

Stenographic Transcript
Before the

Subcommittee on Seapower

COMMITTEE ON
ARMED SERVICES

UNITED STATES SENATE

TO RECEIVE TESTIMONY ON NAVY AND MARINE CORPS
INVESTMENT PROGRAMS IN REVIEW OF THE DEFENSE
AUTHORIZATION REQUEST FOR FISCAL YEAR 2025 AND THE
FUTURE YEARS DEFENSE PROGRAM

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1 TO RECEIVE TESTIMONY ON NAVY AND MARINE CORPS INVESTMENT
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3 FISCAL YEAR 2025 AND THE FUTURE YEARS DEFENSE PROGRAM

4
5 Wednesday, May 1, 2024

6
7 U.S. Senate
8 Subcommittee on Seapower,
9 Committee on Armed Services,
10 Washington, D.C.

11
12 The subcommittee met, pursuant to notice, at 4:29
13 p.m., in Room 222, Russell Senate Office Building, Hon.
14 Time Kaine, chairman of the subcommittee, presiding.

15 Subcommittee Members Present: Senators Kaine
16 [presiding], Shaheen, Blumenthal, King, Peters, Cramer,
17 Sullivan, and Scott.

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

3 Senator Kaine: The hearing is coming to order. And
4 it is historic because never have we started a hearing
5 early in my 12 years in the Senate, but my clock says it is
6 4:29 p.m., so why not make history. We are a minute early.

7 I want to thank my Ranking Member, Senator Cramer. He
8 and I are both, you know, from coastal States. And I want
9 to thank our witnesses for this important hearing of the
10 Seapower subcommittee as we are getting ready to start to
11 write the NDAA, both in the subcommittees and in the main
12 committee, moving toward a markup in the middle part of
13 June.

14 It is kind of hard to believe that the markup comes
15 around faster and faster. It doesn't seem like a year ago
16 that we were doing this, but we have a lot to talk about.
17 The hearing takes place at an extraordinary time for the
18 United States Navy.

19 Commercial vessels from around the world, our naval
20 vessels, and those of our partners have been attacked
21 dozens and dozens of times in the past six months in the
22 Red Sea. And we need to take a moment to appreciate the
23 bravery of the women and men who sail those waters, their
24 skill, their competence, and the competence of all those
25 who have trained them and equipped them to undertake a very

1 dangerous mission.

2 No one here needs to be reminded of the responsibility
3 that we have to provide weapons systems to young men and
4 women to serve them well on their worst days, but it has
5 been a long time since the Navy was presented with such a
6 vivid illustration of this priority.

7 This generation of senior flag officers knows that the
8 difference between a successful campaign and a travesty can
9 be as small as one or two missiles. Today, in the Red Sea
10 where our warfighters are operating within reach of threat
11 systems every day, those one or two missiles, one or two
12 drones, or one or two USVs are out there waiting for our
13 people and for our systems to slip up.

14 And no one in this room would deny the difficult
15 tradeoffs between cost, schedule, and performance that our
16 requirements officers and program managers work through
17 every single day. But the Red Sea has to remind us all how
18 well we balance those tradeoffs ends up being measured in
19 very concrete ways in times of crisis.

20 For months now in the Red Sea, we have been in a
21 position where we have to succeed 100 percent of the time,
22 not 99, not 98, with our sailors, many from Virginia, in
23 harm's way -- those connected to the enterprise and others
24 in that strike group in harm's way. We have to succeed 100
25 percent of the time.

1 A weapon system that delivers too late, is too
2 expensive to afford, or not mission capable when it needs
3 to be is not doing anything for Sailors and Marines as they
4 go into harm's way, and getting these tradeoffs wrong will
5 also consume taxpayer dollars that could buy real time
6 capability elsewhere. I don't say any of this as a
7 critique.

8 I just think we have been blessed with a very
9 impressive, dedicated individuals in your positions over
10 the past several years, but we are seeing in real time the
11 consequences of decisions that have been made for decades
12 that are now being relied upon to keep our folks safe.

13 Despite the best efforts of all predecessors, we have
14 watched as the performance of Navy shipbuilding has slowly
15 declined, and this is something I know we are going to talk
16 a lot about today. And we know that the pacing threat for
17 the Navy and Marine Corps is even more stressing,
18 ultimately, than the challenge that we face in the Red Sea.

19 The Navy's list of headlines is familiar to everyone
20 in this room. The use of the term once in a generation
21 investment has become all too frequent in these settings.
22 Must pay bills to modernize the nation's strategic to turn
23 and rebuild the infrastructure for nuclear vessel
24 maintenance are coming due as we come to grips with the
25 consequences of losing an entire generation of skilled

1 shipbuilders to retirement during the pandemic.

2 Flagship programs like the Columbia struggle despite
3 consistent prioritization, and secondary but just as vital
4 programs are floundering too. There are success stories.
5 People are great success stories.

6 The amphibious warship and destroyer production are
7 both moving forward apace, but even these programs face
8 pretty severe workforce shortages. As the saying goes, the
9 first step is admitting we have a challenge, admitting we
10 have a problem.

11 So, thank you, Secretary Guertin, and please pass my
12 thanks to Secretary Del Toro for starting a hard
13 conversation about the state of Navy shipbuilding with your
14 45 day review. I hope we can continue that conversation
15 here and during the entire NDAA process and do what we can
16 to make this problem better.

17 There is certainly areas we are going to -- we are
18 going to need to make big, painful investments to preserve
19 our capacity to build warships for the generations to come,
20 but there are also areas where money is not going to make a
21 difference, or at least not make enough of a difference
22 fast enough to be worth the investment.

23 And today I want to hear about how we are being
24 intentional about those trades and the opportunity costs
25 that go with them. In particular, we had a Readiness

1 subcommittee hearing earlier today, and we talked an awful
2 lot about the workforce. We talked about recruiting into
3 the uniform service, but we talked about the workforce in
4 our industrial base.

5 And my belief, and I think, I am on the HELP
6 committee, so I focus a lot on education and workforce
7 issues, is an awful lot of the challenge that we are seeing
8 is a workforce challenge.

9 And we sometimes say another part of the challenge is
10 the supply chain challenge, but that is a workforce
11 challenge too because an awful lot of our supply chain
12 backups are driven by our industrial partners having the
13 same workforce challenges attracting and retaining good
14 talent as we see in the military and in our prime
15 contractors.

16 General Heckl, I want to finish and just say a word
17 about you. This is your last hearing in front of the
18 subcommittee. Unless there is some emergency that crops up
19 in the next couple of days that causes to have another one,
20 and I want to make a particular point of thanking you.

21 Since you took this job, you have given very candid,
22 frank testimony in front of this committee in the midst of
23 the most consequential reorganization of the Marine Corps
24 in recent memory.

25 You have been open with us. You have been willing to

1 tell us what you think we need to hear, even if it is maybe
2 not what we want to hear, or even if you know you might
3 face some disagreement from some on this committee.

4 I hope to discuss Force Design a little bit today, as
5 we have many times before, but I also want to applaud the
6 sense of urgency and professionalism with which General
7 Berger, General Smith, yourself, and many other fine
8 Marines have approached these efforts. You remind us of
9 why America wants a Marine Corps.

10 And as you head into a well-deserved retirement, you
11 have earned thanks from a grateful Corps, a grateful
12 Congress, and a grateful nation. And with that, now let me
13 yield to my colleague, Senator Cramer, for his opening
14 comments.

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

3 Senator Cramer: Thank you, Mr. Chairman, and great to
4 be your partner. As the chairman alluded to, we are not
5 both from coastal States, but together we know a lot about
6 the seas and the prairies.

7 But that said, thank you to all of our witnesses. And
8 I might as well start where the chairman ended, General
9 Heckl, and thank you for your service. Congratulate you on
10 your retirement. And I am sure you could find another role
11 that would allow you to come and testify before Congress.

12 And I am sure that is one of your favorite things that
13 you will miss the most in your job. But anyway, thank you.
14 And, to that point, to the point about your directness,
15 your bluntness, that is something that we appreciate very
16 much on this committee.

17 As I mentioned, others as well, Admiral, we look
18 forward to hearing from you, and Mr. Secretary, I have
19 appreciated our discussion earlier this week. But the
20 plain truth is something we all need to hear and share with
21 each other from time to time, realizing that the political
22 constraints we work in.

23 We are also in a -- you know, we are in a dangerous
24 world right now, and we need to know what is necessary and
25 what is doable, and you need to tell us what you need from

1 us. And I appreciate all of you being here today and look
2 forward to working with you.

3 The importance of sea power is obviously only going to
4 increase over the years, and it is pretty darn important
5 right now. Our Navy thwarts Houthi drones and missile
6 attacks on a daily basis, our Marine Corps campaigns in the
7 Western Pacific with allies and partners to deter the
8 aggression of the Chinese Communist Party.

9 I, along with every other Republican Senate Armed
10 Services member, expressed serious concerns with President
11 Biden's order to build a temporary pier on the Gaza coast
12 because of the serious risk to U.S. personnel.

13 And unfortunately, as predicted, they came under
14 mortar fire from Hamas terrorists just last week, which
15 demonstrates the importance of contested logistics. No
16 other nation can match the capabilities of our great Navy
17 and Marine Corps, but there is always room for improvement,
18 and we want to talk about that and be part of that.

19 Our sealift and logistical capabilities are in need of
20 attention. While the Navy partially owns these
21 responsibilities, sealift moves more than 90 percent of
22 military equipment and supplies. We simply do not have
23 adequate capacity.

24 For example, one large ship enroute to Gaza turned
25 around due to an engine room fire, creating an indefinite

1 delay. If we struggle to build a temporary pier in the
2 Mediterranean, how will we build them in the hundreds in
3 the Pacific? During World War II, the Navy's famed Seabees
4 built over 400 advanced bases.

5 I also expect the Navy will improve its support to the
6 Marine Corps as they pivot back to their traditional naval
7 and expeditionary formations. Amphibious ships are in a
8 deplorable state of readiness. Only one amphibious ship
9 out of three was ready to participate in this year's
10 international exercise, Cobra Gold.

11 Additionally, chronic instability of amphibious ship
12 procurement puts the industrial base at great risk. A
13 multi ship buy of amphibious ships is desperately needed.
14 Instability in shipbuilding is not limited to amphibious
15 ships, as you know. Forecasted shipbuilding plans have
16 seen massive variation from year to year.

17 The difference between high and low procurement
18 estimates -- estimates procurement in a Fiscal Year has
19 averaged six ships over the past decade. The December 2020
20 shipbuilding plan forecasted the procurement of 19 ships in
21 Fiscal Year 2025, but here we are discussing the 2025
22 budget that requests just 6, a difference of 13 battle
23 force ships.

24 Industry investments, which take 5 to 10 years to
25 materialize, require stability in shipbuilding orders. We

1 need to send the right market signals and the right demand
2 signals. I am also concerned with progress towards the
3 unmanned fleet.

4 The Navy wants to jump into large, unmanned vessels,
5 while largely ignoring the transition of small and medium
6 systems that can be deployed to the fleet much sooner. For
7 example, the Navy never planned to transition to small,
8 unmanned surface vessel program. It has been thrust upon
9 them from the outside.

10 We must learn, experiment, and scale these emerging
11 technologies ahead of our adversaries. The United States
12 enjoys the most innovative commercial and startup ecosystem
13 in the world, and we must harness this advantage for
14 National Security. Thank all again, all of our witnesses,
15 and look forward to their testimony.

16 Senator Kaine: We needn't have introduction, since we
17 know you really well. So, maybe I will start with
18 Secretary Guertin, and then ask Admiral Pitts and General
19 Heckl to testify, and then we will open up five minute
20 rounds of questions.

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1 JOINT STATEMENT OF HON. NICKOLAS H. GUERTIN,
2 ASSISTANT SECRETARY OF THE NAVY FOR RESEARCH, DEVELOPMENT,
3 AND ACQUISITION; VICE ADMIRAL JAMES E. PITTS, USN, DEPUTY
4 CHIEF OF NAVAL OPERATIONS FOR WARFIGHTING REQUIREMENTS AND
5 CAPABILITIES; LIEUTENANT GENERAL KARSTEN S. HECKL, USMC,
6 DEPUTY COMMANDANT FOR COMBAT DEVELOPMENT AND INTEGRATION

7 Mr. Guertin: Thank you, Chairman Kaine and Ranking
8 Member Cramer, and distinguished members of the
9 subcommittee. On behalf of myself, Vice Admiral Pitts, and
10 Lieutenant General Heckl, thank you for the opportunity to
11 appear before you today and address the Department of the
12 Navy's Fiscal Year 2025 budget for sea power capabilities.

13 We would like to thank this subcommittee for your
14 leadership and support in shipbuilding, naval aviation, and
15 ground programs, and to maintain maritime security in
16 defense of our nation. Thank you also for mentioning the
17 Sailors and Marines operating around the world.

18 As the action over recent weeks have shown, support
19 for our allies remains resilient on a superior naval force
20 strategically postured to adapt to consistently evolving
21 geopolitical challenges and threats. The sailors of the
22 Eisenhower, the Arleigh Burke, the Carney, and others have
23 to watch to defend against the Iranian Houthi aggression.

24 That includes engaging and destroying more than 80
25 one-way attack UAVs and at least six ballistic missiles

1 intended to strike Israel from Iran and Yemen. We are
2 grateful for the professionalism and skill of our sailors
3 and Marines, and mindful of the sacrifices of their
4 families at home.

5 The investments that Congress made in previous budgets
6 enabled our success. I also want to express the
7 Department's gratitude at the passage of the security
8 supplemental to make additional investments in submarine
9 industrial base, while supporting our allies and partners.

10 As we look forward to 2025, the actions of the Navy
11 and Marine Corps team reassures international allies and
12 partners, deters potential adversaries, and responds to
13 those who threaten the lives of our sailors, marines and
14 civilian merchant mariners engaged in lawful international
15 commercial activities.

16 The Navy remains focused on the pacing challenge of
17 managing strategic competition with the People's Republic
18 of China, Russia's illegal war of invasion of Ukraine, the
19 Houthis strikes in the Red Sea, and Iranian aggression of
20 our allies.

21 The President's Fiscal Year 2025 budget provides the
22 resources necessary for the Navy and Marine Corps to
23 continue to implement the 2022 National Defense Strategy.
24 This request builds and sustains the right mix of
25 capabilities to keep the seas open and free, deter

1 conflict, and defend against current and future threats.

2 In alignment with the Secretary of the Navy's
3 priorities, the budget request enables a one Navy, Marine
4 Corps team to continue to strengthen our maritime
5 dominance, building on our culture of warfighting
6 excellence, and enhancing strategic partnerships.

7 Thank you for the opportunity to appear before your
8 subcommittee today. Our mission begins and ends with
9 providing the best possible capabilities to our Sailors and
10 Marines in the fleet, and the three of us look forward to
11 answering your questions.

12 [The prepared joint statement of Mr. Guertin, Admiral
13 Pitts, and General Heckl follows:]

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1 Senator Kaine: Admiral Pitts.

2 Admiral Pitts: Thank you, Mr. Chairman. Secretary
3 Guertin covered the opening statement for the -- all three
4 of us. And I am looking forward to our discussion this
5 afternoon and any questions.

6 Senator Kaine: Same, General Heckl?

7 General Heckl: Yes, sir.

8 Senator Kaine: Okay. Well, we will jump in. So, let
9 me say that it is not going to come as a surprise the first
10 question I am going to ask is about the submarine
11 industrial base and the one submarine request that came
12 over this year.

13 We have made a commitment not only to try to build two
14 a year for us, but we made a commitment to build Virginia
15 Class subs for the Aussies to be able to sell to them in
16 the 2030s. And it is a commitment that is not just words.
17 The Aussies have made a major investment in our workforce
18 to enable this to happen.

19 Imagine, to my colleagues, if we were having a floor
20 debate on the Senate floor about investing \$3 billion in
21 the Australian workforce or the Korean workforce, that
22 would not be an easy debate.

23 And so, the Aussies have done a pretty heavy lift
24 politically to make this investment. And I have had
25 conversations with them, and they are a little bit confused

1 about the signal sent by the one Virginia Class sub.

2 We know how vital this is, the Virginia Class sub, and
3 we have been alarmed by the 45 day report, but other
4 indicia of real problems in that program over the last few
5 years. And a lot of it is on the workforce.

6 We talk a lot about the workforce and supply chain
7 development, and it seems like we talk about it a lot to
8 try to push the boulder up the hill, but only make
9 incremental advances. Earlier in the Readiness hearing,
10 Senator Blumenthal was saying, we need to see kind of a
11 great leap forward on this and we are not really seeing it.

12 With this one submarine request, there is a real risk,
13 I believe, that progress we have made on building up
14 capacity across the supplier base could be at risk. So,
15 Secretary Guertin, let me start with you.

16 What is the impact of procuring only a single Virginia
17 Class sub in Fiscal Year 2025 on our ability to meet our
18 own needs, but also on our ability to meet the commitment
19 that we have made on this really important AUKUS framework?

20 Mr. Guertin: Senator, the resources we got in the
21 supplemental, especially related to the submarine
22 industrial base, are part of that clear message we are
23 sending to --

24 Senator Kaine: Is your mic on, Secretary Guertin?

25 Mr. Guertin: Maybe I need to lean a little bit more

1 forward.

2 Senator Kaine: Okay. Great.

3 Mr. Guertin: So, the submarine industrial base
4 funding is critical to making sure that we can build the
5 capacity that we need to build up to not just two Virginias
6 a year, but really two and a third so that we could satisfy
7 the needs of our Australian teammates.

8 In terms of the industrial base capacity, we have a
9 lot of submarines on order, but we have also added
10 additional resources for advanced procurement that will
11 help smooth out those differences. Anything you would like
12 to add, General, Admiral?

13 Admiral Pitts: No, sir.

14 Senator Kaine: Let me ask this just to follow up. If
15 workforce is a significant component of these delays, and
16 we have known it for a while, and some of these industrial
17 investments that we are making are to build a workforce,
18 what are you seeing in kind of early returns, you know,
19 priorities, projects, initiatives that are showing some
20 signs of success that might give the committee confidence
21 that we will get to where we need to with respect to these
22 programs?

23 Mr. Guertin: We have had some tremendous success in
24 not only getting the message out that the Navy is hiring,
25 not the Navy, but also industry, the industry we need to

1 build say submarines, but also other parts of the Navy as
2 well.

3 So, we are seeing some definite improvement in the
4 hiring rates in industry, but also the training that we are
5 working with industry, with organizations in Virginia, in
6 New England, and other places to improve the breadth of
7 people we have available to do this waterfront tradecraft
8 work, as well as the engineers and logisticians and other
9 people in support of the work.

10 Senator Kaine: And Mr. Secretary, based on the
11 conversation we had yesterday, just to share with the
12 committee, I find it interesting that you talk about the
13 greening of the workforce in the ship and subspace.

14 Many of our workforces in the country have a graying
15 workforce where huge percentages are within five years of
16 retirement. That has its own set of challenges.

17 The greening of the workforce could be a good thing
18 down the road if we can convince people to stay, but it
19 also creates some significant challenges in production
20 capacity. Now, could you talk about that a little bit?

21 Mr. Guertin: Thank you. Yes. So as the challenges
22 of COVID made themselves manifest, we found that a lot of
23 the production work that was going on was being done by
24 seasoned veterans who really knew their craft, needed very
25 little supervision.

1 But as they were retirement eligible and the
2 challenges of working in a close proximity environment -- I
3 mean, you can't do shipbuilding over teams. They retired
4 and we were able to hire in new people, but they required
5 more supervision. Their first time quality wasn't as high.

6 So, that caused some challenges with some of our
7 marquee programs. And unfortunately, it was -- where we
8 are with, say, Columbia is, it probably wasn't going to get
9 any better than where we are.

10 Now, some of our other ship programs, we certainly are
11 engaging with industry to improve and happy to be
12 transparent with you about the work we are doing in that
13 area.

14 Senator Kaine: I am going to stick to my five minutes
15 and now yield to Senator Cramer. I will have more
16 questions in a second round once others are done. Senator.

17 Senator Cramer: Thank you, Mr. Chairman. And on that
18 point, Secretary Guertin, about -- I call it the reverse
19 hockey stick, the acceleration of a project, you know, with
20 multiple experiences throughout it.

21 And I think Tim really hit the point, at this point,
22 we are starting with some, you know, some fresh workforce.
23 But what is the -- what do we have to do differently to
24 make sure that that fresh workforce turns gray while still
25 building ships, or at least stays with long enough to get

1 up to the speed of the adversaries.

2 Mr. Guertin: The investments we are making in
3 training and improving that capacity has to be met with
4 investments with industry so that we can work on this
5 problem together.

6 We will do what we can to help them, but it is their
7 business, and they are already appreciating some of the
8 challenges with not being able to deliver in terms of the
9 timing associated with their incentives, right.

10 They are, you know, behind on schedule. They are
11 missing out on profit. So, this is our problem together
12 and we are going to work it with industry. But what we
13 found is that getting people out to the waterfront or in
14 these places where it is physical labor, it is interesting,
15 and it is something you can build a career out of.

16 There is ways of advancing in terms of going in as an
17 apprentice, and then becoming a journeyman, and then a
18 supervisor. These are great jobs for doing great work for
19 this great nation.

20 What we are finding though is if we can hang on to
21 them for three years, they are in it for the long term, but
22 we are really learning, and we are helping industry figure
23 this out together, is how do we get them to that third year
24 so they will stay for the long haul.

25 Senator Cramer: Yes. That is -- you know, it is a

1 great point. And you know, when you can get a workforce
2 that works for mission as well as money, that is I think
3 part of the secret sauce, and just let us know what we can
4 do.

5 Now, along the same lines, I think we discussed this
6 the other day, I was recently in San Diego and in L.A.. I
7 visited NASCO, as a matter of fact, and learned a lot about
8 some of the things you are talking about right now.

9 But I also visited the Air Force's Collaborative
10 Combat Aircraft, a couple of the programs and it was, I
11 don't mind telling you, a little bit excited about the
12 recent awarding of what I would consider of the five
13 companies that were competing to move forward, the two
14 biggest disruptors were chosen, Anduril and General
15 Atomics.

16 And there are other examples of how we have, you know,
17 sort of expanded our industrial base. The Army selected
18 Palantir for its Titan program. You know, obviously Space
19 Force, which is newest, is only really successful because
20 of some disruptors in the industry that sort of kept space
21 alive, SpaceX, E-Space, and a newer entrance into things,
22 Rocket Lab.

23 So, clearly the fleet has done a good job of
24 experimenting. In fact, I think the Navy has the best
25 research and development lab in the military. But can you

1 describe any major Navy programs, not just prototypes that
2 have been awarded, sort of innovative or nontraditional
3 contracts or companies that have been able to get in the
4 biz, if you will, and show some real innovation?

5 Mr. Guertin: We have done some amazing innovations in
6 the area of unmanned surface and undersea vessels. I will
7 let Admiral Pitts talk about that. I did want to talk
8 about how the Navy's effort in larger collaborative
9 aircraft, the MQ-25, refueling aircraft, and we are making
10 great progress.

11 A little bit of a stumble to get that started, but
12 Boeing is doing some important work in getting that
13 aircraft through its testing so we can get in production,
14 and we need that refueling jet in a big way. Admiral.

15 Admiral Pitts: Thank you, Mr. Secretary. For
16 innovation and getting things out much quicker, we have had
17 some recent success in that we stood up in the Navy a
18 disruptive capabilities office to take emerging operational
19 problems from our fleet commanders. Swarm it. Work with
20 industry. Work with all the experts on the -- appropriate
21 experts on the OP-NACSEV to include contracting and
22 acquisition and see if we can deliver a very fast solution
23 and capability to our fleet commanders.

24 And we are working hand in hand with OSD's replicator
25 effort, which is scaling some of those mass smaller

1 unmanned systems to meet operational challenges. And in
2 that, we are introducing some newer companies and different
3 companies that are showing innovation at scale, sir.

4 Senator Cramer: Well, not wanting to offend the
5 chairman in any way since he kept to five minutes, I will
6 do the same for this round, Mr. Chairman. Thank you.

7 Senator Kaine: Thank you. Senator King is up next.

8 Senator King: I have a reputation around here for
9 being reasonable and calm. Today. I am not going to be.
10 The budget for directed energy in the Department of Defense
11 has fallen by 50 percent in the last two years.

12 We are spending \$4 million to shoot down a \$20,000
13 drone from the Houthis. What in the hell are you guys
14 thinking? The Navy directed energy budget has gone
15 practically to nothing. I don't get it.

16 We are in a world of drones and low cost missiles and
17 low cost drones, and this is the technology that can do
18 something about this, and you are cutting the budget in
19 half. This ought to be the highest priority.

20 You ought to be doubling and tripling the budget, not
21 cutting it in half. Can you give me any rational reason
22 for not pursuing this critical technology as we move into a
23 time of swarming drones? I mean, we can't shoot swarming
24 drones down with missiles. Come on.

25 Any answer to this?

1 Admiral Pitts: So, the --

2 Senator King: I am only getting started by the way.
3 I have got another one coming. But seriously, this is -- I
4 have been beating this drum for three or four years. I am
5 getting nowhere, and we are getting creamed. And we have
6 got -- we are getting creamed in the Red Sea. We are
7 getting -- the Ukrainians are getting creamed with cheap
8 drones coming in from Iran. And we are cutting the damn
9 budget for the technology that could save us.

10 Admiral Pitts: The warfighters out on the fleet are
11 using the tools they have to do the work they need --

12 Senator King: But we are not giving them the tools.

13 Admiral Pitts: Well, we are giving them tools that
14 have been successful but perhaps are on the wrong side of
15 the cost curve. So, I agree with you completely. The
16 opportunity to invest in directed energy is all around us.
17 However, it has to work. We have an experiment prototype
18 put on a one destroyer --

19 Senator King: You HELIOS out in San Diego. I don't
20 know why we are not testing HELIOS in the Red Sea, but that
21 is another question.

22 Admiral Pitts: We have one unit --

23 Senator King: The point is budgets are policy. And
24 your policy is, we don't give a damn about directed energy.
25 That is what the policy is in this budget.

1 And I don't -- I mean, I understand you got to make
2 choices and everything else, but to me, this is an obvious
3 choice. It is like telling of a soldier on the battlefield
4 you can't have a rifle. This is the technology of the 21st
5 century, particularly for aerial warfare.

6 Mr. Guertin: I am excited about --

7 Senator King: Anyone want to take a crack at that?

8 Mr. Guertin: Go ahead.

9 Senator King: Wouldn't you like to have directed
10 energy on those destroyers?

11 Admiral Pitts: Yes. Thank you, Senator. Yes, sir,
12 we would. And we would -- we are continuing efforts, and
13 it is an absolute valid point that our budget was -- we
14 reduced our budget in this particular area of directed
15 energy. It was part of that risk allocation --

16 Senator King: The Navy reduced from \$152 million to
17 \$82 million at a time when the demand is going up. That is
18 just -- I cannot make that makes sense.

19 Admiral Pitts: Yes, sir. But we are continuing
20 efforts. Not as fast as we would like, in both lasers, as
21 HELIOS is one example. And then working with OSD and the
22 Joint Force on a higher energy laser, land based.

23 Senator King: Right. Microwaves.

24 Admiral Pitts: And high powered microwaves. Yes,
25 sir.

1 Senator King: Well, again, it's fine for you to tell
2 me that, but the budget is what is talking here, and it is
3 not talking very loudly about this essential need. Okay.
4 Second issue that is really bothering me and that is
5 readiness.

6 You -- there is a detachment on the Navy website that
7 talks about ships underway, and there are 294 ships
8 deployable, there 70 that are underway. We have 12
9 aircraft carriers, 4 are underway. In other words, about
10 75 percent of the ships that we have aren't doing anything.
11 What the hell is that all about?

12 And by the way, I did a little research today in the
13 Carnival Cruise Line, and I know there are differences, but
14 90 percent of their ships are available all the time, and
15 their average time in drydock is about eight weeks.

16 And those are complex ships. Those are like cities
17 with 5,000 cabins and heat and water and light and
18 everything else. I am not saying they are comparable, but
19 it is a damn sight difference between 90 percent
20 availability and 25 percent availability.

21 And you as well know, as well as I do, a ship goes
22 into one of our maintenance facilities and it is there.
23 What can we do about that? We are appropriating a lot of
24 money to build these ships. You are not using them.

25 Mr. Guertin: Senator, excellent point.

1 When I went through my confirmation hearing, I
2 promised you and the rest of your colleagues that I would
3 get out to the shipyards, I would see what is going on, and
4 I would find out how to improve the way we not only build
5 them, but also the way we maintain them.

6 And I have been true to my word on that, and I have
7 been getting out to the shipyards, and we are working on
8 improving how that work.

9 Senator King: If you need more money for more
10 infrastructure for maintenance, tell us. But you know, we
11 are spending a lot of money building ships that are sitting
12 somewhere that aren't being used.

13 A 25 percent utilization rate. If you were an airline
14 -- by the way, the numbers are similar for the airlines.
15 They are about 90 percent available at all times. They
16 would be out of business. I mean, the difference is they
17 have to make a profit.

18 And I just hope you will look at it that way and think
19 about a better utilization of the taxpayer's assets. When
20 we spend \$12 billion for an aircraft carrier, it ought to
21 be out in the ocean.

22 And then the final point, I am out of time, is
23 hypersonics. As near as I can tell, we have no defense
24 against hypersonics, which renders our entire Pacific fleet
25 vulnerable in the first hour of a conflict. Thank you, Mr.

1 Chairman.

2 Senator Kaine: Thank you, Senator King. Senator
3 Sullivan.

4 Senator Sullivan: Thank you, Mr. Chairman. And
5 gentlemen, thank you. We had a Readiness subcommittee
6 hearing with the Vice Chiefs, just about an hour ago. So,
7 I am going to repeat some of the questions, but I am going
8 to follow up on Senator King's question.

9 Mr. Secretary and Admiral, I asked the Vice CNO in the
10 hearing we just had, so assume you have a magic wand,
11 right, meaning you can get done whatever you think you
12 think you can get done.

13 The knuckleheads in Congress aren't in the way. The
14 President of the United States, who in my view keeps
15 putting forward budgets that don't reflect at all the sense
16 of urgency and National Security challenges, those aren't
17 limits.

18 If you guys, in terms of our shipbuilding -- we didn't
19 talk about amphibious. 32 percent of the amphibs fleet is
20 ready -- 32 percent. Holy cow. Like Marine Corps can't
21 deploy. The Boxer, you know, the big dock amphib that was
22 supposed to go out with one of the mews just turned around
23 because a screw doesn't work.

24 I mean, it is a disaster. I think the Navy is in a
25 ship building crisis. And I think the leadership, from the

1 Secretary on down, is responsible. The Secretary of the
2 Navy often, cause all those big, you know, defense
3 contractors are plusing up their stock. I saw that was one
4 of his quotes. He gets us his climate action plan 18
5 months ago.

6 There is no statutory requirement, by the way, for the
7 Secretary Navy to give us a climate action plan, but a
8 shipbuilding plan is in disarray, disaster. So back to my
9 question. Magic wand. No budget constraints.

10 To Senator King's question, I think -- I just met with
11 a bunch of Republican Senators on the Armed Services
12 committee this morning. We are ready. You want more
13 shipyards, you want private shipyards, you want public
14 shipyards, because this is an existential challenge to the
15 United States. Why? Because the Chinese are cranking out
16 10 to 12 high-end navy ships a year. That is the
17 challenge.

18 So, for the two of you, what would be the top three
19 things? Magic wand. Anything you want, we will give you.
20 And I actually think we are close enough, all of us, to do
21 that. What do you need?

22 We are America. We can build ships faster than a
23 goddamn Chinese Communist Party. But right now, we are
24 not, and they are eating our lunch. And if we go to war
25 with them in the Taiwan Strait, it could be really ugly.

1 What do you need, Mr. Secretary? I don't know, what the
2 hell do you need?

3 Mr. Guertin: So, I probably am not well advised to
4 take you up on your offer.

5 Senator Sullivan: Why not?

6 Mr. Guertin: I would have to tell you --

7 Senator Sullivan: Aren't you in charge of this?

8 Mr. Guertin: The biggest thing that we could use,
9 honestly, is more capacity for repair and construction.

10 Senator Sullivan: Okay, so what does that mean?

11 Mr. Guertin: You need some --

12 Senator Sullivan: Do we need another shipyard,
13 public, private?

14 Mr. Guertin: Honestly, we could use more shipyards.

15 Senator Sullivan: Okay.

16 Mr. Guertin: That would be an amazing place to end
17 up. But China has been investing for 30 years on their
18 ship repair -- ship construction activities, and they have
19 captured, I think, half of the commercial shipbuilding
20 market right now.

21 That means that we, as America, would need to value
22 commercial shipbuilding as highly as they have in order to
23 beat them at that game.

24 Senator Sullivan: Well, your testimony is a little
25 depressing. We can beat China at the game, right. Look at

1 our history. We can do these things. We are America. We
2 need leadership. We need ideas. Admiral, what is your
3 idea? Magic wand.

4 Admiral Pitts: Sir, I agree with Secretary Guertin
5 that the additional capacity -- if you look at our
6 shipbuilding plan this year to achieve our 381 ships per
7 our requirement from the BFSAR, it relies on our current
8 industry to achieving the capacity and delivering our ships
9 on time and on budget, along with resources to sustain that
10 large of a fleet. And the number one item would be
11 capacity, whether that is through outsourcing through
12 another yard --

13 Senator Sullivan: Can you guys just dig into the
14 concept of capacity a little bit more. Like dive deeper on
15 that. What do you mean by that? And what can we provide
16 you?

17 Mr. Guertin: The Maritime Statecraft Initiative that
18 Secretary of the Navy started talking about and has been
19 working across other Departments is a good place to start
20 the conversation.

21 And one of the things that we stepped away from in the
22 70s and 80s was valuing a commercial shipbuilding industry.
23 So, that is a policy thing that together, Navy and Congress
24 and Department of Transportation -- my personal opinion is
25 we need to go back and revisit valuing building commercial

1 ships as a part of what makes America strong.

2 Senator Sullivan: Well, look, I am going to wrap up
3 here, Mr. Chairman, but whatever you guys think, give us
4 your big ideas. Maybe for the record, go back, you know,
5 noodle on this a little bit. This is your job. This is
6 your opportunity. You know, the history of our country is
7 very promising in this regard.

8 My team and I were looking at 1937 to December 6th,
9 1941. A lot of people think we start building ships after
10 Pearl Harbor, which we did. We actually almost tripled the
11 size of the U.S. Navy before Pearl Harbor.

12 So, we can do this. It was Congress and it was a
13 Navy. And so, we can do this. We just need help and
14 direction. But I think you have a bipartisan motivation,
15 given the threat, to get on it. We just need big ideas,
16 bold ideas, and I certainly am one who would vote for them.
17 Thank you.

18 Senator Kaine: Thank you, Senator. Senator
19 Blumenthal.

20 Senator Blumenthal: Thanks, Mr. Chairman. I want to
21 follow up on a couple of the questions that have been asked
22 so far. And Secretary Guertin, you and I talked a little
23 bit about this issue when we were together in Groton
24 recently.

25 I understand that there is an internal report that

1 shows some of the delays. For example, the Columbia, I
2 believe is more than a year behind schedule. Is that
3 correct?

4 Mr. Guertin: A year -- 16 months --

5 Senator Blumenthal: And what is the Virginia Class
6 construction delay look like?

7 Mr. Guertin: We are building two variants of -- I am
8 sorry. We are building two variants of the Columbia
9 -- excuse me, of the Virginia, and one of the variants is
10 up to 24 months behind. The other is 36 months behind.

11 Senator Blumenthal: So, we are not just failing to
12 build in terms of planning. We are way behind right now
13 where we should be.

14 And I think that those numbers are a measure of the
15 crisis that we face in submarine construction, which is
16 essential to our undersea superiority, which is in turn
17 essential to our Navy strength and our defense. I am
18 really at a loss for why we are planning on failure.

19 And this is not personal because I know the bed was on
20 fire when you got into it. You are not, you know,
21 responsible for a lot of these delays, but all of us are
22 responsible right now for a failure to invest, if we in
23 fact, fail.

24 The American public has no idea about this situation.
25 My guess is that the numbers of people who really are

1 familiar with it could fit on the floor of the United
2 States Senate, but they are going to learn about it when
3 that failure becomes apparent with the threats to us
4 abroad. And it is not just the production capacity at
5 Electric Boat or in Virginia.

6 There are literally, for every one of those
7 submarines, 16,000 suppliers, 16,000 suppliers for whom the
8 demand signals are, we ain't doing it anymore. In effect,
9 go put your work force on something else or disband your
10 workforce.

11 So, it is not just the 5,300 people that Electric Boat
12 has to hire. It is also the workforce for those 16,000
13 suppliers. And I would just repeat the request from
14 Senator Sullivan, tell us what you need, not what the
15 budget is.

16 The budget, I recognize, is not you are doing solely,
17 but whether it is in a classified setting or in some other
18 setting, give us what you need, and then it will be on us
19 to meet those needs.

20 Mr. Guertin: Senator, I would be happy to engage in
21 that conversation. I will have to say that the problem is
22 pervasive, it is deep, and it is broad.

23 Our estimates is that just for getting to two and a
24 third plus -- Virginias, plus one Columbia, we are going to
25 need up to 10,000 more people, not just tradecraft, but

1 also engineers and the other elements of support for the
2 people on the waterfront doing that work.

3 We have a big lift in front of us and we are gearing
4 up for it. We are using the supplemental to engage with
5 industry and create those trained people. It is going to
6 be a long, hard run.

7 Senator Blumenthal: I am going to interrupt, and I
8 apologize, but it can't be long. It may be hard, but long
9 is not acceptable, because long is in effect saying, we
10 can't do this in the time that we need to do it.

11 Mr. Guertin: Thank you for that correction.

12 Senator Blumenthal: I want to second the point that
13 my colleague Senator King made.

14 I recently visited our base in Jordan, the joint base
15 that we have with the Jordanians, and I heard a briefing on
16 the Tower 22 drone attack, which is frightening, not just
17 because we lost three of our troops there, but because the
18 drones that were used there essentially are going to be the
19 wave of the future.

20 They are cheap. They are low flying. They are slow.
21 They fly at about the rate of a car. And they are
22 unstoppable if they come at us in swarms right now with
23 what we have. This technology is a matter of keeping our
24 men and women alive when we put them out in those locations
25 with the asymmetric warfare they have right now.

1 We are trying to combat them with missiles that cost
2 millions of dollars. We don't have enough of them. And
3 then they are not as effective as we need to be against
4 them. So, I will follow up on this line of questioning as
5 well. Thanks, Mr. Chairman.

6 Senator Kaine: You bet. Thank you, Senator Peters.

7 Senator Peters: Thank you, Mr. Chairman. Gentlemen,
8 thank you for your testimony here today and your service to
9 our country. I want to follow up on some of the questions
10 related to the submarine program and the industrial base.

11 And Senator Sullivan talking about, and my colleague
12 is talking about what more do you need? However, it seems
13 as if you do have a lot of money that has been appropriated
14 for this. So, it is not a lack of cash, but you just can't
15 keep throwing money out there and not doing things
16 differently.

17 In fact, I think Congress has allocated about \$3.3
18 billion in the recent National Security Supplemental to
19 support the submarine industrial base. So, there are
20 plenty of resources there, and I would argue that there are
21 a lot of suppliers out there that do have the capacity and
22 do have the workforce.

23 I speak from our industry and our industrial base in
24 the State of Michigan. One thing we do in Michigan is we
25 know how to make things. We are a major manufacturing

1 State, and precision manufacturing is what folks do day in
2 and day out. Highly skilled, union workforce is available
3 there.

4 And I know we have a number of suppliers that
5 currently provide material for the submarine program. So,
6 my question for you, Secretary Guertin, is that to what
7 extent are you looking at existing industrial suppliers
8 that are able to provide immediate capacity to be able to
9 shorten this time lag that you have with the submarine
10 programs?

11 Certainly, I would want to work with you on Michigan,
12 but to what extent are you looking at a very well developed
13 and mature supply -- industrial supply base in Michigan to
14 help solve the problems that you are dealing with?

15 Mr. Guertin: Thank you, Senator. It is amazing
16 opportunities that we have for pushing work out of the
17 waterfront activities, where we have these major shipyards,
18 into other places that can build large sections or even
19 smaller pieces that make up this overall thing we call, in
20 this particular case, a submarine.

21 The focus factory effort that we are doing with our
22 major suppliers to push out things like building whole
23 decks or doing preassembly of things so they can be brought
24 to the shipyards to be installed to move as much that work
25 out of the unique place by the water that have -- where we

1 have to actually build the submarine.

2 Very interested in moving as much industrial activity
3 out of those very dense places into areas, other places,
4 other States where that work can be done effectively.

5 Senator Peters: And you are familiar with some of
6 Michigan's capabilities, our suppliers that are there, who
7 do this kind of work, day in and day out, not just for the
8 automotive industry, but actually a very growing and robust
9 aerospace industry in Michigan and certainly naval
10 construction. In fact, we have a major school that trains
11 naval engineers at the University of Michigan. So, we are
12 very, very well prepared. You are familiar with all of
13 that?

14 Mr. Guertin: I am learning more about Michigan's
15 opportunities and other opportunities in other States as
16 well. The University of Michigan is a particular important
17 place for me because that is a place where we get a lot of
18 our naval architects.

19 Senator Peters: Right.

20 Mr. Guertin: But we actually do need to share that
21 joy and get more people into that business. And as well as
22 advanced degrees besides, which I think University of
23 Michigan may be the unique place where we get a master's
24 and PhDs in naval architecture.

25 Senator Peters: Right. Actually, has bachelor's,

1 master's, and PhD. Is the only -- our top tier research
2 university that does that. So, could you -- could the Navy
3 provide me with a detailed accounting of the current
4 Michigan submarine industrial base suppliers and future
5 submarine suppliers' needs? Is that something that is
6 available you could provide to me?

7 Mr. Guertin: I am not going to be able to give that
8 to you immediately, because I might miss something, and I
9 don't want to get anything wrong. I would be happy to take
10 that for the record.

11 Senator Peters: I think that is going to be really
12 important. I think it is important for us to fully
13 understand that and understand how we can help solve that
14 problem. We are all about solving that problem.

15 So, if you could provide that for me and a commitment
16 to work with me to try to figure out how we allow the
17 Michigan industrial base to help solve this problem by
18 making world class products for you.

19 Mr. Guertin: I am happy to make that commitment and
20 to any other State as well.

21 Senator Peters: Secretary -- in your 45 day ship
22 building review, you identified a lot of the ship building
23 delays and some of the things that you have talked about
24 today.

25 But as part of the review, it is not just submarines,

1 you also highlighted delays to the Navy's new Constellation
2 Class frigates. A couple of questions. What
3 responsibility does the Navy share for the delays to the
4 frigate program in particular?

5 Mr. Guertin: Senator, it is a particularly troubling
6 conversation because there were opportunities where we
7 could have kept a better eye on the shop, to be perfectly
8 frank. We did not do sufficient oversight prior to my
9 arrival.

10 However, what that 45 day study illuminated was some
11 of the problems we were having relative to engaging with
12 that company to make sure that they were doing the job
13 necessary to perform with excellence.

14 We have moved hard into that area. I have got a bunch
15 of people now from both the program executive office, as
16 well as Naval Systems Command, rotating through Marinette
17 to provide the additional intellectual resources to get
18 into a better place, as well as making sure they have other
19 contract support work from other naval architecture firms.

20 Senator Peters: Well, I am out of time, but I would
21 love to have further discussion with you about that as to
22 how we solve that problem as well, which is critical.

23 Thank you. Thank you, Mr. Chairman.

24 Senator Kaine: Thank you, Senator Peters. Senator
25 Shaheen up next.

1 Senator Shaheen: Thank you all for being here. I
2 would like to follow up on some of these questions, but I
3 have a good news story that I want to share with you,
4 Secretary Guertin, as we are talking about the challenges
5 the Navy faces.

6 I want to thank you for the recent establishment of
7 the Accelerated Welding Program in New Hampshire. It is a
8 partnership between SENEDIA, Granite State Manufacturing,
9 and the Manchester Community College. And it is working
10 very well, so it is going to help as we look at the -- what
11 we need to do to get those 100,000 new workers that we need
12 for submarine production.

13 But I want to better understand, Secretary Guertin,
14 some of the things that you have said. When you talked
15 about the utilization of our ships, is the issue that they
16 aren't ready to -- they are not seaworthy to go out? Is it
17 that we don't have enough operating funds to put them -- to
18 deploy them out on -- in the bases on which we need to do
19 that? What is the issue with the utilization?

20 Mr. Guertin: I am sorry, Senator, I maybe misspoke.
21 Maybe Admiral Pitts would like to jump in about what it
22 takes to make our ships more ready to go to sea and keep
23 them at sea longer.

24 Admiral Pitts: Thank you, Senator, for the question.
25 In big picture, we have a tiered readiness system where a

1 ship goes through a maintenance period, then it goes
2 through basic training, integrated training, and then it is
3 ready to deploy.

4 And we deploy based on how the Secretary of Defense
5 tells us to allocate to the COCOMS and deploy through our
6 global force management. So, we may have some ships that
7 are not deployed, but they are still doing training or in
8 earlier phases of the full readiness for deployed
9 operations.

10 Now, the fair point is we still, as we are well aware,
11 have some struggles right now of getting our ships through
12 their maintenance, and that is one of the CNO's highest
13 priorities to get more players on the field, to get
14 -- improve our maintenance performance so that we can get
15 them in and out of maintenance and get them operational
16 again.

17 Senator Shaheen: Okay, so with respect to
18 maintenance, Senator King and I share the Portsmouth Naval
19 Shipyard, where they have a very good record of
20 maintenance. I think they continue to be on time and under
21 budget, or at least on budget.

22 And we have significant investment in the shipyard
23 infrastructure optimization plan. Are you saying that once
24 we have completed the SIOP and the four public shipyards,
25 that we still are not going to have the capacity that we

1 need to get the maintenance done on our ships to keep them
2 out at sea?

3 Mr. Guertin: So, I would like to take a first stab at
4 that one. Admiral Pitts, you can join in. By the way, as
5 a formal Portsmouth Naval Shipyard Navy reservist, big fan
6 of the work going on there.

7 I was up there not too long ago, and seeing the new
8 drydock coming together and all the waterfront support
9 facilities were really helping to change how they will do
10 that work now and into the future so that we can do the
11 repair and maintenance of these, especially submarines up
12 there, faster and better as a continuum.

13 This is something we are going to have to continue to
14 invest on. We left that alone for a little too long, and
15 now we are making these big investments now so that we can
16 improve our public shipyards ability to do this work for
17 the nation.

18 Senator Shaheen: I understand that. The question
19 that I am asking, maybe I wasn't clear, is that once we
20 have -- according to our SIOP plan, we are going to make
21 these investments.

22 And at the end of that, are you saying that we are not
23 -- still not going to have the capacity we need to do the
24 maintenance on the ships that are being maintained at those
25 public shipyards? Is that one of the issues?

1 Mr. Guertin: Yes, the SIOP plan reaches a crescendo,
2 but I think as we get to -- further out in years, we are
3 going to want to continue to invest and keep that edge
4 sharp so we can always do this work better and faster as a
5 long term proposition.

6 Senator Shaheen: Okay. I am still trying to get to
7 what you were talking about when you were talking about
8 needing more capacity. Do we need more capacity to build
9 new ships? Do we need more maintenance capacity? Do we
10 need both? And what is the plan to get there? Because I
11 still am not sure that I understand how we are going to do
12 that.

13 Mr. Guertin: Both is good in terms of building and
14 maintaining. In terms of specific capacity challenges
15 -- so the magic wand challenge that Senator Sullivan gave
16 us, I would like to come back to the subcommittee and give
17 you a more detailed and thorough understanding of what we
18 could possibly do different in the future.

19 Senator Shaheen: You didn't answer my question, I got
20 to say. I appreciate that there was an effort to do that,
21 but I don't feel like we have an answer to what we need to
22 do as members of Congress to support the work that the Navy
23 is doing to get us to where we need to be on the fleet that
24 we need. So, I will leave it at that, Mr. Chairman.

25 Senator Kaine: We are going to have a second round of

1 questions. General Heckl, I am going to start with you.
2 And it is an INDOPACOM reality that congested logistics is
3 going to be a significant challenge in the INDOPACOM. And
4 INDOPACOM, TRANCOM -- (technical problems) -- of that
5 problem.

6 But the Marine Corps -- (technical problems)
7 -- logistical issues. So how within the Force Design and
8 then Marine Corps planning are you working to provide
9 options to commanders to support logistics for stand in
10 forces who are within an adversary's weapons engagement
11 zone?

12 General Heckl: Sir, thanks. And I was enjoying the
13 show, so don't feel the obligation to ask me a question,
14 sir, so --

15 [Laughter.]

16 General Heckl: Sir, I will just say, you know, we
17 have gotten after this from the beginning with Global
18 Positioning Network, which is rethinking everything from
19 maritime pre-positioning to -- you know, because the
20 conclusion -- the assumptions we made before about our
21 force was that we would be able to dump in our mountains
22 somewhere and they would be okay. That is never going to
23 happen again. Never going to happen.

24 To Senator King's point about hypersonics, right. We
25 -- so we have to rethink everything. So, the way we

1 approach this is a multi-tiered -- we do have a Marine
2 Corps concept for logistics in a contested environment.

3 We have gone after that as well, and as you know, we
4 have fielded two prototypes of autonomous low profile
5 vessels. Semi submersibles, narco-sub that is almost
6 impossible to track.

7 We prioritized our focus of logistics. I told my
8 staff focus on lethality, right. Good allies and partners.
9 I met with the Commandant of the Philippine Marine Corps
10 today. Our relationship is getting tighter and tighter
11 every day.

12 Our allies and partners are going to be there for us
13 in a lot of ways, you know, chow, you know, other things.
14 The discussion becomes a little more testy when you start
15 talking about lethality, things that we can launch, and so
16 we are focused on lethality.

17 So, the ALPV, the autonomous low profile vessel, is
18 form fit function for two naval strike missiles to get
19 those to resupply points inside the weapons engagement zone
20 of our pacing adversary. So, I think we are moving out on
21 this already. And as you know, we have chartered a couple
22 of vessels, stern landing vessels.

23 One is about to move forward to the island chain with
24 the 3rd Marine Littoral Regiment, and we are going to start
25 experimenting with it now. And we will iterate and make

1 adjustments to where we are going.

2 Senator Kaine: Let me ask you a follow up. I want to
3 ask about a UAS question in the INDOPACON or -- (technical
4 problems). How are you working to counter the prevalence
5 of UAS in defend case, but also to incorporate UASs into
6 your own -- (technical problems) --

7 General Heckl: Well, sir, to your point about
8 logistics, one of the UASs we have already fielded is the
9 TRUAS, the tactical resupply unmanned aerial system. And
10 it doesn't do heavy payloads but think chow, water, parts,
11 and it has the range to do it within the first island
12 chain, the range we need.

13 As far as countering, as you know, we have already
14 fielded the Marine Air Defense Integrated System, MADIS,
15 which is a little bit better on the, you know, the cost
16 curve, right. Fielded with things like Stinger, and it
17 uses a 30 millimeter cannon.

18 And now, the swarming part that Senator King is
19 talking about, we are -- you know, I think technology is
20 catching up. I actually had discussion with a couple of
21 industry partners today at Modern Day Marine about where
22 -- I specifically asked that question about swarming
23 technology.

24 Probably is not going to be lasers, not point defense,
25 but when you talk about large mass swarming, you need

1 things like high energy microwave, right, that can just
2 drop masses of them at one time.

3 And I am going to tell you, sir, I am confident, 100
4 percent confident that technology is going to catch up to
5 that, and we will field those, and we will get on the right
6 side of the cost curve. Until then, we will keep pursuing
7 other things. Like we are looking at APKWS, you know,
8 Advanced Precision Kill Weapon System, a 2.75 rocket, much
9 more affordable than SM-6 and SM-2s, and Evolved SeaSparrow
10 Missiles.

11 Senator Kaine: Secretary Guertin, Senator Peters
12 asked you about the frigate and the challenges with that.

13 You said something in the office yesterday that I
14 would like my colleagues to hear, which is that part of the
15 problem with the frigate was the way -- (technical
16 problems). It is great to do a fixed price contract.

17 That is great for predictability. But if you do it on
18 a first in a class and then the first in class has a lot of
19 changes, it is pretty much guaranteed that that contracting
20 vehicle, which looks good up front, may not be such a good
21 contract. And could you share that insight?

22 Mr. Guertin: So, one of the things that I have asked
23 my team to do, as a result of the 45 day study, is to
24 examine the way we balance risk with industry, the way we
25 manage our incentives, and we restructure those kinds of

1 contracts to make sure that we are utilizing the right tool
2 at the right time.

3 And that is an example of perhaps not using the right
4 tool at the right time. I think that at this point I would
5 have to say it is the only bad example we have of big
6 structure in terms of, you know, using fixed price in one
7 place and cost plus in another.

8 But one of the things, other things that came up
9 through that study is whether or not we are using the right
10 balance of incentives and whether or not these publicly
11 traded companies and how we reach to them and motivate
12 their behaviors through the structure of profit -- we are
13 going to take a fresh look at that and see if we can, first
14 of all, do that better risk balancing between Government
15 and industry, and also make sure that their incentives are
16 effective.

17 Senator Kaine: And before I hand it to Senator
18 Cramer, the other thing about the frigate is, you go into
19 it with a plan.

20 And then, okay, here is a platform that exists, and we
21 will basically replicate 85 percent of the existing
22 platform and 15 percent new. By the end of the design, it
23 is 50 percent existing and 85 percent new, then you are
24 going to have some challenges getting the job done.

25 And I know that is a lesson from that as well.

1 Senator Cramer.

2 Senator Cramer: Thank you. I am going to ask one
3 sort of open ended question about the budget from a
4 different angle. I mean, I guess if we you could have
5 more, you want more capacity, and we are struggling to
6 understand what that is.

7 But if we are stuck with this flat budget or really
8 inflationary -- you know, inflation adjusted negative, you
9 know, cut, our budget cut, what areas of this budget assume
10 the most risk in your mind?

11 If we are stuck with what has been presented, what
12 areas represent the greatest risk? And I think each of you
13 could answer that.

14 Mr. Guertin: Admiral, you want to take first crack at
15 that one?

16 Admiral Pitts: You want me to start?

17 Mr. Guertin: Oh, yeah, please do.

18 Admiral Pitts: Sir, I will just say for the Marine
19 Corps, we have -- you know, we have been aggressively
20 modernizing and we are very, very happy with where we are
21 with forces design. And notice we don't call it 2030
22 anymore.

23 It is never going to end, but now our barracks 2030
24 initiative, which is one of the Commandant's top
25 priorities. So, with this kind of budget, that

1 pressurization on top -- where I will take risks, sir, is
2 in my war enterprise planning team. So, it is
3 modernization. So, we will be forced to slow
4 modernization.

5 General Heckl: Senator, we think the priorities as
6 laid out by the CNO in the second half were the right
7 priorities, given the resources that we had allocated.
8 Where we took risk is in our future fleet.

9 Some of our -- what we -- we have the fleet in being.
10 We are going to modernize the fleet that we have. Where we
11 took risks is those follow on platforms to replace some of
12 our legacy things, such as SSN(X) delaying procurement, air
13 wing of the future. We have some risks there.

14 Senator Cramer: Secretary.

15 Senator Blumenthal: So, I like both those answers
16 actually. I think that in terms of on the acquisition
17 side, where we took risk is understanding what the outcome
18 of the 45 day study and the realities of hire challenges
19 with respect to labor, as well as the supply chain -- the
20 supply chain has fundamentally changed, right.

21 It is just going to be longer. It is going to take
22 longer to get more stuff. In an inflation, capped
23 environment, that is going to be very challenging for us in
24 terms of making sure we get product put out the door in the
25 time we need to.

1 Senator Cramer: All right. Nothing further. Thank
2 you.

3 Senator Kaine: Senator King.

4 Senator King: Yes. Early in April, I requested the
5 Pentagon to give me background on the directed energy
6 budget, and I have an unclassified report which we got
7 yesterday, which I would like to just submit for the
8 record.

9 Senator Kaine: Without objection.

10 [The information referred to follows:]

11 [SUBCOMMITTEE INSERT]

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1 Senator King: It is pretty sad, by the way, but there
2 it is. I don't really have any follow ups except, General,
3 I agree with you. You said -- the technology is going to
4 catch up with the risk. It ain't going to catch up with
5 the risk if we don't fund it, if we don't do the research,
6 the prototyping, and the development.

7 It won't work without the investment and that is the
8 point I am making. I came into this meeting with a cold,
9 and you managed to help me clear my sinuses earlier, and I
10 appreciate that. But seriously, I hope you will go back
11 and think about directed energy, because it just makes so
12 much sense and it is a place where the benefit is
13 overwhelming.

14 A shot from a high powered laser is about, I think,
15 \$0.25 instead of \$4 million. And on the other thing is
16 about -- I agree, ship building, all in. We need more
17 ships, but we also need to utilize the ships we have
18 better.

19 And I hope that you would -- and by the way, the same
20 criticism goes for the Air Force. If they were sitting
21 here, they would be getting a load of this too. These are
22 expensive assets, and we should be using them more
23 efficiently. When the private sector invests in a capital
24 asset, they use it. Those mills are open 24 hours a day.

25 And so, it would seem to me that it would be cost

1 effective to really study maintenance patterns using AI to
2 predict maintenance, what could be done on ship. For
3 example, I think every ship should have a 3D printer, so
4 you don't have to bring it into a dry dock to get a part.

5 So, I think -- I hope that this is an area where you
6 would really do some study because 25 percent utilization
7 of these very valuable capital assets is just unacceptable.
8 So, I appreciate your testimony here today.

9 And Mr. Chairman, I appreciate your holding this
10 hearing. Thank you.

11 Senator Kaine: So, I have two more items that I would
12 like to ask about. So, and they are both related to AUKUS.
13 So, I am going to go AUKUS Pillar 2, then AUKUS Pillar 1.
14 So, AUKUS Pillar 2, talk about -- we are very familiar with
15 Pillar 1.

16 Pillar 2 is more open ended, so I am curious how both
17 the Navy and the Marines are thinking about AUKUS Pillar 2
18 and our engagement with Australia and the UK. Just give us
19 a little status report.

20 Mr. Guertin: Thank you for the question, Senator. We
21 are fully committed to AUKUS Pillar 2. We work very
22 closely with our Australian and UK counterparts.

23 In every domain that is underneath my charge, air,
24 surface, undersea, science and technology, and digital
25 warfare, we have efforts moving along the technology areas

1 that are called out for AUKUS Pillar 2, whether that is
2 hypersonics, undersea capabilities, AI, ML.

3 And it is a very strong relationship, and we are
4 charging out there to help make us all stronger.

5 Senator Kaine: General Heckl.

6 General Heckl: Sir, I don't know that the Marine
7 Corps has much in Pillar 2, but I failed in our office call
8 the other day to mention on -- we are actually doing, in
9 the vein of the stern landing vessel, you know, we have
10 done -- we have gone to industry and chartered ships.
11 Hornbeck Offshore is the first one that will soon be
12 heading out to the first island chain.

13 We are doing a full and comparative test with
14 Australia's sea transport. It is going to be a cooperative
15 operating agreement between the two countries, and we are
16 super excited about it because Australians -- specifically
17 nothing with the UK other than we like getting on their
18 boats and flying fifth gen fighters off of them.

19 But for the Australians, sir, there is a lot of
20 promise there. And they know the theater better than most,
21 so excited about that. But from Pillar 2, sir, I think our
22 activities are minimal.

23 Senator Kaine: Let me ask now back on a Pillar 1
24 question, although it is a little bit broader. So,
25 Secretary Guertin, I am going to put you on the spot on

1 this one. We got to get to 2 plus 1, Virginia plus one
2 Columbia, and then we got to get to 2.3 plus 1 to meet the
3 commitments that we have made in the AUKUS framework.

4 Based on the investments we have made, based upon the
5 investments that we have committed now in this supp, based
6 upon the investments the Aussies have made, based upon the
7 '25 budgetary requests, based upon what is in the FYDP for
8 the submarine industrial base, when should we get to 2 plus
9 1, and when should we get to 2.3 plus 1?

10 Mr. Guertin: I am going to give you a couple of
11 dates, but if I get it wrong, permit me to catch up with
12 you. I believe we will get to two Virginias by '28. And I
13 think it is '32 that we get to two and a third.

14 Senator Kaine: I see Admiral Pitts sort of nodding
15 yes. Is that, General, your understanding as well?

16 General Heckl: That is the General understanding,
17 yes, sir.

18 Senator Kaine: So, 2 by '28, and 2.3 by '32. And the
19 commitment that we have made to the Aussies is to sell them
20 3 to 5 Virginia class subs in the decade of the 30s. So,
21 if you get to 2.3 by '32. And let's see, 0.3 times 9 is
22 2.7.

23 And so, you are kind of maybe not quite getting the
24 three in the 30s that you would be able to sell. I mean
25 obviously that pace -- and they want to buy at least three.

1 They said they might buy up to five.

2 And look, I think some of the Pillar 1 is still kind
3 of open ended in the sense of if they start buying the
4 Virginia Class and they really like them, and they are
5 interoperable, and they learn how to maintain and operate
6 them in an interoperable way with us, there might be a
7 decision down the road, like, we will just keep buying
8 Virginia Class and work on that together, rather than build
9 of a different design that is off a kind of a UK framework,
10 even though there would be a lot of U.S. technology in it.

11 But if -- am I wrong to do the math that way? If we
12 are doing 2.3 by '32, we are not going to be able to sell
13 them three in the 2030s.

14 Mr. Guertin: I think the first two are actually
15 existing Virginias. And we are going to back fit our -- we
16 are going to plus hours in the future. So, I think we can
17 get to three, even to five by the end of the 30s.

18 Senator Kaine: Well, '28 is not far off. I mean, you
19 know, to try to get to two by '28 because what are we at
20 now, like 1.3?

21 Mr. Guertin: We are investing mightily, sir, as you
22 mentioned, in improving our ability to do this business.

23 Senator Kaine: And then, when are we going to get to
24 one a year of Columbia?

25 Mr. Guertin: Well, we are committed to several

1 productions starting in the third boat. And that is where
2 we have to start one a year and I am confident we will get
3 there, but we are going to have to run fast to get to it.

4 Senator Kaine: Yes. Well, I think that seems to be a
5 theme of the hearing. We are going to have to run fast to
6 do what we have said we are going to do, and we need both
7 provide you the resources to run fast, but we also, you
8 know, again, on the workforce issues -- I just worry that
9 some of our issues, you know, cannibalize one workforce to
10 meet another or one regions to help and others.

11 We are not necessarily rowing the net and we got a
12 declining birth rate as a nation, and we got an economy
13 that is pretty hot right now where people have a lot of
14 competition for other jobs, and I don't see that
15 necessarily changing. So, I mean, I appreciate, was it the
16 Academy Awards? Yes. I mean, when I see an ad for the
17 submarine industrial base during the Academy Awards, that
18 is different.

19 That is showing like, hey, we really are reaching out
20 in a nontraditional way, but we are going to have to do a
21 lot in the nontraditional space, I think, if we are going
22 to have the workforce to meet the kind of dates that you
23 are stating before the committee.

24 So, it has been a good hearing. We appreciate your
25 service. We appreciate you being here. I will offer to my

1 colleagues the chance to submit questions for the record by
2 the close of business tomorrow.

3 And if they are submitted, you know, I hope that you
4 will be both prompt and comprehensive in your response.

5 With that, the committee -- the subcommittee adjourns.

6 [Whereupon, at 11:56 a.m., the hearing was adjourned.]

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