HEARING TO RECEIVE TESTIMONY ON

U.S. NAVY SHIP AND SUBMARINE MAINTENANCE

Wednesday, December 4, 2019

U.S. Senate
Joint Subcommittee on Seapower
and Subcommittee on Readiness
and Management Support
Committee on Armed Services
Washington, D.C.

The subcommittees met, pursuant to notice, at 10:00 a.m. in Room SD-106, Dirksen Senate Office Building, Hon. David Perdue, presiding.

Members Present: Senators Perdue [presiding], Fischer, Ernst, Sullivan, McSally, Hawley, Hirono, Shaheen, Blumenthal, Kaine, King, and Jones.
OPENING STATEMENT OF HON. DAVID PERDUE, U.S. SENATOR FROM GEORGIA

Senator Perdue: Good morning. The Joint Armed Services Subcommittees on Seapower and Readiness and Management Support convenes this morning to examine Navy ship and submarine maintenance.

We want to welcome our three distinguished witnesses today: The Honorable James F. Geurts, Assistant Secretary of the Navy for Research, Development, and Acquisition -- good morning; Vice Admiral Thomas Moore, Commander of Naval Sea Systems Command -- good morning, sir; and Ms. Diana Maurer, Director of Defense Capabilities and Management at the Government Accountability Office -- I understand this is your first time testifying, so we'll try to be gentle; thank you very much for being here.

I want to thank Chairman Sullivan and Ranking Members Hirono and Kaine for agreeing to hold this hearing jointly. I think it makes it much more efficient.

The operating and support costs that come after a weapon system is produced can account for some 70 percent or more of the total ownership cost of the lifetime of a major asset. So, I think it's very important for our subcommittee to work closely on sustainment issues, like ship and submarine maintenance, together.

In September, I visited Pearl Harbor Naval Shipyard
with Ranking Member Hirono. She's been after me for the last 2 years about this. This is a major issue with her, and she's exactly right, not just for that shipyard, but for all shipyards. I want to thank Hirono for that invitation. I walked away with a better appreciation of many challenges facing our naval shipyards, and ship maintenance more broadly.

As I've dug into this a little bit deeper, I've personally got concerns, many of which are highlighted in our witnesses' testimony, today, which I look forward to discussing.

Overall, maintenance delays continue to be a significant issue, as the GAO notes, totaling more than 33,000 days across fiscal years 2014 through 2019, for aircraft carriers, surface ships, and submarines. One effect of these delays is fewer ready ships, which places a greater stress on our fleet to meet all of its operational demands. For example, according to Ms. Maurer's testimony: in fiscal year 2019, maintenance delays alone resulted in the Navy losing the equivalent of 19 service ships. Of our 292-ship fleet, 19 were not available to commanders.

The ship depot maintenance account also appears to be chronically underfunded, with large reprogrammings needed each year. In fiscal year 2019, the budget was 9.8 billion. By the middle of the year, the Navy announced shortfall of
nearly $1 billion. However, less than $300 million was available to address this shortfall, which led to a deferral of nearly 700 million in maintenance that continue -- that, combined with the 814 million of the CNO's unfunded priority list, resulting in well over a billion dollars of unfunded maintenance in that current -- in the current fiscal year, in 2019. To my earlier point on schedule delays, even if the Navy had this money, the Navy doesn't seem to have the shipyard capacity readily available to handle this incremental work.

These are challenges the Navy is facing today with a fleet of 292 ships. By the end of the fiscal year, the Navy will have, hopefully, 301 ships. The fleet is growing, but it's far from clear that we can maintain the fleet we have, much less the fleet of 301 ships, and let alone a future fleet of 355 ships.

It's important to recognize that we did not get into this situation overnight, and correcting this underlying issue will require a long-term commitment. As highlighted in the witnesses' statements, a number of systemic factors need to be addressed, including accepting ships with serious deficiencies, ship deployments extended beyond planned durations, poor facility and equipment conditions, cumbersome contracts, a green workforce, and an insufficient drydock capacity.
Senator Geurts, the committee recognized the importance of improving accountability for maintenance outcomes and gave your position the additional principal duty of sustainment, including maintenance, in last year's NDAA. We're looking to you for leadership and follow through to restore the balance between fleet size and its sustainment.

There are four specific areas that I look forward to discussing today, in partnering with the Navy:

First, what size Navy can we predictability maintain, now and in the future? And how do we increase that ability as we increase the size of the fleet?

Second, the implementation of the Navy's 21 billion, 20-year Shipyard Infrastructure Optimization Plan, or SIOP, it is clear to me that Pearl Harbor Naval Shipyard needs to be brought to the 21st century. Is the SIOP the right plan and its implementation being effectively carried out?

Third, private shipyard capacity and the ability of these shipyards to meet the forecasted future surface ship maintenance workload.

Fourth, the extent to which continuing resolutions and budget stability affect the ability to plan and execute maintenance.

In conclusion, in this area of great-power competition, there's no question that our Navy needs to grow larger and become more capable. My fear is that, as the Navy grows,
maintenance capacity will not keep pace. The end result will be a larger fleet, but fewer ships ready for operational tasking.

I look forward to our witnesses' testimony today and thank them again for their attendance.

In order for opening remarks -- the order for opening remarks will be Ranking Member Hirono, Chairman Sullivan, when he gets back from his Judiciary responsibility of introducing a nominee, and then Ranking Member Kaine, and then our witnesses.

I understand Secretary Geurts will have -- give one opening statement on behalf of himself and Admiral Moore. Is that correct?

Mr. Geurts: Yes, sir.

Senator Perdue: Thank you.

And, with that, we'll get started, and I recognize Ranking Member, Senator Hirono.
STATEMENT OF HON. MAZIE K. HIRONO, U.S. SENATOR FROM HAWAII

Senator Hirono: Thank you, Mr. Chairman, for your very complete opening statement. I thank you and Chair Sullivan for holding this hearing.

Of course, I want to thank all of the witnesses joining us today. We certainly appreciate the time that you took to prepare for today's hearing, and also for the work that you all do every day for our country.

I'll keep my remarks brief so we can get on with the hearing.

Last year at about this time, we held a similar joint hearing to discuss Navy and Marine Corps readiness. Many of the same challenges we talked about then remain before us today. Senator Perdue and I have worked together in the Seapower Subcommittee to ensure the Navy has the resources it needs to build a larger, more capable fleet of ships and submarines. But, as noted by the Chair's opening statement, we have a ways to go. And we all know that these platforms require necessary timely maintenance to keep them operational. And it's not enough to build new ships, of course. We need to invest in their maintenance and modernization to keep them afloat.

And I'm particularly concerned about shipyard modernization and how the Navy intends to implement its
Shipyard Optimization Plan. This plan requires focused attention as well as sufficient and stable resources. In Hawaii, we are all proud of the contribution Pearl Harbor Naval Shipyard makes to our fleet's readiness, and I want to be sure that the yard receives the resources it needs to keep our fleet in fighting shape.

In addition to modernizing our shipyards, I'd also like the witnesses to address how we would -- we should improve the timeliness of ship availabilities. Once ships reach the yard, fewer than 40 percent of them are completing their maintenance availabilities on time. Fewer than 40 percent. That means that the majority of those ships do not come out of maintenance in a timely manner. And I know that it is -- this is not the fault of the workers that we have at our shipyards. There are other issues that we need to address to enable them to do their work. We need to do better for the sailors who operate these ships, for the combatant commanders who rely on their capabilities, and for the taxpayers who expect wise use of their dollars.

And again, I thank you for being here this morning.

Senator Perdue: Thank you, Senator Hirono.

And, with that, Senator Sullivan and Senator Kaine will be here momentarily. I think --

Senator Kaine: I'm ready.

Senator Perdue: Oh, I'm sorry. I'm sorry. I was
looking the wrong direction. Good morning.

    Senator Kaine: Good to be with you, Mr. Chair.

    Senator Perdue: I'll recognize our Ranking Member from the Readiness Subcommittee, Senator Kaine.
STATEMENT OF HON. TIM KAINE, U.S. SENATOR FROM VIRGINIA

Senator Kaine: Great. Thanks so much.
And welcome, to the witnesses.

I want to thank the Chairman, Senator Sullivan and Senator Perdue and Senator Hirono. It's good to have this hearing. It's good to have it as a joint hearing between the two subcommittees.

So, I had an opening statement, but it's far less powerful, actually, than the first paragraph of Ms. Maurer's prepared testimony, so I'm just going to read this into the record and make a couple of other comments.

The testimony that she has given to us, "What GAO Found. The Navy continues to face persistent and substantial maintenance delays that affect the majority of its maintenance efforts and hinder its attempts to restore readiness. From fiscal year 2014 to the end of fiscal year 2019, Navy ships have spent over 33,700 more days in maintenance than expected. The Navy was unable to complete scheduled ship maintenance on time for about 75 percent of the maintenance periods conducted during fiscal years 2014 through 2019, with more than half of the delays in fiscal year 2019 exceeding 90 days. When maintenance is not completed on time, fewer ships are available for training or operations, which can hinder readiness."
That's the reason that we're having the hearing today. That set of statistics paints a stark picture about how we make improvements to improve readiness.

We have a series of challenges that we're going to grapple with in the hearing today. Let me just put two first.

Infrastructure. I support the Navy Shipyard Optimization Plan, and I want to thank, Ms. Maurer, and your team, because you recently completed a review of naval shipyards, I guess, last week, and you're going to highlight what actions remain for improvement. This is a long-term issue. So, one of the questions I hope that we'll address today is, how do you fund the Shipyard Optimization Plan in any reasonable timeframe? The estimated cost is $20 billion over 20 years. How can the Navy possibly get there in time with a -- with measurable impacts in the improvement of readiness? And that is, when that 20 billion is spent at the same time as you're doing all kinds of other things -- modernization, focusing on workforce, et cetera. So, that's the infrastructure challenge, writ large.

There's a particular infrastructure issue that is important in Virginia, but really elsewhere, and that deals with climate change in extreme weather. Hurricanes and flooding continue to wreak havoc on military installations along the eastern coast and elsewhere, costing taxpayers
several billion dollars in reconstruction and repair. In Virginia, its hurricanes and flooding; but in other military installations, it's drought, it's extreme heat, it's wildfires. We're seeing this all over the country. The GAO has previously found what many of us already know about our military installations. A quote from the GAO, "The potential impacts of weather effects associated with climate change pose operational and budgetary risk." I note that the FY20 budget request includes, for the first time, drydock flood protection improvements for Norfolk Naval Shipyard. Our military is being -- trying to be proactive in making these resilience investment proposals. And I appreciate that.

So, we all want to make sure that the Navy gets to the highest level of readiness. We're not going to be able to do it overnight, but this hearing will help us identify how we can improve. And we look forward to your testimony.

Senator Perdue: Thank you.

And, with that, we'll move to our witnesses' testimony. We'll start with Secretary Geurts.
STATEMENT OF HON. JAMES F. GEURTS, ASSISTANT SECRETARY
OF THE NAVY FOR RESEARCH, DEVELOPMENT, AND ACQUISITION;
ACCOMPANIED BY VICE ADMIRAL THOMAS J. MOORE, COMMANDER,
NAVAL SEA SYSTEMS COMMAND

Mr. Geurts: Thank you. Chairman Perdue, Chairman
Sullivan, Ranking Member Hirono, Ranking Member Kaine,
distinguished members of the two subcommittees, thank you
for the opportunity to appear before you today to discuss
the Department of the Navy's ship and submarine maintenance.
I'm joined today by Vice Admiral Tom Moore, Commander
of Naval Sea Systems Command.

With your permission, I intend to do one brief opening
remark for the two of us.

Admiral Moore: Yes, sir

Mr. Geurts: U.S. naval forces continue to be in high
demand in an ever-changing and complex geopolitical
landscape.

Across the globe, our strategic competitors attempt to
influence, disrupt, and undermine regional stability and
free access to the seas. Properly maintained, equipped, and
manned ships are critical in ensuring the Navy is ready to
respond when called.

Today, we're here to discuss one critical aspect of
readiness. That's how do we properly maintain and sustain
our ships and submarines? Since 2017, with the strong
support of Congress, the Navy's made steady progress in our
ability to properly and effectively carry out the required
maintenance to ensure our sailors have the most capable and
effective operational platforms available. Although we've
made steady progress, there's still much more to be done.
We continue to work across the entire maintenance
enterprise, both the public and private sectors, to develop
and deliver a comprehensive approach focused on delivering
ships and submarines out of maintenance, on time and in
full. We've done this by implementing measures that are
focused on better planning, better materiel management,
increased capacity, better workforce training, and
investments in our facilities. As a result, since 2017
we're seeing positive indications that the maintenance
initiatives are making a difference. For instance, the on-
time maintenance completions of our DDG-51-class destroyers
have improved from 29 percent in FY18 to 43 percent in FY19,
and we're projecting 71 percent on-time in FY20. Similarly,
the average days of maintenance delays in our public sector
submarine availabilities have improved from 176 delays in
FY17 to 23 delays -- 23 days in FY19, and we've reduced the
workload carryover by 58 percent since FY17.

Although the vectors are moving in the right direction,
the biggest threat to achieving the necessary sustained
performance is budget instability. In 2019, Congress
provided the Navy an authorization and an appropriation that was on time for the first time in 10 years. I cannot overemphasize the importance and the positive impact that had on our ability to maintain our maintenance plans as we have them planned.

This year, although we're well into the first quarter of fiscal year '20, we're on our second continuing resolution. From a ship maintenance standpoint, this has already negatively impacted our planning and contracting for ship maintenance. Our plan -- our ship maintenance plan is only as good as the resources that back it up. A full-year CR would be a devastating blow to ship maintenance. It would reverse all the gains we've made over the last 2 years and create another huge maintenance backlog that would take years to reduce.

Although we've made gains since 2017, significant and steady investments over a long period of time will be required to recapitalize the public shipyards, incentivize the private-sector shipyards to increase their capacity and capabilities, and ensure a workforce is available to adequately meet our ultimate goal, delivering every ship and submarine from maintenance, on time and in full, as we expend the fleet to 355 ships.

We look forward to working closely with Congress to achieve that goal. Thank you for the strong support these
subcommittees have provided the Department of Navy and the
opportunity to appear before you today. We look forward to
answering your questions.

[The prepared joint statement of Mr. Geurts and Admiral
Moore follows:]
Senator Perdue: Thank you, sir.

Ms. Maurer.
Ms. Maurer: Good morning, Chairman Perdue --

Senator Perdue: Good morning.

Ms. Maurer: -- Ranking Member Hirono, Ranking Member Kaine, and other members and staff. I'm pleased to be here today to discuss the Navy's efforts to maintain the ships and submarines that are vital for our country's national security interests.

And, as was clear from your opening statements, you're well aware of the significant challenges the Navy continues to face maintaining the fleet. And we share your concern. As we -- as Ranking Member Kaine already pointed out, we found the Navy was unable to complete scheduled ship maintenance about 75 percent of the time, leading to over 33,000 days of maintenance delays. Those are days that surface ships, submarines, and aircraft carriers were unavailable for operations and training. And, as you can imagine, these persistent and substantial delays hinder the Navy's efforts to rebuild readiness.

My statement for the record today highlights several interrelated factors that have contributed to those delays. First, extended deployments and decreased crew levels mean important maintenance is often deferred, leading to more
time-consuming and costly depot-level repairs. The high
tempo of operations has also increased the maintenance
strain on the fleet. Ships are being used more intensively,
which means, in practice, declining ship conditions. And
once planned maintenance is underway, the Navy is hindered
by the conditions of the public shipyards. The conditions
of the facilities at the four public yards is poor, and the
average age of equipment is beyond its expected life.

The Navy has also faced challenges recruiting,
training, and retaining a skilled workforce. In recent
years, the Navy has hired thousands of workers to help turn
ships around faster, but fixing a submarine or an aircraft
carrier requires advanced technical skills, which can take
years to achieve, and, at many shipyards, more than half of
the employees have less than 5 years of experience.

Further, drydock capacity is extremely limited. The
Navy lacks sufficient dry docks to support a third of its
planned maintenance periods. Many of the dry docks it
currently has are not large enough to support future
submarines, and none are capable of supporting the Ford-
class carrier.

To help with these and other challenges, my statement
today discusses 17 recommendations we've made to the Navy
over the past few years; and the Navy, by and large, agrees
with us and has started taking actions to address our
recommendations. And that's encouraging.

We are also encouraged by the Navy's increased leadership attention to sustainment issues and the development of a plan to improve and modernize the public shipyards. Under this plan, the Navy will upgrade dry docks, facilities, and equipment to meet the future planned maintenance needs. The Navy has also created a program office to bring unity of effort and bureaucratic clout to what will be a 20-year undertaking.

So, all in all, a good start. But, it is still too early to tell if the plan is going to work. The Navy still has to develop the all-important details of what needs to be done, and determine how to keep the shipyards running while also rebuilding and enhancing them. Further, the current estimated price tag of $21 billion is, essentially, notional and likely to be billions more, because it does not include major costs for inflation or improving underlying infrastructure. The Navy agrees with our recommendations to address these issues, and has plans in place to do so.

The Navy has also made important progress on increasing crew size and is exploring an enhanced approach to maintenance planning. Although it will take years to fully implement these efforts, we are encouraged by the increased commitment to address the many contributors to maintenance delays. However, this will need to be sustained for years
to address the Navy's significant and persistent maintenance challenges and ensure the Navy can reliably provide modern, ready naval forces to meet our national security needs.

Chairman Perdue, thank you very much for the opportunity to testify this morning, and I look forward to your questions.

[The prepared statement of Ms. Maurer follows:]
Senator Perdue: Thank you very much.

We'll try to do -- start this at 5-minute periods of questioning. And we'll have second round if we need it.

I'll start off very briefly.

Secretary Geurts, you mentioned CRs, continuing resolutions. I have been -- you know, Senator Hirono and I and Senator Kaine -- Senator Kaine and I are on Budget Committee. We've been arguing about -- fighting this together. We all are like-minded about this. But, I'm not sure a lot of people in Congress understand how it affects you guys in a detailed way. Can you talk about and elaborate -- first of all, the past Secretary of Defense said that -- and each of the services now, at our request, has measured this, and we're talking about somewhere around $20 billion of -- per year, if a full-year CR were impacted. It is $4 billion, alone, in the U.S. Navy, is the best estimate we've been given from the Navy. Can you elaborate, though, on the specific impact of postponing the Bainbridge and Gonzalez availabilities right now? I know there are actions that have been taken related to ship maintenance because of the current continuing resolution we're under right now.

And also, as part of that, Ms. Maurer, you mentioned that workforce was an issue. I'd like the Navy -- Admiral or somebody -- tell me how many people we're able to hire
right now under this current CR. New people. And specifically with regard to these shipyards.

So, the first part of the question, please.

Mr. Geurts: Yes, sir. So, as I mentioned in my opening remarks, a CR is devastating in a couple different ways. If we had a full CR, under the current rules, the Navy would lose $20.5 billion of its buying power this year alone. That's a combination of new programs that we couldn't start. We have a new helicopter trainer --

Voice: FY20?

Mr. Geurts: That is in FY20, yes, sir -- 20.5. About $5 billion of that would be new programs we couldn't start. The new frigate program, we could not start. Helicopter training programs, which directly impact readiness, we couldn't start. Fighter aggressor programs we've got on the books, we couldn't start. Another 5 billion would be plans where we had planned to increase the number or quantity of buys, and we're held to last year's budget level. And then $10 billion would be just in rate increases. What that means to Admiral Moore and myself is, we have to look at every activity where we have a great plan. And, as I think we'll talk about in the hearing, the key, especially on the maintenance side, is good planning and early planning. Now all those good plans and early plans, which we've been working really hard to put in place, all get thrown off.
And then, if you're in private industry, and you don't know -- you know, you don't know if the Navy's going to have 20 billion or not, you're not going to make investments, you're not going to hire folks, you're not going to do the things we need to do to increase capacity. And so, the -- all that instability will lead to us having to plan and replan and replan. Last year, when we had a full-year budget, we obligated 9 percent more than we did in the previous year, with 9 percent less contracts. So, you could see that efficiency in play.

For the two maintenance availabilities you talked about, we -- those were ones we had wanted to plan early. We had to put weeks and weeks of delay in that till we could figure out how to finance those initial availabilities. The shipyard that was going to do the work didn't know when the contract was going to come, and they're the ones that, to keep the ship going out on time, they have to absorb that risk of us not in -- not being able to award the contract when we wanted to. And that will contribute to the risk of maintenance delays. One of the biggest factors in maintenance delays is late planning and late award. And when we don't know what money is coming, in what sequence, at what time, all of our plans then have to be replanned and re-executed.

Tom can probably address the workforce issue.
Admiral Moore: Yes, sir. A little bit of -- the good news is, on the public-sector side, in the -- in our shipyards, they're mission-funded, so they're -- that bill's paid up front. And so, it won't impact the workforce in the naval shipyards doing our nuclear work. The bad news is, the brunt of the impact to the people is going to be on the private-sector surface ship repair. And this has really been our big challenge, frankly, over the last 2 years. I think we've kind of turned the corner on the public yards, but the private sector is looking for that long-term stability. And go ask any company president out there; if they don't know that they've got a stable plan and guaranteed work, they're not going to hire. And that lagging in the hiring is going to then have a deleterious impact on our ability to complete those availabilities on time. So, from the people standpoint in the private sector, surface ship repair side, it absolutely has a major impact.

Senator Perdue: So, you have a -- I'm sorry -- you have a test underway right now to -- we -- I think we passed this, this year. The past CNO -- most recent CNO actually requested this. We made it happen, that you can extend this over multi years. I think we extended to 3 years, as a test, the maintenance allocation. How does that get impacted when you're under a CR like this?

Mr. Geurts: Well, the first immediate thing is, since
that's new, that we can't even start the pilot until --
under the current rules. But, essentially, once we get to
that point, that will give us a little bit more flexibility.

    Senator Perdue: But, you --

    Mr. Geurts: But, we haven't been able to start the
pilot, because of the CR.

    Senator Perdue: That's the whole point. Thank you.

    Mr. Geurts: Yeah.

    Senator Perdue: I'm going to yield -- oh, I'm out of
time.

    If Senator Hirono is okay, I'm going to ask the
Chairman of the other committee to make his opening remark,
if you are ready.
STATEMENT OF HON. DAN SULLIVAN, U.S. SENATOR FROM ALASKA

Senator Sullivan: Thank you, Mr. Chairman.

And, to my Senate colleagues here, I apologize for being late. I was double-tasked with a Judiciary Committee hearing, where I was introducing Alaska's nominee for a Federal District Court position. So, it was quite important. So.

But, I'm going to just -- for efficiency's sake, I will submit my written statement for the record.

[The prepared statement of Senator Sullivan follows:]

[SUBCOMMITTEE INSERT]
Senator Sullivan: And I want to thank the Chairman for -- Chairman Perdue for calling this important hearing. And I will have questions that relate to my opening statement and other issues when my time for questions is up.

Senator Perdue: Then we'll go to Ranking Member Hirono for her questions.

Thank you.

Senator Hirono: Thank you, Mr. Chairman.

As we sit on the Armed Services Committee, there is no question that every single one of you, every time you testify, you talk about how the CR is an insane way to conduct anything. And yet, here we are. So, once again, I apologize for the fact that we can't seem to get our act together in Congress to move things along.

So, I do have a question about Pearl Harbor Naval Shipyard for Secretary Geurts and Admiral Moore. I'd like to ask you specifically about the plans for Pearl Harbor Naval Shipyard, which the Navy has identified as the first project in the Shipyard Optimization Plan. I understand from your testimony that work on the modeling and simulation will be completed by February 2020, which will greatly inform the details of the projects and how best to align the shipyard. Unfortunately, time is not on our side, since the first Virginia-class availability is scheduled to come to PH -- well, Pearl Harbor in fiscal year '27. And if we're
going to be building dry docks, et cetera, to accommodate
that, I mean, it takes a while for that to happen.

So, I understand you're exploring options for a new
graving dry dock to support the future workload at Pearl
Harbor, but you also just released a request for
information, RFI, to explore a floating dry dock. I want to
support the best option for the shipyard to sustain its
critical work for the Navy in the Pacific, but I am
concerned with the reality of the situation we face
regarding timeliness and cost. A graving dry dock would
cost well over $1 billion, which would consume a significant
portion of the Navy's entire military construction budget.
It would also take 5 years to construct, and the Navy then
needs 1 year to certify the dry dock. A floating dry dock
would provide a more near-term capability at a lower cost.
But, is that what the -- is that the right solution for the
shipyard?

Since we won't have the data from the modeling until
February 2020, and that is well after the fiscal year '21
budget submission, can you detail for me how the Navy plans
to budget for and execute the projects necessary to ensure
Pearl Harbor is able to perform the planned workload,
starting with Virginia class in fiscal year '27? And please
provide a detailed timeline and what decisions need to be
made, and when.
Start with -- well, either one of you.

Admiral Moore: Yes, Senator. Thank you for the question.

So, absolutely, we can execute the work at Pearl Harbor Shipyard. Two of the three dry docks there today are fully capable of handling Virginia-class submarines. The one that we're looking to upgrade does not, that we need to fix.

So, we are looking at two choices. We are looking at a graving dock, because, from the Navy's perspective, it's a -- it's good for 100 years, it's a lot easier to do the maintenance in it, you don't have to take it out of service on a regular basis, like you do a floater, to do maintenance.

But, we are looking at a floater, because it is -- as you said there, it is less expensive up front. We've got a business case analysis going on in doing that concurrently with the modeling. And I expect to be through that in the next couple months, and we'll be able to come tell you, you know, what do we think is the best solution, whether it's a graving dock or a floater.

They each have some benefits to them, and they each have some downsides to it, too. The float -- the reason we put the RFI out was because we felt like we -- you know, we were obligated to the taxpayer to look at alternative solutions to the graving dock. And that's why we did that.
And we'll come through the details of that, and we're happy to share that with your staff and with you when we get through that.

Senator Hirono: I mean, the long-term approach would be to have a graving dock, but we are where we are with the resources. So -- well, please keep me up to date.

And we recognize the current contracting strategy for surface ship maintenance is not delivering the ships back to the fleet in a timely fashion, and the lack of time to plan the execution of the availabilities or to the long-term of the long lead time items and speed of contract change adjudications are all contributing to delays. What are the top three things that the Navy and industry can work on to reduce the delay -- delays in completing surface ship maintenance? And you don't have to go over the CR problem.

Mr. Geurts: Yeah. Yeah. Yes, ma'am.

I think the first thing we are doing is making sure we're improving our planning. So, that is understanding the work and scheduling the work and budgeting the work the right way. And then, awarding that work, our goal is to do that 120 days prior to the work commencing. So, our goal is, for every one of these availabilities, to award the contract 120 days in advance so the performer has time to get ready for the ship to come in there, get all the staff, get all the materiel. That's not where we have been,
traditionally. And we're moving our way towards here, and some our early pilots are showing real benefit there.

The second piece, then, is, have the right contract structure. And so, the contract structure that can deal with changes as they occur, very rapidly. So, we have added clauses for small-dollar changes. We can negotiate those on the spot. For larger ones, have a streamlined process so we don't delay the work adjudicating, if there is an unplanned activity.

And then, the third piece is making sure the government's oversight is as effective as it needs to be, but not over-burdensome. Admiral Moore's team has done a pilot, where we've reduced the checkpoints and inspections by over 50 percent. That is actually allowing the work to get done much more fluidly and improving the efficiency.

That's what we're doing, kind of, on the eaches. I would say, at the broader system level, making sure we balance the work right and we don't ask for more work than can be performed in an area or in a concentration area.

So, working with the fleet to get the work scheduled in a more balanced way, and then understanding the capacity and not over-driving the system with more than they can execute.

Senator Hirono: And you're doing that across all the four shipyards, right, making those kinds of efficiency changes?
Mr. Geurts: Yes, ma'am. And this is mostly on the private side, so it's more in the private yards, so it's, you know, shipyards across the country. The other thing Admiral Moore's team has done is gone out proactively and certified -- ask who has dry docks, certify those in advance to open up. We're opening up a broader competitive base now. And so, we're getting more capacity across the country to absorb the work so we don't, you know, put an unrealistic demand on the workforce.

Senator Hirono: Thank you.

Mr. Chairman, I am going to want a second round. I have more questions.

Thank you.


Senator Sullivan: Thank you, Mr. Chairman.

And I do want to say at the outset, you know, there's a lot of talk about the CR. And that's -- we all think it's bad. And this is a very bipartisan committee. And I try to be very bipartisan in my approach to this job. But, it's not just the CR. It's the Defense approps, which is being filibustered right now by the Minority Leader. And I've been in this body for almost 5 years. This the ninth time that the Minority Leader on the other side has decided to filibuster the Defense approps. It's inexcusable.

Inexcusable. And I wish we could fix that, because, you
know, using political leverage, which is exactly what he's
doing, the men and women in the military -- because we all
care about it -- for other objectives, political objectives,
I find to be outrageous. So, it's not just the CR. We
could stop -- we could fund the military right now by
stopping the filibuster on the Defense approps today. And
yet, my colleagues don't want to do it. So, sorry. I get a
little upset about that issue.

Let me ask Ms. Maurer. You know, according to the GAO,
the lack of capacity -- that's what they say -- is a major
issue. But, could you talk in a little bit more detail on
what that means, a lack of capacity, with regard to ship
maintenance? Does that mean more skilled workers, more dry
docks, new shipyards? I mean, what do we need to address
this lack of capacity when we talk about reducing the
maintenance backlog?

Ms. Maurer: So, thank you, Senator, for the question.

When we talked about lack of capacity in my statement
today, and an associated report, we're speaking specifically
about dry docks and the inability, under the current set of
dry docks the Navy has, to complete about one-third of the
scheduled maintenance periods over the next 20 or so years.
That's a major problem. We're talking specifically about
maintaining nuclear submarines as well as aircraft carriers.
So, as you can imagine, having the ability to do that
maintenance is extremely important.

Having this new plan to enhance and upgrade the shipyards is a good step in the right direction, and we are encouraged by the fact that the Navy has developed this plan. The Navy is not alone in, sort of, the sorry state of the infrastructure for depot-level maintenance. The other services are in the same boat, but the Navy is ahead of them, in terms of developing a plan. But, it's going to be a while before we see the all-important details.

The Navy is taking a very measured approach, which is the right way to go when you're talking about something that's going to talk 20 years. But, it's still too early to say whether or not it's going to get them on track.

Senator Sullivan: Let me ask --

Ms. Maurer: -- what they have on paper, it will, but it's still too early to know.

Senator Sullivan: Let me ask another question that's related to that. The Navy, primarily, almost exclusively uses shipyards for maintenance that are at the homeport or near the homeport of current vessels. And, of course, there's a huge important justification for doing that. But, yet, we still have a large backlog. Should the Navy explore the use of alternative shipyards for, say, smaller ships, not carriers or subs, like -- shipyards like those in the Great Lakes, or even those in Alaska? This is something
I've been trying to get the Coast Guard to look at in Alaska, because they move their ships all the way down to Alameda, and yet we have shipyards that are in Alaska that are -- for Coast Guard vessels that are home-ported in Alaska, that could do it much more cheaply. Would this be one area where the Navy could help reduce its maintenance backlog? And I'll tee that up, not just for you, but also Admiral and Mr. Secretary. I think it's an important question for all of you.

Ms. Maurer: That's a great question. And it's, ultimately, largely a political one. So --

Senator Sullivan: Why is it political?

Ms. Maurer: Well, because it comes down to Congress making a decision on, potentially, appropriating funds to open up new shipyards to serve the Navy's public needs.

Senator Sullivan: But -- I'm -- so, let's get rid of the politics. What do you think is a good idea, or not? Do you think that's a good idea as it relates to the backlog?

Ms. Maurer: I think it's definitely something that's a good idea for the Navy to consider. But, from a geo-perspective, we haven't -- we don't have a position on whether or not there should be additional public --

Senator Sullivan: What about you, Admiral?

Admiral Moore: Well, I think it's a fantastic idea. And I think we're already doing that. We've already --
we're taking steps to try and improve -- bring other people into the markets. I'll just use an example. We've gotten Vigor, in Portland, who had capacity to do littoral combat ship work. And we're putting the -- work up there. We're exploring putting other work up there. And we have a growing need for people that can do littoral combat ship work. So, the idea of reaching out and growing the capacity and bringing other people into the market's a good one. I think --

Senator Sullivan: Mr. Secretary, do you agree with that?

Mr. Geurts: Yes, sir. I mean, I --

Senator Sullivan: Thank you, Admiral.

Mr. Geurts: -- I come from, you know, a Special Ops background to plan for the unplanned. We're talking a lot about peacetime maintenance. I think a lot about wartime maintenance. And if we had to surge and double and really geographically --

Senator Sullivan: But, we need the surge now, don't we? I mean, I --

Mr. Geurts: Yes, sir. I'm just --

Senator Sullivan: It's peacetime, but look at these --

Mr. Geurts: I'm just --

Senator Sullivan: -- look at --

Mr. Geurts: -- I'm just saying there's a win-win here.
Senator Sullivan: -- these backlogs.

Mr. Geurts: Yeah.

Senator Sullivan: I mean, they're unacceptable.

Mr. Geurts: Yes, sir. I guess where I was going, that I think there's a win-win here. As we open up more, that also gives us an ability to surge more.

Senator Sullivan: But, there -- is there a legislative block? I tried to get a provision in the NDAA that wasn't accepted. It kind of addressed this. The House has something, I think, in this provision. But, there's no legislative prohibition, is there?

Admiral Moore: Well, this -- you know, there are rules on where we can put ships for taking them out of homeport that we have to follow. Availability has to be longer than 10 months to take it out of homeport. But, you know, that's something we could seek legislative relief on. And there's nothing preventing us from looking to try and expand markets to do the work. And again, I use the shipyard in Portland as an example.

Senator Sullivan: Thank you.

Thank you, Mr. Chairman.

Senator Perdue: Senator Kaine.

Senator Kaine: Thank you, Mr. Chairman.

And I want to offer the counter-position to my friend from Alaska on the reason the Defense appropriations bill is
not yet done. We want to do a Defense appropriations bill, but we want Defense funds to be spent for defense. We don't want Defense funds to be treated as a personal piggyback and allow the President to take money out of MILCON projects that are serving our families to use on a nonmilitary priority at the southwestern border. That's the issue. We're having a debate about the Defense budget, but what we know from experience is, this President believes he can declare an emergency over something that's not military in nature, and rummage through the Pentagon budget like it's a piggybank. Those of us who serve on the Armed Services Committee want to know, when we agree on a Defense appropriations bill, that the money will be used for national defense and will not be pirated away for pet political projects.

Senator Sullivan: Nine times in --

Senator Kaine: You had your opportunity --

Senator Sullivan: Nine times in 5 years.

Senator Kaine: -- Senator.

Senator Perdue: Regular order.

Senator Perdue: If you, on your side, can agree with us that Pentagon money should not be pirated away for nonmilitary projects, we can get this done. But, until there is that agreement, that's what's holding this up right now.
I'm going to battle for the best Defense budget I can, and I know my colleagues are going to do the same thing, but we don't want it spirited away for pet projects. When we had our military leadership at the table in Armed Services hearings, and we've asked them about the situation at the border, they've uniformly described it as a problem and challenge, but they've also uniformly agreed it is not a military emergency. And those of us on the Democratic side of the aisle just don't -- just believe that Pentagon money should not be pirated away for nonmilitary purposes, because once that priority is established, any President can declare an emergency and go into the Pentagon budget and take money away for nonmilitary purposes. That's the principle that we're trying to fight for that I think is in the long-term best interests of this Nation's defense.

Let me focus now on our side of the aisle, the need to provide you budget stability. And I commend to you -- and I think Senator Perdue mentioned this -- I commend to you a bill that the Budget Committee has recently passed which would try to do some significant reforms of our budget process to reduce the instability that you are experiencing. And one element of the bill -- it's a complicated bill, and it has some controversy connected with it, because it would really try to restore the budget process, sort of, as it was envisioned in the 1974 Budget Control Act -- but, one
element of this would be to switch our fiscal year to a calendar year. You know, there's good and bad cholesterol. I sort of think there's good and bad CRs, or at least acceptable and unacceptable CRs. We almost never get our budget done by October 1. Why? Well, often there's an election in the following month, and there's all kinds of reasons not to. When we get deals, it tends to be at the end of the calendar year. And so, the fact that we're in a CR now is not a good thing, but if you just look at the history of the way Congress budgets, it's not an unusual thing.

A friend of mine was a landscape architect, and he used to say, "If you're designing landscapes, don't put sidewalks down. Put the landscape down, then see where people walk, and then put the sidewalks there." Congress tends to get deals, when we get deals, at year-end, not at the end of September.

So, one of the features of the budget bill that Senator Perdue and I and Senator King and others on the Budget Committee worked on -- and it was the first bill to come out of the Budget Committee with a bipartisan vote in 30 years -- one of the features of that bill was to move us to a calendar year, where we're more likely to actually get the work done in a way where then you can count on it. And I will say this. And I say this to colleagues on both sides
of the aisle. There is no excuse for us not getting a
budget deal before we leave for Christmas. There is no
excuse for us punting this into next year. And I hear
cconcerns expressed, or worries, on both sides of the aisle,
that we may be into next year before we get a budget deal
done. That would be malpractice. That would be malpractice
of this body. So, I would say to the leadership, both
parties, and -- we should all do everything we can to get
the budget deal done that we need to.

I want to ask a question about this long-range
maintenance plan that the Navy has. It was March 2019, and
it cites a shortfall in private shipyard capacity to meet
the forecasted future ship maintenance workload. The report
states that the number of private shipyard dry docks
presents challenges for future workload demands, and that
may reduce the margin for schedule changes and delays. How
does the Navy, sort of, develop forecasts of future workload
on the maintenance side? And what -- how can we use that
forecasting to help us do a better job of whittling down
these backlogs?

Mr. Geurts: Yes, sir. Last year was the first year we
kind of put a 30-year maintenance plan in there to go with
the shipbuilding plan, kind of, to get to the earlier
comment.

Senator Kaine: Which was very innovative.
Mr. Geurts: Yes, sir. And so -- you know, and that was the first-generation product. As we continue to mature that, I think that provides the overall, kind of, Rosetta Stone that we're tracking, in terms of our future needs. What we're also doing, as mentioned, is going out and looking where there's already drydock capacity we just haven't, for whatever reason, been able to either certify or leverage. We're working with MSC. They're doing some -- Philly shipyard is doing maintenance work. They hadn't done that before. That's another dry dock that we can take advantage of. And so, what we're doing is using that as a long-term forecast. And then, if we can show that site picture to industry, I think -- you know, I'm confident they will build infrastructure if they can get an understanding of the market potential out there. What we haven't done well in the past is shown them a clear and steady market signal for them to go make the investments they need to make either to maintain the equipment they have or improve their dry dock.

Senator Kaine: Thank you.

I'm over my time, and I'll save additional questions for written or a second round.

Thanks, Mr. Chair.

Senator Perdue: Thank you.

Senator Hawley, I understand that Senator Ernst has
yelled her slot.

Senator Hawley: Thank you very much. Thank you, Chairman.

Thank you, Senator Ernst. I appreciate it.

Secretary Geurts, Admiral Moore, let me ask you how the maintenance challenges that the Navy has been facing is recommending -- informing your recommendations on fleet size as you work through the force structure assessment.

Mr. Geurts: Yes, sir. So, I mean, obviously we've got to have that in balance. You know, building new ships that you can't maintain is not tremendously useful, or not having the fleet size you need to operate globally is not useful. That's a constant discussion within the Navy. Admiral Moore and I have spent plenty of time, in the last 3 months as we're building the '21 budget, trying to get that balance right. The manpower element is, I would say, the third piece of that triangle, so we've got to have, you know, the availability, the capacity, and -- both in terms of ships and people. And, I think, when you see the '21 budget, you'll see our latest view on how to get that balanced correctly.

Senator Hawley: Admiral, do you want to add anything?

Admiral Moore: Yeah, I would just say that the good news, on the public-sector side, we're where we need to be. So, as we go from 291 ships to 355, there's -- you know,
we're really at the 11 aircraft carriers we're at today.

There will be a growth of about -- a little over ten submarines over the next 40 years. But, we think, through SIOP and improved productivity in the shipyard, we can manage that.

Most of the growth from 291 to 355 is going to be in the private sector, and that's going to be, really, the focus of our effort, which is -- gets back to the importance of what the Secretary was mentioning -- stable, predictable budgets -- so a business out there will make the investments and grow their capacity to do the work, going forward. I'm convinced that I have the capacity in the public shipyards today to manage the slow -- the slight growth that we're going to have in nuclear work. I think the bigger challenge is in the private sector, bringing other people into the market and providing them a signal so that they will make the investments necessary, and hire, so that we have that capacity necessary today. That's been our biggest challenge in surface ship maintenance today.

Senator Hawley: Very good. Well, I look forward to seeing more of your work on this and as we look at next year's budget. It seems to me that we have a -- we clearly have a resiliency problem right now, given the maintenance issues. And we are in a position, it also seems to me, where resiliency and capacity are in some tension. And
prioritizing resiliency, given the needs and the demands of
the National Defense Strategy, particularly, again, in the
Indo-Pacific, seems of great importance.

Let me ask you this. Over the last 25 years, the
Navy's cut a lot of its forward infrastructure relied on to
maintain forces while they were deployed. So, to what
extent do you think -- we can start with you, Mr. Secretary
-- that the Navy needs to recapitalize some of that capacity
-- for example, in the form of tenders -- so our ships can
perform more of their maintenance duties while they are on
deployment?

Mr. Geurts: Yes, sir. I'd -- the other balance that
we're really looking hard at is, you know, making sure we've
got all the logistics squared away. That's all of the ready
force, that's sealift, that's maintenance, that's oil, or
that's tenders. We probably got a little bit out of balance
with that, and that's been another focus, over the last
couple of months, as we've looked at putting our budget
priorities together. And we absolutely need to make sure
that we've got that balanced out.

You know, we are going to have to fight to get to the
fight. And that's a little different than what we've had to
do over the last 20 or 30 years. So, a lot of, kind of,
heavy thinking in that, both in terms of operational
planning, logistical planning. And then, what does that
mean to materiel or logistics, whether it's expeditionary, forward-based, or geographically dispersed?

Senator Hawley: Admiral, do you want to add anything to that?

Let me ask you about crew sizes. The Navy's cut crew sizes for many of its platforms over this same time period, which left fewer trained hands available to perform maintenance duties while the ships are deployed. I understand the Navy has already restored some of those maintenance billets. Do you think it would be beneficial to restore additional billets? And do you need Congress's support to do so?

Go ahead, Admiral.

Admiral Moore: I think we have all the necessary decision space to do this without congressional help. I think it's always a balance when you -- you know, the -- one of the large life-cycle cost drivers for a platform is the number of people on board, because the cost of people has been getting more expensive. But, there's a balance. And GAO's done some work on this to show that sailors actually do maintenance, and, when they don't do that maintenance, that maintenance then gets passed on to the depots, which costs more. And some of that work which you would catch early on if you did basic maintenance and corrosion control would not expand into more expensive maintenance later on.
So, I think we're going to have to -- as we get into these future platforms -- littoral combat ship, future frigate -- we're going to have strike the right balance between the desire to get minimal manning on the ship and -- with a recognition that there's a downstream cost to pay associated with that. But, I think we have all the authorities that we need to fix that, sir.

Senator Hawley: Very good.

Last question. We've talked already today about capacity limitations in our shipyards for conducting ship and submarine maintenance.

Let me go back to dry docks for a second. Mr. Secretary, if we implement the Shipyard Infrastructure Optimization Plan, will that get us to a place where we have enough drydock space, in your estimation, to perform the necessary maintenance work in a timely manner?

Mr. Geurts: Yes, sir, absolutely. We're going to take advantage -- there's going to be a little downturn as the submarine numbers go down. That will give us a spot to recapitalize so that, as the numbers grow back up, we will have all the capacity we need.

Senator Hawley: When do you anticipate we would get to that place under the plan?

Admiral Moore: Oh, you know, it's ongoing. We're tracking, very closely, the dry docks. And, as Senator
Kaine and I had talked about previously, we've got -- you know, when we built the mixing bowl, here, we still had to get to work. So, we're still -- we are going to build the dry docks, along with a maintenance plan, along with the growth of the fleet, to make sure that we get the maintenance done in time -- or to get the dry docks done in time to support the maintenance that we're going to need down the road. So, it's an ongoing effort over, probably, the next 20 years or so.

Senator Hawley: Thank you, Mr. Chairman.

Thank you, again, Senator Ernst.

Senator Perdue: Senator Jones.

Senator Jones: Thank you, Mr. Chairman.

Thanks, to the witnesses, for being here.

Kind of following up a little bit on the expansion of the maintenance. And I know that the subs and the carriers are all done, you know, at these shipyards. Is there any value to exploring how expanding the market, so to speak, to -- for our nuclear subs and carriers to private sector to perform non-nuclear-type maintenance on these ships? Is that possible? Is that feasible? What's the risk? What's the reward? Secretary?

Mr. Geurts: Yes, sir. I'll start, and I'll ask Admiral Moore to provide some more of his perspective on it.

So, we are already -- we have sent some nuclear
submarines to our nuclear submarine shipbuilders to do
maintenance availabilities. Quite frankly, the performance
there hasn't been exactly stellar, either. A lot of that is
the same issues we have in the public yards. You've got to
train the workforce. Doing maintenance is different than
doing construction. And so, we've got to -- you know, it's
taken us a while to get the training and proficiency level
up there.

    I foresee, on the submarine side, always wanting to
have a capacity to do some of that work in the private new
construction yards, because that gives us, again, some surge
capacity and gives us opportunities where we need to balance
our workload. So, I see that going on, on the submarine
side.

    And we do some minor work on the carrier side. Admiral
Moore can speak to that.

Admiral Moore: Yes, sir. Thanks for the question.

    So, the work itself probably has to be done in the
nuclear depots just because of the nuclear element. But,
we've already taken steps to try and give some of the non-
nuclear work, non-skid tank work -- you can down all the
list -- and, in particular, into small businesses. I think
there is more opportunity to grow capacity by giving some of
this work that the -- in particular, small business can do,
and free up the skilled artisans at our public shipyards to
work on the really -- the critical things that only they can
work on.

Senator Jones: All right. Well, great. Thank you.

The -- following up on that just a little bit, then, the workforce is obviously a real critical component to all of this. And when we have these budgetary issues -- and I'm -- having been in this body, now, for about 20 months, I may not be as optimistic as my colleagues about any fix right now. I just don't see it happening in the real world that we're living in. And so, with that, we have instability in the workforce. We get workers laid off, we get them hired back, you have to train. You know, what steps can we take -- given just understanding that we're in an instable budgetary process here, what steps can we take, or are we taking, to help maintain that level of consistency throughout so that these workers -- and that may be including transferring workers. I don't know. But, I'd like to have that addressed by each of you, if possible.

Mr. Geurts: Yes, sir. Maybe I'll take the, kind of, private-side maintenance.

So, we are working hard within the Navy to, kind of, work the cash flow issues and prioritize keeping the availabilities on track. We've been able to do that, thus far, in these first two CRs. As that CR gets longer and longer and we're facing a $20 billion shortfall in the Navy
for a full-year CR, eventually that becomes untenable. So, we've kind of done the workarounds. I think the challenge is that uncertainty. If you're a business owner, it looks to be very problematic. And what's really concerning is all the small businesses that are subcontractors to the larger shipyards. They're really the ones that take the hit, because if they -- you know, if work doesn't show up for 2 or 3 months that they had planned on, that can be devastating to a small business. Some of the larger private yards can carry through that. But, you know, we're looking at all the different opportunities we can to create as much stability as we can on the private side.

Senator Jones: Great.

Ms. Maurer: I think, on the public side, we issued a report last year looking at workforce challenges at the entire -- across the entire depot enterprise, including the public shipyards of the Navy. And what we found, that there are a lot of innovative things happening down at individual depots, individual shipyards: retention incentives, pathways programs to encourage high school students to pick up these skilled trades, a lot of things of that nature. So, that's good. But, the recommendation we had to the Navy and to the other services was to take a high-level look to figure out what is actually working and really drill down on those efforts, because, in a lot of the -- particularly in
the public yards, there are competitions for these skilled trades. So, someone who is very skilled at repairing a ship, working at the Norfolk shipyard, can potentially go down the street and possibly make more money in the private yard. So, in the public sector, they need to figure out a way to make sure they retain that skilled workforce. Our recommendation, which the Navy has started to implement, will help them address that challenge.

Senator Jones: Awesome. That's great. Well, thank you.

Thank you, Mr. Chairman. That's all I have.

Senator Perdue: Senator Ernst.

Senator Ernst: Thank you, Mr. Chair.

And thank you very much, to our witnesses today. And may -- I think we've really gone over the budget issues quite thoroughly. Thank you all for sitting through this.

We do have our own challenges in Congress. And I would say that I did sit with Senator Perdue on the bipartisan, bicameral Budget and Appropriations Process Reform Committee. Mazie, you were part of that, as well. And, at the end of that process in 2018, we absolutely came up with nothing that would change Congress's behavior. It is on us, folks. So, thank you for bearing with us. We will have to work through that. Only four times in the past 45 years has Congress ever passed budget and appropriations on time and
on process. Four out of the last 45 years. So, we have to find the intestinal fortitude to work through this. It's not on you, folks. It's on us. So, thank you.

The GAO has estimated that, since fiscal year 2008, the Navy has spent more than one-and-a-half-billion dollars to support attack submarines that provide no operational capability, because they're sitting idle, waiting on maintenance. I think we've gone through a number of those issues on how to mitigate that downtime -- contract renegotiations, using private facilities. Of course, we have absolutely no coastline in Iowa. We have no shipyards in Iowa. So, we can't help you that way. But, we do have a number of businesses in Iowa that are active in supporting the Navy. And I'd bet every single U.S. Navy ship has a Carver pump in it. Carver pump, out of Muscatine, Iowa. So, we do have interest in making sure that our ships are up and operational.

So, I'm not going to dig into shipyards. That's not my area. But, what I would like for all of you to discuss, though, is other ways that we can mitigate some of these issues. And, Secretary, I think you and I have talked over AI before, and how that can be very helpful in some of our maintenance schedules. If you would dig in a little bit deeper, how can we use artificial intelligence, whether that's predictive maintenance, other areas? If you can talk
through that a little bit, how would that be helpful for us?

   Mr. Geurts: Yes, ma'am. And I think the issue is one -- we've talked some of capacity, but there is also an affordability issue. So, even if we had the capacity, we've got to drive down the cost of maintaining the ships, or we won't have the money. And so, that's where I -- we're seeing some amazing novel uses of technology. AI -- we've got a process in the Navy called "perform the plan," where we're using heavy data analytics to really dig in and figure out where the levers are that we should invest in which will have the biggest payoff. That's already providing great benefit to us, and we're looking at bringing more performers in there. AI certainly can play in predictive maintenance and looking at some underlying activities going on.

   The other area we're using is, I'll say, nontraditional suppliers in maintenance -- robotic corrosion, you know, ablation, taking off old paint, using novel techniques that would normally take thousands of hours of labor, that we may be able to do more effectively.

   So, each of the shipyards has a really robust and, kind of, thriving innovation program right now, where they're bringing in folks from Iowa and everywhere else. So, my message is, if you have an idea on how to reduce costs or do things more effectively, we want to get you involved in the program. And we're getting a lot of non-shipbuilder, ship-
repair, traditional industry players that are making a huge
difference for us.

Senator Ernst: No, that's incredible. And I -- I'm
glad that the Navy has really been an active participant
using AI and other methodology to decrease cost to the
taxpayers. It's really important that we have a strong
force, but we're doing it responsibly with what tax dollars
we have.

One of the other areas that we've been looking at is
reworking those existing contracts to make sure that future
contracts are including technical data rights. And can you,
you know, expound on that a little bit, as well, and where
are we with that situation?

Mr. Geurts: Yes, ma'am. A little bit less on the ship
maintenance side as our other contracts, but it impacts
maintenance, because if we don't have rights and we're
locked to a specific vendor, or don't have the data to do
the maintenance, then that can be an issue. So, a lot of
hard work on the Navy. We've kind of got it dedicated now
on data rights, industrial -- intellectual property team-
working to make sure each of our contracts has the rights we
need, again, to go off and provide the full flexibility to
find the most cost- and mission-effective solution.

Senator Ernst: Yes. And I appreciate it very much.

Again, thanks, to all of you. You know, I was doing a
visit, not all that long ago, where you -- we made the point that you don't necessarily have to be a defense hawk or a fiscal hawk. You can be both. All of us on this committee support you. We support you. We just want to make sure our dollars are being used to the fullest extent possible, protecting those taxpayers, maintaining a strong force. So, we want to make sure that we're doing that. But, it is up to us, as Congress, to make sure we have our act in order, as well, so that we can properly fund you.

So, again, thank you very much for being here today. And I appreciate your input.

Thank you.

Senator Perdue: Senator King. Another member of the infamous Budget Committee.

[Laughter.]

Senator King: But, I think there's a plan underway now that's a good one.

Senator Perdue: Well, I just heard we're 90 percent -- our late number is 90 percent, just in case you guys want to do a parallel. I hope you noted that. Four times in 45 years. Sorry.

Senator King: There you go. Thank you.

I want to pull back the focus on maintenance. Admiral, perhaps you can answer this question. 291 ships currently in the fleet. How many of those are either at sea or could
go to sea tomorrow? In other words, what's -- what percentage of the fleet is ready to go tomorrow?

Admiral Moore: Well, I've got -- doing quick math in my head, which is always problematic in public -- I've got 53 ships in -- currently in maintenance availabilities, in public sector and the private sector. So, those 53 ships aren't available. And then there's probably another 50 or so that have just come out of maintenance, that are, we would say, early in their training cycle, that would -- we probably would not deploy. I can take --

Senator King: So, that's about a third. About 30 percent.

Admiral Moore: About a third. And that's probably typically what we would see.

Senator King: Now, my question is -- I don't know how to analyze that figure. Are there any good benchmarks? What's the availability factor of Carnival Cruise Line or American Airlines with their large, bulky metal objects?

[Laughter.]

Admiral Moore: Yeah, well, I mean, Carnival Cruise Line is going to have a higher availability --

Senator King: Or commercial shipping, generally.

Admiral Moore: Commercial shipping, in general, just basic -- because of what they use it for and the type of maintenance that they have to do to maintain the ship, and
because of the fact that --

Senator King: Well, I'm looking for a benchmark. I mean, I'm not suggesting --

Admiral Moore: Okay.

Senator King: -- that's the right one, but, you know, I don't know how to analyze 30 percent. Is that a good number, a bad number? My sense is, that's a high number.

Admiral Moore: Well, I think, historically, that's probably been -- what it's been. I think the -- you know, the Optimized Fleet Response Plan is designed or trying to provide more ASIBO to the fleet from what we've had previously. If you look historically at aircraft carriers, for example, you know, we started in a 24-month cycle, back in around 2000, where the ship was in maintenance for about 6 months, and then it had about, you know, 10 months of work-up and then a 6-month deployment. So, you would say, "Hey, it was only deployable 25 percent of the time."

Today, in a 36-month cycle, you know, 6 months of maintenance, about 10 months to work up, and the ship's available, you know, almost 60 percent of the time for -- to --

Senator King: I want to follow up on Senator Hawley's question, which I thought was a very good one. And that is, How much can we do while the ship is underway? And has some serious analysis been done of that? Because one of the
problems that's been cited here today is the high ops tempo, the longer deployments, the more active deployments. It seems to me if we do some really serious thinking about that, that's an opportunity to diminish the maintenance challenge if we can keep the ships in better shape while they're deployed.

Ms. Maurer: We do a lot of maintenance when -- while we're underway, but it's not the deep maintenance that you would need to keep the ship running.

Senator King: Has the Navy, though, done a -- an indepth analysis of this option, a think piece, if you will?

Admiral Moore: Can I just take that for the record, sir?

Senator King: I'd appreciate that.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]
Senator King: And if they haven't, I would suggest
that it -- it's -- it would be a useful project to sort of
approach it with a -- as a blank sheet of paper and say,
"What -- how much could we do without having to go into the
dry dock?"

Mr. Geurts: Yes, sir. The only thing I would add is,
we also do a fair amount of modernization at the same time.
So, separately, we're doing --

Senator King: Sure.

Mr. Geurts: -- a lot of activity to figure out, How do
we streamline modernization, particularly with our IT
systems, so we're not ripping out cable and ripping out
computers, and be able to upgrade in place? And so, that's
another important difference than a commercial -- they're
not generally doing as much rip out and replace.

Senator King: That's an upgrade, as opposed to
painting and scraping.

Mr. Geurts: Yes, sir. But, we do them in the same
period. And so, we talk about maintenance and
modernization. We've got to work both. And we are working
--

Senator King: And you have to do that with 40-year
assets.

Mr. Geurts: Yes, sir.

Senator King: I understand that.
Secretary Geurts, you've been talking about -- you gave us some good figures, at the beginning, about improved, sort of a momentum in this, sort of shorter delays, more availability. What are the bottlenecks? Is it money? Is it infrastructure? Is it management? Where do we need to target our attention? I say "our," including all of us here.

Mr. Geurts: Yes, sir. I think one of the real powerful things the committee did by putting under the RDA the responsibility for sustainment was ensuring and incentivizing that we're bringing a full set of the acquisition and contracting tool set to play, here. And so, what I tended to see, coming in, was, we had a bunch of availabilities that we treated each as an individual product, you know, and we were -- competed each individually. We did -- it tended to be very late, and it would be, kind of, akin to, you know, every Friday, calling for a painter to show up Monday, and doing that 52 times, as opposed -- and so, getting a more systematic look at it, and figuring out what's really creating the bottleneck -- part of it, on the private side, is not a line of sight or confidence in the vision that's coming. And so, you -- if you don't have confidence in the work coming, you're not going to make the longer-term investments to have the right workforce and the right infrastructure.
Senator King: We're -- I'm out of time, but I want to leave you with a quick suggestion. When you buy a ship, you should also buy the intellectual property to the parts so that the Navy can print, which is where it's going, its own parts, which I think would be a significant increase in efficiency rather than having to wait to order parts and get them in. I just -- same thing -- I've made this recommendation. You should not only buy the ship, but buy the rights to the -- to make the parts, as necessary.

Mr. Geurts: Yes, sir. And maybe in a followup I can -- I mean, we have 3D printers we're deploying with ships now, so --

Senator King: Good.

Mr. Geurts: -- I'd love to give you --

Senator King: I could see them all -- I could see 3D printers deployed on the ships.

Mr. Geurts: They are. We already have them deployed on ships. So, I -- and I'll give you an update on that, maybe separately, as a followup.

[The information referred to follows:]

Senator King: Thank you. Appreciate it.

Thank you, Mr. Chairman.

Senator Perdue: Senator Shaheen.

Senator Shaheen: Thank you, Mr. Chairman.

And thank you all very much for being here.
I want to follow up on the 3D printer with respect to the impact on the submarine industrial base, because that's one of the challenges that I think we would all agree we face. Back during the Cold War, we had over 17,000 suppliers. Now we have about 3500 active suppliers. And as we think about what we need to do to ramp up production for the Virginia payload module for the Columbia class, that's a challenge, which may be made worse if we no longer are looking for some of those suppliers to provide parts. So, I guess my real question is, what are we doing to support and grow that industrial base that we're going to need?

Mr. Geurts: Yes, ma'am. And there's -- you know, I talk a lot about the submarine -- the generational production we're doing on the submarine side. And one of the key enablers to that is the supply base -- regrowing that, robusting it, and making sure it's capable of delivering. What we're trying to do is -- we have an integrated enterprise plan, where we take all of our submarine work, all of our aircraft carrier work, look at it in total, and make sure the supply base sees that in total so they understand the marketplace. That's starting to bear some fruit. And the Congress has been very helpful with a lot of the initiatives, in terms of funding, to get the supply base up to the ramp we need. When I think of the 3D-printed issue, I don't think of it displacing a supplier
doing work. I think of it more, how can I do some
expeditionary maintenance --

Senator Shaheen: Yeah. No, I was sort of --

Mr. Geurts: -- in place --

Senator Shaheen: -- being facetious when I was --

Mr. Geurts: Yes, ma'am.

Senator Shaheen: -- saying that. But -- I appreciate those efforts, but what is the signal that the Navy sends when we have a contract for nine Virginia-class submarines with General Dynamics Electric Boat and we still haven't committed on the tenth submarine? Doesn't that send sort of a mixed message with our interest in seeing the industrial base do the ramp-up we need?

Mr. Geurts: Yes, ma'am. And specifically to ensure that didn't cause an issue with the supplier, in that contract we have awarded all the materiel for all ten submarines. So, to the supplier, they're getting orders for the -- all the materiel for ten ships. That's because we didn't want to cause disruption in their plans.

Senator Shaheen: Great.

Mr. Geurts: So, I think we've mitigated that risk in the supply base. The option is really for the construction element of the ship.

Senator Shaheen: Thank you.

I want to go back to the Infrastructure Optimization
Plan. I had the opportunity, a couple of weeks ago, to be at the Portsmouth Naval Shipyard with a number of other members of the delegation to do the groundbreaking for the paint, blast, and rubber facility, and also for the Defense Logistics Agency Warehouse, which are critical pieces if we're going to continue to make the shipyard more efficient. As you know, one of the projects that is part of this effort is the Multi-Mission Dry Dock Project, which -- can you confirm if that's still on track for the FY21 budget request?

Admiral Moore: Yes, ma'am. It's still on track. That's a key component of our overall strategy.

Senator Shaheen: Good. Thank you.

And as you're looking at -- you've discussed a number of things today with respect to what will increase the Optimization Plan -- increase the costs of that Optimization Plan. And, Ms. Maurer, you talked about the 17 recommendations which could help address that. How is the Navy looking at those recommendations and implementing them?

Mr. Geurts: Yes, ma'am. And I am in total agreement with the GAO, in terms of their identification that we need to continue to refine our cost estimates, have an independent cost estimate done. The way we're approaching that is, as you know, modeling the shipyards, building the digital models. That will then lead to, kind of, our area
defense plan -- or area construction plans. And then, that will allow us to get the refinement in there. Separately, and I think uniquely, we've put a combined program office team -- we're going to run this like a program, not a collection of individual products -- or projects. I think that's unique -- I haven't seen that before in the DOD -- given the importance of this. I think that, one, we have a dedicated team to it, with all the right discipline. We've got the recommendations on how to cost-estimate better. That will all come together and continue to give us more confidence that we've got the projects scheduled in the right way to do the right job with a budget that we understand and can execute.

Senator Shaheen: And does that sound right to you, Ms. Maurer?

Ms. Maurer: Yes, it does. We're very encouraged by the fact that the Navy concurred with our recommendations. And it is -- I don't think it is -- it is also very important they set up this program office, because, up until now, to try to finance improvements at the yards requires pulling from multiple pots of money, wiring together in different parts of the Navy org chart. Pulling it all together in one piece is important.

The last thing I'll say, though, is, since this indeed a 20-year plan, it's very important for Congress to continue
to keep its eye on it, as well as Navy leadership. And, of course, with the GAO, we'll keep track with what's going on with the implementation of our recommendations.

Senator Shaheen: Thank you.

And I'm out of time, but I just want to thank you, Secretary Geurts, for attending the USS Thresher Memorial ceremony at the end of September. As we all know, the Thresher was the worst submarine accident in naval history in the United States, and it took the lives of 129 men on board. And to finally get that memorial meant so much to the families. And to be able to recognize the SUBSAFE Program that grew out of that tragedy, and the difference that that's made to keeping our sailors safe, it's really important. So, thank you very much.

Mr. Geurts: Thank you, ma'am.

Senator Perdue: Senator Duckworth.

Senator Duckworth: Thank you, Mr. Chairman.

And thank you, to the witnesses, for being here today.

I believe that, in any discussion on the readiness of Navy ships and submarines, we must include a discussion of logistics. Specifically, military logistics on transportation, I feel, is often overlooked. So, I would like to discuss the fact that Navy ships and submarines would not be complete without discussing the readiness of the strategic sealift fleet, as well.
The sealift fleet is comprised of both Maritime Transportation Administration, MARAD, ready reserve fleet vessels, and Military Sealift Command surge vessels. If fully activated, the entire body of the strategic sealift fleet would be tested. This capacity is vitally important in getting to and sustaining a fight, especially when you're looking at places like Africa or the Asia-Pacific region. The time to focus on the readiness of this entire strategic sealift capability is now, and not during a national crisis or war.

And so, as you all know, the strategic sealift is managed by two organizations, the Sealift Command and the Maritime Administration. Given that we have two organizations in two different departments that are responsible for the U.S. military strategic sealift capability, I believe it's really important that we consider the readiness and maintenance needs of MARAD's ready reserve fleet when discussing the Navy's overall ship and submarine maintenance status.

Mr. Geurts, Vice Admiral Moore, what are you currently doing to track and capture the maintenance needs of MARAD's ready reserve fleet? And how do you balance and ensure their maintenance cycles are prioritized?

Mr. Geurts: Yes, ma'am. It's a really critical element of our Nation's warfighting force and, to your
point, sometimes gets overlooked. A lot of work over the last, I'd say, year and a half. We did a report to Congress in March of '18, kind of, outlining the need to have the sealift force the Nation needs, just like we need the Navy the Nation needs. We get daily updates from MARAD on the status of all of their ships, what -- you know, their reliability, what their challenges are. And they certainly have challenges. It is an aging fleet. We put together, kind of, a three-prong plan, in terms of service life, extending, perhaps replacing, a small number with used boats, and then having a recapitalization plan. We outlined that in March, and we're continuing to execute that right now.

Senator Duckworth: Did you want to add anything, Admiral?

Admiral Moore: No, ma'am.

Senator Duckworth: Okay.

Does the panel believe that the Navy appropriately values the ready reserve fleet and provides adequate funding for their maintenance? And, if not, what level of funding do you think they need?

Mr. Geurts: Yes, ma'am. I think we are, over the last 2 years, renewing our commitment to that. We have been adding money in the budget every year to ensure we can extend those ships that are aging out, and then look for
creative ways to recapitalize them. Probably opportunities
to continue to work with Congress to come up with the best
balance of that -- kind of, those three levers to pull:
extending current ones, replacing some of those with
available used fleet, and then buying new. And we'll --
we're -- we'll to continue to work with you on that. That's
part of our '21 budget discussion, is to make sure we have
that balanced out the right way.

Senator Duckworth: Okay.

I'm deeply concerned about the abysmal status of the
surge sealift -- the Navy's surge sealift vessels. In
total, it's -- what I have is that two of the 15 vessels are
currently not mission-capable, five of the 15 are deemed
unseaworthy and have now lost their Coast Guard certificate
of inspection, and, basically, half of the Navy -- almost
half of the Navy's surge vessels can't even set sail.

Admiral Moore, what is your maintenance plan to repair
the Navy's surge sealift vessels and return them to a fully
operational status?

Admiral Moore: Yeah, ma'am, unfortunately, I don't --
MARAD doesn't fall under me, so I can't give you a good
answer on that, but I'm certainly happy to take that to
record and get to -- get that question to the right person
and get you an answer.

Senator Duckworth: Right, they don't fall under you,
but you're going to be relying on them. So, what are you
doing to nudge them along or -- I mean, we can't be in these
silos and say, "Well, they don't fall under us." But, half
of them are not even seaworthy, and we're going to rely on
them -- the Navy's going to rely on them. So, what are we
doing?

Mr. Geurts: Yes, ma'am. So, again, for the current
fleet, we have been increasing the funding to service-life-
extend the existing ships and then working on a
recapitalization plan at, kind of, the Navy level. Admiral
Moore doesn't own the maintenance of those. Those fall
under the broader perspective. So, I think -- I'd love to
offer a commenter who would give you a detailed brief of how
we see that laying out, the resources we're putting in
towards this, and where we see the readiness now and growing
in the future.

Senator Duckworth: I definitely would like to get a
briefing on that recapitalization plan. I do think that we
have a silo problem, here. And the Navy, overall -- DOD,
overall, is going to be relying on those ships. And to say
that, "They don't fall under us" is, I think
oversimplification, because I think we need to be working
jointly together when half of them are not -- I mean,
they've lost the Coast Guard certification.

Mr. Geurts: Yes, ma'am.
Senator Duckworth: That's unacceptable.

Mr. Geurts: Yes, ma'am.

Senator Duckworth: Thank you.

I yield back.

Senator Perdue: I understand we're going to have a
series of votes at -- starting at 11:30, but we will go
through a second round, here, very quickly.

And I just have one other followup question. I'll have
other questions -- I'll put them in the record --
particularly with regard, Ms. Maurer, your report on the
equipment. We didn't quite get to the equipment. But, this
is shocking to me, as an ex-manufacturing guy. That some of
our equipment is 15 years past its useful life is shocking
to me, at -- I believe that was at Norfolk, on page 13.

Can you parallel -- Ms. Maurer, can you parallel the
aircraft? We've talked about surface ships. And I know
that's not totally within your -- but I'd love to get a
contrast between -- I know you have a background in this.
Where are we in -- in beginning of 2017, about two-thirds of
our F/A-18s really couldn't fly that night. They were
waiting on -- that day -- they were waiting on maintenance.
I know the Navy's made great progress in that. I know you
just had a presentation on the F-35, as well. Parallel for
us the depot issues on aircraft that are coming off our
aircraft carriers, as well -- and briefly, if you don't
mind.

Ms. Maurer: Sure. Real briefly, big picture, the Fleet Readiness Centers, which are the -- part of the Air Force that -- or part of the Navy, rather, is taking care of Navy aviation, faces some of the similar challenges in terms of infrastructure, similar challenges in terms of workforce, maybe not as acute as they see at the public yards, but, systemically, it is the same. We have some ongoing work right now that's looking at the current status of fixed-wing as well as rotary-wing aircraft, in terms of their mission capabilities and historical operation and sustainment costs. That'll be coming out early in the coming calendar year so we have some more information on those trend lines. But, essentially, readiness levels and mission capability levels are not where they need to be for Navy aviation or for the Air Force.

Senator Perdue: Thank you.

Senator Hirono.

Senator Hirono: Thank you.

In September, my colleagues in the Hawaii Congressional Delegation sent a letter to Secretary Spencer about the Navy's intent to cancel plans to construct a drydock waterfront facility, P-214, at Pearl Harbor Shipyard, and the impact that this would have on workforce morale, quality of life, and the Navy's ability to achieve efficiencies in
maintenance and availabilities for the Pacific fleet. P-214 is a project that has been authorized and appropriated twice to address vital shortcomings at Pearl Harbor. And in light of the GAO report, I'd like to reiterate my concern that cancellation of this project is premature and will have an undesirable and negative impact on the workforce at Pearl Harbor that has been asked, for years, to work in often substandard conditions. And, despite these conditions, the workforce at Pearl Harbor has sacrificed and persevered to meet their mission of ensuring the readiness of the Pacific fleet. It is long past time to demonstrate to the workforce that new capital improvements to the infrastructure are on their way.

So, I'm interested to learn -- and this is for you, Secretary Geurts and also Admiral Moore -- to learn why the Navy chose to do this, this cancellation, before the new proposed facility is fully analyzed and evaluated, designed, and costed, especially given the preliminary cost estimates of the new drydock production facility estimated to be between 1.5 and 2.0 billion. I mean, don't get me wrong, I want to see a new -- you know, the new drydock production facility, but I do have serious concerns with the Navy's ability to adequately budget for such a significant project.

So, really, timing-wise, the analysis that you're undergoing will be completed next spring to determine the
feasibility, while the funding for the canceled project, P-214, is good for 5 years. And I think you understand why I'm concerned about the premature cancellation. So, will you explain to me why you needed to cancel P-214 while you're still undergoing an analysis process?

Admiral Moore: A lot of -- ma'am, thank you for the question. So, I mean, we're fully committed to the upgraded drydock production facility that's going to go in. This particular facility, at $45 million, was relatively small and a small portion of the yard. Our early analytical work showed that the return on investment was going to be small compared to what we're going to get with the drydock production facility that's going to go in there next. And so, rather than spend money there and then have to take that down when it gets superseded by the new production facility, we made the decision that it would be better to press on for the drydock production facility. And you have my commitment, you're going to get a -- either a new graving dock or a floater, and you're going to get a drydock production facility that's going to be state-of-the-art, that is going to set Pearl Harbor, first and foremost, ahead of everybody else.

Senator Hirono: But, you're not spending this 45 million right now. It's good for 5 years. So, why not leave that on the books?
Admiral Moore: I believe the Navy's intent, because of some -- was to use that to continue to work on the refueling facility that has to be completed at Portsmouth Naval Shipyard. So, the money is going to be reprogrammed to do that necessary work, because that work has to be finished --

Mr. Geurts: Yes, ma'am. I -- again, I will make the same commitment. I'm also working very closely with our environmental and installations group to see how we can accelerate these larger facilities that we've talked about here, given their importance and the criticality of ensuring we have the right facilities for the workforce here. You're absolutely right, we need to demonstrate to all the workers in our shipyards that we're -- we care about them, we're going to invest in them and give them the world-class facilities they need.

Senator Hirono: Well, apparently that message is still -- you know, it hasn't assuaged the concerns about what is deemed. And this is a concern shared by our delegation, that this is a rather hasty cancellation.

The GOA testimony today is based on previously published work in 2015 and 2019 regarding ship maintenance and the whole slew of issues that have already been raised. The GOA made 17 recommendations, and the DOD has concurred with most of them, and has fully implemented six. I don't know if this is something that, Secretary Geurts, you can
respond to as to what the other -- the remaining recommendations are, and where we are, and the status of meeting those recommendations, or if this is a question that should go to the Secretary of Defense.

Mr. Geurts: Yes, ma'am. So, I take the GAO's recommendations and our commitment very seriously. I agree with the analysis in the -- at the end of Ms. Maurer's testimony, kind of, outlaid, kind of, status on those. So, a number of them are, kind of, longer-reaching recommendations, and we're going to work closely with the GAO to ensure they know where we are, and then, quite frankly, use their skills and perspective to ensure we are acting in the way we need to and get the best practices. So, it's got my personal attention. I've looked through each one of them, and hold me accountable to implementing them.

Senator Hirono: Thank you.

Senator Perdue: Senator Blumenthal.

Senator Blumenthal: Thank you, Mr. Chairman.

Thank you, Secretary Geurts, for speaking with me on the phone the other day before the signing of the Block 5 contract with Electric Boat. And thank you for your and other members of the panel's support for our submarine-building program there and elsewhere around the country. I think we're all agreed, in this room at least, that our
submarines seem to be the most survivable leg of the nuclear
triad, and that Russian advancement in this area underscores
the importance of investing in this strategic advantage.
There's no way around the need for investment and
engagement, not only in the marque-named builders, but also
the suppliers, the defense industrial base, the supply
chain, which need, as much as anything else, that
investment.

And you and I talked a little bit about the capability
of Electric Boat and other private contractors to meet the
needs under that contract and others. The Block 5 contract
has an option for a tenth submarine. I think we need an
eleventh within that same time period covered by the
contract. But, the question that we discussed is whether
there will be the capability to do the Virginia-class
building and Columbia-class, an unprecedented challenge for
our defense industrial base.

And the key to it, in my view, is workforce training.
You alluded to it in it -- your testimony, and you
specifically mentioned, quote, "improving the training of
the workforce" as a key-line effort in the public shipyards.
I want to emphasize how important workforce training is in
the private shipyards, and how important it is for there to
be close collaboration between the Navy and private partners
in meeting the training deficits that we face right now.
You visited Electric Boat this August with Secretary Esper. You saw Electric Boat's active learning centers. They're doing all the right things. We just need to make sure they are scaled up. Instead of hundreds, we need to train thousands.

So, let me ask you, as well as Admiral Moore, do you believe, as I do, that proactively addressing these looming workforce shortfalls in the private yards is essential to ensuring on-time delivery of the Columbia-class and the Virginia-class programs?

Mr. Geurts: Yes, sir. I would say workforce development for the Navy, even broader than all that, is the number-one issue, whether that's in training sailors, whether that's in training our maintenance teams, whether that's in the public yards, whether it's in the private yards, or whether it's new construction, whether it's repair. I'm very encouraged by a lot of the, I would say, innovative techniques, our Electric Boat, Newport News, HI, is using, as well as in our public yards, to get after that. We've lost a generation of vocational skilled training as a kind of core, and so rebuilding that is going to be one of the critical elements, not only for the Navy, but for the Nation. And we are dedicated to ensuring that's a key thing that we stay focused on, in all regards.

Senator Blumenthal: I assume, Vice Admiral Moore, you
would agree.

But, I really want to emphasize that it's -- and you folks do a great job with training sailors. No question. But, the private manufacturers and shipyards need the investment. And in the last budget, or in the one that's under consideration now, I think there's $10 million that I asked to be inserted for Electric Boat's training program. I think that, in future years, that number has to be much bigger than it -- than that $10 million, because the pipefitters, the welders, the electricians, the folks who actually put submarines together, they make the parts, they put those parts together, and they do it very well. But, as you've said very well, we're losing a generation.

Thank you.


Senator Sullivan: Thank you, Mr. Chairman.

I just have one final question as, kind of, from the GAO study, but then to the strategic level.

So, the GAO found that, since fiscal year 2014, the Navy fleet all across the board has spent over 33,000 more days in maintenance than expected. That seems -- number's almost incredible. That's 91 years of delay. And if this is becoming so commonplace that it seems to be something that we're building into our operations, Mr. Secretary, Admiral, how can we be advancing the strategic objectives...
outlined in the NDS with this kind of challenge? Obviously
the lost operational presence in places like the South China
Sea or the Mediterranean or the Arctic is a huge negative
impact. And does China have these problems like we do, or
are they just getting their fleet out and about? How is
this impacting our broader National Defense Strategy?

Mr. Geurts: Yes, sir. I guess, from my perspective,
the past performance is unacceptable and unsustainable. And
that's why you've seen, I think, such a large focus on the
Navy, particularly in the last 2 years, to look at this
problem holistically. As the GAO's indicated, it's a -- you
know, a system of systems. There's lots of moving parts.
We, in the past, may not have looked at all of it
holistically. It was lots of little tribes, kind of,
working in different elements.

I'm encouraged by the performance we've seen in the
last 18 months, but I'm not satisfied. We have a long way
to go to ensure we can, kind of, get up on the pipeline we
need and then drive cost out of it.

Senator Sullivan: But, bottom line, this dramatically
undermines our ability to --

Mr. Geurts: Absolutely.

Senator Sullivan: -- execute the National Defense
Strategy and reorient towards the Indo-Pacific.

Mr. Geurts: Yes, sir.
Senator Sullivan: Do you agree with that, Admiral?

Admiral Moore: Yes, sir, I agree with that.

Senator Sullivan: Thank you.

Senator Perdue: Senator Kaine.

Senator Kaine: Thank you, Mr. Chair.

I think that was a good analysis that Senator Sullivan did. I hadn't done the math. But, 91 years of delay -- delay is 91 years of these subs and ships not being in the water, doing the mission that they do, which is not only defending the country, but preserving open sea lanes, et cetera. So, if you think about it as 91 years of mission loss, that really demonstrates why we have to get on this.

A couple of questions for you, Ms. Maurer, really quickly. On that first page that I quoted when I did my opening comment, I just want to make sure I understand another piece that you mentioned. At the bottom of the first page, What GAO Found: "For example, the Navy estimates it will take 20 years to improve the infrastructure at its shipyards." I am assuming that that is a reference to the Shipyard Infrastructure Optimization Program. Is that correct?

Ms. Maurer: That's correct, Senator.

Senator Kaine: And that's the program -- Secretary Geurts, in your testimony, that's the 20-year, $21 billion program. Now, that's your desire. You still have to get
the funding from us, right?

Mr. Geurts: Yes, sir. We've got to request it, and then it has to be supported.

Senator Kaine: And in that $21 billion Shipyard Infrastructure Optimization Program, a lot of that money is MILCON money, correct?

Mr. Geurts: Yes, sir.

Senator Kaine: So, for example, on your testimony, you talk about examples of MILCON projects underway. And my eye is drawn to the Norfolk one of the four, but you talk about a new -- you're in negotiations to award a contract to build a new defueling and inactivation complex that will replace a 25-year-old facility. And so, that's just an example of, at these shipyards, the sorts of MILCON investments that are going to need to be made.

Mr. Geurts: Absolutely, sir. And part of the challenge is, we've run these shipyards hard, and they were designed many, many years ago, and they're not now optimized, as I'm sure Senator Perdue, when he looked at it -- that's not the way you would set it up from scratch. So, we've got to not only modernize it, but do it in a way where we can get efficiency back into those shipyards.

Senator Kaine: Let me tell you another challenge you have. So, one challenge is, a lot of this money that you need to solve the problem that we're discussing today is
MILCON money, but another one is, there's a lot of competition for MILCON money, right? I mean, we're talking about -- we have to build new hangars to deal with the F-35s that are coming online. We have to repair Tyndall and Lejeune that got blitzed, you know, by hurricanes in 2018. So, it's not exactly like MILCON projects are just easy to get funding for, correct? The competition is pretty intense.

Mr. Geurts: Yes, sir.

Senator Kaine: I'll just close by saying my colleagues and I are really, really committed to having a MILCON budget that is robust and that goes for the purpose for which it was intended.

Thank you, Mr. Chair.

Senator Perdue: I'm going to take you -- the Chairman's privilege and make a comment, because I want to follow up on that. I think that's a very valid comment. And I'm not surprised it comes from the Senator. He is very thoughtful about these issues. And that is this, that I'm concerned, when we look at Seapower as a subcommittee, and Readiness, these two committees overlap in so many ways. The one I'm concerned about is allocation of total spending in the Department of Defense. We spend about $760 billion. Fourteen percent of that is overhead. I'd like to understand why that's up from 2 percent, just 40 years ago.
The -- but, the other 86 percent gets split in a third, a third, a third. And I've got two Navy people here today, so I'm going to get a vested -- I'm not asking a question, but I want to make a point. The point is, the NDS -- the allocation of dollars in our budget for the DOD is not consistent in so many ways. MILCON is one. But, the overall support of the NDS is not there. It does -- it's not consistent. The allocation of the money is not consistent with NDS. And that's something that we're going to be looking at, from a Seapower Subcommittee standpoint. So, I would welcome any input you guys have specifically as it relates to NDS.

Senator King.

Senator King: No questions.

Senator Perdue: Senator Blumenthal, do you have another followup?

Senator Blumenthal: No.

Senator Perdue: Anybody?

Well, I think we've worn the subject out. So --

First of all, Ms. Maurer, thank you for this report. This is fascinating. And I appreciate the objectivity and the succinctness of it. It really helped us advance our education of the -- this issue. We'll be talking more.

But, Admiral, thank you for your service and your -- both of you, for your service and your focus on this. We
know you're on it. We see the improvement.

But, this has been a very enlightening hearing. Thank you all for being here today and for your testimony.

Thank you.

[Whereupon, at 11:39 a.m., the hearing was adjourned.]