Stenographic Transcript Before the

Subcommittee on Seapower

COMMITTEE ON ARMED SERVICES

# **UNITED STATES SENATE**

HEARING TO RECEIVE TESTIMONY ON NAVY SHIPBUILDING PROGRAMS

Tuesday, November 27, 2018

Washington, D.C.

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3	Tuesday, November 27, 2018
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5	U.S. Senate
6	Subcommittee on Seapower
7	Committee on Armed Services
8	Washington, D.C.
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10	The subcommittee met, pursuant to notice, at 2:31 p.m.
11	in Room SR-220, Russell Senate Office Building, Hon. Roger
12	F. Wicker, chairman of the subcommittee, presiding.
13	Present: Senators Wicker [presiding], Rounds, Shaheen,
14	Blumenthal, Kaine, and King.
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OPENING STATEMENT OF HON. ROGER F. WICKER, U.S.

#### 2 SENATOR FROM MISSISSIPPI

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3 Senator Wicker: The hearing will come to order.
4 Ranking Member Senator Hirono is in a markup and will be
5 joining us as soon as she can.

б By agreement, we are going to skip opening statements 7 of the chair and ranking member until such time as Senator 8 Hirono arrives. And -- but we will welcome our three 9 distinguished panelists today -- Honorable James F. Geurts, 10 Assistant Secretary of the Navy for Research, Development, 11 and Acquisition; Vice Admiral William R. Merz, Deputy Chief 12 of Naval Operations for Warfare Systems; and Lieutenant 13 General David H. Berger, Deputy Commandant of the Marine Corps for Combat Development and Integration. 14

So, gentlemen, I understand you have drawn straws, and one of you gets to make an opening statement. Is that correct?

18 Mr. Geurts: Yes, sir.

Senator Wicker: All right. Well, we will let you proceed, and then we will take questions on a 5-minute basis. And when my distinguished ranking member arrives, we may interject some opening statements for the record. You are recognized, Mr. Secretary.

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1 STATEMENT OF HON. JAMES F. GEURTS, ASSISTANT SECRETARY 2 OF THE NAVY FOR RESEARCH, DEVELOPMENT, AND ACQUISITION; ACCOMPANIED BY VICE ADMIRAL WILLIAM R. MERZ, USN, DEPUTY 3 CHIEF OF NAVAL OPERATIONS FOR WARFARE SYSTEMS (OPNAV N9); 4 5 LIEUTENANT GENERAL DAVID H. BERGER, USMC, COMMANDING б GENERAL, MARINE CORPS COMBAT DEVELOPMENT COMMAND AND DEPUTY 7 COMMANDER FOR COMBAT DEVELOPMENT AND INTEGRATION 8 Mr. Geurts: Thank you, sir. Chairman Wicker, Ranking Member Hirono, and 9 10 distinguished members of the subcommittee, thanks for the 11 opportunity to appear before you here today to update you on 12 the Department of the Navy shipbuilding plan. I am joined 13 today with Admiral Bill Merz, Deputy Chief of Naval Operations for Warfare Systems, and Lieutenant General Dave 14 15 Berger, Deputy Commandant for Combat Systems Development and 16 Integration. With your permission, I would like to provide a few 17

18 brief remarks for the three of us and then submit our formal 19 statement for the record.

20 Senator Wicker: Okay, proceed.

Mr. Geurts: We would like to first thank Congress forthe timely enactment of the Fiscal Year 2019 DoD budget.

23 On-time enactment of the authorization and appropriation for

24 Fiscal Year 2019 without a continuing resolution provides

25 the predictability and stability in funding that is critical

as we build the Navy the Nation needs in support of the
 National Defense Strategy.

Timely passage of this budget has enabled us to 3 4 accelerate contract awards, increase our acquisition 5 efficiency, and deliver for our sailors and Marines. б Additionally, your continuing support of our maritime 7 accelerated acquisition programs has provided much-needed 8 agility within the budget cycle. Through day-to-day interactions with the committees, we are able to quickly 9 pursue near-term capability gaps against emerging threats. 10 11 The strategic environment continues to be more dynamic, 12 increasing in its uncertainty and sophistication. The 13 proliferation of modern technologies, along with the erosion of the competitive advantage in areas where we have long 14 enjoyed relative superiority, contest our ability to 15 16 influence and create a great range of challenges for a 17 globally responsive force. In order to retain and expand 18 our competitive advantage, it is imperative we continuously 19 adapt to the emerging security environment and do so with a 20 sense of urgency. This requires the right balance of 21 readiness, capability, and capacity, as well as budget 22 stability and predictability. It requires a Navy of at 23 least 355 ships.

24 The Navy's 3-year shipbuilding plan for Fiscal Year
25 2019 provides the framework to achieve this 355-ship Navy at

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a steady, sustainable, and affordable rate. Our current
plan puts the Navy on path to 327 ships by Fiscal Year 2023
and 355 ships by 2034. Executing this plan relies on
sufficient and stable funding. It also requires we continue
to work to improve our -- and reform our business processes,
as well as ensure we maintain a robust industrial base.

7 Our shipbuilding industrial base and supporting vendor 8 base continues to be a unique national security imperative that must be properly managed and protected. We value our 9 10 partnership with Congress, and together, we can ensure that 11 our Navy and Marine Corp teams operating around the world continue to provide effective deterrents as instruments of 12 13 peace or, if necessary, to deliver superior naval power to protect those who are threatened. 14

We thank you for the strong support the subcommittee has always provided the Department of the Navy and the opportunity to appear before you today. We look forward to answering your questions.

- 19 [The prepared statement of Mr. Geurts follows:]
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Senator Wicker: Well, thank you very much. And I will
 just direct questions to the panel, and the one who feels
 best suited to answer, step forward.

Encouraging news on the requirement, the statutory requirement according to the SHIPS Act, which is the unanimous position of this subcommittee and also the law of the land signed by the President of the United States. So, 327 by the year 2023, 355 another 11 years after that. How will the -- how optimal will that mix be, Mr. Secretary, at those two stages?

11 Mr. Geurts: Sir, I think, you know, as we talked about 12 in the springtime, we were ready to accelerate the plan to 13 2034 by extending the life of a number of our destroyers. 14 That is not the optimal mix, per se. I will turn it over to 15 Admiral Merz in terms of where he sees a little bit of an 16 imbalance. But it is certainly a workable mix that would 17 allow us to execute the National Defense Strategy.

18 Bill, if you want to jump in?

19 Admiral Merz: Yes, sir.

First of all, Senator, I would like to echo Secretary Geurts' appreciation on the enactment of the 2019 bill. It just makes every process significantly more efficient.

23 Senator Wicker: It was a bipartisan achievement, and I24 am I proud to have been part of this team.

25 Admiral Merz: Yes, sir. Thank you very much.

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1 Regarding the mix, you know, we have been long-time 2 defenders of the proper mix to 355. The 355 is a derived 3 number. We determine what type of ships we need in what 4 numbers, add them all up, and we get the 355 or higher, 5 depending on what study you rally around. When we extended б the life of the DDG 51 to 45 years, it immediately shifted 7 the shipbuilding plan left about 20 years as far as total 8 numbers, but in the incorrect mix.

9 However, if you are going to have an incorrect mix, it 10 is nice to have too many destroyers while we were balancing 11 out the remainder of the fleet. So we have determined that 12 that imbalance is less of a risk, more of an imbalance in 13 the correct direction.

14 Senator Wicker: Good point. Good point.

Admiral Merz: But we still need to fill in the rest of the fleet, and holding the fort down with more DDGs is a sound way forward.

18 Senator Wicker: Well, let me ask you about some 19 assumptions that might change the plan and get us there 20 faster. Specifically, what would happen if the Navy changed 21 some or all of the following assumptions? Executed 22 additional service life extensions. Maintained overall 23 shipbuilding funding levels at the Fiscal Year 2035 level 24 after we get finished with the Columbia class procurement. That would be sweet, would it not? Receive supplemental 25

1 funding for the Columbia program outside the normal account 2 in Fiscal Year 2021 through 2035. Or -- and/or use the 3 available shipyard capacity identified in the 30-year 4 shipbuilding plan.

5 Mr. Geurts: Sir, I think all those would be 6 instruments of change to move that to the left. When we 7 built the shipbuilding plan, we built a framework of what a 8 steady, sustainable rate would be and then where we had 9 opportunities to accelerate should funding become available, 10 whether that is in destroyers or in submarines, or in some 11 of the other classes.

12 So those opportunities exist. Depending on the levels 13 of those assumptions you spoke of there, there is certainly 14 opportunity to move that plan to the left.

15 Senator Wicker: Okay, so --

Mr. Geurts: I think it is important, though, sir, and I think that both my colleagues would share that we are balanced in doing that. And so, as we look forward to our plan, we got to make sure we include a balanced force that we can sustain and keep ready, and that is part of the calculus as we move forward as well.

22 Senator Wicker: Okay. You know, according to statute, 23 we are supposed to revert back to the BCA caps. I view that 24 as unthinkable, and it would be irresponsible on the part of 25 this Congress. But what would happen if we did that, or how

might a flat or declining defense budget affect the
 shipbuilding account? What would that do to our national
 defense readiness?

4 Mr. Geurts: Sir, I think, our job for the Department 5 --

Senator Wicker: You have 12 seconds, sir. 6 7 Mr. Geurts: Yes, sir. Our job for the Department of the Navy is create the best balanced force mix we can, given 8 the funding available. So I will not hypothesize what that 9 might look like in those different budget scenarios other 10 11 than to say, you know, we would try and balance with the 12 funding available. Obviously, at the BCA level, that 13 significant a cut would be difficult to imagine us executing the current plan under BCA caps. 14

15 Senator Wicker: Difficult to imagine, yes.

16 Admiral Merz: Sir, if I can just add on to that, 17 actually two pieces, your previous question about service 18 life extensions, we do that -- we review every ship for 19 service life extensions and extend what we can. But those 20 last two points you made, I think, are absolutely 21 fundamental to sustaining the shipbuilding plan. That is a 22 steady funding profile and the figuring out an alternate 23 solution to the Columbia funding profile, which we have 24 already identified in the shipbuilding plan, and that is 25 work to be done. Not quite a panic yet, but it is on the

1 horizon, and we are going to have to deal with that.

As far as the BCA, there would be immediate impact as soon as that went in. Depending on how it last, I think we can go from immediate to devastating impact on the program. Senator Wicker: Thank you very much.

6 Senator Shaheen?

7 Senator Shaheen: Well, thank you, Mr. Chairman. And Secretary Geurts, I am glad that Admiral Merz was 8 more direct about his response to that question. And I 9 10 would say to you all that this is an imminent possibility, and unless Congress is very clear about what the impact is 11 12 going to be, I think it makes it harder to make a decision. 13 So I hope that you will not be as diplomatic as you were in your response to that question, and you will be very direct 14 and say, "This is what the impact is going to be." Because 15 16 I think people -- I think we need to hear that in order to make the best decision possible. 17

18 Mr. Geurts: Absolutely. Will do, ma'am.

19 Senator Shaheen: Secretary Geurts, as we all know, the 20 goal of the 355-ship Navy came as the result of the QDR in 21 2014. Now all of us here on the subcommittee were in 22 Halifax a couple of weeks ago for the Halifax Security 23 Forum, and we heard Admiral Davidson, who is the commander 24 of U.S. Indo-Pacific Command, say that we need a bigger 25 Navy. And he said that the Chinese fleet continues to grow,

1 and I quote, "The capacity concern is going to become 2 greater in years to come."

3 So, given that the 355-ship Navy was the result of a 4 study in 2014, are we still comfortable that that number of 5 ships is adequate to address the growing threat from China 6 and Russia, for that matter, the great power competition 7 that we are now facing?

8 Admiral Merz: Yes, ma'am. I will take that one. So the 2016 FSA, it was a composite of the old plans, 9 the threat, the threat vectors, and then what are the phases 10 of warfare we have to deal with across those threat vectors. 11 12 No matter what study you looked at, they all said we need to 13 be bigger, and we have endeavored on a path to get bigger. Three hundred fifty-five, I think, is a minimum. 14 We 15 are -- we have started the process on the next force-16 structure assessment. It is typically about a year-long 17 process when we get the new combatant commanders in place. 18 The adjustment to the old plans and how that affects the 19 component command, in our case the Navy component commands, 20 and then we put together the force structure assessment. 21 And then we have typically a commission of external 22 assessors to look at that, and then we red-team it, and then 23 we put it out.

A single force structure assessment typically will influence two or three budget cycles, which is actually a

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pace that is very aligned with how quickly we can even
 adjust the shipbuilding plan and the force structure. So it
 typically works out well for us.

We have seen nothing from the combatant commanders to date or Secretary Mattis' National Defense Strategy that would give us any indication that we were going to be coming off that 355 ship in composition or in total numbers.

8 Senator Shaheen: Thank you.

Secretary Geurts, you testified before the subcommittee 9 in April about the Navy's initiatives to work with small 10 11 business. I come from a State where small business is the 12 foundation of our economy. We heard recently from Air Force 13 Secretary Wilson about the Air Force's Blue Shift Initiative to try and engage small businesses in the needs of the Air 14 Force in the future. Is there anything similar that the 15 Navy is doing for small business? 16

17 Mr. Geurts: Yes, ma'am, absolutely.

18 In coming off of 2018, it was the largest year on 19 record for the Navy in terms of small business awards. We 20 are a couple percent above our goals, with over \$15 billion 21 going directly to small businesses. So they are key to our 22 future, absolutely.

23 So, yes, I am coordinating directly with Dr. Roper and 24 taking advantage of any opportunity there. The Navy still 25 is kind of top performer of all the services on SBIR Phase

1 III opportunities, where we turn those initial small 2 business awards into larger awards. And then this last year 3 we have awarded several major ship construction projects 4 directly to small businesses on the coast. So sometimes, I 5 think it gets thought of only from a technology standpoint, 6 and we are having small business -- they are constructing 7 ships for us and doing an outstanding job. They will be a 8 key to our future.

Secretary Shaheen: That is great. I appreciate 9 hearing that. Can you tell us how we can ensure that small 10 11 businesses in our States are aware of what is going on and 12 how to be engaged in those proposals when they come out? 13 Mr. Geurts: Absolutely. So I have assigned a deputy program manager for all of our programs as a small business 14 advocate. And so, one thing to recommend to them is for any 15 16 of the programs that they are interested in, contact the program manager. That way they have got somebody inside the 17 18 program that is their advocate, as well as any of our small 19 business offices we have all around the Navy.

20 Secretary Shaheen: Great. We will follow up. Thank
21 you.

22 Thank you, Mr. Chairman.

Senator Wicker: Let me just follow up, Admiral Merz,
on Senator Shaheen's first line of questioning. The -- and
I would call to everyone's attention Secretary Geurts'

opening statement. The emerging threats have not diminished in the last 2 years, have they, Admiral? If anything, they have gotten worse?

4 Admiral Merz: Exactly right, sir.

5 Senator Wicker: And the challenges -- I think his 6 statement was that they are more dynamic, and you certainly 7 agree with that. So, if anything, there would be a higher 8 requirement.

9 Now, this 355 you mentioned, and I appreciate you 10 saying this, this is the minimum that we need. A 355-ship 11 fleet is not some best-case ideal that we would like to 12 achieve if everything goes well. Am I correct there?

13 Admiral Merz: Yes, sir.

14 Senator Wicker: So, what -- actually, the admirals and 15 generals came back to us with 655, did not they?

16 Admiral Merz: Yes, sir. That was one of the numbers 17 that was evaluated.

Senator Wicker: And it was, of course, resource
challenged, and we have to make all the numbers come out.
We do not have unlimited funds. But the 355 is the minimum
under a scenario where things were dangerous, but actually
less dangerous than they are right now. Am I correct?
Admiral Merz: Yes, sir, absolutely correct.

24 When we constructed the shipbuilding plan, first and 25 foremost, we set a steady build rate that would continue to

1 grow the Navy over time at an affordable rate and to protect 2 the industrial base. We put tremendous effort in identifying the extra capacity in the shipyards that we 3 4 could increase the pace to 355. And that was independent of 5 the service life extensions that we did with not just the б DDG 51s, but we are also looking at up to 7 Los Angeles 7 class submarines that we are going to endeavor to do service 8 life extensions on.

The fact is, it is going to take us decades to get 9 10 there, and the higher the pace, the steeper the ramp, the 11 better. We are also endeavoring to design ships that can 12 take much better advantage of things we can control on a 13 shorter timeline, like the capabilities we put on these ships. The way we have been explaining it is, you know, the 14 15 CONOPS, the tactics on how the commander employs the ships, 16 that can change in hours, days, weeks; the capabilities, months and years to develop; ships, years and decades to put 17 18 together.

19 So we are endeavoring to design these ships to take on 20 these capabilities under a much shorter timeline to affect 21 these CONOPS. It is all tied together. Three hundred 22 fifty-five is the minimum to get there. The sooner we get 23 there, the better.

Senator Wicker: And I would just echo also, SecretaryGeurts, what Senator Shaheen said. We do not want you to be

alarmist. We do not want you to exaggerate and wave your
 arms. You are relaxed about your job, and you are going to
 do what you can with what we give you. But do tell us the
 facts, and let us be honest with the American people about
 how far behind we have gotten.

6 So thank you very much and --

7 Mr. Geurts: Yes, sir. I just -- one other piece on 8 the Budget Control Act. Obviously, the number is 9 devastating in itself. The other piece that is particular 10 challenging for shipbuilding is that every ship are line-11 item appropriated, and those cuts come down as an equal 12 share to every appropriation.

13 And so, not only is the number itself, you know, a drastic reduction which will cause great disruption, how 14 that number will get laid across the budget, should we get 15 16 in that condition, will be devastating to the way we have funded and constructed our shipbuilding program. So there 17 18 is a little bit of a double whammy in there that will cause 19 a complete disruption of our program should that path come 20 to us.

21 Senator Wicker: And I think members of the committee,22 we are actually working on the 2020 budget even as speak.

23 So the future is imminent.

24 Senator Rounds?

25 Senator Rounds: Thank you, Mr. Chairman.

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1 I would like to follow up on what the chairman was 2 suggesting here. Admiral Merz, in September, the commander 3 of the U.S. naval forces in Europe said, and I quote, "I think Russian submarines today are perhaps some of the most 4 5 silent and lethal in the world." And that the caliber of 6 missiles that Russia has deployed from coastal defense 7 systems, aircraft, and submarines have -- and once again, I 8 quote -- "Shown the ability to reach pretty much all the capitals in Europe from any of the bodies of water that 9 10 surround Europe."

How is this type of Russian activity factoring intoNavy budgeting and posture decisions?

Admiral Merz: Yes, sir. So the specific capabilities of Russia, we keep a very close eye on it. And Admiral Foggo, being a submariner, is uniquely attuned to the undersea capabilities. Matter of fact, he spends much of his life underwater working on this problem.

18 Unfortunately, I cannot really speak in this forum the 19 specific capabilities we are concerned about and what we are 20 doing about them. But I am happy to come and brief you in a 21 separate forum on how that goes. But we do --

22 Senator Rounds: That is fine. But I think what is 23 important here is, is that there is a need for additional 24 resources and that our peer adversaries are not sitting 25 still. They are developing their systems. They are

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1 continuing to move with new technologies.

And what this open session is an opportunity to do is to highlight our need to continue to move forward with those new technologies. And it is really difficult to be able to share with the American public unless you are prepared to lay out in some pretty clear terms just how serious the threats are from our near-peer competitors.

8 I am going to ask on Russian side, and then we are 9 going to go into China. But on the Russian side, can you 10 visit a little bit about how serious this is, or is this 11 just day-to-day operations?

12 Admiral Merz: So the capabilities that Russia brings 13 is very serious. They are tremendous engineers. We have been sparring with them for quite a long time as they are 14 our old Cold War adversaries. The technologies they develop 15 16 are often leading in whatever field they desire to --17 Senator Rounds: So I am going to lead you down the 18 road a little bit. So the 1990s technology that we have today, are they capable of handling the technologies that 19 20 are being deployed today by the Soviet Union with regard to 21 submarine warfare?

Admiral Merz: So, are we capable of handling the '90stechnology that Russia has fielded?

24 Senator Rounds: Or the ones that they are fielding 25 today, with our 1990s technologies?

Admiral Merz: Sir, I really cannot get into how we are going to deal with the Russian capabilities from a U.S. capability standpoint. We will have to take that to a different forum.

Senator Rounds: Okay. How about on China? And I am
going to ask this of both Secretary Gertz and you, Admiral
Merz.

8 The former Indo-Pacific Command commander has testified that only half his requirement for attack submarines in the 9 Pacific theater was being met. This challenge will only 10 grow worse in 2020s as attack submarines retire at a faster 11 12 rate than they are planned to be built. How is the Navy 13 planning to mitigate the attack submarine shortfall in the 2020s, and what are you doing right now to make sure that 14 you do not have additional attack submarines sitting at dry 15 16 dock, such as what we had with the Boise and several others 17 as well?

Mr. Geurts: Yes, sir. Again, I think if you ask Admiral Merz and I, you know, that is probably the most looming shortfall ahead of us in terms of capability is in attack subs. And so, I think we are attacking that in several different courses of action.

One is ramping up the Virginia production to two,
potentially more than two down the road, submarines per year
and getting those submarines -- new submarines out into the

fleet. The second area is where can we do some service life extensions. Some of our existing submarines, using the seven cores we have available to extend the life of some of our existing submarines and push -- mitigate some of the bathtub that is coming up. And then the third piece is attacking availability, and so that we have very submarine as available and in the fight as we can.

8 Senator Rounds: How many submarines do you have in dry 9 dock right now waiting to get in? How many of them are tied 10 up at dock waiting to get into dry dock today?

11 Mr. Geurts: Sir, I will have to get you the exact 12 number on that. What I would say is where we are looking is 13 both how do we improve performance in the public shipyards? 14 So that is part of our shipyard optimization plan. And then 15 how do we move, work, and leverage the private capability so 16 that we do not have ships waiting to get into the public 17 yards?

18 Currently, we have four ships in the private submarine yards doing their availability repairs. We are going to 19 20 contract for an additional two coming out. And so, the 21 NAVSEA commander and I are looking very closely at the 22 future throughput we need both in the public yards and in 23 the private yards to balance that out, so we do not get back 24 into the state where we have submarines waiting for years to get into the yard. 25

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1 Senator Rounds: Just, Mr. Chairman, I just think the 2 point being that it is pretty tough to ask the private 3 boatyards to be able to be ready to go, not knowing whether 4 or not we are going to have the resources available to fund 5 those systems on a timely basis. That is part of the reason 6 for the discussion today is not only looking at the 7 technology necessary, but just to maintain the existing 8 fleet on our way to a 355, we have got to have consistent funding in the mix that you can count on in order to make 9 10 those long-term contractual obligations with the folks who 11 actually do the repair work.

Mr. Geurts: Absolutely, sir. The steady and predictable funding is the key. We have got to convert that into deliberate plans with enough lead time so that those private yards are ready and equipped to take that input as we come in.

When I look at the future, I think there is always going to be a future of both public and private submarine maintenance that makes sense from having a balanced skill set that gives us flexible options depending on the repairs we need to do and attacks this throughput so that we maximize the availability of every asset we have.

23 Senator Rounds: And I will ask for the record the 24 numbers that you got right now that are waiting to get into 25 dry dock that you can get back to me on.

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Mr. Geurts: Absolutely, sir.

2 Senator Rounds: Thank you. Thank you, Mr. Chairman. Admiral Merz: Senator, I would like to follow up just 3 one comment on your larger question of the total number of 4 5 submarines and what are we doing to get there? I think this б is just a tremendous case study and a lesson for everybody 7 that if you walk away from your industrial base, there is no 8 graceful recovery. There is nothing we can do to minimize the trough other than selectively picking years that we can 9 10 potentially build a third submarine per year. And even that 11 that will not fill in that trough.

We are going to extend submarines the best we can, but we are not going to reach 66 submarines until the very end of this shipbuilding plan. And it is simply a result of delivering -- and the number is close, I think it is two submarines in the '90s. And that is an industrial base that is just not sustainable. This is the long-term impact.

18 Thank you.

19 Senator Rounds: Thank you, Mr. Chairman.

20 Senator Wicker: Senator Kaine?

Senator Kaine: Thank you, Mr. Chair, and thanks to thewitnesses for being here today and for your service.

23 I have questions about four kind of discrete issues

24 that I will just address, and whoever can deal with them,

25 please do.

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First, Secretary Geurts, your opening statement --1 2 written statement talked about the possibility of the two CVN buy, and the quote was, "Navy is continuing to negotiate 3 4 the significant savings associated with the two CVN buy, 5 should the Department choose to pursue the option." б The NDAA that we passed requires The Secretary of 7 Defense to certify to the defense committees not later than 8 30 days before entering into a contract if you decide to go the two-buy route. Can you give me a status report on those 9 10 discussions? Are we likely to have some certification of that kind soon, or just give me the status? 11 12 Mr. Geurts: Yes, sir. Since we spoke last, we have 13 been working closely with the shipyard and negotiating what savings would look like should we go into a two-carrier 14 condition. We think those savings will be better than the 15 16 \$2.5 billion number that quoted I think the last time we 17 spoke. 18 We are in, as you know, the 2020 budget process right now. So we have not made a final decision on whether to 19

25 Senator Wicker: What is your drop-dead date on having

Senator Kaine: Great.

pursue that or not. I would expect that decision sometime

by the end of this calendar year. And obviously, then we

certify that and submit that to Congress, per the NDAA.

would have -- should we go down that path, the SecDef would

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1 to make that decision?

2 Mr. Geurts: Sir, I am not sure there is a drop-dead 3 date, per se. We are aiming to have that decision by the 4 end of the calendar year. If that decision were to move out 5 much longer than the calendar year, the savings achievable 6 will start to erode, given that we currently have CVN 80 on 7 contract.

8 Senator Kaine: A second issue that deals with the submarine supply base, Admiral, you were talking about. 9 There was \$450 million in the Fiscal Year 2018 and 2019 10 NDAAs and approps for submarine supplier base expansion. 11 We 12 have heard from some suppliers that the Navy has yet to 13 release any of those funds. I do not know whether that is true or not, but that is what we have heard. Is that the 14 case, and if so, can you tell us what you are likely to do 15 16 to release those funds and start to do the --

17 Admiral Merz: I am going to pass that to Secretary18 Geurts.

Mr. Geurts: Sir, let me take that one for the record. I believe we have obligated all the Fiscal Year 2018 funding in there. But let me take that for the record and get you a full accounting of that action obligations to date, and then for the things we have not obligated, both the timing and where we plan to obligate those.

25 Senator Kaine: Actually, we will submit that for the

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record. There have been challenges with the advanced
 weapons elevators on the CVN. Some of the technical
 difficulties seem similar to those that were experienced
 earlier on both the launch and arresting systems. I think
 that the Navy put together independent review teams to
 tackle those issues and provide solutions.

7 Are we at a point where that may be needed on the 8 weapons elevators, or are we in a position where we think the progress on the weapons elevators is satisfactory? 9 10 Mr. Geurts: Yes, sir. So there are 11 weapons 11 elevators. Each one of them we have to produce, test, and 12 then certify. The first two of those have been produced. 13 The first one has been through test and certification. The second one is about 94 percent through test. We are making 14 15 progress to get through all the elevators during this 16 availability.

17 I am likely to do an independent review team, not on 18 the immediate construction for CVN 78, but looking at the 19 longer-term sustainability, resilience, reliability, to make 20 sure we are in a position to support those elevators for the 21 long term, that we have got all the training, all the 22 reliability built into those. We have done some mini 23 independent reviews for the 78 elevator design as they are. 24 So we will not do one on the current efforts on 78. We have 25 got a dedicated team working our way through those issues.

1 Senator Kaine: And is your timing on that testing and 2 certification on 78, you have this 12-month period where you 3 are testing, do you think you will get through the testing 4 and certification of all the 11 elevators in a yearlong 5 period?

6 Mr. Geurts: My current assessment is we will get 7 through all the production and much of the testing. We may 8 have some of the certification issues to go. I am watching 9 that very closely, and we will keep you and your staff 10 informed on progress there.

11 Senator Kaine: Excellent. This last one is very -- it 12 is kind of a minor and technical thing, and yet it may 13 portend a larger problem. We have got a company in Virginia called Collins Machine Works. They are in Portsmouth, and 14 they have raised an issue that I think this kind of an 15 16 interesting one, and the committee has become aware of this. 17 There is an issue affecting production of propeller 18 shafts for the Virginia class sub. This is a contractor 19 that has used a commercial off-the-shelf product for which 20 there was no military specification in terms of welding 21 flux. The subcontractor then changed the mixture of the 22 welding flux. It turns out now that it now does not really 23 meet the requirements, and I think Collins has let the Navy 24 know about this.

25 I am assuming we sort of promote use of off-the-shelf

1 technologies when we can, and yet in this instance, there 2 was not a mil-spec for the off-the-shelf technology. And so there was a change of it by the supplier that ended up 3 4 affecting the production of the propeller shafts for the 5 CVN. Is that just kind of a normal kind of thing that you work through as it comes up, or does it portend something 6 7 larger about use of off-the-shelf commercial products? 8 Mr. Geurts: I am not sure it portends to a specific issue with commercial off-the-shelf products. I think what 9 it does show us is how fragile our supplier base is and how, 10 if you have an issue with one supplier, it can cause larger 11 12 programmatic issues.

13 So, you know, one of the things that was in the industrial base report we did as part of the executive 14 15 order, some of the work we are doing with the funding that 16 this committee has provided is really looking at the fragility of that supplier base, how do we bolster that up, 17 18 where do we have single-source suppliers that we can bring 19 on -- you know, bring additional sources on to give us 20 flexibility? One, so we are not caught with only one 21 supplier in certain conditions; two, so we can grow at the 22 production rate we need to grow at.

23 Senator Kaine: I think that the point, Mr. Chair, just 24 about the fragility of the supply base. If you have a 25 supplier and they just change the mixture on the welding

1 flux, and then that leads to the inadequate delivery of 2 propellers for the subs, which then means the subs cannot do what they are supposed to do, I mean, it is pretty fragile 3 when the changing of the mixture on welding flux ends up 4 5 potentially blocking your ability to get propellers. б Mr. Geurts: Absolutely. 7 Senator Kaine: So I think using those -- the funds that I asked about earlier to expand the submarine supply 8 base is important to make sure that we are not leaning too 9 heavily on something that is as fragile as you point out. 10 Mr. Geurts: Absolutely, sir. 11 12 Senator Wicker: The \$450 million that you asked about 13 earlier --Senator Kaine: Yes. Yes, I think that that can be 14 used to address some of these challenges, I think. 15 16 Senator Wicker: And you agree with that? 17 Mr. Geurts: Yes, sir. We certainly agree. I mean, we 18 have done a lot of work looking at common suppliers across 19 our nuclear aircraft carriers and submarine programs and, 20 actually, the support of the committee here, both making 21 sure that they are -- the suppliers are ready to go and that 22 we can take advantage of doing common buys across those 23 programs so that supplier sees a more steady stream of 24 planned and predictable work. It is challenging enough at the prime level when 25

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programs start and stop and move around. It gets really challenging in the second- and third- and fourth-level suppliers to be able to deal with changing profiles and changing requirements. So the efforts the committee has done here to help us in that regard will pay off big as we continue along on these important programs.

7 Senator Kaine: Thank you so much. Thanks, Mr. Chair. 8 Senator Wicker: Mr. Secretary, you answered Senator Kaine's question about the troubling issue of the advanced 9 weapons elevators. Let us get your thoughts on three others 10 11 that are significant risks in the Ford class. The 12 electromagnetic aircraft launching system, the advanced 13 arresting gear, and the duel band radar -- how are we coming 14 on those?

Mr. Geurts: Sir, I would say of all of the technologies on the CVN 78, of which there were many we have proved out on this lead ship, the weapons elevator is the one that is last one for us to get tied up and work our way through. I think we have got a path there.

20 On both the EMALs program, both the launcher and the 21 arresting gear, we have had over, I think, 747 both 22 catapults and traps on the CVN 78 during its 81 days --

23 Senator Kaine: I hope the numbers were equal of the 24 launches and the --

25 Mr. Geurts: Yes, they were. They were, sir.

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1 Senator Kaine: Relatively, you know --

2 Mr. Geurts: Relatively, 24,000 cycle events of that 3 equipment on our shore-based test site there. So we are 4 feeling pretty confident on both of those systems, both on 5 catapults and the arresting gear there. Duel band radar, 6 again, making good progress there. I do not see any major 7 technical issues with that system as well.

8 And then, as we look toward CVN 79, we are seeing fairly drastic reductions in labor hours. HI has proven 9 10 that once we get this design nailed down, their ability to 11 be efficient in producing those, we are seeing 16 percent 12 less production labor hours on the second carrier in that 13 class than the first one. And so, as we get that design locked down, the efficiencies that we expected to see are 14 bearing out in the production phase. 15

Senator Wicker: Are we going to be glad we went with the EMALs and advanced arresting gear?

18 Mr. Geurts: Yes, sir. The challenge with the legacy systems, one, are, you know, parts and being able to produce 19 20 those, but for the carriers of the future to be able to 21 launch everything from fairly heavy fighter craft and some 22 of the others to very light systems like the MQ-25, you need 23 these systems to have the range of capability you need to 24 launch that different kind of air wing of the future. And 25 so, while, yes, there certainly have been technical

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1 challenges we have had to work through, it really opens up 2 our ability to operate a wider variety of aircraft from the 3 deck, both manned and unmanned, which I think is going to be 4 critical to those carrier effective operations as we look to 5 the future.

6 Senator Wicker: Thank you.

7 Let us talk about frigates. We are supposed to do a 8 competitive award in 2020. Please update the subcommittee 9 on the Navy's acquisition strategy for the new frigate. Is 10 the intent still to award the contract based on full and 11 open competition?

12 Mr. Geurts: Sir, absolutely. We are marching right 13 along the schedule that we briefed earlier. And recently, the CNO and I both validated the frigate requirements. So 14 15 we have got those requirements now locked down. That was 16 per the schedule we have. We are drafting the RFP, which we 17 will -- request for proposal, which we will get out to 18 industry here this spring. That will give us time to get 19 additional feedback from them. We have been interacting 20 them throughout this whole design process as we have looked 21 at all the requirements to make sure the requirements were 22 affordable.

That draft RFP will then lead to an RFP we plan to release at the end of this fiscal year, which will give us a full year then to award that competitive contract, a full

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and open competition for the frigate program. So that
 program remains on track, and I am confident we will execute
 that to plan.

4 Senator Wicker: Now, on the LCS, the Congressional 5 Research Service noted that the Navy did not perform a 6 formal rigorous analysis to determine the right approach to 7 addressing the set of capability gaps and mission needs with 8 regard to the LCS. How are we going to keep from repeating 9 this experience with the new frigate, and do you challenge 10 to CRS in their conclusion?

11 Mr. Geurts: Go ahead, Bill.

Admiral Merz: Sir, I will take that one. So, regarding the CRS on the LCS, no, we do not challenge it. We took some lumps on the LCS. We learned a lot. I am personally a fan of that ship and that ship class. I think it has tremendous utility, and we will come through all of that.

18 I will tell you a lot of lessons learned we rolled into 19 the frigate process. The frigate process is a new process 20 for us. We brought industry in early to discuss how these 21 requirements may play out, using their expertise to really 22 discover the art of possible before we set the requirements. 23 It created some anxiety up front, a lot of give-and-24 take. I think in the end, industry is happy. We are 25 getting, at least all the vectors are, a much more lethal

ship for the price point, and simply because instead of just levying requirements on industry, we are working with them as partners ahead of the requirements process. So I think all of that is a much healthier approach to avoid some of the pitfalls we had with some of the earlier classes.

6 Senator Wicker: Can you describe the Navy's vision for 7 the future surface combatant force, Admiral? To what extent 8 does extending the service life of the Arleigh Burke class 9 destroyers affect the timeline for procuring the next large 10 surface combatant?

Admiral Merz: Yes, sir. I touched on that a little 11 12 bit earlier when I was talking about the spectrum of things 13 we can influence over time. And the piece about the large surface combatant, about making it as an adaptable platform 14 15 as we can to take advantage of these much more quickly 16 churning capabilities that we are going to have to field. And really, adapt it in the timeframe of one maintenance 17 18 cycle. Not a dry dock, not an overhaul, but we can do these 19 pier side, we can outfit these ships and move them out. 20 The Arleigh Burke is a fantastic ship. Matter of fact, 21 the Flight III that we are delivering soon is going to be 22 pretty much the most capable warship on the seas. The 23 problem with the Arleigh Burke is she is full. We really do 24 not have much room to expand or modernize her much beyond 25 her current platform.

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1 Matter of fact, she is capable to the point now that 2 the next large surface combatant is probably going to pick 3 up right where we left off with the Arleigh Burke. So there 4 is this very nice evolution between the two ships. When we 5 are testing out the technology on the Arleigh Burke, the б adaptability concept of the next generation of large surface 7 combatant, I think we are going to be in a much better position to be a lot more agile, both on industry side and 8 on the warfighting side with this. 9 10 Senator Wicker: What would be the timeframe, generally

11 speaking, of this next generation?

Admiral Merz: It is a two-phased approach. The first one, early '20s -- '23, '24 -- and then a follow-on version in the late '20s, really depending on how this first phase goes.

16 Senator Wicker: Senator Shaheen?

17 Senator Shaheen: Thank you, Mr. Chairman.

Earlier today, the Full Armed Services Committee heard from the National Defense Strategy Commission on their report about the NDS. And one of the comments that Admiral Roughead made was that it had taken 15 months to get the John McCain back into operation, and it was in the context of suggesting that we cannot afford to have that kind of an asset down for that long a period of time.

25 And you know, if we look at history, at the Portsmouth

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Naval Shipyard during the 5-year span of World War II, they produced over 70 submarines. Four of them were launched on one day in 1944. So I appreciate that we are in a totally different time, and technology is different, but what are we going to do about that concern that we cannot have that major an asset down for that period of time and expect to be competitive?

8 Mr. Geurts: Yes, ma'am. I think -- I agree with the concern that we have got to be able to not only have the 9 assets to start the fight or withstand the first day of the 10 fight, but withstand the sustained fight. Part of what we 11 12 are looking at as we relook at both our public shipyards and 13 how we do private repairs is to get more stability into those yards and get them all to the point where they are 14 15 capitalized to be able to operate at the pace we need them 16 to operate with.

Without even a wartime scenario, just looking at the 17 18 amount of ship repair work we are going to have to do, I mean, that is going to continue to accelerate at the same 19 20 pace as we are in the shipbuilding. So one of the things we 21 are going to do this year is a 30-year ship repair 22 sustainment plan so we can really look at where do we have 23 any limitations in the system, whether that is capabilities 24 like dry docks. Are we maximizing use of all the capacity 25 we have? And then are there things we could do better on

1 the acquisition strategy side that would enable some more 2 stability in those both public and private yards so they 3 could stabilize their workforce?

4 Our biggest challenge -- you know, facilities is a
5 challenge. Our largest challenge is in the workforce -6 Senator Shaheen. Right.

7 Mr. Geurts: -- end of business. And if we cannot get 8 stability, both in new construction and in repair, then we 9 will really struggle to attract the workforce and retain the 10 workforce we need.

Senator Kaine had a great session down in the Norfolk area just on workforce, and if you look at the numbers that we have to hire, it is a pretty staggering number. Now, if we can get to a sustainable infrastructure, both on the public side and on the private side, that can handle that load, that gives a lot more flexibility to handle unplanned work and work that in.

18 Senator Wicker: Will that --

Mr. Geurts: Right now, we are right along the edge. I am sorry, sir.

21 Senator Wicker: Tell us about that number. Since we 22 are talking about that, what information did Senator Kaine 23 elicit there about the staggering number --

24 Mr. Geurts: So Senator Kaine had a great session just 25 between public yards and the private yards and the local

1 community. And I would say it is the same in all of our 2 shipbuilding towns of how do we work together to attract, train, and retain the workforce? Whether it is in the 3 4 public yards or in the private yards, whether it is new 5 build or repair, we have got to look at that in aggregate. б And our biggest challenge in terms of achieving 7 velocity is in workforce. I think over 50 percent right now, 56 percent in the public yards in terms of workforce 8 have less than 5 years' experience. So not only do we have 9 to attract those workers and get them in the system, then we 10 have got to figure out how to more effectively train them. 11 12 I would say Portsmouth is leading --13 Senator Shaheen: Right. The challenge is there. Mr. Geurts: -- leading the fleet in terms of some 14 really progressive ways to rapidly train. The challenge is, 15 16 circling all the way back to BCA, drastic cuts where we have to turn that whole pipeline off. And to Admiral Merz's 17 18 point, you do not just a year later turn that back on. That 19 is a decade -- you are going to create a decade problem that will cause another decade to turn around. 20 21 And so, my hope is unless we address this growing need, 22 we will not handle the current workload, much less emergent 23 work that comes out of, heaven forbid, an accident or 24 wartime repair. Senator Shaheen: I agree. Thank you. 25

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1	Admiral Merz: Ma'am, I will just
2	Senator Shaheen: Thank you, Mr. Chairman.
3	Admiral Merz: pile on to say I have a lot of
4	personal experience with Portsmouth Naval Shipyard. It is a
5	very solid citizen as far as repairing our ships. On their
6	behalf, I would tell you the McCain is a tough test case.
7	She is not a typical repair. She is not a
8	Senator Shaheen: Yeah, I was just I was not
9	suggesting that McCain
10	Admiral Merz: Yes ma'am.
11	Senator Shaheen: was an issue for the Portsmouth
12	Naval Shipyard, but just that it reflects the challenge that
13	we have got.
14	Admiral Merz: The McCain was somewhere between
15	reconstruction, twisted steel. She was a mess, and she took
16	a lot of bit a lot of bit of work.
17	Senator Shaheen: Thank you.
18	Senator Wicker: Senator Kaine?
19	Senator Kaine: Well, if I could, I would just like to
20	thank Secretary Geurts because he, at my invitation, came
21	down. And just to kind of share, after we got the NDAA done
22	and we had the commitment to 355 ships, I think everybody in
23	my shipbuilding community was feeling great. I am sure your
24	communities were feeling the same way.
25	But we kind of needed a scared straight moment where

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1 these will not build themselves. And so, we had, you know, the workforce needs of a 355-ship Navy, and we pulled 2 3 together public and private shipyards, both the builders and 4 repairers, and then all of the K-12 systems. There is 5 probably about 10 jurisdictions with K-12 systems, community б college, 4-years. And Secretary Geurts and others came down 7 and said if we are going to do this, let me tell you what 8 the need will be.

The head of the Huntington Ingalls shipyard said, 9 "Well, the shipbuilders that will be building these are in 10 pre-K right now, but if we are not equipping with the skills 11 12 or having guidance counselors kind of position them in this 13 direction, then we will not meet the challenge in Hampton Roads, and we might not meet the challenge as a nation." 14 Senator Wicker: Do you agree, Secretary, that around 15 16 Senator Shaheen's shipyard is really very, very cold there a 17 lot of the time?

18 [Laughter.]

Senator Wicker: And at Senator Kaine's place, the traffic congestion is just awful trying to get to and from work. You do not have to answer that question.

22 [Laughter.]

23 Mr. Geurts: Sir, my family is from Green Bay. So
24 those are both very warm places.

25 Senator Kaine: Well, and I would just say, it turned

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1 out to be just what my community needed. That June 8th 2 symposium has generated a follow-on collaboration, and I am 3 attending the opening of a new technical institute connected 4 to Tidewater Community College next Monday? Yes, I think 5 next Monday, where they will be training a lot of people in 6 the trades that would be relevant to this, but I think the 7 workforce needs are going to be massive.

8 And to balance -- the other thing I will give Secretary Geurts real compliments on, the notion of a 30-year ship 9 repair plan. It is one thing to do a 30-year shipbuilding 10 11 plan. That is fantastic. But the notion of ship repair, 12 which was quite affected by sequester, all the readiness 13 stuff -- "We will defer maintenance on this for a while." And it really put the workforce in a position where they did 14 not know what was coming and when it would come and how 15 16 would sequester affect them.

The idea of trying to do a ship repair plan over the same time horizon you are doing new construction makes perfect sense. And that was also really music to the community's ears to hear a degree of foresight going into the repair side. I think all of our communities would benefit from that.

Last thing I will say, too, is I do not mean to throw a competitor into the mix, but I toured the Navy base in Rota on November the 9th, which was a Friday morning. And in

Rota, a lot of American ship repair is done by Navantia.
 And the Navy leadership at the Rota base talked about, you
 know, we see our ships repaired in public yards and by
 private shipyards in United States and even by Navantia, and
 they were giving Navantia a lot of props and saying, "Hey,
 they built the Nina, the Pinta, and the Santa Maria. They
 know what they are doing."

8 So there are good ideas out there if you are trying to 9 do a 30-year ship repair plan, and all the good ideas are 10 not necessarily all ours. So we ought to be trying to take 11 good ideas from wherever we can find them.

12 Mr. Geurts: Absolutely, sir. And again, I think if we 13 can clearly show that demand signal with some stability, then we will get a number of players interested in that. 14 Where we are doing a lot of work on our side is really 15 16 looking at how we contract for those ship repairs and making improvements to that. Both for a stability standpoint, we 17 18 are already seeing some of our improvements having a drastic 19 impact on reducing timeline and allowing more players to 20 come in to create a competitive and capable field. Because 21 again, there is plenty of work coming.

We struggled a little bit over the last several years with the current amount of repairs. That is going to -- as we talked about, that is going to continue to grow. So we have got to pay very close attention to that.

1 Senator Kaine: Excellent.

2 Senator Wicker: General Berger, thank you for 3 listening to us for an hour. The minimum Navy requirement 4 for amphibious ships is 38. Combatant commanders need more 5 than 50 amphibious ships on a day-to-day basis. The current 6 inventory includes only 32 amphibious ships, with just 10 to 7 15 operationally available on a given day.

8 What is being done to close this gap? And let me ask 9 you about either a multiyear or block buy of LPDs.

General Berger: A couple of parts of the answer to 10 your question, Senator. First, the 38 ships, as you 11 12 mentioned, is the agreed number based on a capacity to land 13 two Marine expeditionary brigades. The National Defense Strategy requires us to compete and deter and then fight if 14 15 we need to, which is why the combatant commanders, as you 16 state, say it is higher than 38. Without -- if it is not 17 going to go any higher than that, then that means some risk 18 somewhere in the globe that the Secretary and the Chairman 19 have to balance.

What we are doing to close it, what the Navy is doing to close it on the big decks is the next LHA follow-on to the American Tripoli, absolutely critical, and earlier is better from a Navy/Marine Corps standpoint because we need l2 big decks. They are an incredible platform, and anything we can do to move that, accelerate that, is a good thing.

1 On the smaller end, the LPD Flight IIs, which is a 2 follow-on, of course, to the San Antonio class, absolutely 3 brilliant use of a hull form that both the Marine Corps and 4 Navy are happy with, we are comfortable with in taking 5 advantage of that hull form to replace the LSDs, which are 6 35, 40 years old. Absolutely critical.

Senator Wicker: Maybe, Mr. Secretary, on the Flight II
-- does the Navy plan to buy one ship at a time or block
buy, and is multiyear procurement an important tool in
cutting costs and stabilizing supplier base? And does the
Navy plan to use the \$350 million to buy multiple sets of
long lead time material?

Mr. Geurts: So, generically, we have used block buys and multiyears extremely effectively here with the support of the committee to both accelerate production and save costs. On DDG 51, we will save \$700 million on that multiyear.

In terms of the LPD one, it is a little early right now, pre-decisional in terms of what we will do with that funding until we sort out our 2020 budget. I will be happy to come brief the committee once we get the 2020 budget locked down, and we will describe the strategy we have when we get the President's budget over here in February. Senator Wicker: Okay. Senator King?

25 Senator King: Thank you, Mr. Chairman.

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I apologize for being late. There is no effort around
 here to schedule hearings in any rational way. If you have
 a computer system that can do that, let us know.

Admiral Merz, the Zumwalt is being armed, if you will,
combat system activation in San Diego. I guess my first
question is how is that going?

Admiral Merz: It is going well. As you know, we did a review of the complete requirements of the DDG 1000, the advanced weapons system, the advanced gun system, and then the combat system, and in the end, we decided to split the two programs.

Senator King: Can you -- is your mike on?
Admiral Merz: Yes, sir, it is. I will lean forward
here.

15 Senator King: Thank you.

Admiral Merz: We determined that the best future for 16 17 that ship is to get it out there with the capability that it 18 has and separate out the advanced gun system, leaving everything else in place, very capable platform with or 19 20 without that gun. And we will be developing either that --21 the round that goes with that gun or what we are going to do 22 with the space if we decide to remove that gun in the 23 future.

24 The rest of the ship is doing fine. It is still on 25 track to be operational in 2021 to the fleet. And then in

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1 the ensuing cycle to get it on deployment thereafter.

Senator King: And I understand it has basically been
re-missioned from land attack to strike -- sea-based strike.
Is that -- can you define that?

5 Admiral Merz: It has been re-missioned to a strike 6 platform, whether sea-based -- sea targets or land targets. 7 It can handle both, and that takes advantage of its 8 tremendous arsenal of VLS cells. The other benefit of the 9 Zumwalt class is those VLS cells are larger than any other 10 service ship VLS cells. So it opens up an aperture of more 11 weapons options for that ship.

12 So this is -- this was thrust that drove us to, hey, let us get the ship out there. Let us not hold it back 13 because of the projectile challenges. And it is science and 14 technology challenge. It is not an engineering problem. We 15 16 just cannot get the thing to fly as far as we want. So we are going to continue to work on that and take advantage of 17 18 the strike capabilities with the combat system of that ship. Senator King: If my next question is getting into a 19 20 classified area, please tell me. Given the power 21 capabilities of that ship, is this -- do we see this long 22 term is an opportunity for directed energy or other kinds of 23 nonprojectile or non-expensive projectiles? 24 Admiral Merz: Yes, sir, we do. Before you arrived, I 25 talked about how we are moving to an era of new ship

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1 adaptability. I would tell you Zumwalt is kind of the case 2 study for that. She has the balance of what we call SWAP-C, the space, weight, power, and communications that allows us 3 to expand the ship over time. So she is going to be a 4 5 candidate for any advanced weapons systems that we develop. Senator King: Particularly given the power generation. 6 7 Mr. Merz: Exactly right. Exactly right. Senator King: General Berger, do you have any concerns 8 about this re-missioning? Does this is undermine the land 9 10 strike capacity that the Marines might have been counting on from this ship? 11 12 General Berger: Senator, I do not think it replaces it

13 at all. I think any forward commander is going to ask for 14 all the capability he can have, and the Zumwalt adds to an 15 arsenal that is already there. I do not look at it as a 16 challenge or a competitor at all. It is -- if you were in 17 PAC Fleet or PACOM, this is more tools in your toolkit.

Senator King: Secretary Geurts, talk about combatants -- surface combatants. There is always a trade-off between industrial base and absolute lowest price. Describe you and Secretary Spencer's view of how do you make that trade-off to be sure that we are maintaining the industrial base that is necessary going forward.

24 Mr. Geurts: Yes, sir. I mean, obviously, there are 25 all the things we consider as we look at different systems

and look at the industrial base. We aim to put together
 strategies that enable us both to keep cost competitiveness,
 as well as a predictable, stable industrial base.

4 So I think, as you saw, we adjust -- by using the 5 example of the DDG 51, we adjusted from what used to be kind б of a pro-based approach to, okay complete for quantity, but 7 each will have enough quantity guaranteed to have a stable 8 production line. And then over time, we will compete. So, in our case, we did not put the option ships into that 10 9 10 multiyear because depending on when the timing was, 11 depending on the situation, we may make different choices on 12 each of those option ships. So that was --

13 Senator King: But is this kind of calculus going to be 14 applied to the option ships?

Mr. Geurts: Sir, we will always look at both pieces of that. And I have flexibility depending on -- depending on the situation to make determinations along any of those lines.

19 Senator King: That me ask about the frigates. You 20 have taken a different approach rather than a blank sheet of 21 paper. I cannot remember the term. "Parent craft" I think 22 is the term. Do you anticipate significant savings from 23 that approach? It makes sense to me. I will preface the 24 question, but --

25 Mr. Geurts: Yes, sir. I think two things that are

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unique in that acquisition strategy that I think will bear
 fruit for us. One is specifying that we needed to have a
 parent design to then reduce the risk in the timeline
 associated with testing.

Senator King: The timeline is very aggressive.
Mr. Geurts: Yes, sir. The second piece, which I think
has been paying big dividends for us, is having an
interactive -- an iterative requirements process. And so,
the CNO and I just slapped the table on the requirements for
the frigate.

11 Senator King: You have closed the door? 12 Mr. Geurts: We have closed the door, but that was 13 after almost a year of iterative conversation with all the 14 industrial competitors where we looked at the cost, the 15 risk, the schedule impacts of any of these potential 16 requirements changes.

So between the requirements side and the acquisition 17 18 side, which included the industrial partners, we had a great 19 back-and-forth dialogue so that everybody understood going 20 into the competition exactly what was expected. And we 21 understood, with much more precision than we have in the 22 past, the cost and risk to any of our requirements. So that 23 we, in the end, created the best balance of affordability, 24 achievability, and operational effectiveness. And that was 25 a joint effort between the requirements and the acquisition

1 side.

2 Senator King: I compliment you on that. I think 3 closing the door on the requirements at some point is one of 4 the ways that we can defeat the problems of procurement and 5 cost. How many of these is the bid going to be for? How 6 many frigates?

7 Mr. Geurts: So the initial bid will be for the lead 8 ship and then nine additional ships. So the first 10 of 9 what is currently a requirement of 20. That requirement may 10 get revisited over time.

11 Senator King: And I understand that is winner-take-12 all. Out of the five bidders, one yard is going to get all 13 that business.

14 Mr. Geurts: That is the current acquisition approach.15 Yes, sir.

Senator King: Why that approach? I mean, you are having five yards, highly qualified, a lot of work, a lot of intellectual input, why not some kind of division of those of that buy in order, again, to get back to the question we were discussing about industrial base?

21 Mr. Geurts: Yes, sir. It is certainly a trade-off. I 22 think the challenge is with the production rate that we 23 currently have laid into the shipbuilding plan, one would 24 have to really look hard is do we have -- is there enough 25 work to sustain two yards in parallel with that?

Now, obviously, if we revisit that production rate and
 production ramp, there are certainly opportunities to have
 more than one yard produce that. Part of our strategy will
 be to produce a data package that would allow, should we
 want to go down that path, additional producers of the ship.
 We will have to balance that. So that will be a cost effective --

8 Senator King: Plus, for the second round, you would 9 have additional competition. You would have additional 10 competition plus industrial base maintenance. I hope that 11 is at least in the discussion.

Mr. Geurts: Yes, sir. We will continue to look at that as we go forward. Our current focus right now, and I am happy to report we are on track in terms of locking the requirements down. We will have a draft RFP out this spring. We will have a final RFP out by the end of this fiscal year, which will put us in conditions to effectively award that initial contract in October of 2020.

Senator King: All right, thank you. Thank you, Mr.Chair.

21 Senator Wicker: Senator Blumenthal?

22 Senator Blumenthal: Thank you, Mr. Chairman. Thank 23 you for having this hearing, and thank you, each of you, for 24 your service to our Nation and for being here today.

25 I was very pleased, Secretary Geurts and Admiral Merz,

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to see in your written testimony that the Columbia class program remains the Navy's number-one acquisition priority and is on track to start construction at the beginning of Fiscal Year 2020-2021. I assume you would agree with me that it is vitally important that that program remain on track.

7 Mr. Geurts: Yes, sir. That is my number-one priority. 8 Senator Blumenthal: And that is the reason that I championed an additional \$237 million in this year's NDAA in 9 10 advance procurement above the President's budget to address 11 the long lead time that is required for this kind of 12 program, adding capacity and capability to sufficiently prepare the submarine industrial base for that very 13 substantial increase in work. You cannot hire people 14 necessary for that kind of program just by putting an ad in 15 16 the newspaper. Correct?

17 Mr. Geurts: Yes, sir. The supplier base will be one 18 of the pacing items for that program, particularly as we 19 look at that program, two Virginias and four aircraft 20 carrier. We are looking across that base all the time. 21 Senator Blumenthal: Would you support increased 22 advance procurement funding for that program? 23 Mr. Geurts: Sir, I would say in advance procurement 24 funding and anything we can do to help the supplier base will drastically reduce risk going forward. What we are 25

seeing in most of our construction programs is a key risk is
 supplier fragility, either single sources or single
 producers where we have to ramp up production.

4 Senator Blumenthal: Thank you.

5 I am sure that you have read repeatedly and carefully the GAO report entitled, "Actions Needed To Address Costly б 7 Maintenance Delays Facing the Attack Submarine Fleet." I know Senator Shaheen asked you about maintenance issues, and 8 others may have as well. The report concluded, "The Navy 9 has not effectively allocated maintenance periods among the 10 11 public and private shipyards to limit attack submarine idle 12 time."

13 As you are well aware, the GAO estimates that since Fiscal Year 2008, 14 attack submarines have spent a combined 14 61 months, 1,891 days, idling while waiting to enter 15 16 shipyards for maintenance. Meanwhile, Electric Boat, which has additional capacity to take on maintenance 17 18 availabilities, is being underutilized, which harms our 19 industrial base because it means that those idle workers 20 will go elsewhere. 21 In fact, without additional work, Electric Boat's 22 workforce will decline just as it needs to ramp up the 23 workforce for Columbia class production. They need to hire

an additional 15,000 new employees over the next 10 years.

25 So we need action now to address the backlog that is

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1 bad for our national security and the harmful impact on our 2 industrial base. We have been talking about this maintenance backlog for over a year with no clear solution 3 in sight. When will the Navy release a plan to provide 4 5 maintenance work to Electric Boat in order to help manage б their workforce and the maintenance that needs to be done? 7 Mr. Geurts: Yes, sir. Attack submarine availability is a critical issue for us, particularly as we have the 8 bathtub approaching. And so, it is one of the primary 9 focuses for myself and Naval Sea Systems Command. 10 Currently, we have four submarines in maintenance 11 12 availabilities at a combination of Electric Boat and Newport 13 News. We are going to award at least two additional availabilities into the private yards to better balance that 14 15 out. But going forward, you know, under the new role this 16 committee provided me to oversee sustainment readiness, that 17 is really -- I am really focusing on getting predictability 18 and advanced planning in the readiness area for ship repair, 19 with a particular focus on submarines. 20 And not only look at making sure we have got the public

and the private yard balance correct, but we do it in a predictable manner so that the private yards can facilitize and be prepared for it. Ideally, my hope would be that we would have an enduring capability at both the public yards and the private yards for submarine maintenance repair.

1 Senator Blumenthal: Can you tell us when you will be 2 making those awards? 3 Mr. Geurts: So the first four are currently underway. We will be, I believe, this summer releasing, this 4 5 spring/summer the RFPs for those next two maintenance б availabilities. And then we are going to continue to look 7 out over time. I can give you -- if you like, I will take a 8 question for the record on the exact timing of each one of 9 those. 10 But my strategic approach to this is balancing out that work and getting predictability into the maintenance 11 12 planning so that we have capacity to get those ships both in 13 and out of those availabilities on time to give the combatant commanders the capability they need. 14 Senator Blumenthal: And two of those awards will be 15 16 for private and two for public? Is that the --Mr. Geurts: Of our upcoming availabilities, at least 17 18 two of them will be to the private yards. Senator Blumenthal: And will one of those yards be 19 20 Electric Boat? 21 Mr. Geurts: We are still sorting out exactly our 22 strategy, whether we are going to compete those two private availabilities or award those sole source. 23 24 Senator Blumenthal: And you would be able to provide 25 more information in a question for the record?

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1 Mr. Geurts: Absolutely, sir.

2 Senator Blumenthal: I appreciate your --

3 Mr. Geurts: Absolutely.

Senator Blumenthal: -- responding in that way. As you
know, often the cost is lower in private yards like Electric
Boat than it is in the public yards. The GAO concluded that
private shipyards were 24 percent less expensive from 2010
to 2017 for overhauling Los Angeles class subs. Has that
been your experience?

10 Mr. Geurts: That has not been my experience, per se. 11 But I guess what I would say is not taking on which is 12 cheaper than the other, every one of them will benefit 13 through better planning, more advance planning, and having a 14 strategy everybody can plan to and then execute, versus 15 right now, we do not -- we have not provided the planning 16 horizons, which then drives up the cost on either side.

17 Senator Blumenthal: I think that strategic change in 18 direction will be welcome to everybody on this committee 19 because we are all concerned about the maintenance backlogs 20 that have occurred, which pose a danger to our national 21 security as well as our fiscal health. And I appreciate 22 your providing any additional information.

23 Mr. Geurts: Yes, sir. And we are going to absolutely 24 need those private yards as we look to service life extend 25 some of the Los Angeles class ones by re-coring those. That

will put additional pressure on the public yards. And so, again, my intent is to with this 30-year ship repair plan, get more ahead -- get ahead of these looming availabilities and repair cycles so that we can put the right strategy in place, which than enables us to more cost effectively deliver those availabilities and get those ships back in the fleet.

8 Senator Blumenthal: Thank you, Mr. Secretary.

9 Thank you, Mr. Chairman.

10 Senator Wicker: General Berger, let us talk ship to 11 shore. Tell us how we are doing on the Marine air/ground 12 taskforces, and with regard to the ship to shore maneuver 13 and the vision for the future, what are our gaps and 14 shortfalls?

General Berger: Senator, the connectors that you spoke of, as important as they are right now, they are going to be more important in the future. In a peer competition world which you alluded to in the beginning, the concept for the Navy's operations and the Marine Corps naval force forward, we are going to be more distributed. The more distributed we are, the more important connectors are.

The LCACs we have right now that have been SLEP'ed once already need to be replaced, and they are being replaced. They have to be. The LCUs that are 45, 50 years old have to also be replaced. Both are going to be critical to move the

naval force, the Marine MAGTFs around the naval force, both
 from ship to shore, shore to shore, and shore back to ship.
 So those two -- the programs for the LCAC replacement
 and for the LCU replacement, absolutely essential.

5 Senator Wicker: Okay. Well, let me move to A2AD, 6 General Berger, and Admiral, you may want to join in here. 7 Much have been made of emerging anti-access and area denial, 8 A2AD, capabilities of certain countries. To what extent are 9 existing and emerging A2AD capabilities a concern for the 10 amphibious assault?

General Berger: I think the A2AD threat, which is well 11 12 publicized, drives you toward a place where amphibious 13 forces, the amphibious capability is even more important. And the reason for that is you are going to need -- in the 14 15 layered offense and defense, you are going to need forward 16 forces, inside forces that are survivable and lethal both. 17 So the ability to project power from a sea base, a 18 sovereign ship, a platform from the sea, onto either an advanced naval base or to secure a commons area -- a strait, 19 20 for example, that might be contested -- any of those are 21 possible missions that the maritime component commander 22 might need to do. I mean, his job one is to keep the 23 commons open for friendly use and perhaps deny them from a 24 threat.

25 So the ability to -- if you did not have an amphibious

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force, said another way, Senator, if you lack that
 capability, then your only option is to bring it from some
 other land, some other place.

Senator Wicker: Are we talking -- is our assumption
5 miles, 25 miles? What is the distance?

б General Berger: It is going to be completely threat 7 dependent. It is going to be dependent on the operating 8 environment that that commander sees in front of him. Senator Wicker: Admiral, do you have anything to add? 9 10 Admiral Merz: I would only add that A2AD is one of 11 those peer competitor capabilities, both ours and theirs, that we track closely. This will rapidly go to a higher 12 13 classification, but it is probably less range dependent than sector dependent. That is kind of how we look at it. And 14 15 the ability to operate in those environments creates 16 advantages and disadvantages, depending on how you are 17 outfitted to deal with it.

18 Senator Wicker: Senator King?

19 Senator King: Thank you.

We are doing multiyear procurement block buys for combatants, maintaining industrial base. Do we have a plan on recapitalizing ready reserve force? We can have great combatants, but if we cannot get the supply to them, that is a problem. Where does that stand?

25 Mr. Geurts: I will talk about it. I will say

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generically, and then Admiral Merz can talk about it from a
 requirements standpoint. I would say, yes, that is
 absolutely something we are going to have to work our way
 through in the coming years.

5 Right now, we are looking at it in a combination of б extending some service life extension of our current assets 7 through the authorities given and through the committee, 8 some potential procurement of some used assets, and then looking at a future ship Common Hull -- CHAMP program that 9 10 could potentially provide some new build assets going into 11 the future. And so, we are looking at all three of those 12 lines of operation.

On CHAMP, specifically, we are preparing by the end of the year to put an RFP out and bring on multiple potential builders to do similar to what we have done with frigate and get into an iterative requirements kind of solution space to try and, you know, lock down more of the specific requirements for that hull.

Admiral Merz's team has been working on the requirements from a warfighting standpoint. This would enable us to do the same thing we did in frigate, bring in the industry team early and then get into some iterative design requirements trade-offs so that we could then set our final requirements for what a CHAMP program would look like in the outyears.

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Senator King: This is sort of a parenthetical, but we 1 2 go home and are asked to defend the defense budget and the cost. And one of the things that I have tried to get across 3 is we are recapitalizing a lot of -- and the submarine is 4 5 the biggest example and in the nuclear area, the number. It б would be helpful, I think, if you guys could quantify that 7 to some extent. In other words, what is ordinary cost of operations, and what is recapitalization? The Columbia 8 class would be the prime example. 9

Because I think those are two different subjects that the public needs to understand that we are, in a sense, paying bills that have not been paid because some of these platforms are 40, 50 years old. And the Air Force, of course, we have got all kinds of situations where the planes are a lot older than the pilots. So that would be helpful, for the record, if you could --

Mr. Geurts: Yes, sir. I would be happy to both answer that and then talk in those terms as we are going forward. Senator King: What is operation and maintenance versus

20 what is recapitalization?

21 Couple of other questions. On the cruiser, we are 22 talking about -- we are talking about the frigate. Are you 23 thinking of following a similar program on the new cruiser 24 that it might be a pre-existing design and rather than a 25 clean sheet of paper?

1 Mr. Geurts: Sir, I think we are on the early end of 2 defining all of the parameters around that. Admiral Merz 3 can talk from the requirements side. Their team has been 4 working the initial requirements. We are starting to engage 5 industry.

6 Senator King: It just seems to me to the extent that 7 we have hull designs, that we do not have to necessarily 8 modify. That is a much more -- that is better for the 9 taxpayers. It is faster. I hope that is in the plan. 10 Mr. Geurts: There are advantages to the degree that we

11 have hulls that can meet the requirement.

12 Admiral Merz: Yes, sir. I mean, we were very pleased 13 with how the frigate requirements definition phase went. Senator King: Can you come up a little closer? 14 Admiral Merz: That will certainly --15 Senator King: That will inform the process? 16 Admiral Merz: That will certainly inform the large 17 18 surface combatant process. It really just comes down to the 19 SWAP-C that we spoke about on the DDG 1000, whether or not 20 in the requirements definition phase on whether or not we 21 can generate a hull that is going to give us enough volume 22 to evolve over time.

23 Senator King: I hope that one of the requirements for24 all these new platforms is that they be easily modifiable.

25 Admiral Merz: Yes, sir.

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Senator King: That is a 50-year hull, but you might
 have 10 years of software and then --

Admiral Merz: Sir, the way we say it is we cannot help that we make great ships that are around for 50 years, but what we can help is the ability to evolve them very quickly. And this whole adaptability piece is driving requirements. Senator King: I would think that would be a design criteria.

9 Admiral Merz: Yes, sir.

10 Senator King: There was some testimony -- not 11 testimony. There was a question in the full committee 12 meeting this morning about the John S. McCain, and it is 13 about to come back into service. It has taken a long time. 14 Why did that take so long to get a ship -- I mean, you could 15 practically have built a new ship in the year plus that it 16 took to repair that ship.

17 Mr. Geurts: Yes, sir. And I think that points to our 18 need for stable and predictable funding and programming that 19 allows us then to build both the industrial base and the 20 repair base that can handle the needs --

21 Senator King: Was with a problem with -- was there no 22 place to fix it, or did it -- it was just a yard that --23 Mr. Geurts: I think it was a -- I think some of those 24 repairs are more complex than they first appear looking at 25 them from the outside. You know, Fitz has had some -- you

know, it is a is pretty tremendous job to repair some of it.
 There are some modernization that is also occurring ongoing
 with it. And then you have got to work it into a fairly
 constrained right now either new build or repair yard
 workforce and capacity.

And so, my intent over time is as we look at this 30year ship repair plan and 30-year shipbuilding plan, if we can provide stability in those efforts, we can get the workforce and the capacity built up, which then would allow us more quickly to address emergent work than we currently have right now with the --

You know, if you look at the industrial base report we submitted to the President on the executive order, one of its findings was we do not have a lot of excess capacity either in new build or in repair. And so, when an emergent repair comes out that you were not planning for, you do not have a lot of assets to immediately throw in that without having impacts down the road.

Senator King: One follow-up question, if I might, Mr.
Chair? A more general question is availability, generally.
I would appreciate it if you could supply for the committee
by class of ships what percentage of the fleet of that class
is available at any given moment? In other words, is it 50
percent, 60, 70, 80? I do not know.

25 I would think would be interesting to know and

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1 important to know because if we are better -- if we are able 2 to keep our ships in better repair, it can be a savings in the long run. You could end up with the same combat power 3 for less dollars if we maintain and life extend. So I would 4 5 just like to know fleet availability along the various types б of ships and any thoughts you have on it. 7 Mr. Geurts: Yes, sir, happy to provide that for you, and we will provide it by each class of ship. Obviously, a 8 key --9 Senator King: Do a comparison with the cruise lines 10 11 ship. 12 Mr. Geurts: Yes, sir. Lots of different --13 Senator King: Lots of differences. Mr. Geurts: Lots of differences, but there are 14 15 certainly -- and one of the things we have doing last year 16 both, and particularly in aviation readiness, is taking best lesson learned out of that and bring them. We have had --17 18 we have relationships --19 Senator King: My sense is the private sector does a 20 better job of their capital assets being online. I do not 21 know, but that is the impression. 22 Mr. Geurts: There are certainly opportunities to learn 23 from all that. We have relationships with -- in fact, we 24 have got a team that is going to go down and has a

25 relationship with Carnival Cruise Lines to look at that very

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1 notion.

2 Senator King: So my question was not completely 3 stupid?

4 Mr. Geurts: No, sir. Absolutely not.

5 Senator King: I was worried.

6 Mr. Geurts: We will --

7 Senator Wicker: Can you put a percentage on how stupid8 the question was?

9 Senator King: Yes, that is right.

10 [Laughter.]

General Berger: Could I just add one thought? Because we talk about this all the time -- the snapshot, whether it is aviation or ships, that we provide to you is going to be skewed because we deferred maintenance for years.

15 Senator King: Yes.

General Berger: So the snapshot will look not -- we will not be happy with that snapshot because we knew -- when we ran those ships and planes hard for a decade, we knew we were going to play a price on the backside.

20 Senator King: Thank you. Thank you, Mr. Chairman. 21 Senator Wicker: Just a follow-up, Mr. Secretary, your 22 written statement describes corrective measures being taken 23 to address recent issues of welding quality and inadequate 24 testing of missile tubes for the Columbia class. Can you

25 provide your assessment of the root causes and program

1 impact?

2 Mr. Geurts: Yes, sir. The challenges we had with 3 Columbia were on the missile tubes. We had similar issues 4 on missile tubes on the Ohio program decades ago. So we had 5 moved those missile tubes very early in the program to prove 6 out the fabrication welding of those assets.

7 When we got into looking at the first set of tubes that8 were manufactured, there were issues with improper

9 inspection of welds, which led to missile tubes that did not 10 fully meet all of the specifications in terms of those weld 11 designs. So that was an issue at a supplier. The supplier 12 did not inspect properly the welds. Those then got shipped 13 to the production facility.

14 Senator Wicker: What were the consequences to that 15 supplier?

16 Mr. Geurts: So that supplier is on a fixed-price 17 contract. So that supplier -- subcontract to EB. So that 18 supplier now is repairing all of those missile tubes.

Fortunately, we had programmed those mission tubes with a lot of margin in terms of our schedule. So we currently assess we still have 12 to 13 months of schedule margin even with all of the missile tube repairs. And so, we do not assess that will impact the Columbia build schedule, which is critical for us. But again, it is a very important

25 issue.

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1 One of the issues that points to, and we have had a 2 couple -- we have talked about the Collins shaft issue as 3 well -- is the criticality of the supply base. In the industrial base report, I think since 2000 it documented 4 5 over 20,000 they call them establishments that have б disappeared from the shipbuilding industrial base, really 7 pointing to that fragility in the supply base. And so, that is one of the areas we are really focused on ensuring, one, 8 we have got suppliers that are the building the quality 9 10 products we need, and two, anywhere we have some of these 11 single-point suppliers we try and build up their robustness. 12 Senator Wicker: You guys are in the building business 13 and hardware business, not so much in the personnel business, except that you really are. What quality of young 14 Americans are stepping forward now, General and Admiral? 15 16 And we are asking them to handle some pretty state-of-theart, sophisticated stuff. Am I correct? 17 18 Admiral Merz: Yes, sir. Our talent is eye-watering. 19 And I do a lot of public speaking --20 Senator Wicker: Eye-watering, yes. 21 Admiral Merz: Sir. And whenever the question comes up 22 of the quality of American youth, I just simply say come to 23 sea with us and see them. Keeping them from getting bored 24 is probably the biggest challenge. I mean, they are very 25 active. They are very multi-task. The grow up in an

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environment to communicate across multiple domains
 simultaneously. In a long story, I can tell you about my
 daughter that I use as an example, but they truly are just
 top-shelf individuals.

5 The challenge is it is only 1 percent of Americans б qualify to serve in the military. All services are 7 competing for that talent. It is often the same talent pool 8 that the engineering companies are competing for. So attractive pay, benefits, the training, those are the things 9 we continue to press forward to draw on the talent we need. 10 11 It is an all-volunteer force, and that makes it a 12 competition.

13 Senator Wicker: General, anything to add?

General Berger: I think Secretary Geurts spoke earlier 14 about not taking the industrial base for granted. He did 15 16 not say it in those words, but that was what he inferred. And I think you can say the same thing about the recruiting 17 18 effort that the services have to do. That is an every day, every hour of every day effort. Because just like the 19 20 Admiral said, there is a lot of competition out there for 21 the same talent.

I agree with him that the caliber of high school graduates and college students that come into the service, we have never seen anything at that level. But it is also something you cannot take for granted. It is an everyday

1 battle.

2	And I think in my personal experience I will not
3	speak for anyone else. My personal experience, the only
4	time we are going to have to worry about that really is if
5	they ever sense that the country is not behind them, is not
6	supportive of them in some way, then we ought to be worried.
7	But as long as that is the case, we will find enough
8	patriots, and they are very well-qualified.
9	Senator Wicker: Well, thank you very much, gentlemen.
10	We appreciate your service, and we appreciate your
11	information to us today.
12	And if there is nothing else are there some magic
13	words that I am supposed to say?
14	Oh, let me just add, Senator King is right about the
15	scheduling. Senator Hirono, in spite of her best
16	intentions, is not going to be able to make it to the
17	hearing at all. I will just submit my opening statement for
18	the record.
19	[The prepared statement of Senator Wicker follows:]
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1	Senator Wicker: And do we need to leave some time
2	open? Let us leave it open for a week for questions for the
3	record.
4	[The information referred to follows:]
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1	Senator Wicker: Anything else, Senator King?
2	Thank you, sir, and thank you, gentlemen.
3	This hearing is adjourned.
4	[Whereupon, at 4:04 p.m., the hearing was adjourned.]
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