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Before the

Subcommittees on Seapower and  
Readiness and Management Support

COMMITTEE ON  
ARMED SERVICES

## **UNITED STATES SENATE**

HEARING TO RECEIVE TESTIMONY ON THE SHIPYARD  
INFRASTRUCTURE OPTIMIZATION PROGRAM

Tuesday, May 10, 2022

Washington, D.C.

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2 OPTIMIZATION PROGRAM

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5  
6 U.S. Senate

7 Subcommittees on Seapower and  
8 Readiness and Management  
9 Support

10 Committee on Armed Services  
11 Washington, D.C.

12  
13 The subcommittees met, pursuant to notice, at 2:44 p.m.  
14 in Room SD-350, Dirksen Senate Office Building, Hon. Mazie  
15 Hirono, chairman of the subcommittee, presiding.

16 Committee Members Present: Hirono [presiding], Kaine,  
17 Blumenthal, Peters, Cramer, Sullivan, Wicker, Fischer,  
18 Ernst, Scott, and Hawley.

1           OPENING STATEMENT OF HON. MAZIE HIRONO, U.S. SENATOR  
2 FROM HAWAII

3           Senator Hirono: This hearing will come to order. We  
4 will momentarily be joined by Senator Kaine and other  
5 members. We are, as you know, in the midst of voting.

6           I would like to welcome our witnesses to the hearing  
7 this afternoon: Mr. Frederick Stefany, Principal Civilian  
8 Deputy Assistant Secretary -- that is a mouthful. Welcome,  
9 Mr. Secretary -- Assistant Secretary of the Navy for  
10 Research, Development, and Acquisition; Vice Admiral William  
11 Galinis, Commander of Naval Sea Systems Command; Rear  
12 Admiral Troy McClelland, Program Executive Officer for  
13 Industrial Infrastructure; and Ms. Diana Maurer, Director of  
14 Defense Capabilities and Management for the Government  
15 Accounting Office. Thank you for your service to the nation  
16 and for the truly professional service of the men and women  
17 under your command.

18           I also want to recognize our ranking member, Senator  
19 Cramer. I also want to recognize Senator Kaine and Senator  
20 Sullivan, and I appreciate my colleagues' willingness to  
21 hold this Joint Readiness and Seapower hearing on this very  
22 important subject.

23           We stand at a crossroad today. The nation's shipyards  
24 are in dire need of modernization to ensure we can maintain  
25 the current fleet and the fleet of the future. I am

1 encouraged that the Navy has finally gotten serious about  
2 investing in this critical infrastructure that has been  
3 neglected for too long.

4 In Hawaii we are all proud of Pearl Harbor Naval  
5 Shipyards' contributions to our fleet's readiness, and I  
6 want to be sure that the yard receives the resources it  
7 needs to keep our fleet in fighting shape. I look forward  
8 to hearing from you this afternoon about how the fiscal year  
9 2023 budget supports this plan.

10 The Navy has begun a once-in-a-generation program to  
11 modernize its shipyards under the Shipyard Infrastructure  
12 Optimization Program, or SIOP. This 20-year program to  
13 improve the shipyard infrastructure is an effort that has  
14 been sorely neglected for many years, and we have to get it  
15 right. We are relying on the digital twin modeling and  
16 simulation effort to develop the most efficient and  
17 productive layout for operations at the four public  
18 shipyards.

19 Last year, for example, we had to add \$250 million to  
20 fund the dry dock at the Portsmouth Naval Shipyard due to  
21 unexpected ballooning of the estimated cost. We need to  
22 understand what steps the Navy has taken to make sure we  
23 have better cost estimates of the projects we are  
24 undertaking. This will be important as the Navy turns to  
25 the dry dock replacement at Pearl Harbor Naval Shipyard,

1 which is the next dry dock to be constructed and will  
2 require significant dredging and filling to extend the  
3 existing dry dock.

4 We also need to understand how the Navy is structuring  
5 the SIOP effort to improve the efficiency of the shipyards  
6 to deal with the ship maintenance challenges that are facing  
7 the Navy today.

8 SIOP is not limited to just the dry docks. It also  
9 extends to optimizing the work on the shipyards through  
10 production facilities and other improvements to misaligned  
11 configurations. And this is why I have been so focused on  
12 the warfront production facility at Pearl Harbor. This  
13 project is important to the workforce there, and I want to  
14 ensure the Navy remains committed to it. We need to be able  
15 to maintain the fleet we have if we are ever to reach the  
16 fleet size the Navy has identified as required to respond to  
17 future threats. SIOP's success is critical to that goal.

18 And we want to help and we would ask the Navy to  
19 consider how the program could be accelerated without  
20 impacting availability. So I look forward to hearing today  
21 how we can work together to make sure SIOP is a fully  
22 successful effort.

23 And now I turn to Senator Cramer for his remarks.

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1           STATEMENT OF HON. KEVIN CRAMER, U.S. SENATOR FROM  
2 NORTH DAKOTA

3           Senator Cramer: Thank you, Chairwoman Hirono, as well  
4 as Chairman Kaine and Ranking Member Sullivan for agreeing  
5 to hold this hearing jointly to discuss a range of important  
6 naval shipyard issues that cross our subcommittee  
7 jurisdictions. And let us face it -- it is not just the  
8 issue of the day. It is the issue of the day with regard to  
9 the future of the Navy.

10          As I think about our naval shipyards it is striking to  
11 me how intertwined they are with our nation's history. In  
12 other words, they are really old. Even before our  
13 independences, for example, Norfolk Naval Shipyard, near and  
14 dear to Senator Kaine's heart, of course, was first  
15 established in 1767 under the British flag as Gosport  
16 Shipyard and seized 7 years later during the Revolutionary  
17 War. There is not even a Senator that old anymore, is  
18 there?

19          In the 1790s, the USS Chesapeake, one of the first six  
20 U.S. Navy ships authorized and funded by Congress, was built  
21 there. Later, the first dry dock in the Western Hemisphere  
22 opened in 1833, known as Dry Dock 1, and now a historic  
23 national landmark. It is still in use today. Think about  
24 it. It is 189 years old and still used to maintain naval  
25 vessels.

1           Suffice it to say, our four public shipyards all have  
2 storied histories in their truly national infrastructure.  
3 Each is over 100 years old and showing its age. The poor  
4 condition of these shipyards is having a serious negative  
5 effect on fleet operations today and the bill has come due.  
6 This is not a future problem. It is here now and one we  
7 must work together to solve.

8           So while there is a lot to discuss, and I appreciated  
9 Chairwoman Hirono's opening comments and much of what she  
10 had to say, I plan to focus my questions on how Congress can  
11 help in terms of authorities, workforce development, and  
12 funding. On the last point, I am hopeful the bipartisan  
13 group of Senators working on the Shipyard Act, many of whom  
14 are in the room today, will be able to get it done. I look  
15 forward to the testimony of our witnesses.

16           Thank you, Madam Chair.

17           Senator Hirono: Thank you.

18           Now I would like to turn to Senator Kaine, the chair of  
19 the Readiness Subcommittee. Senator Kaine?

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1           STATEMENT OF HON. TIM KAINE, U.S. SENATOR FROM  
2 VIRGINIA

3           Senator Kaine: Thank you, Chair Hirono. Readiness  
4 Subcommittee meetings are fun, Seapower Subcommittee  
5 meetings are fun, but this is really exciting, this joint  
6 meeting, and I want to thank the chair and I want to thank  
7 the witnesses for being here today and for your dedicated  
8 service to the country.

9           You have got some friendly faces around the dais when  
10 it comes to support for our Navy's shipyards, but at the  
11 same time the Navy has some significant challenges on its  
12 hands regarding the implementation of SIOP, especially the  
13 ability or inability to be on time, on budget.

14           There is no doubt that these are necessary investments.  
15 The condition of our shipyards, both in terms of  
16 infrastructure and workforce, given that the age of the  
17 shipyards was indicated by Senator Cramer, do require a lot  
18 of resources and support. We have to do our part here in  
19 Congress.

20           When we look at how the Navy has executed SIOP projects  
21 to date I have some concerns, and I also see some positives.  
22 On the concerns side, how do we ensure that the Navy can  
23 even program the average \$1 billion per year in budget  
24 requests over the next 20 years? The dry dock replacement  
25 at Portsmouth -- that is the Portsmouth in Maine, not



1 Virginia -- was originally estimated by the Navy to cost  
2 \$250 million. Then the cost doubled, and then it increased  
3 another \$250 million as a result of a sole-source contract.

4 So today my particular interest in hearing from you is how  
5 we have implemented the lessons learned from Portsmouth for  
6 the rest of the SIOP portfolio.

7 It is not all bad news. The Navy has invested well  
8 over the statutorily required 6 percental capital investment  
9 program since 2011. That is a real positive. The work of  
10 the GAO has never been more important than it is today, so I  
11 am glad to have Ms. Maurer here testifying again before the  
12 committee. I look forward to hearing her insights on how  
13 the Navy can better execute construction projects, modernize  
14 its capital equipment, and otherwise optimize shipyard  
15 operations.

16 So Madam Chair, thanks again for leading the charge on  
17 this hearing to discuss our shipyards in detail.

18 Senator Hirono: Senator Sullivan?

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1 STATEMENT OF HON. DAN SULLIVAN, U.S. SENATOR FROM  
2 ALASKA

3 Senator Sullivan: Yes. Thank you, Madam Chair, and I  
4 want to thank you and Senator Kaine and all my colleagues  
5 for conducting this hearing. It is a very important  
6 hearing. And to Senator Cramer's discussion of history, I  
7 actually was just talking to Senator Hirono as we walked  
8 down to the vote on the latest movie on Midway. I do not  
9 know if anyone has seen that movie but it is quite a good  
10 movie.

11 And it has got a scene where the shipyard, I believe  
12 that was in Hawaii, did a miraculous job of bringing the  
13 carrier, the Yorktown, back online to go fight in the Battle  
14 Midway and was decisive. So the shipyard point, about what  
15 Senator Cramer was talking about, really made history in  
16 that critical battle that was one of the most important in  
17 World War II, one of the most important battles in our  
18 nation's history. So that is how important this topic of  
19 discussion is.

20 As has already been noted, the average of naval  
21 shipyard facilities is over 60 years old, and the average  
22 dry dock age is approaching 100 years old, and we have seen  
23 the readiness of shipyards weaken as decisions were made to  
24 prioritize shipbuilding over ship maintenance. When  
25 initially developed, the Shipyard Infrastructure

1 Optimization Plan had a bill of \$21 billion over 20 years.  
2 That number has already increased in the last few years, and  
3 that is the topic I hope we can discuss in detail today.

4       Additionally, according to the GAO, the Navy cannot  
5 currently complete all required maintenance for aircraft  
6 carriers and submarines with our existing dry dock  
7 capabilities. So how can we balance these necessary capital  
8 investments with the existing maintenance requirements? I  
9 think we find ourselves in a challenging situation as it  
10 relates to operational demands, ship maintenance, and the  
11 conditions of the fleet, not to mention the challenges in  
12 the INDOPACOM theater and a look at where China is with  
13 regard to its shipbuilding and maintenance capabilities.

14       Another issue that I think impacts the Joint Force is  
15 maintenance on conventionally powered ships. Delayed  
16 overhauls of surface combatants that escort nuclear aircraft  
17 carriers also impact readiness. And I believe one option in  
18 that regard is to conduct lower-level maintenance at smaller  
19 private shipyards to free more space for more complex  
20 maintenance overhauls at our larger private shipyards. I  
21 hosted the Secretary of the Navy a couple of years ago to  
22 our shipyard in Ketchikan, Alaska, which has enormous  
23 capabilities and is looking to do a lot of work for the U.S.  
24 Coast Guard. We have another shipyard in Seward, Alaska,  
25 that just completed almost \$11 million worth of work on the

1 USNS Grasp, a Navy rescue and salvage vessel. The work was  
2 delivered on time, on budget, and received outstanding  
3 feedback.

4 So this is an all-hands-on-deck need, and I think there  
5 are shipyards across America, including in my state, that  
6 can participate and help out with regard to the challenges.

7 Thank you. I look forward to hearing our witnesses.

8 Senator Hirono: Thank you, Senator Sullivan, and I  
9 thank him for suggesting that we all go to see the new  
10 Midway movie, because it really highlights the importance of  
11 our public shipyards.

12 We will start this hearing by hearing from Secretary  
13 Stefany first. Please proceed.

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1           STATEMENT OF FREDERICK STEFANY, PRINCIPAL CIVILIAN  
2 DEPUTY ASSISTANT SECRETARY OF THE NAVY FOR RESEARCH,  
3 DEVELOPMENT, AND ACQUISITION

4           Mr. Stefany: Yes, ma'am. Thank you. I will be  
5 reading a statement for all three of us from the Navy.

6           Chairwoman Hirono, Chairman Kaine, Ranking Members  
7 Cramer and Sullivan, distinguished members of the  
8 subcommittees, on behalf of myself, Vice Admiral Galinis,  
9 and Rear Admiral McClelland, thank you for the opportunity  
10 to appear before you today to discuss the Department of  
11 Navy's Shipyard Infrastructure and Optimization Program,  
12 better known as SIOP.

13           Modernized and ready shipyards are generators of fleet  
14 readiness and are the strength of our national security. We  
15 appreciate the strong support this committee, and  
16 particularly the subcommittees have shown for infrastructure  
17 optimization efforts to date. We are committed to  
18 maintaining transparency throughout the planning and  
19 execution of the Department's SIOP investments.

20           As mentioned, SIOP is a once-in-a-century opportunity  
21 to revitalize our nation's four public shipyards, ensuring  
22 that these critical national security facilities are  
23 properly positioned to meet current and future needs of the  
24 Navy. It is about modernizing aging facilities, equipment,  
25 and dry docks that have served our fleet for generations,

1 and doing that modernization without disrupting our current  
2 maintenance that supports the readiness of today's fleet.

3 We also need to upgrade these facilities and equipment  
4 to support new classes of ships, such as the Ford aircraft  
5 carrier and the Virginia Block V submarines, while at the  
6 same time making the shipyards more efficient and more  
7 effective at maintaining all our ships. We need to bring  
8 them up to modern standards and ensure they are resilient to  
9 climate change. All of this will take years of consistent  
10 funding, construction, and leadership at all levels.

11 Informed by complete Future Years Defense Program,  
12 FYDP, the fiscal year 2023 budget includes our strongest  
13 SIOP funding since the program was established. It includes  
14 \$1.7 billion for the program in fiscal year 2023, with a  
15 sustained commitment of \$8.3 billion across the FYDP.

16 In fiscal year 2023, the request will support  
17 modernization of capital equipment and will enable advanced  
18 planning activities and required environmental assessments.  
19 The 2023 funds will also enable critical MilCon projects  
20 such as the start of the replacement of Dry Dock 3 at Pearl  
21 Harbor, Hawaii, and the continuation of multi-mission Dry  
22 Dock 1 in Kittery, Maine, and Dry Dock 8 saltwater systems  
23 in Portsmouth, Virginia, as well as the planning for the  
24 multi-mission dry dock at Bremerton, Washington.

25 Multiple Navy commands play key roles in SIOP planning

1 and execution. For example, the Navy Facilities Engineering  
2 Systems Command, or NAVFAC, builds and maintains the  
3 shipyards, the Naval Sea Systems Commands operates the  
4 shipyards, and the commander of the Naval Installations  
5 Commands hosts all of those activities.

6 To ensure disciplined oversight while maintaining  
7 uninterrupted support to the fleet, the Navy is treating  
8 SIOP as if it is a major defense acquisition program. We  
9 have established a program executive officer for industrial  
10 infrastructure late last year, we are developing an overall  
11 SIP acquisition strategy, and we are developing individual  
12 master plans with cost, schedule, and performance  
13 measurement baselines for each of the shipyards to measure  
14 our progress as we go.

15 We understand that for SIOP to succeed we must properly  
16 plan and execute SIOP work with impacting the shipyard's  
17 ability to execute their mission. Balancing SIOP's needs  
18 with that of the fleet and the shipyards is, and will  
19 continue to be, critical and an iterative process involving  
20 all stakeholders. We are committed to working as a team to  
21 ensure the program is executed to avoid impacting fleet  
22 operations or ship maintenance periods, and conversely, that  
23 ship maintenance availabilities do not impact downstream  
24 SIOP projects.

25 We believe improved SIOP governance, combined with

1 consistent funding, will focus and accelerate this critical  
2 long-term initiative. It will enable the Navy to sustain  
3 nuclear-powered warships we have now and the ones that we  
4 are building for the future fleet, strengthening maritime  
5 dominance in defense of our nation.

6 And with that we look forward to your questions. Thank  
7 you.

8 [The prepared statement of Mr. Stefany, Admiral  
9 Galinis, and Admiral McClelland follows:]

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1           Senator Hirono: Thank you. I would like to hear from  
2 Ms. Maurer.

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1           STATEMENT OF DIANA MAURER, DIRECTOR, DEFENSE  
2 CAPABILITIES AND MANAGEMENT, GOVERNMENT ACCOUNTABILITY  
3 OFFICE

4           Ms. Maurer: Thank you very much. Good afternoon,  
5 Chairwoman Hirono, Chairman Kaine, Ranking Members Cramer  
6 and Sullivan, and other members and staff. It is good to be  
7 back before both subcommittees today.

8           Over the past 5 years we have issued a series of  
9 reports about the poor condition of infrastructure at the  
10 Navy's shipyards. The 37,000 skilled artisans who overhaul  
11 and repair carrier and submarines often perform that work in  
12 facilities that are in poor condition, using equipment that  
13 is well past its expected service life.

14           As was mentioned, the shipyards were built well over a  
15 century ago to repair wind- and steam-powered ships. Their  
16 layout is far from efficient to maintain nuclear-powered  
17 vessels. Moving the people, equipment, and parts necessary  
18 to repair a submarine is like trying to drive the century-  
19 old streets of Boston.

20           Perhaps most significantly, the Navy does not have  
21 enough dry dock capacity to meet the future maintenance  
22 needs of the fleet. In 2017, we found that the Navy lacked  
23 a comprehensive plan for addressing these significant  
24 problems. The Navy, to its credit, developed the SIOP,  
25 created a program office to manage it, and kept Navy

1 leadership informed of its progress. In late 2019, we took  
2 an in-depth look at the SIOP. We thought it was a decent  
3 first step, essentially a series of plans to improve each of  
4 the shipyards, and at that time the Navy estimated it would  
5 take 20 years and spend about \$21 billion to implement its  
6 planned improvements.

7 We found that initial cost estimate was unrealistically  
8 low. Among other things, that \$21 billion price tag did not  
9 factor in inflation and did not include the cost to improve  
10 underlying utilities. We recommended the Navy improve its  
11 cost estimates to help manage the program and provide  
12 Congress the information that you need to help make funding  
13 decisions, and those recommendations are still open.

14 Fast forward to today. The Navy has refined its plan,  
15 identified resource needs, and enhanced leadership  
16 engagement. This provides a reasonable framework for  
17 eventually improving shipyard infrastructure. But the  
18 realities of the shipyards have not significantly changed  
19 since our 2019 report.

20 In a report that we issued yesterday, we found that  
21 overall facility conditions at all four shipyards remains  
22 poor and among the lowest across the entire depot  
23 enterprise. The average age of equipment has increased and  
24 most is beyond its expected service life. And the backlog  
25 of facility restoration and modernization projects has grown

1 to about \$7 billion. Plus the Navy faces some very real  
2 time pressures. Ford-class carriers and expanded payload  
3 Virginia-class submarines will need dry dock capacity that  
4 the Navy currently does not have. It remains to be seen how  
5 the Navy will specifically address these problems. Its  
6 proposed actions are complex and are many years away from  
7 being fully implemented.

8 We have a number of concerns about SIOP implementation.  
9 First, the Navy's estimated date for completing the  
10 individual shipyard plans has slipped to the end of 2024.  
11 As a result, we do not yet know the full details of what the  
12 Navy will upgrade and optimize, how long that will take, or  
13 what it will cost.

14 Second, as was mentioned, the estimated cost for the  
15 first three dry dock improvements projects have grown from  
16 just under \$1 billion to nearly \$6 billion. That does not  
17 bode well for the future cost of the 11 other planned dry  
18 dock projects.

19 Third, we are concerned that these increasing dry dock  
20 costs could crowd out other planned improvements. Dry docks  
21 should be a top priority but they are not the only priority.  
22 Mr. Stefany, Admiral Galinis, and Admiral McClelland  
23 understand these challenges and have committed to addressing  
24 them. Maintaining that top-level support will be vital  
25 because this effort will span many administrations and many

1 Congresses.

2 GAO will continue our independent oversight of shipyard  
3 improvements. Later this month we will start our next  
4 review, focusing on the Navy's cost estimates and schedule  
5 for SIOP projects. Our continued oversight will help inform  
6 Congress and enhance the Navy's efforts to improve its  
7 shipyards, which are vital for ensuring naval readiness.

8 Madam Chairwoman and Mr. Chairman, thank you for the  
9 opportunity to testify this afternoon. I look forward to  
10 your questions.

11 [The prepared statement of Ms. Maurer follows:]

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1           Senator Hirono: Thank you. We will proceed to 5-  
2 minute rounds of questioning. We will start with me.

3           So Admiral McClelland, are you the person that is  
4 charged with overseeing SIOP?

5           Admiral McClelland: Yes, Senator, I am. Admiral Troy  
6 McClelland and I have been assigned as the Program Executive  
7 Officer for Industrial Infrastructure, and SIOP is in my  
8 portfolio. I will note that I work very closely with the  
9 Naval Facilities Engineering Systems Command, the  
10 construction agent for design and construction, and Naval  
11 Sea Systems Command, Senator.

12          Senator Hirono: But you are the point person to  
13 oversee SIOP?

14          Admiral McClelland: Yes, Senator, I am.

15          Senator Hirono: So one of the major issues relating to  
16 the modernization program is the vast difference between the  
17 cost estimates -- and I think Portsmouth is a prime example  
18 -- the difference between the estimates of what it would  
19 cost to modernize those facilities, that shipyard, and what  
20 the contract goes out for. So what is being done or has  
21 been done to make sure that as you embark on the Pearl  
22 Harbor Naval Shipyard modernization that the estimates are  
23 accurate?

24          Admiral McClelland: Thank you, Senator, for that  
25 question. So what I lead with is a mechanism for early

1 contractor engagement has been installed by the construction  
2 agent, Naval Facilities Engineering System Command, and  
3 specifically it is an acquisition strategy that allows us to  
4 have early engagement with multiple contractors so we can  
5 discuss with them means and methods, talk to them about the  
6 costs that they see, and then implement lessons learned as  
7 we are developing the program. And that has been done for  
8 the Pearl Harbor work, Senator.

9 Senator Hirono: Ms. Maurer, do you think that that is  
10 a lesson learned from the Portsmouth example?

11 Ms. Maurer: Thank you, Senator. Yeah, I would imagine  
12 and hope that the Navy has learned some lessons from what  
13 happened in Portsmouth in terms of cost growth with the dry  
14 dock.

15 Senator Hirono: Is your microphone on? I am having a  
16 little difficulty hearing you. Maybe you can get closer.

17 Ms. Maurer: Sure. Is this better?

18 Senator Hirono: Yes.

19 Ms. Maurer: Okay. So I would hope that, and it is  
20 clear from the Navy's reporting that it provided the  
21 Congress just a few weeks ago that they have listed a number  
22 of lessons learned, and one of the items that is noted in  
23 their report is that they are learning some lessons from the  
24 cost growth from the Portsmouth project as well as others.  
25 That is something we will be looking into in much more depth

1 when we start our new review, digging into cost estimates  
2 and schedule estimates for some of the larger SIOP projects.

3 I would note, as well, that there has been pretty  
4 significant cost growth for the Pearl Harbor project as  
5 well, which is obviously a critical capability that is  
6 required, but there has been significant cost growth in that  
7 project as well as increase in the overall scope.

8 Senator Hirono: So Secretary Stefany, in view of the  
9 challenges that you have had in making sure that our cost  
10 estimates are accurate, and you note that there is, in the  
11 2023 budget, \$1.7 billion, and then going forward what I  
12 think I heard you say \$8.3 billion for the SIOP project. Do  
13 you think that is going to be enough, in view of the  
14 challenges that you faced in accurate cost estimates?

15 Mr. Stefany: So, ma'am, one of the other lessons that  
16 we wanted to bring up was getting the design much more  
17 mature before we actually put out a formal estimate. That  
18 was another lesson we learned from Portsmouth and Pearl as  
19 well.

20 So I feel like the big projects that are in the next 5  
21 years, we have the designs mature enough that we have  
22 confidence that there is not going to be continued growth on  
23 those projects. Do we have enough funding across the FYDP  
24 to do all the work that we have planned for those 5 years?  
25 Yes, ma'am. I think later on we will talk about things



1 maybe to accelerate or move things from outside the FYDP in.  
2 But yes, in the 5 years for the FYDP we have enough funding  
3 to do the work we need to do in those years.

4 Senator Hirono: I think that we are really going to be  
5 very much focused on making sure that there is enough  
6 funding to proceed with SIOP because the four public  
7 shipyards are counting on us to be able to move forward.

8 And as mentioned, I have been very focused on the  
9 waterfront facility. I still do not quite understand why  
10 that production facility, which is going to enable the Pearl  
11 Harbor Navy Shipyard workers to be able to be more efficient  
12 in the work that they do, I still do not understand why the  
13 facility part of the modernization is not happening at the  
14 same time as the dry dock building. Care to comment, Mr.  
15 Secretary, very briefly? I am running out of time.

16 Mr. Stefany: Quickly, ma'am, yes. In a previous  
17 budget cycle we had to make a hard choice to push the design  
18 and the planning of the waterfront facility off because of  
19 budget constraints in a previous cycle. Now we are looking  
20 to see if we can bring it back. So previous decisions have  
21 pushed the facility out 2 years beyond the dry dock itself,  
22 but we are looking, as part of the next budget cycle, can we  
23 bring things forward and try to line them up. Because  
24 ideally, we would like to have them lined up, in a perfect  
25 world, ma'am.

1           Senator Hirono: Which means -- just one more thing,  
2 then -- as Ms. Maurer testified, a lot of the equipment is  
3 also beyond the age of when they should be replaced, and if  
4 we are not going to have the waterfront facility next to or  
5 near where the dry dock is, where they equipment will be  
6 necessary, we have got to make sure that the equipment that  
7 they are using is up to par.

8           I would like to recognize Senator Cramer.

9           Senator Cramer: Thank you, Chairwoman, and thanks  
10 again to all of you. So sticking with the lessons learned  
11 theme a little bit while looking forward, let me start with  
12 you, Secretary Stefany. Do you have any advice for us, in  
13 terms of policy, streamlining processes, authorizations,  
14 obviously funding, but what have we learned that we can be  
15 helpful with in making this process a little more efficient  
16 and effective?

17          Mr. Stefany: I will start with a couple, Senator, and  
18 see if Admiral McClelland has a couple more in the details.

19          Senator Cramer: That would be great.

20          Mr. Stefany: Authority which we have for these mega-  
21 projects to fund them incrementally over time, which you  
22 have provided us in the past, I think continuing that for  
23 these large projects and potentially looking at maybe a  
24 multi-year type procurement like we do in the shipbuilding  
25 world, where we can see if we can get the most efficiency by

1 building a set of projects together in a multi-year  
2 contract, a single, large contract I think are two  
3 authorities that might be worth looking at to give more  
4 flexibility and negotiating space to our team.

5 And I will ask Admiral McClelland if he has any more  
6 specific ones.

7 Admiral McClelland: Thank you, Mr. Stefany. So I  
8 would only mention maybe and emphasize what Mr. Stefany  
9 said. Really, the multi-year work relative to repair and  
10 maintenance is something we are looking very closely at.  
11 These are complex projects, and I sometimes think repair and  
12 maintenance could give the impression of less complexity.  
13 But really, the multi-year relative to, say, a dry dock that  
14 we are repairing and the way that relates to an operational  
15 availability, and a current operational availability, is  
16 absolutely critical.

17 And so our ability to have a flexible approach, multi-  
18 year funding certainly is going to help us execute over  
19 time, Senator.

20 Senator Cramer: Thank you for those. Along with all  
21 of that, of course, there is another challenge that we are  
22 hearing from everybody, I mean, seasonal, farm, hospitality  
23 workers to surgeons and very sophisticated technology  
24 workers, and everything in between, we have a workforce  
25 challenge in our country right now, particularly in the

1 private sector.

2 I presume you are experiencing the same thing or seeing  
3 the same thing. Do you have any thoughts, first of all,  
4 maybe what you are trying to do to recruit and retain  
5 employees at the yards but also, again, if there is anything  
6 that you think we could be doing.

7 Mr. Stefany: I think Admiral Galinis would be best to  
8 address the workforce at the shipyards.

9 Admiral Galinis: Yeah, Senator, that is a great  
10 question. Thanks very much. You know, we are seeing the  
11 same thing in the public yards as well. Our attrition rates  
12 are higher than what we had planned. Our recruitment rates  
13 are lower than what we had planned. And what we are doing  
14 is we offer some pretty good training as we bring people  
15 into the yards through our apprentice programs, so that is  
16 one real positive.

17 The other thing that we are looking at right now is,  
18 you know, we are actually looking at wages. For our entry-  
19 level positions -- and many times we are competing at a wage  
20 that is less than what some businesses in the local area,  
21 for example, whether it be Amazon or even a Starbucks, for  
22 example. Typically the starting wage for some of our  
23 mechanics is in that \$14- to \$15-an hour, so right about the  
24 minimum wage level. And what we are finding is in some  
25 areas where our shipyards are located, Portsmouth and Puget

1 Sound, in particular, the going wage is actually higher than  
2 that. So we are working through Navy leadership and with  
3 the human resources organizations across the Department of  
4 Defense to look at that wage grade that we are paying our  
5 folks.

6 Senator Cramer: I commend you on that, and if we can  
7 be helpful we ought to be. Clearly when you are competing  
8 for talent with Starbucks in the Seattle area it is a tough  
9 competitor, but we ought to have the best that we can get,  
10 and we want to certainly help you be competitive.

11 I will just bring up, real quickly, there are 18 co-  
12 sponsors, and a lot of from this committee, of the Shipyard  
13 Act, infrastructure and some additional resources. Maybe  
14 you could just generally comment on the Shipyard Act, what  
15 you know about it, and how helpful it maybe could be. Mr.  
16 Secretary?

17 Mr. Stefany: Yes, sir. The Navy supports that act,  
18 the idea of having a commitment of all the funding up front  
19 with a time -- not a time limit, you know, 1 year to spend  
20 it, but having a period of time to spend the funding most  
21 efficiently. And the knowledge that all, in this case, the  
22 total dollar value was there and could be worked with  
23 industry most effectively, is a best practice. So we would  
24 absolutely support that, sir.

25 Senator Cramer: It is always tough to apply the time

1 value of money in appropriations processes by the government  
2 but we need to get better at it. Thank you.

3 Thank you, Madam Chair.

4 Senator Hirono: Senator Kaine.

5 Senator Kaine: Thank you, Chair Hirono. Ms. Maurer, I  
6 have a couple of questions for you. In your prepared  
7 testimony you talk about the GAO finding that the average  
8 condition of facilities at the four public shipyards  
9 improved at three of the four from 2016 to 2020. I would be  
10 remiss if I did not notice that the one that did not  
11 improve, and actually got worse, was the Norfolk Naval  
12 Shipyard. Explain the GAO's finding in that regard.

13 Ms. Maurer: Sure. Thank you, Senator. So we were  
14 reporting and summarizing information that is collected at  
15 all the public shipyards by the Navy, and you are absolutely  
16 right, Norfolk was one of the four where conditions had  
17 actually worsened a bit over the course of a 3-year period.  
18 Some of that was no doubt related to just the sheer age of  
19 the facility, both in terms of the facilities as well as  
20 some of the equipment. Some of it may have been related to  
21 a change in some of the methodologies that the Navy is using  
22 to assess facility conditions. That may have been part of  
23 it as well.

24 Big picture, all four of the public shipyards are still  
25 rated as poor in terms of overall facility conditions, and

1 we remain gravely concerned about that.

2 Senator Kaine: The GAO issued a report yesterday, and  
3 your team's work found that applying leading practices and  
4 more transparent reporting could help reduce risks posed by  
5 the \$1.8 billion maintenance backlog. Can you talk a little  
6 bit about the GAO's recommendations to reduce risk  
7 associated with that backlog?

8 Ms. Maurer: Sure. Thank you. Yes. So we did issue a  
9 report yesterday. We were focused on the amount of backlog  
10 which is the uncompleted depot level maintenance across the  
11 fleet. Nearly all of that \$1.8 billion was in the surface  
12 fleet. Most of that was in some of the ships that the Navy  
13 has identified either previously or currently for  
14 decommissioning.

15 We made recommendations to encourage the Navy to be  
16 more transparent about how it collected and reported the  
17 information on backlog, both internally as well as to the  
18 Congress. We also felt that the Navy could do a better job  
19 of applying best practices, of tracking that growth in  
20 backlog and assessing its progress and whittling it down  
21 over the years.

22 Senator Kaine: One more question for you, Ms. Maurer.  
23 In the prepared testimony you said that the GAO had offered  
24 nine recommendations and the Navy has implemented five of  
25 them to date. Can you talk a little bit about why the other

1 four have not yet been implemented?

2 Ms. Maurer: Sure. So definitely want to give Navy  
3 credit for implementing the five, and those are largely  
4 around the overall governance around the SIOP effort, so  
5 that is a good-news story.

6 The four that are still open, three are related to cost  
7 estimation, and that has been, frankly, one of the major  
8 problems with SIOP from day one. The cost estimates have  
9 not been on point and they have been, frankly, wildly off  
10 point from the initial plan that was developed in 2018.

11 We are encouraged by what we are hearing today, that  
12 the Navy is taking better steps to get their arms around  
13 that problem, but we are going to continue to encourage them  
14 to fully implement the three recommendations we have on cost  
15 estimation. The other remaining open recommendation is  
16 around assessing and tracking overall progress with the  
17 SIOP.

18 Senator Kaine: Thank you. To the Navy witnesses, talk  
19 to us a little bit about what you are doing -- well,  
20 actually, I am going to skip. I think that question has  
21 been asked by another colleague.

22 To the Navy witnesses let me ask one thing about  
23 pandemic. Everything everybody has to do has had to change  
24 because of COVID, and shipbuilding and the operation of your  
25 enterprise along with it, and we are not out of it yet. I



1 think we are seeing improvement but we are not out of it  
2 yet. What pandemic-related impacts have you observed as it  
3 relates to shipyard operations, workforce issue, and supply  
4 chain-related challenges?

5 Admiral Galinis: Yes, Senator, thanks for that  
6 question. I will take that one. We have seen some impacts  
7 across the shipyards. I will tell you due really to the men  
8 and women in our shipyards and the leadership in those  
9 shipyards we kept every shipyard open every day during the  
10 pandemic, and they really did a tremendous job.

11 That being said, there was impact as the pandemic kind  
12 of ebbed and flowed across the country. We were able to  
13 mitigate that to some extent by activating our reserve force  
14 that we have in each one of the shipyards. That played some  
15 tremendous benefits. So we activated the reserve force for  
16 a period of about 9 months or so, really through the worst  
17 stages of the pandemic, and that really helped us mitigate  
18 that.

19 I would tell you right now I think we are at a stable  
20 work environment. We are seeing probably almost near pre-  
21 pandemic levels in terms of the workforce on site every day  
22 inside the shipyards. Where we are starting to see some of  
23 the impacts is in the supply chain, I think, and that has  
24 been discussed in several different forms, but that is where  
25 our biggest impact is today, sir.

1           Senator Kaine: Thank you. And as I hand back to the  
2 chair, as I have spent time in shipyards and ship repair  
3 facilities in Virginia I sort of just ventured a compliment,  
4 how well you are dealing with pandemic. It has got to be  
5 hard to rethink everything. And one of the ship repairers  
6 reminded me, you have got to remember we are an industry  
7 that thinks about safety first. Not every office puts  
8 safety at the beginning, the first briefing of every day,  
9 and they said this is an industry that does it, and so it  
10 was maybe easier for us than others to come up with the  
11 right protocols to continue to do the nation's work and to  
12 do it safely. So I applaud our shipbuilders and ship  
13 repairers in the Navy and our industrial partners for that.

14           Madam Chair, I yield back.

15           Senator Hirono: Senator Sullivan.

16           Senator Sullivan: Thank you, Madam Chair. I want to  
17 go back to my Yorktown historical moment. So that was a  
18 ship that was severely damaged in battle and then came to  
19 Hawaii, I believe, and was very rapidly repaired and then  
20 participated, decisively, in the Battle of Midway.

21           Admiral Galinis and Ms. Mauer, a June 2021 GAO report  
22 on the Navy's ability to repair battle-damaged ships  
23 revealed alarming shortcomings. So I want to know how we  
24 are addressing this contingency. Let us assume we get into  
25 a serious naval battle with the Chinese, led by the Chinese

1 Communist Party. What is our capability to, for example,  
2 repair a battle-damaged aircraft carrier or a battle-damaged  
3 submarine? My understanding, from reading the GAO report,  
4 is that those ships would have to go back to the continental  
5 United States for repair. Is that true, and are we trying  
6 to address many of the shortcomings revealed in the 2021  
7 report?

8 Admiral, why don't we hear from you first and then Ms.  
9 Mauer on this question.

10 Admiral Galinis: Yes, sir. That is a good question.  
11 I mean, let me just, for the committee, right up front, I  
12 would tell you I feel like we are challenged in that area,  
13 and that is something our team is working on closely. We  
14 have conducted a number of different, I will say, exercises,  
15 both tabletop exercises as well as real-life exercises on  
16 battle damage repair.

17 And I will give you just a couple of examples. The  
18 Bonhomme Richard, I think everybody here knows the story of  
19 that. We were able to, as we were bringing her around and  
20 into the ship dismantling yard on the Gulf Coast there we  
21 conducted a number of exercises where we actually sent teams  
22 of Navy repair experts onto that ship to go through and  
23 conduct battle damage assessments and some rudimentary  
24 repairs to really start to exercise some of that capability.

25 For some of our normal repairs, and I will use the USS

1 Chancellorsville, which right now is in dock out in  
2 Yokosuka, Japan, where we are replacing a shaft out there,  
3 looking at that and thinking about that differently. The  
4 initial estimate that came in to replace that shaft was in  
5 the range of 140 to 150 days. As we kind of thought our way  
6 through that, you know, we got that down to 90 days to 100  
7 days or so, just by changing our processing and thinking  
8 about things different.

9       So we are exercising that type of thought process into  
10 some of our repair, sir, but I will tell you we have still  
11 got some work to do.

12       Senator Sullivan: But is it true right now that at  
13 least for a nuclear aircraft carrier or submarine that is  
14 battle damaged the only place for it to be repaired would be  
15 a shipyard in the continental United States?

16       Admiral Galinis: We could do some of that work in  
17 Yokosuka, Senator. We have got docking facilities and  
18 certainly a full range of ship repair capability in  
19 Yokosuka. Our major repair facilities, yes sir, are back  
20 here in the United States, particularly up in Puget, on the  
21 West Coast.

22       Senator Sullivan: So, Ms. Maurer, do you think that  
23 the rather alarming shortcomings revealed in the 2021 GAO  
24 report on this topic have been addressed or are they still  
25 pretty glaring? And I am talking about the topic of battle-

1 damaged ship repair, quickly, like we did with the Yorktown.

2 Ms. Maurer: Thank you, Senator. I think the Navy  
3 continues to be challenged to do its regularly scheduled  
4 maintenance. We have done reviews that showed that  
5 competing depot-level maintenance continues to be  
6 significantly delayed far too often. In our estimation they  
7 would be significantly challenged to repair battle-damaged  
8 ships as well.

9 On the encouraging side, though, we have seen increased  
10 Navy attention and focus on the recommendations we made in  
11 our report, which were broadly speaking, to bring some  
12 coherence and central leadership and focus to the issue of  
13 battle damage assessment and battle damage repair. That has  
14 happened since our report so we are encouraged by that. But  
15 we are going to continue to watch this very, very closely.

16 You know, you used the Yorktown example. Obviously,  
17 the ships that the Navy is using today are much more  
18 technologically sophisticated than the Yorktown so it  
19 creates an even more substantial and significant battle  
20 damage repair challenge for the Navy.

21 Senator Sullivan: Great. Thank you.

22 Senator Hirono: Senator Scott.

23 Senator Scott: Thank you, Chair.

24 First of all, I thank all of you for being here. Mr.  
25 Stefany and Admiral McClelland, thank you for all your hard

1 work with regard to shipyards. Do you think we have enough  
2 shipyards? Are they the right size, adequately equipped?  
3 Do you think we have the right labor force, and are we where  
4 we need them?

5 Mr. Stefany: Thank you, Senator. I will start with  
6 the nuclear base, and I would say yes, the four nuclear  
7 shipyards we have, as augmented by our two private  
8 shipyards, are able to do nuclear repair work. Newport News  
9 and Electric Boat I think are sufficient. The SIOP  
10 improvements, efficiencies we are going to get from SIOP as  
11 well as some of the productivity improvements to our Naval  
12 Sustainment System will provide the capacity among those  
13 six, the four public shipyards and the two private, I  
14 believe, to meet the demand going forward.

15 On the surface ship side, the private shipyards, again,  
16 that is an industrial base that looks is more, but I believe  
17 again we have the right number of private shipyards for the  
18 surface ship side as well, sir.

19 Senator Scott: How about the labor force?

20 Mr. Stefany: Labor force I think we are tapping out in  
21 each of those regions. And so we have actually started a  
22 couple of pilot projects with the Department of Labor,  
23 looking at bringing skilled workers from other parts of the  
24 country into the area where our shipyards are. Because I  
25 think each shipyard has a really good training program

1 locally but it is not enough to support the shipyards in  
2 those areas. And I can certainly give you a do-back on  
3 areas where we are working for developing other forces  
4 around the country.

5 Senator Scott: Admiral McClellan, do you want to add  
6 anything?

7 Admiral McClelland: Yes, sir. I would only mention  
8 that of course we are considering the future capability that  
9 is needed for new classes as we are working on the capacity  
10 as well, and it is really all three of the efforts in SIOP  
11 that help us relative to the capability and capacity, and  
12 that is the new dry dock, of course, as well as repaired and  
13 restored dry docks, as well as recapitalization, new and  
14 restored buildings, and then the equipment. I think it was  
15 mentioned the equipment and upgrading the equipment is vital  
16 for the ultimate capacity of the public shipyard. Sir, all  
17 of those are being considered in SIOP and thought through  
18 accordingly, Senator. Thank you for the question.

19 Senator Scott: Thanks. As I understand it, Communist  
20 China is producing about half of all ships built globally.  
21 If our number one adversary has that kind of market control,  
22 does the United States and our democratic allies facing  
23 long-term risks to national security and merchant shipping?  
24 If each of you could sort of answer that.

25 Admiral Galinis: Yes, sir. You know, from a

1 shipbuilding capacity perspective, you know, predominantly  
2 the shipbuilding done here in the United States is military  
3 vessels, both on the nuclear side as well as the surface  
4 side. And we have got some good capacity in that area, down  
5 on the Gulf Coast in particular, Newport News and a number  
6 of other places, and Virginia, up in the Northeast as well.  
7 So we have got good capacity, surely not near what our  
8 competitors have, particularly China. But, you know, the  
9 capacity we have, I think, is fully utilized right now,  
10 utilized well.

11 Mr. Stefany: I would like to offer that the other  
12 competitor companies that you mentioned, Senator, have a  
13 strong commercial shipbuilding that then feeds their  
14 military. And so anything we can do to help expand U.S.  
15 shipbuilding would be something that we would certainly look  
16 favorably upon, to help our military shipbuilding.

17 Senator Scott: Anybody else?

18 Admiral McClelland: Sir, and in SIOP the four public  
19 shipyards is, of course, focused on the availabilities and  
20 the depot-level maintenance. And so I think that works  
21 hand-in-hand as we improve our efficacy relative to the  
22 operational availability in SIOP in conjunction with the  
23 process improvements. I think that will then help overall  
24 from a fleet availability, sir.

25 Senator Scott: Ms. Maurer?



1 Ms. Maurer: Thank you, Senator. From the GAO  
2 perspective, some of our work has seen some of the tradeoffs  
3 that need to be made between new ship construction and  
4 resources going towards maintaining ships. Sometimes those  
5 tradeoffs need to be made. We already talked a little bit  
6 about the workforce challenges. I think that is a  
7 significant constraint as well. We issued a report about 3,  
8 4 years ago that flagged workforce challenges facing the  
9 entire depot enterprise, not just the public shipyards.  
10 That continues to be a challenge and an even more  
11 significant one. It is certainly an issue that would need  
12 to be addressed, on both the private sector as well as the  
13 public sector side of the house.

14 Senator Scott: Thank you. Thank you, Chair.

15 Senator Hirono: Senator Hawley.

16 Senator Hawley: Thank you, Madam Chair. Thanks to all  
17 the witnesses for being here.

18 Mr. Stefany, if I could just start with you. A few  
19 weeks ago Admiral Conn testified to the committee, and you  
20 were here for this, that the first and second profiles in  
21 the April shipbuilding report did not meet or support the  
22 operational requirements for denying a Chinese assault on  
23 Taiwan. Can you help me understand why the Navy would  
24 include two shipbuilding profiles in the plans that do not  
25 support the pacing scenario and the pacing theater?

1           Mr. Stefany: Yes, sir, Senator. I believe the goal of  
2 the plan was to provide options, different ranges of  
3 options, to you and to the rest of the Department. One  
4 option clearly is if we had a fiscally constrained approach  
5 what would be the best Navy we could have with that fiscally  
6 constrained approach, as was mentioned by Admiral Conn.  
7 That is a very high-risk approach so we also then wanted to  
8 have the un-fiscally constrained approach. So you saw a  
9 range there for levels of risk to meet the threat.

10          Senator Hawley: So let me ask you this. How does the  
11 SIOPs report that third profile in the plan, the one that  
12 actually will allow us to meet the pacing challenge and the  
13 pacing theater, Profile 3, I think it is.

14          Mr. Stefany: Yeah, Profile 3, as you look at the ships  
15 that we would build in that profile compared to the capacity  
16 that we are creating through the SIOP program, that those  
17 match up, that as we look further out into the out years, in  
18 the '30s and the '40s, the SIOP will enable us to be able to  
19 maintain that size fleet.

20          Senator Hawley: Okay, good. So the SIOP does support  
21 that third profile.

22          Mr. Stefany: Yes, sir, because, frankly, in the  
23 submarine and in the aircraft carrier world, the profiles  
24 are not that different, and that small delta the SIOP will  
25 support. Yes, sir.

1           Senator Hawley: Great. Good. Tell me this. Is it  
2 accurate, Mr. Stefany, that 20 percent of the Navy's fast  
3 attack submarines are both behind schedule on maintenance  
4 and have also lost critical dive certifications? Is that  
5 right?

6           Mr. Stefany: Sir, I would not know the exact number  
7 here in front of me. I would have to take that for the  
8 record, unless one of my other witnesses know that number.

9           Senator Hawley: Does anybody else know?

10          Admiral Galinis: No. I would have to look at that to  
11 get those numbers.

12          Admiral McClelland: No, sir. I do not know.

13          Senator Hawley: Let me ask you this then, Mr. Stefany.  
14 How does the Navy plan to overcome the current maintenance  
15 and certification backlogs? Go ahead, Admiral.

16          Admiral Galinis: Yes. So there are three areas that  
17 we are working on. One is the SIOP piece, with is a  
18 recapitalization of the yards that we are talking about  
19 today. The second area is how we operate the shipyards,  
20 which is through the Naval Sustainment System for the  
21 shipyards, that Secretary Stefany talked about. That really  
22 gets into the processes, so that is how we plan the  
23 availabilities, how we execute the availabilities, how we  
24 get material into the yards, and really just kind of  
25 improving those processes. And I tell you, we have got some

1 challenges in that area.

2 And then the third part really gets to our workforce  
3 piece and how we train the workforce. And I talked to you a  
4 couple of times about some of the training programs that we  
5 have, bringing people in. I will tell you, you know, one of  
6 the things that we are seeing is as we hire folks, more of a  
7 challenge in bringing people into the yards that have some  
8 level of mechanical experience. By this I mean at the  
9 journeyman or even the apprentice level. We are finding  
10 that more of the folks are coming in really with little  
11 skills and we are having to put them through the entire  
12 training program, and that is something we have continued to  
13 work through over the last couple of years.

14 Back on the Naval Sustainment System piece, just a lot  
15 of work going in there. Think about the complexity of  
16 overhauling a nuclear-powered aircraft carrier or a nuclear  
17 submarine. You know, getting the planning right up front,  
18 getting the planning done right up front is key to that.  
19 And so a lot of focus on that.

20 Materiel procurement, especially on a Virginia class,  
21 has got to improve, and then just basic day-to-day execution  
22 inside the yards.

23 Senator Hawley: So, Admiral, do you have now the  
24 manpower and dry docks available to address the current  
25 maintenance backlog?

1           Admiral Galinis: I do feel like we have the manpower  
2 available. We have got about 37,000 folks inside our four  
3 shipyards. That is enough manpower. We need to improve our  
4 productive capacity inside those yards through the three  
5 things I just talked about.

6           Senator Hawley: Okay. Fair enough. I am just  
7 wondering if we are having this much trouble right now  
8 servicing the current submarine force how are we going to  
9 maintain the force that the Navy hopes to acquire in the  
10 coming years?

11          Admiral Galinis: So again, improving that productive  
12 capacity. I think SIOP brings a lot of that. The other  
13 thing of part of the processes we use and how we manage the  
14 shipyards is looking for opportunities to outsource some of  
15 this work to commercial industry, particularly at the  
16 component level. I think there are more opportunities to do  
17 that, that would then free up some of the mechanics inside  
18 the shipyard to get after what we really need them to do,  
19 working on the vessels on the waterfront there.

20          Senator Hawley: Great. Thanks to all the witnesses.  
21 Thank you, Madam Chair.

22          Senator Hirono: Thank you. I am going to take a  
23 second round of questions, and actually it is a follow-up to  
24 Senator Hawley's questions about the certification backlog.  
25 So that means that we are having some challenging in making

1 sure that we are repairing and making ready our current  
2 ships. I am not talking about the new dry dock that has to  
3 be built, et cetera.

4 Admiral Galinis, you mentioned that these are processes  
5 and we have workforce issues, et cetera. So are there  
6 specific things you are doing to address the certification  
7 backlog problems, specific things you are doing?

8 Admiral Galinis: Yes. Specifically inside the  
9 shipyards. So I talked about the number of areas that we  
10 are working on. So on the production workforce, for  
11 example, waterfront operations, how we manage work day-to-  
12 day. So, you know, over a shift, over a week, over a month  
13 are we getting the work completed that we have planned? And  
14 we are finding that in all areas we are not doing that.

15 And so when you start to dig into that, why is that not  
16 happening? Well, the mechanics do not have the right  
17 engineering paper. They may not have the right materials.  
18 In some cases, you know, we talked about the industrial plan  
19 equipment. Okay, we may not have that fully operational.  
20 That slows down work.

21 So there are issues in each one of these areas that we  
22 have got to get after. And there is lot of that that,  
23 frankly, is under my control to go fix, and we are doing  
24 that. We are working Admiral McClellan through the SIOP  
25 program. We are getting out the industrial plan equipment.

1 I will tell you another area is the information  
2 technology. We have not really talked too much about that.  
3 That continues to be a challenge inside the shipyards. We  
4 have gotten some tremendous help from Navy leadership over  
5 the last couple of months to upgrade some of the computers  
6 and the networks going to the shipyards.

7 So those are the things that we are getting after today  
8 to improve the productive capacity inside our shipyards.

9 Senator Hirono: So in determining how to enable the  
10 workers to be more efficient in the work do you also  
11 question the workers? Do you get their input, and do they  
12 see that you are making changes? And some of the changes  
13 may be very simple such as locating the equipment closer to  
14 where the repair work is being done. So are you -- I have  
15 to assume that you listen to them.

16 Admiral Galinis: We absolutely are, ma'am. So a  
17 couple of ways that we are doing that. You know, through  
18 the process that we have right now -- and you are familiar  
19 with poll surveys, right? So we target the workforce for  
20 specific things in terms of where do they see the barriers?  
21 Where do they see the roadblocks? You know, leadership  
22 within my organization, and me personally, you know, getting  
23 into the shipyards, down to the waterfront, and sitting down  
24 in, I will say, small groups of mechanics and supervisors,  
25 to just kind of have a discussion, talk about what this

1 Naval Sustainment System shipyard really, what we are trying  
2 to get after, and does it really match with some of the  
3 challenges that they are seeing day-to-day in the work that  
4 they are doing? In some cases we are seeing that close  
5 lash-up. In other cases we are not.

6 The other piece that you mentioned I think really is  
7 the ownership, and we are starting to really see, at the  
8 trade level down at the waterfront the supervisors really  
9 starting to embrace some of the improvement initiatives that  
10 we are putting in place. And that, frankly, is where it  
11 really needs to start to sustain what we are doing.

12 Senator Hirono: I think that is really important. I  
13 visited our Pearl Harbor Naval Shipyard a number of times  
14 and I know it means a lot to them to be listened to and to  
15 have the changes made that will enable them to meet their  
16 deadlines.

17 Ms. Maurer, I am looking at your 2017 GAO  
18 recommendations and there were a number of recommendations  
19 that were met. But there were a bunch of these that have  
20 not been met, such as include metrics for assessing progress  
21 toward meeting each of its SIOP goals. It is indicated that  
22 that has not been met. Is that accurate?

23 Ms. Maurer: Yes, that is correct, Senator.

24 Senator Hirono: Do they have a way to go on that  
25 point?



1 Ms. Maurer: They --

2 Senator Hirono: How about include all -- I am sorry.

3 Ms. Maurer: They still have some work there, yes.

4 Senator Hirono: Include all costs such as inflation  
5 program, office activities, utilities, roads, environmental  
6 remediation when developing a cost estimate. Has that been  
7 done?

8 Ms. Maurer: That has not been done completely, no.

9 Senator Hirono: What about using cost estimate best  
10 practices and developing a second cost estimate?

11 Ms. Maurer: That has not been completed yet either.

12 Senator Hirono: And obtain an independent cost  
13 estimate of the naval shipyard's program prior to the start  
14 of project prioritization.

15 Ms. Maurer: That is something that the Navy says they  
16 have efforts underway to address, and we will be assessing  
17 that as part of our new work that starts later this month.

18 Senator Hirono: I think they are doing that with  
19 regard to the dry dock that is being built at Pearl Harbor  
20 Naval Shipyard.

21 Thank you. The other questions I have I will just  
22 submit for the record.

23 Senator Kaine, do you have a second round?

24 Senator Kaine: Madam Chair, I just have a couple, but  
25 if you want to go vote I can handle it from here if you want

1 me to.

2 Senator Hirono: Please go ahead.

3 Senator Kaine: Actually, you know what? I am going to  
4 submit my second round for the record.

5 Senator Hirono: Senator Hawley, did you have a second  
6 round?

7 Senator Hawley: I just have one or two questions,  
8 briefly, Madam Chair, just on the AUKUS deal. I think this  
9 is for you, Mr. Stefany, but anybody. As part of that deal  
10 we pledged industrial support to our allies, haven't we?

11 Mr. Stefany: Yes, Senator. As part of the AUKUS deal  
12 we will support them out and what exactly we do versus the  
13 UK versus Australia is to be determined. But yes, we will  
14 be supporting that.

15 Senator Hawley: Okay. So here is where I am going  
16 with this. Back to this maintenance issue, given how tight  
17 we are on maintenance support for our own ships and subs  
18 currently, how are we going to meet our pledges under the  
19 AUKUS deal and do what we need to do to clear our own  
20 maintenance backlog?

21 Mr. Stefany: Yes, sir. The AUKUS effort, frankly, is  
22 15, 20 years out before those requirements come into  
23 fruition, and by then that is the period of time that we  
24 expect that the SIOP-type efforts will have matured for  
25 ourselves and provide some capacity.

1           Senator Hawley: Okay. So in other words, I mean,  
2 being able to execute on the AUKUS deal, as to these  
3 particular terms, depends on us really knuckling down here  
4 and in this next window clearing this backlog and getting up  
5 to speed. Is that fair to say?

6           Mr. Stefany: Both of the private and public yards,  
7 yes, sir.

8           Senator Hawley: Yeah. Okay. Thank you, Madam Chair.

9           Senator Hirono: I just want to note that when I asked  
10 series of questions as to whether the GAO's recommendation  
11 had been met I would ask the Navy witnesses but particular  
12 Admiral McClellan, who is overseeing SIOP, that you will  
13 meet those recommendations, unless you disagree with the  
14 recommendations. So I should ask, do you agree with these  
15 recommendations that you have not met as yet?

16          Admiral McClellan: So, Senator, certainly from a  
17 lessons-learned perspective many of the item GAO notes are  
18 also in our lessons learned, and active plans are being  
19 developed and put in place, and in some instances we will  
20 immediately see some implementation relative to, as you  
21 mentioned, Senator, the work out at Pearl Harbor, for  
22 example, dry dock and other places. So very much are  
23 actively leaning forward on the recommendations and creating  
24 the processes to implement those recommendations, Senator,  
25 and look forward to doing so.

1           Senator Hirono: So as we continue to focus on SIOP I,  
2 for one, would like to see the Navy meet these other  
3 recommendations of GAO.

4           And with that I am going to leave the record open for 5  
5 days for additional questions from members, and with that  
6 this hearing is closed. Thank you very much.

7           [Whereupon, at 3:47 p.m., the hearing were adjourned.]

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