Stenographic Transcript Before the

Subcommittee on Seapower

COMMITTEE ON ARMED SERVICES

UNITED STATES SENATE

TO RECEIVE TESTIMONY ON THE STATE OF CONVENTIONAL SURFACE SHIPBUILDING

TUESDAY, MARCH 25, 2025

Washington, D.C.

ALDERSON COURT REPORTING 1029 VERMONT AVE, NW 10TH FLOOR WASHINGTON, DC 20005 (202) 289-2260 www.aldersonreporting.com

1	TO RECEIVE TESTIMONY ON THE STATE OF CONVENTIONAL SURFACE								
2	SHIPBUILDING								
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4	Tuesday, March 25, 2025								
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6	U.S. Senate								
7	Subcommittee Seapower								
8	Committee on Armed Services								
9	Washington, D.C.								
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11	The committee met, pursuant to notice, at 2:31 p.m. in								
12	Room SR-222, Russell Senate Office Building, Hon. Rick								
13	Scott, chairman of the subcommittee, presiding.								
14	Committee Members Present: Senators Scott [presiding],								
15	Sullivan, Sheehy, Kaine, Shaheen, Blumental, and King.								
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OPENING STATEMENT OF HON. RICK SCOTT, U.S. SENATOR
 FROM FLORIDA

3 Senator Scott: The hearing will come to order. Thank 4 you each of you for being here. It's my hour to serve as 5 chair of this important subcommittee and I look forward to 6 working with my colleague, Ranking Member Kaine from 7 Virginia, to ensure Navy has the ships and resources they 8 need. The Navy's very significant to both of us.

9 First off, I want to introduce our witnesses. We're 10 joined by three experts in the state of our nation's able 11 shipbuilding, starting with Dr. Brett Seidle, who serves as 12 the Acting Assistant Secretary of the Navy for Research 13 Development and Acquisition and is responsible for the 14 overall management for shipbuilding programs. Nice, easy 15 time.

Next, is Vice Admiral James Downey, who serves as the commander of the Naval Sea Systems Command, providing technical direction, contracting authority, construction oversight, and other critical functions for Navy shipbuilding.

21 And, finally, Shelby Oakley, who is the director for 22 Contracting and National Security Acquisitions at the 23 Government Accounting Office, where she has reviewed our 24 shipbuilding efforts extensively. Thank you again for being 25 here and thank you for what you service to our country.



1 So many of you have heard me talk about my father, my 2 dad. I'm blessed. I have my doctor dad, he was crazy. He joined the Army very young, underage. He was one of 3,000 3 4 Americans who did all four combat jumps for the Second World 5 I think he got paid more to do jumps. He thinks about War. 6 80 out of 80 people came back alive. He told me the Germans 7 were bad, the foxholes were bad, the food was bad, so I 8 joined the Navy. But I'm proud he did, he did all four 9 combat jumps with the 82nd airborne that they did, and then 10 fought in the Battle of the Bulge.

11 I thought the food was going to be better, but it was 12 really not very great. I served as radarman aboard the 13 U.S.S Glover. I'm proud of being a Navy veteran, but we can all acknowledge that he's facing significant challenges and 14 15 in need of a turnaround. President Trump has made clear 16 that his administration is focused on making our military 17 the lethal fighting force it should be, and I'm glad we have 18 a President focused on this.

In the past few years, unfortunately, we've seen the Navy failing to recruit, pass the audit, and most relevant to our discussion today, deliver ships on time and on budget. In the last five years, 41 ships were delivered to the Navy. Of those 41 ships, only four were delivered on time and on budget. It's 9.7 percent. So, I'm a business guy, I built businesses. No one would consider less than 10



percent success, acceptable. In the private sector something would've changed. You wouldn't keep using the same company, a company would probably go bankrupt. You clearly change people out.

5 Yet, over the past four years, we've seen the Navy 6 failing to improve ships, innovate or deliver things on time 7 and on budget. As a failure to the American people expect 8 their federal government to use their tax dollars wisely and 9 expect their Navy to be on the cutting edge of innovation to 10 defend our national security.

We clearly have to make some changes. I think my colleague, Senator Kaine, is in the same position. We want to do everything we can to help with a turnaround and we got to do it fast.

In today's Subcommittee on Seapower hearing, we will provide oversight on our navy's conventional surface shipbuilding efforts, see why our naval readiness and shipbuilding are falling behind communist China, and understand how we can work to rapidly change course.

I have serious concerns about the challenges to our maritime dominance. The United States is losing ground unfortunately to communist China in naval power, and our shipbuilding enterprise is failing to keep up. Communist China Navy has 370 ships and submarines with over 150 major surface combatants, and they continue to pioneer innovative



designs like large, unmanned surface vessels and carriers
 for unmanned aircraft.

In contrast, the United States has failed to capitalize its naval ship building since Ronald Reagan led the production surge over four decades ago. Our service combatant fleet is growing old with the average age of our ship exceeding 20 years, meanwhile, programs intended to modernize our force have completely failed.

9 The Cruise replacement program, the Littoral combat 10 ship, the Zumwalt-class destroyers, its failure to 11 modernized forced us to restart production of older DDG-51 12 Arleigh Burke class ships as a temporary fix, even though 13 these ships were already desperately in need of innovation 14 to begin with.

15 What's even more concerning is that we don't seem to be 16 learning from our mistakes or taking any significant steps 17 to improve the process. Take the Constellation-class 18 frigate, once intended as an affordable and mature design, 19 as a glaring example of our ongoing challenges. Our recent 20 GAO report attributed the program's failures to an immature 21 design, with constant weight growth and slow approval 22 processes that have delayed the lead ship by at least three 23 years. This crisis extends beyond combatant ships. Our 24 logistics and support fleet, including oceanographic ships, 25 towing and salvage ships and fleet oilers, suffer from the



1 same systemic failures.

2 The common thread here is ships aren't being delivered on time, they're way over budget, and too often they aren't 3 4 what we wanted. We're past the time for gradual change; we 5 need to take immediate bold transformative action to change б how the Navy acquires ships in the entire design and 7 building process. If we don't, we're going to continue 8 falling behind our adversaries, the stakes could not be possibly be higher. Communist China, unfortunately, their 9 10 government has chosen to be our enemy. And it's our job to ensure the United States Navy has the tools and ships it 11 12 needs to be ready for whatever may come.

13 Throughout today's hearing, I ask our witnesses to put 14 all options on the table, because if we do not act 15 decisively, the United States risk being a second rate, 16 naval power, unable to defend our interest or deter 17 aggression increasingly in dangerous world. I'd now like to 18 recognize Ranking Member Kaine for his comments.

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21 STATEMENT OF HON. TIM KAINE U.S. SENATOR FROM VIRGINIA 22 Senator Kaine: Thank you, Chairman Scott, and thanks 23 to all the witnesses and everybody who's here to talk about 24 this important topic. I look forward to working together as 25 your Ranking Member in this subcommittee. And you're right



1 that both of us personally, you as a Navy Veteran and me as 2 the father of a Marine, but also because of our state's 3 equities, care very deeply about the seapower mission.

4 I'll acknowledge the same thing that I acknowledged at 5 the hearing last year, that the hearing takes place during б an extraordinary time for the U.S. Navy. And let's start 7 with some positives. Attacks continue on commercial ships 8 That's not a positive, but our nation in the Red Sea. 9 sailors have demonstrated absolutely remarkable ability to 10 defend key shipping lanes that permit global commerce, battling back against a heavy arsenal of attacks from the 11 12 Houthis. And we appreciate the bravery of the women and men 13 who sail them to those waters and the skill and competence 14 that they've shown over the last many months.

15 But we know that the Navy today is not operating at 16 readiness levels to match the threats we face around the 17 world. We had the hearing in the full committee two weeks 18 The Vice Chief basically said that we have an 80 back. 19 percent readiness standard for ships and subs. It's 20 somewhat complex the what that metric means, but the bottom 21 line is we're at about 62 percent to the 80 on surface 22 ships, 67 percent to the 80 on subs. We've seen some 23 improvement in maintenance, but on the construction side, 24 we're not where we need to be.

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Given the change in administrations, the first year of

the administration, we never get the budget in February.
So, we don't have the budget request for FY26. So, I can't
yet comment upon how that budget might address the issue of
readiness. But we're here today to discuss the state of the
industrial base that supports the conventional Navy, how the
Navy is supporting the base, and what we need to do to
support it in the future.

8 The Navy's industrial base is not in great shape. I 9 don't say any of that to attack either the Navy, the Navy 10 witnesses, or the industrial base. We have fantastic innovators, but bottom line for a series of reasons, whether 11 12 it's supply chain challenges, workforce challenges, 13 inflation, not sufficient attention to the way to allocate 14 the work among those with the capacity to do it. We're not 15 meeting our needs.

Despite the best efforts of your predecessors, we have watched as the performance of Navy ship building has degraded across the portfolio. And we know that the pacing threat from the Navy is much more stressing than this everyday threat that we're seeing in the Red Sea. The Indo-Pacific and other theaters have critical challenges for us.

There are some success stories: the amphibious warship and destroyer productions are moving forward at pace. But Virginia Class Sub, Columbia class sub, the frigate program that the chairman mentioned and others, we've got real



issues. I am a member of the Health Education Labor Pension
 Committee, and I'm sort of particularly focused on workforce
 challenge.

4 And I will just state up front, I'm a little bit 5 worried on the supply chain side and the cost side. What a 6 regime of comprehensive tariffs against products around the 7 world will do this, the cost of some of the inputs that 8 could make this matter even tougher. There are areas where 9 money is going to be needed, but there's also areas where 10 more money is not going to be enough to make the difference, 11 or at least not enough of one fast enough to meet the needs 12 that we have. And so, it's a matter of doing things better.

13 And so, we have to be open to new approaches, admit 14 what we have been doing needs to change and improve if we 15 want a better outcome. Ms. Oakley, the GAO report that you 16 issued recently, it was long, but my punchline was if we 17 keep doing the same thing we've been doing and expect that 18 the results will magically be better, we're living in a 19 fantasy world. We're not going to get better results unless 20 we're willing to embrace change.

21 So, I look forward to the discussion today with the 22 Chairman and our colleagues. And with that, I yield back. 23 Great.

Senator Scott: Thank you, Senator Kaine. Now we'llhear from Dr. Seidle.



STATEMENT OF DR. BRETT A. SEIDLE, ACTING ASSISTANT
 SECRETARY OF THE NAVY FOR RESEARCH, DEVELOPMENT, AND
 ACOUISITION

Dr. Seidle: Thank you Chairman Scott, Ranking Member
Kaine and distinguished members of this subcommittee, good
afternoon. I sincerely appreciate the opportunity to be
here today to address the state of conventional U.S.
shipbuilding.

9 I am currently the Acting Assistant Secretary of the 10 Navy for Research Development and Acquisition and prior to assuming this role in January, I spent half my career in the 11 12 private sector leading manufacturing organizations for 13 General Motors and Alcoa. The other half of my career has 14 been spent leading the Naval Research and Development 15 establishment and since arriving in DC in 2020, I've also 16 spent time serving as the executive director of NASSCO for 17 leading our nation's public shipyards.

First and foremost, today, I fervently believe our Navy has never been more important than it is right now. The United States projects its presence around the globe via our Blue Water Navy impacting geopolitical decisions on a daily basis and helping to maintain our way of life.

Leading in the Navy has resulted in a very purposedriven life for me and I believe it's a mission that resonates with all of us who serve. That mission ensuring



the men and women of the armed services come home safely, that our sailors and marines are never in a fair fight, is both motivational and inspirational for myself and the rest of our acquisition team.

5 I mentioned recently that we have fielded the finest 6 navy ever assembled in the history of the world, and I 7 believe that is still true yet today. Our Navy's 8 performance these past three years has been in a word, 9 outstanding delivering on engagements from the Red Sea to 10 the Western Pacific, and I have been proud to be a part of 11 the team that helps make that possible. And for the men and 12 women of this body and the thousands of employees who make 13 up our acquisition enterprise and industrial partners, you 14 have my heartfelt thanks for delivering on that performance. 15 But today, I have a bounce in my step for another 16 reason, because not only do we have to perform militarily, 17 but we are also in an economic battle with our adversaries. 18 Nations build wealth when they build products. And strong 19 manufacturing base is key to economic buildup.

Today, we once again recognize the need to reinvigorate and awaken the industrial might of our nation, and I can't think of no better place to start than our ship building enterprise. I truly am more excited about this challenge than anything I've been involved in during the past 40 years and it is way past time that we get after it. I have been



1 asked if it's just too hard to find people that want to do 2 the work of ship building, that the work is too difficult, 3 too hot, too cold, too dirty. I find that assertion to be 4 patently false.

5 The human condition is the same as when I was a kid. 6 People want a fair wage. They want to be respected for the 7 work that they perform. They want to have a mission they 8 support that's bigger than their life. And I think 9 supporting our Navy checks all those boxes.

I have visited our shipyards and it was confirming of my beliefs and rather than being discouraged, I come away emboldened from what I saw. Because there I met industrial partners and leaders I respect, employees who were passionate about our Navy and their role in supporting this country and I also saw latent capacity that can be tapped to make a real difference.

17 Having said all the above, we clearly have significant 18 challenges in our ship building enterprise. Simply put, we 19 need more ships delivered on time and on budget, and we are 20 challenged in both of these arenas. Costs are rising faster 21 than inflation, and schedules on multiple programs are 22 delayed one to three years late. We need increased 23 modernization, infrastructure investment, better workforce 24 hiring and retention, and improved supply chain performance. 25 And my commitment to this body is that our industrial



1 partners and I, with your strong continued support, plan to 2 get after these issues and will behave as if the fight is 3 tonight.

I also believe the relationship between this body and our industrial partners is central to our success and solving the problems already mentioned. In each of these three groups, individuals get up every day, passionate about solving the problems in front of us with similar goals and aspirations, albeit different perspectives.

And in that vein, this committee has my passionate commitment to be an outstanding partner, to look forward and drive change, to build the connective tissue with our industrial partners-instrumental to our success, and to reinvigorate our manufacturing base to drive the economic engine of this country.

16 I am genuinely excited to be here today and look 17 forward to taking your questions.

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1	Senator	Scott:	Thank you.	Admiral	Downey.
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STATEMENT OF VICE ADMIRAL JAMES P. DOWNEY, USN
 COMMANDER, NAVAL SEA SYSTEMS COMMAND DEPARTMENT OF THE NAVY
 Admiral Downey: Chairman Scott, Ranking Member Kaine,
 distinguished members of the Seapower Subcommittee. Thank
 you for this opportunity to appear before you today to
 discuss the Navy's conventional surface shipbuilding
 programs.

8 I would first like to thank the committee for its 9 candid perspectives, in determination to help the Navy 10 accelerate the delivery of combat power to the fleet. Recent testimony before Congress, including testimony 11 12 reports from my GAO colleague, Ms. Oakley, have been 13 integral in supporting the Navy's routine communication with 14 Congress regarding the complex realities of shipbuilding in 15 2025.

16 As the commander of Naval Sea Systems Command, I am 17 privileged to lead a team charged with translating war 18 fighter requirements into combat capability, enabling our 19 nation and its allies to provide persistent presence and 20 peace, project power and war, and assured access at all 21 times. Our focus is on getting our ships and their war 22 fighting systems designed, delivered, and maintained to meet 23 global national security requirements.

With any project and certainly one as complex as shipbuilding, judicious planning is what establishes the



foundation for successful execution. As the technical authority for our ships and related systems, NAVSEA is committed to appropriately evaluating costs schedule, and technical requirements to deliver the right capabilities to our war fighters, recognizing that requirements discipline plays a quintessential role in shaping a program for success.

As a best practice, the Navy procures approximately 50 9 percent of our surface force to primarily commercial 10 standards. For combatant programs, with more stringent 11 build requirements, we continually review our military 12 specifications and are committed to doing so collaboratively 13 alongside industry, to simplify and streamline wherever 14 possible.

15 We are also actively transitioning design plans into 16 digitized formats, reducing the burden on the ship builder. 17 Similarly, we are committed to working alongside industry, 18 to ensure our contracts and acquisition strategies are 19 aligned and balanced to the specific procurement need. We 20 continue to face mounting challenges, from shifting 21 demographics and workforce shortages, to supply chain 22 disruptions, that collectively continue to pressurize our 23 shipbuilding contracts.

We need strategic solutions to improve waterfront productivity, and we are evaluating contracting approaches



and incentives, while also centralizing that data to better
access what levers are needed to improve shipbuilding
performance. In program execution, our supervisors of
shipbuilding provide the onsite technical and contractual
oversight for the construction of navy vessels at our major
private shipyards.

As of today, the Navy has 92 ships under contract, with 56 ships actively in construction. In addition to these 9 prime ship building contracts, we also have a number of 10 yards that outsource large components, resulting in a more 11 distributed shipbuilding model, with somewhat more complex 12 oversight required.

With the assistance of this committee, we now have a dedicated Deputy Commander within NAVSEA, overseeing our waterfronts and improving communications and coordination across all of our ship building projects, to better deliver capability at the speed and scale of need.

When you visit the shipyards and speak to the workers, whether it's welders, machinists, front office staff, or engineers, you understand what it means to them to build a great ship from the keel up, to start with nothing and then to deliver a fully capable warship. That's the product of teamwork in its purest form of execution.

This ship building culture, which in some communities goes back generations, is what we focus on cultivating and



nurturing. Continuing to do so will require competitive wages as well as affordable housing, quality schools, and other supporting functions for the shipyard workers. NAVSEA is deeply committed to helping industry create productive, and safe workspaces on the waterfront in order to attract and retain the skilled workforce we need to build the navy our nation requires.

And so, I thank Congress for these investments in our ship building programs, because these efforts will not only help stabilize production, but will enhance the maritime industry for future generations. I'm committed to transparently working in close collaboration with this Congress and industry to meet the Navy's four structure goals.

15 Thank you again for this opportunity to appear before 16 you today. I look forward to your questions.

17 [The prepared statement of Admiral Downey follows:]18 [SUBCOMMITTEE INSERT]

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STATEMENT OF MS. SHELBY S. OAKLEY, DIRECTOR,

2 CONTRACTING AND NATIONAL SECURITY ACQUISITIONS GOVERNMENT3 ACCOUNTABILITY OFFICE

Ms. Oakley: Chairman Scott, Ranking Member Kaine and members of the subcommittee, thank you for the opportunity to speak with you today about the ongoing challenges facing Navy surface ship building and the solutions that could help turn things around.

9 Let's start with the hard truth. Despite the Navy ship 10 building budget nearly doubling over the past two decades, 11 the size of its fleet hasn't grown. The Navy had roughly 12 the same number of ships in 2003 as it does today, even 13 though it has spent billions trying to expand. In addition, 14 almost every surface ship is now significantly delayed.

Meanwhile, our strategic competitors are rapidly building and deploying modern, highly capable fleets. The Navy simply cannot afford to continue with business as usual.

For over 20 years, GAO has been reporting that the Navy's approach to shipbuilding is fundamentally flawed. We've issued 90 recommendations since 2015 alone, yet more than 60 of them remain unaddressed and the consequences of inaction are clear-billions in cost overruns, years of schedule delays, ships that ultimately don't provide expected capability.



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1 The biggest driver of the outcomes we see are the 2 unrealistic business cases that the Navy puts forward to 3 support its shipbuilding programs. These business cases 4 don't adequately reconcile what can actually be done within 5 available resources, including technology, design knowledge, 6 industrial based capacity, and funding.

7 As a result, the Navy's budget requests are founded on 8 optimism, to secure funding. Later as business cases 9 deteriorate and realism sets in, challenges that were 10 predictable from the start, begin to emerge. Yet the Navy continues to push forward, awarding contracts for ships that 11 12 likely can't be built with the resources available. As a 13 result, they arrive later than planned and cost far more 14 than expected. The LCS and DDG 1000, among others stand out 15 as prominent prior examples of this dynamic.

16 The question is, has the Navy learned from these past 17 mistakes? To some extent, yes. Recent efforts 18 incorporating more proven systems and increasing engagement 19 with industry before contract award are steps in the right 20 direction. But old habits die hard.

Take the Frigate program for example. The Navy has already put six ships under contract despite the fact that two key systems remain unproven and design changes have led to weight growth that threatens performance. Now over two years in, construction on the lead ship has effectively



1 stalled with delivery delayed by at least three years. This 2 isn't just a minor hiccup, it's indicative of a system where providing a capable ship to the fleet on time is given less 3 4 priority than protecting the program budget and keeping 5 money flowing to underperforming programs, under the guise б of stabilizing the industrial base. This approach directly threatens the Navy's ability to meet its long-term force 7 8 structure goals that rely on large numbers of frigates.

9 You might ask, is this scenario simply unavoidable? Is Navy ship building just irreparably broken? The answer's 10 no, but the Navy must break the cycle. Our work over the 11 12 past 15 years, visiting and learning from leading companies 13 around the world, including leading builders and buyers, 14 consistently demonstrates that large complex projects can be 15 designed and built on schedule and within budget, if the 16 right practices are followed.

These include things like first developing a solid business case, one that aligns technology design knowledge funding, industrial based capacity, and time, before committing to construction. Then continuously evaluating that that business case is maintained.

Second, adopting iterative approaches that include developing and refining designs and cycles, using knowledge gained from testing, validating, and obtaining user feedback. Third, improving collaboration by streamlining



decision making. And finally strengthening in-house
 expertise and investing in modern ship design capabilities
 and digital tools to better execute and oversee programs.

These approaches enable leading ship builders to develop complex ships in vastly shorter timeframes in the Navy, and to be adaptable to evolving customer needs. And our work has shown that they can be thoughtfully applied to Navy ship building.

9 In conclusion, the Navy has much work to do to improve its practices and restore its credibility with Congress, 10 taxpayers in the fleet. It won't be easy. And breaking 11 12 with entrenched ways of doing business requires sustained 13 commitment over many years to see real change. Such improvements could help the Navy achieve its four structure 14 15 goals faster, create stability for the industrial base, and 16 send a clear message to potential adversaries that the U.S. 17 Navy remains the dominant maritime force.

18 Chairman Scott, Ranking Member Kaine, and members of 19 the subcommittee, thank you for your time and for allowing 20 me to speak on this important topic. I'll take any 21 questions you have.

[The prepared statement of Ms. Oakley follows:][SUBCOMMITTEE INSERT]

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1 Senator Scott: I think the Ranking Member Kaine and I 2 are not going to alternate, going to do a vote, so we'll be in and out. So, I'll start with my questions. Admiral 3 4 Downey, how long have you had the job? 5 Admiral Downey: Just over a year, sir. January of б 2023 7 Senator Scott: Any word on some of the issues you're 8 dealing with. 9 Admiral Downey: A few issues. Yes, sir. 10 Senator Scott: All right. So, let's talk about the 11 Constellation class frigate. So, it's what, three years 12 behind budget. Three years behind way over budget. So, 13 let's talk about what went wrong. So first off, I think --14 here's my understanding, tell me if I've got this wrong. 15 The Navy chose the Constellation class frigate based on the 16 parent design of the European frigate used by Italy and 17 France, right? 18 Admiral Downey: Yes, sir. 19 Senator Scott: The Navy awarded the design to 20 Fincantieri Marinette Marine for about \$800 million for the 21 lead ship, right? 22 Admiral Downey: Yes, sir. With a competition across 23 five folks for about 18 months.

24 Senator Scott: Construction began in August, 2022 with 25 the Navy certifying basic and functional design was complete



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2 Admiral Downey: Yes, sir.

3 Senator Scott: A little over two years ago, two and a 4 half years ago, right. So how did a ship that started with 5 85 percent in common with the parent design, fall to 15 6 percent in common with that parent design, and were those 7 design changes from the Navy or from the shipyard?

Admiral Downey: Sir, I'll start with the design changes. A combination of both. There's a group of about 182 changes, about 80 percent of the changes were requested from Fincantieri to adjust the build spec to their design, all significant changes to get closer to what they proposed. And then there was about 20 percent from Navy.

14 Of those of Navy, we invoked Build America Act, which 15 changed equipment in the propulsion plant, but that was the 16 decision to start from the first of the class. We canceled 17 a couple systems, the MQ-8, for example, and said, we'll get 18 to that in the future. We reduced speed on the ship. There 19 was a very significant speed requirement in Sea State six 20 beyond what a destroyer would be required. So, there's a 21 combination of changes on both sides, sir.

22 Senator Scott: So why were the changes made? 23 Admiral Downey: The 20 percent on the Navy side were 24 to change to the requirements that we had proposed and to 25 cancel about three changes there. One cancellation of speed



and two other system cancellations because those programs got canceled out. The vast majority of the changes, working together with Fincantieri, were their recommendations to align the build spec change what we put out to closer to their -- proposal.

6 Senator Scott: So, was that a decision by the Navy or 7 a decision by Congress?

8 Admiral Downey: The Navy changes were a decision by 9 Navy working with Fincantieri. The other changes were 10 proposed by Fincantieri and Navy agreed to the changes.

Senator Scott: Did that increase the cost?
Admiral Downey: Overall, yes, from a perspective of
time because design wasn't completed right. So, they fell
behind in design and therefore it's contributing to the 36
months.

Senator Scott: So, was it a fixed price contract? Admiral Downey: Yes, it's price contract for fixed price incentive fee contract for building the ship, and the ship builder went with a firm fixed price design contract, through a subcontractor.

21 Senator Scott: Okay. And they won in a bid process,
22 right?

23 Admiral Downey: I'm sorry, sir.

24 Senator Scott: They went through a bid.

25 Admiral Downey: They went through a bid with us, and



1 then they contracted to Gibbs & Cox for the design.

2 Senator Scott: So, are they making money?

3 Admiral Downey: No.

4 Senator Scott: Okay.

5 Admiral Downey: They're losing money

6 Senator Scott: As a result of losing money, did they
7 slow anything down?

8 Admiral Downey: Yes. As I said, I took this job -- I 9 had the opportunity for this command in January of '24. Was invited to sit through a review a couple months before that, 10 11 and could see that the reviews needed additional rigor, that 12 the status of production was about 3 percent. But design 13 was reported as holding up production despite the prior 14 estimates of how far design was completed. So overall, what 15 appeared to be occurring to me is the design was being 16 significantly over progressed.

Senator Scott: So, the company, the builder, made the decision to slow down because they were losing money?

Admiral Downey: Yes. Because they chose to do a firmfixed price to design contract.

21 Senator Scott: Does that bother you?

22 Admiral Downey: Yes.

23 Senator Scott: Huh. Okay.

Admiral Downey: To address this, we surged about 80 people up on site in Wisconsin, with the monies invested to



drive a collaborative approach to finished design. We
expect that functional design will complete by this summer.
We've gone from 30 percent first time quality as I took that
first review and came into the job to 80 percent, by colocating Navy engineers, not only with Fincantieri, but also
requiring Fincantieri to bring their subcontractor up on
site in Wisconsin as well.

8 Senator Scott: Senator Blumenthal.

9 Senator Blumenthal: Thanks, Mr. Chairman. Ms. Oakley, 10 I know that the President's announced a new office to oversee ship building, but on the other hand the Musk 11 12 operation, call it whatever you will, and the Secretary of 13 Defense are evidently going to terminate, fire people, who would be hands-on overseeing and supervising ship building. 14 15 Am I right that this kind of mass firing of the civilian 16 workforce, many of them veterans would undermine and 17 potentially set back our ship building efforts?

18 Ms. Oakley: I don't have any insight into the specific 19 cuts that DOGE is proposing for the Navy programs or the 20 Navy workforce. I will say that our report that we issued a 21 few weeks ago on the Navy ship building and ship repair 22 industrial base, identified workforce capacity as a key 23 issue that came up over and over again, both within the Navy 24 and at the builders, as a key challenge for turning things 25 around in terms of performance, both at the yards and within



1 the Navy itself.

Senator Blumenthal: So, building the workforce requires investment in people. It requires morale and a commitment of support to people who show up for work every day, whether it's building submarines or other ships or supervising the process of committing resources to them. Correct?

8 Ms. Oakley: Yeah. I think it would be difficult to 9 build up a workforce without that kind of support.

10 Senator Blumenthal: Let me ask others here, how do we 11 build that workforce which we've talked about doing for 12 years and years in submarine construction, for example, and 13 it isn't getting done, evidently?

Dr. Seidle: I appreciate the question. I think we're putting a lot of effort in our maritime industrial base arena. This body has funded us about \$4 billion over the last two years, and we have aggressively gone after kind of the workforce hiring and retention.

I think we've seen some good effect on the hiring arena, I think you've seen the build submarines.com at some of our major sporting events, will probably be in the March Madness arena too, on advertisements. We've had 16 million hits on that site, 2.5 million applications. It's led to about 9,700 employees hired in 23, a 40 percent increase over 22, another 10k in 24.



1 But sir, those folks are coming and then we're treating 2 out way too quick. We probably are seeing 50 to 60 percent attrition in our first-year employees and it is about the 3 4 labor rates. When I was working in manufacturing in the 5 '80s, minimum wage is 3.35 an hour, and we paid three or б four X for 13 or \$14 an hour for our labor. Today it's 7 about 1.2 X compared to the living wage, and it's impacting 8 that significantly.

9 Senator Blumenthal: Electric Boat is doing a lot of 10 great work in its apprenticeship program and its outreach in 11 training, in going into the community colleges and the 12 schools. But I'm hopeful that the Department of Defense can 13 do more to support what they are doing. And especially as 14 we go into the NDAA investing in apprenticeship training. 15 Would you agree that we need to do more of it?

Dr. Seidle: Most definitely. I was up at Electric Dr. Seidle: Most definitely. I was up at Electric Boat, had a chance to see some of the programs that they have. I think not only is it great from a training perspective, it's the community involvement and it allows people to feel good about their workplace and their environment and their culture. So yes, very supportive of that Sir.

23 Senator Blumenthal: You would agree that we will24 continue to need to build more submarines?

25 Dr. Seidle: Absolutely.



1 Senator Blumenthal: And that includes not just 2 Virginia class, but also the Columbia class? 3 Dr. Seidle: Absolutely, yes. 4 Senator Blumenthal: Would it be a mistake? I think, 5 you know, what I believe to for example, eliminate the 6 Columbia class? 7 Dr. Seidle: It would be a significant mistake. We 8 have maritime dominance in that submarine arena. And the 9 Columbia class is the most important leg of our nuclear 10 triad. A critical capability that we need to maintain 11 dominance in. 12 Senator Blumenthal: And do we need to continue to 13 build the Virginia class? 14 Dr. Seidle: Absolutely, yes. 15 Senator Blumenthal: These are rhetorical questions. 16 Dr. Seidle: They are rhetorical. We are all in with 17 you, sir, on that. 18 Senator Blumenthal: I would see no need to ask in a 19 normal time. 20 Dr. Seidle: I understand. 21 Senator Blumenthal: But I'm appreciative that you're 22 on record and I believe the Department of Navy is as well, 23 and I hope the Secretary of the Navy newly confirmed will be 24 as passionate as you and I are. 25 Dr. Seidle: Thank you. Based on my conversations with



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31

1 him, I'm sure he will be, sir. Thank you.

Senator Blumenthal: Thank you. Thanks, Mr. Chairman.
 Senator Kaine: [Presiding.] Senator Sheehy.

4 Senator Sheehy: Thank you, Interim Chairman, I guess 5 Ranking Member Chairman. How do we -- even if we wanted to 6 scale our shipbuilding capacity, even if we wanted to take 7 it to the 10, 20, 30X that we need to even approach what 8 China's building right now. I mean, how do we physically do 9 it? We don't even have the physical shipyards available to 10 build those right now. So, from an industrial based perspective, how do we acquire the physical footprint to 11 12 start building enough vessels that we're going to need very 13 quickly?

Dr. Seidle: So, my first reaction to that, there's a lot of discussion around shipyard capacity and capability. There's a study ongoing right now with the Navy and Cape that will be out shortly, that talks about the capacity and how much more is needed. I think at this point, the workforce issues that we're talking about and the greening of the workforce is leading to lots of rework.

For example, at most of our yards right now, the years of experience is three to four years. I think unlocking that latent capacity is a lot about driving modernization into the yards, getting through some of these wages issues to have our retention numbers up. All those things start to



1 play. We also are working on a lot of --

2 Senator Sheehy: I agree that workforce is key, but I think the workforce will fundamentally and eventually 3 4 respond to a free-market incentive and is relatively 5 elastic. But, you know, last time we had to build a Navy б fast, you know, Henry Kaiser bulldozed 10 miles of San 7 Francisco Bay and built a shipyard. And we just don't have 8 that capability anymore. I mean, whether it's ocean front 9 real estate, isn't available anymore.

10 So, I've heard a lot about the workforce and I totally 11 agree with you, we're very aligned on the workforce issue, I 12 think is critical. But I have not really heard anybody yet 13 talk about the real estate issue, which is how do we get the 14 physical space available to conduct the work when needed.

Ms. Oakley: I think one of the things that needs to be considered is looking beyond these big platforms, right? Looking to smaller, non-traditional capabilities that could provide that decisive capability for us. You know, in that China fight, thinking about things like robotic autonomous systems, leveraging those kinds of things, smaller yards can build those types of ships.

And so, when you're thinking about building up our capacity for ship building in the United States, we can look toward those types of platforms to be the augmenter to the fleet that we need. Not just looking to build, you know,



1 double, or triple the amount of large surface combatants.

2 Senator Sheehy: And I'd agree, but I think, you know 3 it's always fun to talk about the tactical end of the spear, 4 because that's what's fun to look at. But the reality is 5 the heavy lift, sea lift logistic capability to move a lot б of people and a lot of stuff halfway around the world 7 quickly is -- that's actually what's more deeply concerning 8 to me. And not the pointed end of the spear, the war fighting end of the Navy, but the ability to lift 500,000 9 10 troops in everything they need and all the vehicles they need halfway around the world quickly. 11

And to that end, my second question, and I'll yield back there, is you know, the incentives around ship building and the contractors there, and that Senator Scott alluded to you know, the ship building acquisition model is very dated. You know, it's basically still the same model that we had 80 years ago.

18 Traditionally and historically, a lot of large naval 19 fleets used leased vessels. And instead of placing the risk 20 on the government to buy the ships and the contractors, 21 basically, there are some risks there, but really the risk 22 on the Navy to buy them.

Has there been any study on exploration of leasing of ships, placing the risk on private companies who would be willing potentially to take that risk to build us a fleet,



that it wouldn't probably be right for guided missile destroyers and cruisers and submarines, but it could work for you know, some like submarine tenders, which we're woefully short on right now, I think we have two, we need like 15 and logistical vessels.

Has there been exploration of leasing commercial
vessels and putting the maintenance burden, the upgrade
burden on the contractors versus on the Navy?

9 Admiral Downey: I'll take that one, sir. I don't 10 think so. I've been doing this for guite a while and I 11 haven't seen studies on leasing. And I'll go back to your 12 other point. We need them produced, we have about 80 13 commercial vessels under U.S. flag versus thousands under 14 another country. So, it really, I think it goes back to 15 your other point here of how do we increase capacity? So, 16 on the pure Navy side, we do have some in my view, having 17 worked with Maine and California a lot, there is more 18 capacity up in Bath, and there is more capacity out at 19 NASSCO in California. We need to look at our requirements, our variations in builds, and how we get a more- a longer 20 21 run similar to the DDG-51 program. we're all working on 22 Virginia and there's multiple blocks of Virginia's.

23 So that definitely has an effect on the producibility 24 and the learning there. So, I think we have to do both and 25 get to who would produce them for us. We've added Wisconsin


Fincantieri Marinette, we've added Austal, and now we have
 Hanwha in Philadelphia.

3 We've also looked in the past at reactivating reserve 4 or decommission ships principally the frigate class. And 5 that has led to, it's a dated combat system. We've б reactivated some of those ships for foreign countries, but 7 it's would mainly be for coastal patrol. But to your point, 8 we need to do both. We need to grow the shipyards here and 9 look at other acquisition options.

10 Senator Sheehy: Thank you.

11 Senator Kaine: Senator King.

12 Senator King: Thank you. I've been waiting 13 years 13 for the timer to break, so there'd be no limit. A couple of 14 sorts of technical observations before I get to broader 15 questions. One is, as you know, the DDX is in the design 16 stage, and the concern from the point of view of the 17 shipyards, both in Bath and in Mississippi, is that there be 18 a smooth transition between DDG-51 and the DDX. What 19 concerns us is a timing trough, because you can't turn on 20 and turn off welders.

And so, I hope that as you plan out the transition process, that that's top of mind, because it would be disastrous for the yards if there was a lag in demand between the two ships. Doctor, are you with me on that one? Dr. Seidle: Yeah, I am. So, we saw the lessons from



DDG-51 to DDG-1000 back in the day and how some of that worked out. We clearly are going to be intentional about the transition of DDG-51 to DDG-X, to keep the production line hot, to then feather in DDG-X and then only taper out DDG-51 once DDGX is up and running.

6 Senator King: I'm glad to hear that. Keep that in 7 mind.

8 Dr. Seidle: Yeah, will do.

9 Senator King: Second point on this developing DDX, 10 Ingalls and General Dynamics are working together on the 11 design, which is a new approach, but it's an important one, 12 and I hope the Navy will continue to iterate with them, 13 because having the build yards be involved in the design 14 will make a big difference in terms of construction learning 15 curve and all those kinds of things. So, I hope that 16 project which is underway, will be maintained and the Navy 17 will be forthcoming in terms of communication with the two 18 yards.

Dr. Seidle: Yeah, just to comment on that, I see that as a great opportunity. We're working with them even before preliminary design phase, and it gets to some of the things that you've talked about, Ms. Oakley, that we need to be doing, so we are excited and we'll be all about it.

24 Senator King: Well, having served on this committee 25 for a while, it strikes me that one of the problems we have



1 is requirements creep. At some point, it has to be pencils 2 down. And if you learn anything from the Ford, it's that 3 doing research while you're building a ship is not the way 4 to go.

5 So, I think, again, that as we move toward DDX, we need 6 to say, okay, here's the requirements, here's the design, 7 and let's build it. Not let's iterate the design as we are 8 moving through the construction process, that's what's 9 really messed us up in some of these major overrun projects. 10 If I were going to list the three biggest problems right now 11 in developing shipyard capacity, the first would be 12 workforce, the second would be workforce, and the third 13 would be workforce. And the Navy has to be thinking in 14 unconventional ways.

For example, one of the most important things that could be done to develop workforce is to have childcare facilities, parking, the kinds of things that -- housing in the area. We've had people recruited to Bath who get there, and then they can't find a place to live. And so, I believe that that has to be part of the mentality of developing workforce.

And then of course training, and all those details that go to attracting people in this economy. And finally on the development of the infrastructure, it is the infrastructure itself. There has to be investment. It has to be a joint



investment between the private shipyards and the Navy in terms of infrastructure buildings, more efficient layout of the facility and those kinds of steps I think are very, very important.

5 So, again, I'm giving you advice, but this is based on 6 my experience with working with these shipyards. And I 7 guess I would reiterate -- oh, I wanted my final question to 8 You mentioned 60 or so recommendations that haven't GAO. 9 been followed. What are the top three that if you had to 10 beep, if you were pressed, what are the top three recommendations that haven't been followed that you think 11 12 would make a difference?

13 Ms. Oakley: You really pressing my memory on 60 14 recommendations, but I think most pressing in the front of 15 my mind are our recommendations related to design and the 16 changes that we'd like to see the Navy make with regard to, 17 like you said, ensuring that the design is finalized before 18 we're awarding a contract for construction, and before we're 19 starting to bend metal. Because the problems arise when 20 those design changes start creeping in as the pressures of a 21 fixed price contract begin to mount.

And then that leads to just challenges overall, and it's just exactly what we're seeing with the frigate program. And so, we made recommendations to the Navy that they ensure that they have matured their basic and



functional design before awarding the contract for detailed
 design and construction.

Another recommendation that we made was related to 3 4 ensuring that detailed design on each individual block is 5 finished before you begin construction on that block. Most 6 of those recommendations are really aimed at ensuring that 7 there's less of a likelihood that these surprises will pop 8 up at a time where the pressure's going to be high to continue to proceed because of, you know, schedule or money 9 challenges. 10

11 Senator King: I think this goes without saying, and I 12 appreciate that modularity is king at this point. So, we're 13 building 40-year assets here. They ought to be constructed 14 in such a way that they can be upgraded easily without 15 ripping the whole platform apart. So, I hope those are some 16 things.

17 The other thing that is something that I've observed, 18 is when we're buying these major objects, we should also buy 19 the IP, so that every ship can have its own 3D printer. We 20 don't have to have ships in port, for inordinate amounts of 21 time waiting for a part. So, I hope that's in your planning 22 as well because in this day and age -- and by the way, I 23 think the same thing about the Air Force, availability is a 24 big issue in our fleet, and we should improve our 25 availability. We should benchmark against carnival cruise



lines, because if they were only available 40 or 50 percent
 of the time, they'd be out of business.

3 So, to the extent we can have intellectual property as 4 part of the purchase, then you have the right to make the 5 parts as necessary without even having necessarily to go 6 back into port. Thank you.

Admiral Downey: Thank you for that, sir. I'll hit on 7 8 a few of those points. Modularity; for the Ford class, we 9 studied in the design that about 40 percent of the cost of 10 modernization goes to rip out. So, for the Ford class, 11 where we have the command spaces, the O-3 level, the gallery 12 deck we went with a general arrangement where all 19 mission 13 bays are lined up against each other and the services are 14 moved out of the spaces.

15 HVAC ducting, these things, and built in a flexible 16 infrastructure. So that common bolt size, quick disconnect 17 power panels, lighting, are pressurized under deck so that 18 you don't have any ducting in the spaces. So those type of 19 efforts are modularity that removes I'll say hardware 20 constrained interface or many different such interfaces to 21 the systems, is an area we significantly need to move 22 forward with.

On the tool sets, we also have some, I will say not even balanced efforts, but some solid tool sets in the submarine area and digital arrangement drawings in the



carrier area. So that it's not left to an interpretation of the worker. The drawings can be extremely complex. So, we have invested in those areas significantly. Studies show in those areas that such tools -- and I have one more point, but such tools can reduce labor by as much as 8 percent as you go through that work.

7 The other key area on the commercial side, so I have 8 been to Korea, Japan, India, Canada, et cetera, Spain, 9 Italy, and the Middle East. Most of the yards that I've 10 been to that have a large production capability, use a 11 common tool set across the yard. We go by program. So, 12 when we get into yards that have multiple product lines, 13 they may be using different tool sets, which causes -- until 14 you go into some of the other foreign large yards it's less 15 obvious in our yards of what's going on. And they don't 16 change the tool set to the new one, until it's ready to 17 support all their product lines.

18 Last point is, in our yards where we have multiple 19 lines, they're also managed by program. They're not managed 20 by a governance approach across the yard from the government 21 side. Some of our yards, we have more than half a dozen 22 lines in those yards. So, it goes to the priority of the 23 program and the different government offices integrating. 24 So, we have been working closely on what is a 25 governance approach that allows shipyard X to get their



1 programs done to cost and schedule in more than a program 2 focused manner.

3 Senator King: I appreciate that. And you mentioned 4 bolts and I once visited a Toyota plant in Tokyo where they 5 built one RAV4 a minute, one brand new automobile a minute б came off the line. And they said one of the secrets of the 7 success of that factory was listening to the workers. And 8 one of the things I said, well, what kind of suggestions did 9 they make? And he said, well, somebody noticed we had 86 10 different bolts in a Toyota, and we figured out how to make 11 that into about eight. It saved a huge amount of time, a 12 huge amount of acquisition, and that kind of analysis. I 13 think the lesson there is to listen to the workers because 14 they know on the ship deck what works and what doesn't work. 15 Dr. Seidle: Yeah. Just to comment on that automotive 16 guy in my past --

17 Senator King: Is your mic on?

Dr. Seidle: It is. Maybe I'll get closer. Automotive guy in my past, quick story about Toyota and GM. When I was working for General Motors, worst running plant in our lineup was the Fremont plant. It had about 55 percent uptime on the assembly line, 20 percent absenteeism, criminal activity. GM gave up and just shut the plant down in 80 or 81.

25

3 years later, Toyota wanted a footprint in the U.S. to



1 make vehicles, we wanted to learn TPS Toyota Production System, they said, let's use the Fremont plant. And we 2 said, no, you don't want to do that, right? Bad karma. 3 4 They convinced us and then they said, let's hire the people 5 back. And we said, no, you really don't understand, you 6 don't want to do that, but they did it. And in three years 7 it was the best running plant in our lineup, 96 percent 8 uptime, just an incredible work environment. And you'd go 9 there and you would see folks on fire for what they were doing at their station. 10

And it was because they were empowered to make changes for what they were doing to improve their work and their efficiency and throughput. It was an amazing thing to see the difference. And you're absolutely right that it pays dividends in any manufacturing arena where there's a lot of touch labor, and folks can improve what they're doing. Over.

18 Senator King: Thank you, gentlemen. Thank you very 19 much, madam, for your comment.

Ms. Oakley: I'll just make a quick comment, because your last comment about talking to the people is in many of your comments are completely in line with our leading practices for product development that GAO has gone and talked to leading companies all across the world and ask them how do they do business? How do they meet customer



1 needs? How do they get products out on time quickly and on
2 budget?

And one of the key aspects of that is that user feedback, the people who are actually going to be using the product, give feedback all along the way from the beginning to the end, that drives changes in that design, design drives changes in how it's produced, and then results in providing the customer with a capability that they actually want and will be happy with.

And so, I think what you're saying is completely in line with recommendations we've made both to DOD and to the Navy, to bring their practices more in line with how these leading companies do business. Thank you.

14 Senator King: Thank you, Mr. Chairman.

Senator Scott: [Presiding.] Thank you, Ranking MemberKaine.

17 Senator Kaine: Thank you, Mr. Chair. And I'm going to 18 hopscotch around on some topics. Ms. Oakley, on the last 19 point, I would suggest sometimes GAO go visit a company in 20 Lynchburg, Virginia, Framatome, which is one of the main 21 suppliers in the nuclear base. And Framatome is responsible 22 for going out during outages at nuclear power plants.

Outages are not disasters. They're the planned period where they pull a reactor out, retrofit and put it in. And obviously they want to do that as fast as they can, and



watching how they are able to do this work of such complexity, surge it and do it in a very short time so that the reactor is not offline and is actually producing power. It makes me a little bit embarrassed as I think about how slow we are in some other aspects of what we do. So that would be one to put on your visit list.

7 Ms. Oakley: Yeah, happy to do that.

8 Senator Kaine: To Admiral Downey or Dr. Seidle, do you 9 all know how the shipbuilding enterprise workforce has been 10 affected thus far by DOGE or particular directives from the 11 secretary that might be related to DOGE?

Dr. Seidle: So, I'll make some comments and I'll let
Admiral Downey make a few comments as well on that.

Senator Kaine: And I'll accept "No, I don't know yet" for an answer, if you don't really have the sense of it.

Dr. Seidle: So, from the earlier comments, I think the first thing that we have been assessing is the deferred resignation program, in the area that kind of I oversee. If you think about the PEO community and the supervisor ship builders that he has, it looks like those numbers are in the 3 percent range.

And whenever we look at the number of folks on that list that were probably retirement eligible and decided to say, I'm going to take this now as a result, it drops down to about a percent and a half. So, it is a manageable thing



1 for us when you think about normal attrition.

Senator Kaine: How about on the probationary side?
Dr. Seidle: Probationary side small numbers as well.
And as you know, we've kind of stopped that process. And so
once again, the numbers in my neck of the woods appear to be
manageable to work through, because we have that kind of
attrition also on a yearly basis.

8 Senator Kaine: Admiral Downey, anything different to 9 offer on that?

Admiral Downey: I would offer, I represent a large part of the Navy enterprise, about 90,000 folks, and that they're 90 percent civilian. The deferred retirement number across that enterprise for me is around 1200 folks. And with the offers, these are people who chose to retire. There were very few probationary people that were probationary due to performance.

Senator Kaine: Right. Probationers, you know, for everybody who isn't familiar with this, they're new hires, so they're either brand new or they're career switchers. So, somebody going from active duty to civilian DOD, that's a career switcher who then is probationary.

Admiral Downey: Sir, that's where I was going. My folks hired 7,400 people last year, about 8 percent of the 90,000 and that's not uncommon per year. As we've worked through the definitions, almost all of those folks have



been, I'll get the word wrong, accepted or exempted because
 of the national defense work that they're doing.

The other area was purchase cards. We purchase a lot in our naval shipyards. One shipyard may -- that's how they buy material -- So Portsmouth Naval Shipyard may have more than a thousand transactions a month et cetera. I have in the 10 to 15,000 a month across all these areas, and we were able to turn on, per command, what I asked for to have turned back on.

Senator Kaine: So, everybody wasn't limited to just 11 \$1, right?

12 Admiral Downey: So far, we've very brief interruption, 13 and we've gotten back to what I've asked to have back. On 14 the industry side, across this rest of this decade, the 15 shipbuilding need for what we have booked is to hire about 16 200,000 people. That's what's needed across that effort. 17 So, the stabilization of programs, the not changing of 18 requirements, that's going to be critically important to 19 these people.

Last one on that, on wages, Dr. Seidle hit where those wages are. Some of our initiatives to focus on a 25 percent increase for the first folks, you know, the first-year people, \$20 to \$25, that adds about 1 percent to the cost of a ship. A \$4 billion ship becomes a 4,000,000,040.

25 Senator Kaine: You mentioned this to me yesterday and



I'm curious about this. So, Dr. Seidle, you were testifying right as I came back from voting about this, the odd compression between, you know, it used to be that a ship builder compared to minimum wage is making, you know, multiply x minimum wage. And now we're down to 1.3, 1.4, which makes the relative attractiveness in a job in the shipyard less.

8 The point that Admiral Downey made yesterday and today 9 is if you increase sort of beginning salaries, and I guess 10 you do some other adjustments, so there's not unacceptable salary compression, but if you do a 25 percent increase, it 11 12 changes the cost of a carrier, for example, by 1 percent, 13 because so much more is not in the salary side. And that's, 14 an important thing, and I think that's something that we 15 have to grapple with. Here's, a question I was curious 16 about --

Admiral Downey: 1 point on that, sir, if I may. it's not simply to raise the wage, but if we can retain these folks and have them focused, we're going to deliver closer to schedule and the overall cost is going to come down.

21 Senator Kaine: Yeah. We're dealing with this greening 22 of the workforce and retention is really important. Let me 23 ask you this, I was pleased when the President during his 24 State of the Union on March four, announced plans to 25 establish a White House office of shipbuilding to revitalize



U.S. shipbuilding industry. I'm just wondering if have you been read in, are there yet details about what that looks like, what's the Navy's plan for collaborating with this White House office of ship building? How might it be structured? Who might the leadership be? This is 21 days after that speech, so maybe the answer is no. But do you know any more about that proposal?

8 Dr. Seidle: At this point it is still early in the 9 discussions on that. We do expect to have solid 10 integration, have been told that we'll be over there 11 regularly having conversations, but to date, we still 12 haven't moved out on our end yet on some of that.

13 Senator Kaine: We'll want to keep track on that from 14 the subcommittee standpoint. Over to you Ms. Oakley, and 15 something the GAO had a report that was a December report 16 about amphibious warfare. Fleet Navy needs to complete key 17 efforts to better ensure ships are available for Marines. 18 And the report had this conclusion, "The Navy is likely to 19 face difficulties meeting a statutory requirement to have at 20 least 31 amphibious ships in the future, given the age of 21 the ships and other factors".

There's a provision in the NDA at section 1023, that requires that the naval combat force of the Navy shall include not less than 31 operational amphibious warfare ships, but it allows to be counted as operational ships that



are temporarily unavailable. What's GAO's perspective on how the Navy is interpreting "temporarily unavailable"? Because we want 31, but we don't want 31 discounted by a deep fraction of "temporarily unavailable" ships that we really can't count on to be.

Ms. Oakley: Yeah, I mean, I think that report pointed out that some of the things that were considered "temporarily unavailable" were years at a time unavailable and counted toward that total.

10 Senator Kaine: And would you suggest that in an NDAA, 11 for example, this year, we should take some of that 12 ambiguity out of a phrase, like temporarily unavailable and 13 maybe be a little more specific about what we mean?

14 Ms. Oakley: I think the more specific you can be in 15 giving direction to the Navy would be helpful, because then 16 it leaves it up to their interpretation. The other thing 17 I'd mention is that we have recommendations from 2020, that 18 ask the Navy to reconsider how it defines operational 19 availability, because oftentimes those definitions can be 20 based upon a ship just being able to get underway, but not 21 actually being able to do its missions. And those 22 recommendations remain unopen and there's no action yet on 23 those recommendations.

24 Senator Kaine: I have one other question I'd like to 25 ask maybe before, I'm sure you have a second round, and I



1 may think of some other things too, but to Ms. Oakley, in 2 your opening testimony, you were kind of assessing some of 3 the challenges that you know, undergirded the report that 4 you recently did about pacing challenges and construction.

And one of the things you said, maybe in response to a question, is some degree of sort of unreality between the ships we're putting under contract and the Navy sort of does it with an optimism about the future budget meeting what they've put under contract, and we're not really lining up what we're saying we're going to do with the budgetary resources.

12 And I'm troubled by this. I mean, here's a recent 13 example that speaks to a potential cognitive dissonance. We did a reconciliation bill a couple weeks back, that 14 15 suggested we should spend about another \$150 billion in 16 defense. We're going to continue - on top of what the base 17 budget has been, we're going to continue to work on that. 18 But at the same time as we were doing that, the secretary 19 was sending out kind of the cut memo to the Pentagon, 20 exempting 17 areas, but saying to everybody else, come up 21 with a five to 8 percent cut.

Now, I get it, that just asking for a cut plan does not mean you're going to accept the full plan. And just because you've exempted somebody in round one doesn't mean you won't come back to them later. But it did seem to me a little odd



that we were saying we need 150 billion more dollars and at the same time, I'm reading the memo from the Secretary of Defense saying, everybody's got to give me cuts. Maybe the cuts are going to be reprogrammed back in, but I just worry that we are not really being like cold-blooded and objective and just truthful.

I mean, sometimes the eyes are bigger than the stomach, and we want more than we're willing to pay for, but what is the way we get at that problem? I mean, it's got to be discipline on our shoulders, but it also has to be disciplined over at the Pentagon.

Ms. Oakley: I think there's a couple of ways to get at that. You know, when we're talking about realism, we don't just mean that they can't do what they put on paper under their current budget, we mean that they can't do what they put on paper at all. Right?

17 So, they walk into these programs oftentimes with these 18 unrealistic business cases that say, oh, the technology will 19 mature, the design will work out, that system will get there 20 on time. And then we structure all of the cost and schedule estimates around that optimism, and then they don't arrive. 21 22 And then that causes cascading delays and problems. Right? 23 And so, then the overall top line that's required 24 increases, instead of putting in the work at the beginning 25 to gain the knowledge that you need to be able to



understand, here's what it's going to take to get there,
both from a cost and schedule perspective, and then putting
forth those realistic budget estimates, those realistic
schedule estimates, that match with that.

5 Now, that doesn't mean that you automatically say, oh, 6 you know what, it's going to take us 20 years to build this ship, and that's just what it is. Right? That's where our 7 8 leading practices for product development could really be 9 useful to the Navy, because these leading companies, they 10 don't focus on going for a home run every time, they build 11 their products such that they can be designed and iterated 12 on over the course of a number of years.

13 They put in that work at the beginning to understand 14 what is the most important thing that we need to provide a 15 valuable capability to our customer or to the sailor in this 16 case, and how do we then structure a program that can be 17 done quickly to get that out all while we're thinking about 18 what is the next iteration? what's the next thing that we 19 can get them guickly? And that then therefore truncates the 20 amount of money that you need and the amount of time that you need, to look toward devoting that money and allows them 21 22 -- could allow the Navy to be flexible and agile to changing 23 threats.

Senator Kaine: Great. Thank you very much.
Senator Scott: Okay. I'll just ask a question before



Senator Sullivan gets ready. Dr. Seidle, you worked in the auto industry? Were you a supplier or were you one of the big companies?

Dr. Seidle: so, first I worked with General Motors for about 13 years, then I was with Alcoa when we stood up a plant to support the big three automakers.

7 Senator Scott: Did you ever get a fixed price contract 8 with one of the OEMs? Did you ever agree to build something 9 for a fixed price?

10 Dr. Seidle: I certainly did.

11 Senator Scott: And when you did that, did you like 12 take in consideration you might have to pay somebody to do 13 the work?

14 Dr. Seidle: Sure did.

Senator Scott: Did you take in consideration what you would have to pay them in wages?

17 Dr. Seidle: Yes.

18 Senator Scott: Probably did, right. After you got the 19 contract, did you go back to the OEM and say, I really don't 20 like this contract, I'd like to get paid more?

21 [Laughter.]

Dr. Seidle: I'll tell you sir; we had several contracts that were underwater when I was with Alcoa trying to really buy our way into that business the first time. And so, we dealt with those to your point, right. We owned



1 it.

2	Senator Scott: They were so understanding. Right.
3	They just said, sure, we'll just pay you more money. It was
4	a bid contract and you made the decision to go into that and
5	get the contract and then you lost money.
6	Dr. Seidle: There wasn't enough understanding, sir.
7	Senator Scott: So, when you were doing that, did you
8	say what I heard, that I went down and that the builder just
9	decided to stop working.
10	Dr. Seidle: Yeah.
11	Senator Scott: Did you ever do that?
12	Dr. Seidle: No, I did not do that.
13	Senator Scott: Would that have ever helped you get
14	more contracts that OEMs?
15	Dr. Seidle: That would not, sir.
16	Senator Scott: Alright. So, did one of the OEMs ever
17	say to you, you know, I'm really worried about your
18	workforce?
19	Dr. Seidle: Yeah.
20	Senator Scott: But did they say, let me give you a
21	whole bunch more money?
22	[Laughter.]
23	Dr. Seidle: No, they didn't, sir.
24	Senator Scott: So, I mean, what's frustrated me is
25	that these people go bid on these contracts so like



Senator Kaine said, well, you brought it up earlier, that there's been wage compression. And I think in a lot of industries there's been a lot of wage compression, but no one told these companies to set the wage at this point. They made that decision.

Dr. Seidle: Yeah. This gets to the business case
issues that Ms. Oakley brings up. Right? The business case
has to stand on its own for them and for us both.

9 Senator Scott: Now, it's our job to review, to make 10 sure -- Like when I ran an auto company, we were a supplier 11 to the big companies. So, for my contracts, I had to reduce 12 my prices. I defined productivity gains every year, year 13 after year after year, I lost a contract by contract. They 14 never came to me shocking and said, let me just give you a 15 little bit more money, I feel sorry for you.

16 Dr. Seidle: Yeah.

Senator Scott: Just makes you mad that these people go out there -- and what you've said is, they're bitching because they can't get the workforce. Whose responsibility, is it? They bid for their own contract.

Dr. Seidle: In my opinion, the business cases right now are not where they need to be for both our industrial partners and ourselves. And so, then we have some of these contracts that are pre COVID contracts as well and ultimately, we find ourselves in a tough situation.



1 Now, sir, I will also tell you I am a proponent of 2 working closely with them right now to get to the right answer, to make these adjustments, to do the right thing, 3 because our nation needs it. And also, as I've been out 4 5 there meeting with them, I see industrial partners that are б willing to come to the party as well with us. I can't speak 7 to what's happened the last two or three decades on that 8 front, but I can tell you what I'm seeing now. 9 Senator Scott: Right. Senator Sullivan. 10 Senator Sullivan: Thank you, Mr. Chairman. Great 11 questions. It's good to have a businessman as a Senator. 12 [Laughter.] 13 Senator Sullivan: Okay, boy, oh boy. I don't even know where to begin on this topic, but I think the really 14 15 good news is, as the President of the United States and 16 everybody on this committee, bipartisan group of Senators,

17 we all want to get at this problem, fix this problem. Boy, 18 I don't even know where to begin.

Let me begin, Ms. Oakley, great job on your guys' newest study that came up, your report. I sent it to the incoming Secretary of the Navy and said, you should read this. Very quickly, from your big analysis, the top three things, if you've already said it, say it again, that you think we should be doing.

And again, the big idea here is that everybody wants to



fix this, the President, the SEC NAV, all of us, so that's not always the case in Congress. And we're willing to put a lot of money towards it, but that's not always needed either. What are the big three that you would recommend succinctly here?

Ms. Oakley: I think you're referring to the industrialbase report that we issued, right?

8 Senator Sullivan: Yeah.

9 Ms. Oakley: So, from that report, I think the biggest 10 thing is that the Navy needs to ensure that it seizes this 11 bipartisan support and opportunity that it has with all the 12 investments that are going in to address the industrial 13 based challenges and issues. So that report, as you note 14 determine that the Navy didn't really have metrics in place 15 to --

16 Senator Sullivan: Or a strategy for that.

Ms. Oakley: Or a strategy to guide those investments. Senator Sullivan: The last Navy Secretary and God love them -- but you know, when you're getting the climate action report to Congress, which is not required by Congress, you're talking about climate change all the time and not ship building. No wonder we're in this disaster, but I'm going to look towards the future.

24 [Laughter.]

25 Ms. Oakley: Well, that takes me to my next point in



1 looking toward the future. So, the Navy kind of has two 2 problems here, right? As Admiral Downey mentioned, there's already 90 ships under contract, I think that amounts to 3 4 about \$150 billion backlog of ships. So, the ship in some 5 cases has already sailed on those products. And so, what 6 they can do in that regard is look toward gaining that 7 knowledge about design, ensuring designs are stable before 8 construction begins, so that that construction progress 9 isn't disrupted and we're not talking about design changes.

10 Senator Sullivan: Okay. Can I really, I want to touch 11 on that point. Did you guys see the Wall Street Journal 12 piece? they did a really good piece recently on, I'm trying 13 to think of what ship it was.

14 Ms. Oakley: Frigate.

15 Senator Sullivan: It was on Frigate and all the change 16 orders that just killed it. I had the honor of having 17 lunch, just a week ago, with the former Secretary of the 18 Navy, John Lehman, who was responsible for building Reagan's 19 600 ship Navy. Pretty impressive, right? The size of the 20 U.S. economy was about one third of that size than we are 21 today, the employment, and these guys just focused and built 22 a gigantic navy. They helped us win the Cold War. He did 23 it. He was secretary for six years. And I said, Mr. 24 Secretary, how'd you, do it? And what's the number one 25 thing? He said, change orders.



I stopped him. I said, once we get through a phase done, done. And he told me all the examples of industry and everybody, some big top guy in the industry tried to get him fired. And he says, we're done, no change, build that ship. Build 30-40 of them, maybe come back after that. Build the ship, stop with the change orders.

7 I think the Navy right now is almost the opposite. 8 That Wall Street Journal article was -- every time some 9 captain in the Navy had a new idea, it was a brand-new 10 change order it seemed like on that ship. So, would you 11 agree that that's like a huge one? Certainly, Secretary 12 Lehman thought it was huge, and that guy knew what the heck 13 he was doing, right? He built the 600 ship Navy under 14 Reagan.

15 Ms. Oakley: I think that when you're talking about 16 being able to snap a chalk line like that and say no more 17 change, you have to make sure that you've done the work to 18 understand that you can even actually build the ship that 19 you've designed. And so, our recommendations would focus on 20 doing that upfront work so that you can snap that chalk 21 line, and be assured of the ship that you're building and 22 the timeframes and costs with which you're going to be able 23 to build it.

24 Senator Sullivan: Okay. It's a great point, because 25 it's not like we've never done this before, right? It's not



1 like we don't know how to build Navy ships. It's not like 2 we don't know how to build a giant fleet. We just need to 3 relearn our lessons from the past. Would you agree with 4 that?

5 Ms. Oakley: I agree. The Navy knows what it's doing. б Senator Sullivan: Admiral, let me ask you, it's a 7 really big question and you're the perfect guy to answer it. 8 So, you know, we have this great impeccable culture of 9 excellence and safety record in our nuclear reactor program. 10 And the head of Navy nuclear reactors is an Admiral, 11 starting with the legendary Hyman Rickover, who has an 12 eight-year billet. You think that's part of the reason Navy 13 nuclear reactors has been so successful?

Admiral Downey: Certainly, is part of it. Continuityis important in these complex projects.

16 Senator Sullivan: So, I had a provision last year in 17 the NDAA that said, your job, NAVSEA, which oversees all the 18 ship building from design to building, should have an eight-19 year billet. A little radical, but I took the example from 20 the Navy nuclear reactors. How long is your billet right 21 now?

22 Admiral Downey: Three years.

23 Senator Sullivan: Okay. Three years.

Admiral Downey: And typically, it's a year or two

25 extensions. You start with three-year orders --



Senator Sullivan: And oh, do they normally extend you?
 Admiral Downey: Oh, yes.

3 Senator Sullivan: Okay. Well then that makes my 4 amendment even smarter. Because I think you're a vice 5 admiral, by the way. Is it always a vice admiral? NAVSEA?

6 Admiral Downey: This job it's been a vice admiral 7 since the seventies.

8 Senator Sullivan: Okay. So, I think you're a great 9 Vice Admiral, but when you're two, three years in, you're 10 three, and this is nothing against you or all the other Vice 11 Admirals, this is a really big job. You're probably like, I 12 wonder if I can make admiral. And so, you're looking around 13 and you are kind of maybe not so focused. I'm not saying 14 you; I'm just saying generically.

So, the Senate in a debate, right in this room, good debate, I got Democrats, Republicans pushed back on me and by the end they were like, geez, Dan, this makes a lot of sense. Let's do eight years, NAVSEA, like the navy nuclear reactors head in the last three years. He's a full Admiral, four star and that way, and it's your last job, just like navy nuclear reactors.

Now we were told the Pentagon and the Navy hated my idea. When it went to conference, they stripped it out. So, there you go. In innovation that I think was pretty darn good, you're even telling me that normally it's three



1 years, but they say, oh, you might be extended one or two if 2 we need you. No, let's just say like Navy nukes that NAVSEA 3 should start as a three star, get promoted to a four star, 4 eight years.

5 So, you are responsible designing and building ships. 6 Three years, I mean, how long does it take to build an 7 Arleigh Burke guided missile destroyer, typically? 8 Admiral Downey: About five years. Yes. 9 Senator Sullivan: So, you can't even oversee the 10 building of one ship, is that correct? 11 Admiral Downey: Not from start to finish. 12 Senator Sullivan: No, you can't. How about a frigate, 13 how long normally? 14 Admiral Downey: Well, frigates from the past, we're 15 still working on that schedule now. 16 Senator Sullivan: I know you are, 17 Admiral Downey: But this started in 22, and we're 18 forecasting a three-year delay, so seven years. But it 19 should be back to the four-ish year point of view. 20 Senator Sullivan: But even that's four years, right? 21 Admiral Downey: Yes, sir. 22 Senator Sullivan: Okay. So now I know you probably 23 need to get permission from Big Navy to answer this 24 question, but what do you think about the idea of having the

25 NAVSEA, like the head of nuclear navy nuclear reactors being



an eight-year billet, oversee it, own it, and then you retire as a four-star Admiral when you're done. Just the way Admiral Rickover did, just pretty much everyone else did, with the exception, I think of Admiral Richardson who did such a good job, he was promoted CNO, but that was unusual. What do you think of that idea? Especially, how many years are you into your current billet?

9 Senator Sullivan: So, you think you'd be able to do a 10 better job if you were looking at your current billet and 11 say, I have seven more years to turn this machine around. 12 Or right now, you're like, geez, I got two more years left. 13 I'm wondering if I'm going to make four-star Admiral. I 14 wonder if I should be looking around. What do you think is 15 better for you?

Admiral Downey: Just over a year. January of 24.

Admiral Downey: So, a couple technical nuances, there is no four star. I'm an engineering duty officer, so our last four star was Admiral Rickover.

Senator Sullivan: We can make the NAVSEA Admiral in his final three years of an eight-year billet, a four-star admiral.

Admiral Downey: I understand, I'm not out looking for another one, not that I wouldn't love to stay.

24 Senator Sullivan: None of this is -- I'm using you as 25 a generic example. None of this is directed at you. You're



8

1 doing a great job.

Admiral Downey: What I would offer is, my most complex jobs I've had have been more than three years. Not by initial design, but I had a certain destroyer program and I wasn't leaving even after selected for flag, until that ship was delivered.

7 Senator Sullivan: And isn't that making my point? And 8 if NAVSEA typically gets extended beyond three years, which 9 sounds like it does. Doesn't that make the point of what 10 we're trying to do here? Because this committee, in the 11 U.S. Senate agreed with the amendment we passed, that 12 amendment got stripped out in the house conference.

Admiral Downey: Continuity is usually a good thing. And then you can do whatever you need to do to the person if they're not performing. Another nuance, it's a little complicated, just my personal comment, as you promote halfway through, who relieves you? There's a three-star reliever. So, it's a little -- the long runs got to be thought of.

20 Senator Sullivan: Don't we do that with navy nuclear 21 reactors?

Admiral Downey: No, that's four star relieves a four star.

24 Senator Sullivan: Alright. We will figure that out. 25 Anyone else have a view on that from our experts here? I'm



1 way over my time, sorry.

2 [Laughter.]

3 Dr. Seidle: I'll answer it with a question. Any large 4 corporation that has complex products, do they change out 5 their leadership that quickly?

6 Admiral Downey: There you go.

7 Ms. Oakley: That's consistent with my knowledge.

8 Senator Sullivan: Okay. Thank you, Mr. Chairman. I 9 think I'm going to make another attack at this idea, and 10 hopefully the Navy will agree with us and not fight to kill 11 it, which they did successfully last year.

12 Senator Scott: Thank you. Admiral Downey could a ship 13 builder, let's go back to what Senator King was talking 14 about. Could a ship builder act on recommendations from its 15 workers such as standardizing the bolts or making other 16 changes as Senator King suggested? Or would it take years 17 to get the change qualified and approved by the Navy?

18 Admiral Downey: Thank you for the question, sir. Ιt 19 depends upon what the change is, what the Senator was 20 referring to, our Gemba walks, you're at the water for, I'm 21 sure you're familiar. So, we have been on the surface 22 maintenance side in the last 20 months, we've doubled the 23 on-time delivery. And we have been doing Gemba walks for 24 about the last three years, of what is holding things up, 25 how do we go faster? Getting it into the larger complex



1 system, it takes longer than that. And we've seen that.

So, we've been really focused on additive manufacturing efforts. We've got about 15 different major projects going on and moving those parts as an example, from 900 to 9,000 available. We need to move much quicker here. We are not moving quick enough.

7 Senator Scott: Why does it take -- you know what, I 8 don't understand. I was never in this shipbuilding 9 business. But I don't get why it would take that long to 10 build a ship? I mean, you have all the parts and so why 11 would it take, I mean, you can see maybe it'd take two years 12 to build a ship, but four years, five years, eight years. I 13 mean, if you just start, think about it. If the way we do 14 manufacturing in this country, it didn't seem like it would 15 take that long, right?

16 Admiral Downey: So that's an area we need to improve, 17 we don't have all the material upfront. We buy it 18 throughout. So, the committee congress has supported us 19 significantly in the last few years of changing advanced 20 procurement, from two years to three years. Half of our 21 material in the last three to four years, five years has 22 taken half as long again too. So, we don't start with all 23 that material there.

Even if it's a follow-on multi-year, we need to affect that and make sure we're ready. We need better efforts in



getting the jobs for the workers that the hours that are effective as we analyze them, it's not where it needs to be. They're back and forth to the work site.

4 Senator Scott: But that's the responsibility of the
5 company that bid on this contract.

6 Admiral Downey: Yeah, I'm not arguing, sir.

Senator Scott: That's what's frustrating about this, is that's their job. Have we asked you that when you were in the auto business? Did they? No

10 Admiral Downey: I agree with you.

Senator Scott: How long does it take to build a cruise ship?

13 Admiral Downey: It's closer to the couple of years.

14 Senator Scott: Do you know?

Ms. Oakley: Yeah. We benchmarked and the longest commercial ship that we benchmarked took 52 months. The quickest Navy ship that we benchmarked was somewhere around 8 90. It was a complex commercial cruise ship.

19Senator Scott:Took 52 months

20 Ms. Oakley: At most.

21 Senator Scott: And what was the -- like the second one 22 when like Royal Caribbean has all these oceans or whatever -23 - well how much of the second one after they built that

24 first one at that design?

25 Ms. Oakley: Don't have that data, but it's never



1 longer.

2 Senator Scott: Golly. It just doesn't make sense. I 3 mean, it doesn't make any sense to me why we're doing this. 4 So, Dr. Seidle, why did the Navy use a firm fixed price 5 contract for the design construction of the frigate? What 6 was the rationale and do you think this was right?

7 Dr. Seidle: I can't speak to the rationale of that. 8 And honestly, Admiral Downey might have better sight picture 9 on that. We certainly talk a lot about firm fixed price for 10 lead ships is not what we typically want to do, right? 11 That's not how we are typically trying to roll. So not sure 12 about the decision back at that time. I can pull the thread 13 on that or if Admiral Downey has additional insight. But 14 it's not typical what we would do for a lead ship.

15

Senator Scott: Go ahead.

Admiral Downey: The Navy awarded a fixed price incentive fee with the ship builder for a first of class, and then the ship builder awarded a firm fixed price with their subcontractor. I don't know why we didn't say, why are you doing that? How is that risk balanced? But we also awarded a fixed price incentive fee for T-AGOS, for example.

So, you can trace this back several years ago, that there was more than two -- there was three or four programs that we're starting first of class with and we're doing fixed price. And having been involved with this business a



long time, generally that's not a risk balanced approach for
 first of class.

Senator Scott: Ms. Oakley, so when you give them these 3 4 ideas and then they don't do them, do they tell you you're 5 crazy? Do they just ignore you? What do they do? б [Laughter.] 7 Ms. Oakley: Thankfully, I've never had anybody in the 8 Navy tell me I'm crazy. 9 Senator Scott: Do they just ignore you? Ms. Oakley: Yeah, It's just a lack of action in a lot 10 11 of different respects. I think also too the recommendations 12 don't get elevated to the level that they need to be, to be 13 able to be resolved. And I'm glad to be able to work with 14 Dr. Seidle you know, going forward on how we can get some of 15 these recommendations implemented. 16 Dr. Seidle: Okay. I'll, make a comment on that. We

17 met last week to talk about this as well and spent some time 18 together. I think in the past we typically are talking to 19 each other via reports, which is not really the way to get 20 after it. And I think we can do a lot better job of working 21 closely with her office and I mean that sincerely.

22 Senator Scott: You know, going back to what Senator 23 Sullivan said, the problem you have if you sit here, who's 24 responsible? Nobody. Because we change people out all the 25 time. So far, like can you say John was responsible or



Sally was responsible for the frigate not being done on
 time?

3 Admiral Downey: No.

4 Senator Scott: In business you could.

5 Admiral Downey: Yes sir. No. multiple folks involved 6 in multiple turnovers over that period of time.

Senator Scott: And has anybody been held accountable?
Admiral Downey: Not from a termination perspective.
Senator Scott: From a didn't get promoted?

10 Admiral Downey: Yes. I will share, I've terminated 11 for cause, relief for cause, multiple folks. I terminated 12 the Ford program manager when I was the PEO, I terminated 13 the shipyard, CEO and XO out in the far east this fall. And 14 those aren't decisions that you ponder. It's not fun, but 15 those are decisions that have to be reported to Congress and 16 you got to move out on it. Overall, where that is 17 appropriate, it has in the longer run a positive effect on 18 the workforce and the product line.

Senator Scott: Yeah. You know, in business, no one wants to fire anybody, right? And it's not your fun day, right? boy today am excited. But if you don't, then nothing happens. I'm done.

23 Senator Kaine: Senator Shaheen is on her way, so as 24 soon as she comes in Ill depart. Tariffs on aluminum and 25 steel, how might that affect the cost of these inputs into a



supply chain where we're already seeing costs go up faster
than the rate of inflation?

3 Dr. Seidle: So, we're having those discussions. It's 4 a little early from an assessment perspective. You know, 5 probably about half of our aluminum and a third of our steel б in 23 came from Canada. Clearly tariffs in those arenas 7 could drive cost. But having said that, the steel plate and 8 bar for our ship building efforts, most of it is 9 domestically sourced. But we are expecting impacts, but we 10 don't have our hands around yet what those impacts are yet. 11 Senator Kaine: Would it be hard or easy to go from, 12 you know, 66 percent domestic to a hundred percent domestic, 13 like that?

14 Dr. Seidle: I don't have the --

15 Senator Kaine: It'd be hard. Let me say one last 16 thing and Senator Shaheen's about to arrive and I know I 17 have a couple of questions. Just on the matching our 18 reality to our budget, I'm very pro AUKUS. I think it's 19 great. I think we need to have more alliances in the India 20 Pacific. We need to deal with the China threat that the 21 chair discussed.

But I am worried about this reality to budget and in particular, given that the Australian Parliament did something that I just shuttered TO contemplate what it would be like if we tried to do this here. They had a debate and



they voted to give the U.S. \$3 billion for the U.S.
 workforce to help build subs for Australia.

So, imagine we were having a debate on the floor of the 3 4 Senate about we want to give the UK \$3 billion to help us do 5 something. It would be a very tough debate. They did it 6 and they made the commitment and it demonstrates the concern 7 that they have about China, obviously. But we have a lot at 8 stake in trying once they have gone out on that political 9 limb way out on the limb, we've got all lot at stake in 10 trying to make sure we can meet the commitment.

And so, we need to meet our own needs for sure. But that's a huge commitment that they've made to us, and we need to reciprocate with that. I yield back, Mr. Chairman. Thank you.

Senator Scott: Senator Shaheen, are you ready?
Senator Shaheen: So, I think this is for Dr. Seidle.
Am I pronouncing your name correctly?

Dr. Seidle: You most certainly are, ma'am. 18 Thanks. 19 Senator Shaheen: Alright. As you know, at our 20 Nation's four public shipyards, and actually Senator Kaine 21 may have raised this concern, the maintenance and 22 sustainment mission is critical. With that in mind, I 23 wanted to ask about the future of the SIOP program, which is 24 very important to the Portsmouth Naval Shipyard. And I hear 25 that the Navy's getting close to a decision on the



infrastructure upgrades that are required for the Ford Class carrier program at the Puget Sound Shipyard. And that this will be the largest construction project that the Navy's ever undertaken.

5 And while I understand that the Navy has said it will 6 not impact other SIOP projects that are already underway, I 7 want you to reassure me that that is in fact the case 8 because there are a number of projects underway at the 9 Portsmouth Naval Shipyard that will be affected if there are 10 impacts on other yards that already have SIOP projects under 11 construction.

Dr. Seidle: Yeah, thank you for that question, ma'am. The multi-mission dry dock obviously, in the infrastructure upgrades is an important effort that we are absolutely looking at, and intend to move forward with.

16 I think it's fair to say no impacts to current SIOP 17 projects that are ongoing right now. We have about 6.3 18 billion worth of projects across 51 different projects. 19 And, you know, it includes dry docks up at Portsmouth, two 20 of those there. We got a dry dock at Norfolk; we got a dry dock going in at Pearl as well. And so those efforts are 21 22 all ongoing. The M2D2 is about 80 percent complete from a 23 design perspective.

Like I said, we don't expect impacts to current SIOP projects, but we will obviously prioritize funding and SIOP



issues going forward. And some of that will play out in our
 decision making and we'll continue to update via kind of our
 SIOP five-year plan.

I'm bullish on like SIOP is doing great things for the Navy, Mark Edelson and his team are really doing good work. Not only solving some of these infrastructure issues that we've had forever -- somebody was saying you know, our most recent built shipyard is in 1908. We don't often think about it that way.

10 Senator Shaheen: New Hampshire goes back to 1800, so -11 -

Dr. Seidle: I know, right? So just great work ongoing there. Also, a lot of industrial equipment, you know, 500 million and probably 237 pieces of equipment, I think is the number. So, we are committed to stay in the course on SIOP in perpetuity. So, we'll continue to keep you updated and apprised as we move forward.

18 Senator Shaheen: So, as you're thinking about the 19 commitment and Puget, what's the timetable? And so, what 20 should people who are watching this be considering as 21 they're thinking about where the decision points are for 22 what's going to happen?

Dr. Seidle: Yeah, ma'am. I'll take that question for the record and get back with you from a timing because I don't want to misspeak on that because I know it's an



important piece of the equation. But we'll take that for
 the record and come back to you.

3 Senator Shaheen: Okay, thank you.

Admiral Downey: Ma'am, I can offer, being responsible for the shipyards. I have just had an update this morning on how it's going in Portsmouth on the dual docking capability, and overall going well. That project is well ahead of M2D2, but your senses are right. It's a large project, M2D2, Ford-class carrier docking capability and major electrical upgrades.

As we go through these SIOP reviews and decisions, there's two constant themes of the reviews. How is it going to affect the work of the ships that are being processed through the yards? And then how is it going to affect the other projects?

So, these are themes at the highest levels of the Navy as we go through, and we'll get the specific dates, but roughly M2D2 is, I'll use the phrase, a slow start around the 28 timeframe and 2030 kind of the large start. That's the rough timeframe and we'll come back and validate. A lot of that Of course depends upon where we are in the budget process and what the national priorities are.

23 Senator Shaheen: And so, will the fact that we're in a 24 continuing resolution for the remainder of this year affect 25 that?



1	Admiral Downey: The continuing resolution approach
2	will affect some of the maintenance decisions for some of
3	our platforms, but not the construction projects that I'm
4	aware of.
5	Senator Scott: Okay.
6	Senator Shaheen: Thank you, Mr. Chairman.
7	Senator Scott: All right, thanks to the witness.
8	Thanks for coming, thanks for your testimony. We're going
9	to leave the record open for three days to take questions
10	for the record.
11	This concludes the meeting.
12	[Whereupon, at 4:09 p.m., the hearing was adjourned.]
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