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HEARING
ON
NATIONAL DEFENSE AUTHORIZATION ACT
FOR FISCAL YEAR 2021
AND
OVERSIGHT OF PREVIOUSLY AUTHORIZED
PROGRAMS
BEFORE THE
COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES
ONE HUNDRED SIXTEENTH CONGRESS
SECOND SESSION
—
SUBCOMMITTEE ON SEAPOWER AND
PROJECTION FORCES HEARING
ON
**DEPARTMENT OF THE NAVY FISCAL
YEAR 2021 BUDGET REQUEST FOR
SEAPOWER AND PROJECTION FORCES**
—

HEARING HELD
MARCH 4, 2020



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**DEPARTMENT OF THE NAVY FISCAL YEAR 2021 BUDGET
REQUEST FOR SEAPOWER AND PROJECTION FORCES**

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES,
Washington, DC, Wednesday, March 4, 2020.

The subcommittee met, pursuant to call, at 2:01 p.m., in room 2118, Rayburn House Office Building, Hon. Joe Courtney (chairman of the subcommittee) presiding.

OPENING STATEMENT OF HON. JOE COURTNEY, A REPRESENTATIVE FROM CONNECTICUT, CHAIRMAN, SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

Mr. COURTNEY. Good afternoon, everyone. This afternoon, the Seapower and Projection Forces Subcommittee meets to hear testimony from the Department of the Navy on the fiscal year 2021 budget. Before us today are Assistant Secretary of the Navy for Research, Development and Acquisition, James Geurts; Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities, Vice Admiral James W. Kilby; and Deputy Commandant for Combat Development and Integration, Lieutenant General Eric Smith.

Gentlemen, thank you for being here today.

On February 10, the Department of Defense presented to Congress a Navy budget that is at odds, many of us believe, with their own stated goals of achieving a 355-ship fleet. Instead of the 10 ships that we expected to see this year, we received a proposal, as the Congressional Research Service reported, for just 7, 2 of which are salvage ships or tugboats. Instead of 54 ships through 2025, we have a budget that cuts that number by 22 percent to 42 ships over the next 5 years.

This budget represents the lowest number of combatants requested in nearly a decade. And to put this plan in context, it puts us at a shipbuilding rate and fleet size over the next 5 years below what was projected under the last administration, which was pursuing at the time a 308-ship goal.

One of the most infuriating changes in this budget is cutting the Navy's program of record for production of two *Virginia*-class submarines per year to one. This comes as combatant commanders have repeatedly warned of the looming reduction in attack submarine force levels that will see the fleet decline nearly 20 percent within this decade, beginning, ironically, in 2021, the same year the President's budget strikes a *Virginia*-class boat.

Congress has strongly supported the two-a-year build rate, and specifically, the second 2021 attack submarine. Led by this subcom-

mittee, the conference report for last year's NDAA [National Defense Authorization Act] stated the clear position that Congress expected the Navy to budget for two submarines in 2021. We authorized and funded a \$200 million increase in advanced procurement to support procurement of the submarine. To date, we have provided at least \$1.1 billion towards this boat.

This baffling move was made even more confusing based on testimony that we have received so far in full committee. Last week, for example, HASC [House Armed Services Committee] heard testimony from the Chairman of the Joint Chiefs that it was not in his best military advice to pull an attack submarine out of the budget. The Acting Secretary of the Navy explained that he was informed of the decision only after last-minute budget moves were made without Navy input. The Chief of Naval Operations indicated that his top unfunded priority is the restoration of funding for a second attack submarine. And the Secretary of Defense, despite submitting and defending a budget that cuts the submarine in 2021, stated that he personally believes that we need even more attack submarines than currently planned.

On February 12, Ranking Member Wittman and I wrote to the Secretary of Defense requesting the Navy's 30-year shipbuilding plan by February 27. Our hope was that this plan would help our subcommittee make sense of the change in direction this budget represents for shipbuilding and the submarine fleet.

I say request, but in reality, this plan is required by Federal statute to be submitted with the budget. That requirement is clear. It does not say that the Secretary may present a 30-year plan at the time of his choosing. It says clearly that the Secretary shall.

A few days ago, the Secretary wrote to Chairman Smith indicating his position that submission of the budget's 5-year planning projection is sufficient. Let me be clear. A 5-year plan is not sufficient, according to the law. This subcommittee has produced shipbuilding marks as part of the NDAA year in and year out, relying on the 30-year requirement in order to make long-term investments, which is inherent to shipbuilding, unlike other Pentagon acquisition programs.

So, today, all Congress will see before we mark up the defense bill is a limited 5-year plan, a 5-year plan that, as a matter of plain fact as verified by the CRS [Congressional Research Service], puts us on a path to barely reach more than 300 ships within the next 5 years, let alone 355 or 390 anytime soon.

As our witnesses and members of this panel know all too well, shipbuilding is a long game with progress measured not just in years but in decades. Without a fuller understanding of what informs this request and where it goes from here, 2021 risks being a lost year in shipbuilding that will take years to recover from.

So, to our witnesses here with us today, I say we can and we must do better. Our panel has a hard-earned reputation for punching above its weight and producing tangible results for our Navy and Marines Corps. You can expect to see us do that again this year as we begin work on the 2021 defense authorization mark for seapower programs.

And now, it is my privilege and honor to yield to the ranking member, my good friend, Congressman Rob Wittman.

[The prepared statement of Mr. Courtney can be found in the Appendix on page 35.]

STATEMENT OF HON. ROBERT J. WITTMAN, A REPRESENTATIVE FROM VIRGINIA, RANKING MEMBER, SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

Mr. WITTMAN. Well, thank you, Chairman Courtney. I want to thank you so much for your leadership and for your steadfast conviction to make sure we have the Navy that this Nation needs. I really appreciate that. And I want to thank our three witnesses for joining us today.

Gentlemen, the administration has been consistent with their drive to expand the capacity of the United States Navy. President Trump foresaw the great power competition and called for a 355-ship Navy. Unfortunately, his vision and foresight have not been replicated in the budget request. This relentless drive on behalf of legacy curmudgeons to hold back implementation of the National Defense Strategy will continue to delay the required reform.

It is apparent that we need to move toward a maritime strategy that will require both long-range strike and naval power, yet the budget request continues to emphasize COIN [counterinsurgency] operations and legacy force structure allocations. We have to do better.

Of all of our Nation's defense procurement programs, shipbuilding is by far the longest, most complex of any acquisition program. Shipbuilding requires years of planning, billions of dollars to capitalize the shipyards, and lengthy periods of ship construction. Yet there are some in the administration who continue to believe that the industrial base is a faucet that can be shut off and shut on. Some believe that in the short term we can add shipyards to expand our ship construction capacity. The reality is starkly different.

I believe that this shipbuilding budget request is an attempt to begin to turn the faucet down. We are actually on the precipice of putting a number of shipyards out of business. And unfortunately, the administration's overestimation of the capacity and the elasticity of the industrial base will have negative repercussions for a very long time.

Central to these concerns is the budget request to order a single submarine. We are on an inextricable path to reduce our attack submarine force structure from 51 to 42 submarines. The combatant commanders are begging for more undersea strike capacity, yet this budget request seeks to perpetrate this egregious deficit. The administration compounds this shipbuilding deficit by an accelerated ship retirement schedule that includes four littoral combat ships, four cruisers, and three amphibious ships. Some of these ships have only been in commissioned service for 6 years or less. The math on these retirements, compounded by an anemic shipbuilding request, points us in the wrong direction.

Gentlemen, I am not a mathematician, but building 8, 6 of which are warships, retiring 11, doesn't get us to 355 by 2030, period. Can't get there.

Furthermore, the administration continues to ignore the plight of our Nation's sealift. The Navy may point to the budget request to procure two used ships in fiscal year 2021. Unfortunately, the ad-

ministration also endorsed a legislative proposal that would virtually eliminate that any new ship construction effort for these sealift vessels. General Franks, the then VII Corps commander during Desert Storm, understood the value of these forces when he was quoted as simply saying, “forget logistics, you lose.”

In sealift, the only change from last year is that our sealift forces, aged another year, can only accomplish 40 percent of the required tasking, and the administration is prepared to accelerate the decline of this essential logistics force.

As to the Marine Corps, I am actually delighted with the vision that the Commandant has placed before our Nation. I continue to be impressed with this change and look forward to more actionable items to implement a long-needed turn to the future of military conflict. My hope is that the Marine Corps is timely in implementing these needed changes.

Again, I appreciate the chairman for his leadership and having this important hearing, and I yield back the balance of my time.

[The prepared statement of Mr. Wittman can be found in the Appendix on page 37.]

Mr. COURTNEY. Thank you, Mr. Wittman.

And now, Mr. Geurts, I think you will be presenting a statement for the panel?

Secretary GEURTS. Yes, sir.

Mr. COURTNEY. Okay. The floor is yours.

STATEMENT OF HON. JAMES F. GEURTS, ASSISTANT SECRETARY OF THE NAVY, RESEARCH, DEVELOPMENT AND ACQUISITION, DEPARTMENT OF THE NAVY; VADM JAMES W. KILBY, USN, DEPUTY CHIEF OF NAVAL OPERATIONS, WARFIGHTING REQUIREMENTS AND CAPABILITIES; AND LTGEN ERIC SMITH, USMC, DEPUTY COMMANDANT, COMBAT DEVELOPMENT AND INTEGRATION, HEADQUARTERS, UNITED STATES MARINE CORPS

Secretary GEURTS. Chairman Courtney, Ranking Member Wittman, distinguished members of the subcommittee, thanks for the opportunity to appear before you today to address the Department of the Navy’s fiscal year 2021 budget request. Joining me today are Vice Admiral Jim Kilby, Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities; and Lieutenant General Eric Smith, Deputy Commandant for Combat Development and Integration.

Sir, with your permission, I intend to provide a few brief remarks for the record.

Mr. COURTNEY. Without objection.

Secretary GEURTS. We thank this subcommittee and all of Congress for your leadership and steadfast support of the Department of the Navy. Your efforts to fully fund the fiscal year 2020 budget for 12 ships helps provide the stability and predictability in funding that enable us to build and sustain the naval force the Nation needs, and in so doing, execute the maritime component of the naval defense strategy—or National Defense Strategy.

Since the start of fiscal year 2019, we delivered 11 battleships to the fleet, including most recently the future USS *Tripoli*, our newest large-deck amphibious ship. Today, with the USS *Tripoli* deliv-

ered, we have 78 ships under construction—or under contract and 46 under construction. We expect to take delivery of 12 ships in fiscal year 2020 and award contracts for 8 additional ships this year.

As we continue to modernize the fleet, we have also focused on ship and aviation maintenance, delivering higher aircraft mission-capable rates, improved on-time deliveries of ships for maintenance, and reduced maintenance backlog for our nuclear-powered fleet.

We achieved key milestones on the USS *Gerald R. Ford* [CVN 78], returning her to sea after a post-shakedown availability and qualifying all aircraft in her air wing and readying her for deployment, while launching the future USS *John F. Kennedy* ahead of schedule at a 16 percent reduction in labor hours from CVN 78. We are on track to begin full construction of *Columbia* [class of submarine] in October of 2020, with 80 percent detailed design complete at construction start, the highest level of completion at construction start in the modern shipbuilding era.

Our use of agile and innovative contracting approaches have leveraged the many authorities Congress has provided, enabling us to deliver our ships, aircraft, and weapons with over \$25 billion in savings to the taxpayer over traditional acquisition methods.

Although our budget reflects the hard choices we had to make given a flat budget, our 2021 request builds on these prior investments and improved acquisition outcomes in order to provide the best balanced force in support of the National Defense Strategy for the resources available. It continues key investments in advanced technology and modernization, prioritizing recapitalization of the ballistic submarine force. It supports the sustainment and readiness recovery to deliver credible forces today, while pursuing increased lethality and modernization to ensure readiness for the future fight. It includes procurement of 44 battle force ships within the FYDP [Future Years Defense Program], and aims to continue a healthy industrial base that is critical in meeting this demand.

And we appreciate the continued strong support Congress has always given us in preserving that industrial base for our shipbuilding programs.

Thank you for the strong support of the subcommittee and for all that you have always provided our sailors, Marines, and their families. And thank you for the opportunity to appear before you today. We look forward to answering your questions.

[The joint prepared statement of Secretary Geurts, Admiral Kilby, and General Smith can be found in the Appendix on page 39.]

Mr. COURTNEY. Thank you, Mr. Geurts.

And again, we have got a lot of members here who I am sure are bursting with questions, so I am going to kick it off. And I am not going to, you know, belabor the point, but I do feel it would be helpful on the question of the *Virginia*-class submarine program just to get a couple sort of baseline bits of fact out which will help us as we move forward.

So, you know, right now, the Block IV contract is underway in operation, the two-a-year construction schedule teamed up between Virginia and New England, and then Block V, which was just executed at the end of the year, again, contemplates a two-a-year ca-

dence. By cutting a sub, you know, we are going to reach a year where that is going to dip down to only one in terms of the construction schedule.

Columbia, as you point out, begins construction late this year. The real ramp-up starts in about 2023.

So, the question I have is—two questions. Number one, I mean, do you have confidence right now that the shipyards are capable and have the capacity to handle the two-a-year build rate as required under Block IV and at least the first 4 years out of the 5-year Block V contract?

Secretary GEURTS. Yes, sir. I had less confidence, candidly, 6 to 9 months ago where we were seeing some of the Block IV deliveries starting to move to the right, and the concern was could we maintain the cadence we needed to and not add risks to *Columbia*. And I have said repeatedly before, the number one way to reduce risk to *Columbia* is a stable, well-performing *Virginia* program.

And so, at that time, we started working very closely with the shipbuilder to get that end of Block III start of Block IV performance stabilized. I am happy to report, over the last 6 months, that has stabilized. My concerns are not now can they execute; they just need to continue to execute. At the time, we created a, you know, potential relief valve for that 10th ship in the multiyear. At this point and in the decisionmaking that is coming up to our budget release, it was more an affordability issue, not an execution issue. I am confident they can execute the ship.

Mr. COURTNEY. Well, I appreciate that because, I mean, it is almost like there is an intuitive sort of reaction that maybe, you know, the bandwidth is getting too clogged and it is too much. But the fact is, again, as you said, there has been some really good work done, the construction readiness review process, which I think has helped both yards get the modular units delivering on time. Is that correct?

Secretary GEURTS. Yes, sir. If you recall, last year, we also added a program executive officer for *Columbia*, and so the goal out of both sides was have a team focused on getting *Columbia* ready, getting the design ready, getting that ship ready to go, and then have a team dedicated to getting *Virginia* where it needed to be. It wasn't where it needed to be, you know, with high confidence. It is now. And so, our intent is to build on that. We have the flexibility, given the budget is included this year to bring that ship back into the multiyear. As we were in the end game, it just, frankly, became an affordability issue with all the other constraints on the budget.

Mr. COURTNEY. Okay. So, again, we have sort of, you know, confirmed that the two-a-year build rate is, you know, executable. I guess, then, the question is, then, if we lose that last sub in the Block V contract, which would be around 2023, which is at the same time ramp-up is occurring, I mean, the fact is that it may add—that sort of confluence of events may add risk to *Columbia*. Is that a correct way to view things?

Secretary GEURTS. Yes, sir. I mean, I think submarine construction is very sensitive to cadence. And the number one thing we can do is stability and get on a cadence. And, you know, as we went from one a year to two a year and trying to hold that cadence, that

is where we need to preserve it. It is also very sensitive to dips in workload, and so there is some work we are going to have to do at the end of 2023 with the shipbuilder to understand and manage any potential dip in the workforce requirement, because the last thing in the world we want to do is be laying off folks right before we need to climb this giant *Columbia* wall. And so, I think that is—we will have to watch that closely, work closely with you and the shipbuilder, with the committee here and the shipbuilder, to manage our way through that piece.

If we cut short and have a large gap at the end of Block V before having Block VI move in and *Columbia* startup, that will be a risk to execution, not only in *Virginia*, but in *Columbia*.

Mr. COURTNEY. So, again, I think it is really important to sort of flush that out. Today, you know, we have had probably 100 or so submarine suppliers sort of crisscrossing the Hill, and I talked to a number, as well as Mr. Wittman did, this morning. This budget, frankly, has kind of sent a little bit of a shock wave in terms of just their own decisions about investing in capital, you know. So, you know, it may be intuitive that, you know, this budget kind of lessens and makes it easier for execution, but in fact, it really actually creates disruption.

The other point I just wanted to sort of quickly walk through with you is that if, let's say, you know, this cut goes through. Next year or the year after, Congress wants to say, well, you know what, we actually probably should build—add a submarine later. The fact is that the cost of doing that would be cheaper than—or excuse me—more expensive than the cost of trying to restore this year's submarine. Is that a safe—is that an accurate analysis?

Secretary GEURTS. Yeah, absolutely. At some point, you don't have the capacity of getting back to cadence, to speed cadence up. This is the year, I would say, we need to either add that ship in this year or then we will just have to, you know, work on that at the start of Block VI. So, we are very sensitive kind of to that cadence and not—I don't think there is a way to execute three in a *Columbia* year with a high degree of success.

Mr. COURTNEY. So, with that awareness that it is really now or never if we are going to protect this build rate, I mean, I think that is very helpful.

You know, as the subcommittee moves forward in terms of trying to address this, and again, there is high interest on both sides of the aisle to do it, I just want to again, as in the past, whether it was the Bush administration or the Obama administration, the subcommittee has been willing to work with the Navy and obviously all of your team to try and find a way to address obviously what I think is, you know, people really are very concerned about.

So, with that, I will now yield—okay—yield to Mr. Wittman, who—

Mr. WITTMAN. Yeah. Thank you, Mr. Chairman. I am going to defer my time until later, and I am going to go to the gentleman from Wisconsin, Mr. Gallagher.

Mr. GALLAGHER. Thank you, Mr. Wittman.

Mr. Geurts, thank you for—we were discussing your deep northeast Wisconsin ties, which I very much appreciate. In your testimony, you implicitly call out northeast Wisconsin for delivering the

JLTV [Joint Light Tactical Vehicle] 4 months ahead of schedule which we are very proud of that. I hope the Marines are appreciating that as well.

I am hoping you can clarify something on the record. Last week, I spoke with Secretary Modly about the additional budget that would be needed in order to buy, build, man, and maintain a fleet of 355 ships compared to the current 293-ship fleet we have today. His answer was about \$120 million to \$130 billion over 10 years. And I just wanted to make sure that that was, in fact, the all-in cost, including manning and maintaining and not just acquisition.

Secretary GEURTS. Yes, sir. Maybe two points to reinforce Secretary Modly's comments. One, that is the all-in cost. It is not just the procurement cost. So that includes the operating, maintenance, all the bills that are associated with it. And two, we don't see there is a significant industrial base limit to achieving that. We will have to work closely with the industrial base, and obviously, there is a lot of concerns in the near term, but we see that is achievable from an industrial base perspective.

So, it is not industrial base limited, but that dollar figure was not all just procurement for ships. It also included the manpower, and Admiral Kilby can provide additional detail, if needed.

Mr. GALLAGHER. Sure. Well, maybe that is a followup. I appreciate that.

And I think then on Friday, Secretary Modly spoke at the Brookings Institute and talked about the potential for a 390-ship fleet or even potentially a 435-ship, if you include unmanned vessels. So same question. How much additional budget would the Navy need in order to afford the total ownership cost of a fleet of that size, 390 ships excluding unmanned or 435 including unmanned?

Admiral KILBY. So, sir, thanks for that question. The additional ships alluded to by Secretary Modly are, of course, being discussed right now. We owe that discussion with the Secretary of Defense, but they are not the same—it is not the same scale as battle force ships as we characterize them today, destroyers and submarines, et cetera. So, I think some of those ships will have less of a total build, but there will still be an increase.

So, the types of things we have studied over the last couple of years with the Marine Corps and the Navy are smaller amphibious ships to help support littoral operations in a contested environment, smaller logistic ships to help support distributed maritime operations. So, I don't want to say they will have no cost, but they will have a lesser cost. So, I think that overall figure, as granular and macro as it is, includes all appropriations and would not be adjusted well out of limits from what was described in that original statement from you in the testimony.

Mr. GALLAGHER. Well, I guess what I am trying to crudely point out, less eloquently than Chairman Courtney and Ranking Member Wittman have in other ways, is there is an obvious disconnect here between the considerable additional resources we are hearing directly from the Navy in order to meet that statutory goal of 355, if not a 390- or 435-ship fleet, and what we have been presented in this budget.

I will say, though, while we await the coming of the INFSA [Integrated Naval Force Structure Assessment], like Godot, it shall ar-

rive at some point, there are things we know we need to build now, right, in the FYDP? Maybe you could speak to that, Secretary Geurts.

Secretary GEURTS. Yes, sir. The budget we sent over demonstrates those ships we know we need to build, the ships we need to build in 2021, and again, not all we would have liked to have built or planned to build the year prior. The ships in there under any scenario I can imagine are solid ships. We need to build those ships. They are foundational, as are the ships we have in the Future Years Defense Plan.

What we are really talking about as we talk about INFSA and the 30-year shipbuilding plan a little bit is what is the longer term trajectory, and with those battle force ships, what other complementary ships might we want to include in that mix to work that overall joint strategy to compete and win on a global scale.

Mr. GALLAGHER. And in the 26 seconds I have left, Secretary Geurts, can you give us a sense of whether frigates will be produced in enough numbers to require two yards to produce them?

Secretary GEURTS. Sir, our priority right now on frigate is to do the down selection credibly, fairly, and with great confidence, and get that ship, whichever one is selected, built and in the fleet as soon as possible. My guess is once we get that ship in the fleet, that ship will be in high demand, and we will look for ways to accelerate it and more than likely build more of it. That is a guess. But our first priority is execute the source selection, pick the right ship, execute that lead ship well, and then get into serial production. From there, I foresee a lot of different branches and sequels in terms of how many.

And if we can follow up, you know, I think Admiral Kilby can discuss how that will fit into the future architecture.

Mr. GALLAGHER. Well, I am out of time.

Secretary GEURTS. Again, there is no architecture I have seen where frigate isn't a major piece of it.

Mr. COURTNEY. Thank you, Mr. Gallagher. I think that is the first time Samuel Beckett has been quoted at a subcommittee hearing.

Mr. Norcross.

Mr. NORCROSS. Thank you, Chairman.

Mr. Secretary, Admiral, General, good to have you here. First of all, I want to echo the statements by our chairman and our ranking member on the considerable concern we have on the sub build rate. We have been to England, seen how the tubes are getting ready for the *Columbia*, but we have seen the infrastructure building up a workforce. That industrial base, it does not turn on and off like a spigot. I know you understand that. But as it was just mentioned, somehow it feels there is a disconnect here.

But I just want to shift a little bit and talk about what we have and how do we get it to the place we need it in the time we need it. So, the turbo activation exercise, which was 60-some ships with only 64 percent available for tasking, and that is just can they get it running and moving. Does not test the equipment on board, the cranes, the lifts. In fact, I would suggest that in any future demands, that there needs to be spot on, not every ship, but to see what on the ship is working. Because it can be moving, but if you

can't load it, you are dead in the water. And that seems to be a real void that is taking place.

But let's talk about that organic surge fleet that we are trying to create. Year after year, we hear we are not getting close. This year, we had the study done, and it proves that. What are we doing?

Secretary GEURTS. Yes, sir.

Mr. NORCROSS. It really changes fundamentally. We keep talking about it, and two ships doesn't do it.

Secretary GEURTS. Yes, sir, it doesn't do it. We are kind of taking a three-pronged approach. I will kind of address maybe your questions on the Ready Reserve Fleet at the macro, and then I think a lot of where we have been doing a lot of our study and thought is logistics and kind of in a placement even larger than that which, quite frankly, we were not where we needed to be in the 2016 force structure assessment on that major part of the fight. It was focused mostly on the battle force ship, and a lot of work has been done. And where we are talking with the Secretary is really how do we address all the other parts of the battle and not the main battle force.

In terms of—I would agree with the strategic sealift. We need to really get after it. We have put in additional money for maintenance, about \$200 million more, just for maintenance of the ships we have. As you know, we put in money in 2021 and in 2022 to get after buying some used ships, and we have some money in 2023 to buy new.

Candidly, I will tell you, we are not at the place yet where I am comfortable with the cost benefit of buying the new. And so, we have got, you know, early returns from industry. Those are very expensive ships, you know, over a billion dollars for some of these ships, and that is not, quite frankly, not going to be affordable.

And so, our effort right now is, first off, get maintenance money to the fleet we have, to your point, make sure, well, as old as they are, they can at least perform the mission they have. Buy some used vessels quickly, and then really work hard on this CHAMP [Common Hull Auxiliary Multi-Mission Platform] or whatever program we need to do to get numbers out there greater than onesies, twosies.

Mr. NORCROSS. So that is the physical side, the ship. Let's talk about the fleet, the mariners that we don't have. How do you plan on supplementing that? The ones we have are not exactly spring chickens, and the replacements aren't coming in anywhere near what you need.

Secretary GEURTS. I think we have to work, you know, closely with MARAD [United States Maritime Administration] in that, you know, capacity as well. That is a little more on their side of the fence than ours, but it is something that we have got to address.

And then I would also say we have to look at not just the strategic, can we get it to the theater, very important. That is the first piece. The second piece is once we get it to the theater, can we get to the Marines and sailors or soldiers who need it, or airmen. That is the other piece. So, we have got to fix strategic lift, but we have got to do more than that. We have also got to look at the intra-

theater and the last tactical miles element, particularly in a contested environment.

Mr. NORCROSS. So, with 45 seconds to go, if you were called on today to replicate our lifts that we had during the first Gulf war, can we do it?

Secretary GEURTS. We would do it, but it would be painful, and we probably wouldn't do it with the level of confidence that the Nation needs. And even if we did the lift of Desert Storm, the next fight isn't going to be a Desert Storm. That will be necessary but not sufficient. So, we have got to do a lot more than just the strat[egic] lift. We have got to get logistics right for the whole theater in a contested environment.

Mr. NORCROSS. Thank you.

I yield back.

Mr. COURTNEY. Thank you, Mr. Norcross.

General Bergman.

Mr. BERGMAN. Thank you, Chairman, and thanks to all of you for being here.

You know, as I watch the TV screen and knowing that, let's say, other countries are watching us, not all of whom are our friends, and they look at us having the discussion, and they are putting their chess pieces in their development, it kind of unnerves me a little bit that in our attempt to be, my word, honest brokers on both sides of the dais here, that we are being too predictable.

In shipbuilding, you don't—we use the term often about the bigger the ship, the longer the input on the rudder before you actually get a turn in that ship. Again, 355, 435, 390 just rings as arbitrary, okay. So, the point is, we have got to—we have to come to some number. But I don't understand why, with some of the ships that we are going to take out of commission long before their service life is over, why we wouldn't—can you give me a reason why we wouldn't keep them in some level of capability in the event something happened? So, when there was a natural transition of the passing of the baton, help me here with the why of taking these ships out of commission early in their service life.

Admiral KILBY. So, Congressman Bergman, I will start and get joined by Secretary Geurts, if necessary, but when we put together our budget, we followed four priorities. One was to fully fund *Columbia*; second was to restore readiness; third was to increase capacity and lethality and modernization, to not allow those ships to not be equipped with what they needed to be relevant; and fourth was capacity.

So, as we tried to put this together in a challenging budget, we viewed those ships that we identified to be decommissioned as less valuable, not not valuable, but less valuable for the other things we wanted to fund on that prioritization scheme.

Mr. BERGMAN. But this is taking money from operating the ships to put it into other programs. Is that right?

Secretary GEURTS. Sure.

Mr. BERGMAN. Okay. If it is not about money, it is all about money, right? Okay. That is some of the issues that we count on you all in your philosophical and intellectual honesty in your mission to create that naval, you know, force of the future.

And speaking of that naval force of the future, Lieutenant General Smith, you know, during the hearing today, we have heard much about the shipbuilding budget. We just talked about it. And we certainly look forward to seeing, you know, the 30-year shipbuilding plan. One of my concerns about the Marine Corps is the ability to give input to the plan as the Corps. Has the Marine Corps been provided an opportunity to comment on or contribute to the Navy shipbuilding plan?

General SMITH. Congressman, we have. We have from the get-go. I have been in 33 years, and the level of coordination and integration, not just cooperation. Cooperation signifies that we are being friendly. Integration and coordination has never been better. Admiral Kilby and I work together literally every day. I see him more than any other Marine Corps general officer. We have been in the INFSA and in all of our studies that we have done for the last couple years, but most especially the last, say, 8 months, we have been literally side by side working through this so that the Marine Corps needs and interests in support of distributed maritime operations, our contribution to those fleet commanders, has been completely incorporated. And the hard choices are being made, sir, but we are completely tied at the hip so that we can support the fleet commander.

Mr. BERGMAN. And I have just a few seconds left. I would ask you to take this for the record. This is about incorporating training and simulation. You know, when General Clark was—excuse me—Admiral Clark was CNO [Chief of Naval Operations] and put all the billions of dollars into the Great Lakes Naval Training Center there, I mean, it really was a 21st century vision of training sailors in their basic training to get them ready for the fleet. And kudos to him and his vision at the time.

I believe I would like to hear, we would like to hear, from you especially, about how we are going to incorporate the training of the future utilizing simulation, utilizing—basically getting the sailors ready for the new technologies before they even walk on deck, you know.

[The information referred to can be found in the Appendix on page 73.]

Admiral KILBY. Yes, sir. I will take that for the record. If we have time in another round, I can give you some more discussion.

Mr. BERGMAN. Well, you know, let's put it this way. When you have got something to see, let's take a look at it, or a plan or a timeline or whatever. Again, there is no hurry on it, but it is going to be important that we keep ahead, because what changes quickly is the digital side of things. And what we are using as training capabilities, the ship's hull is probably going to be the ship's hull.

Secretary GEURTS. To your point, sir, we have to make sure we match the absorption rate. We can generate a lot of technology and incorporate it fast. If we can't absorb it, it won't do anything productive for the fight.

Mr. BERGMAN. Thank you, Mr. Chairman.

Mr. COURTNEY. Thank you.

Mrs. LURIA.

Mrs. LURIA. Well, thank you, gentlemen, for being here today. And I feel somewhat like we did this in reverse because we did the

full HASC hearing about the Navy prior to the seapower one specifically. But over the course of those hearings, we have heard a lot of information that has been somewhat conflicting and then been added on top of.

So, at the original hearing, Acting Secretary Modly told us that the 355-ship Navy that has been mandated by law and that we are seeking to achieve, that he thought we could get there in 10 years. And then I just heard you say today, this is a quote, I wrote it down, that there are no constraints on the industrial base. Did I understand you correctly that you feel that there are no constraints on the industrial base to get us to a 355-ship Navy in 10 years?

Secretary GEURTS. Yes, ma'am. What I was—I was just trying to communicate there is the industrial base could support getting to 355 ships in 10 years. That doesn't mean the resources available—to get there are available, are in the budget. But in terms of when I look at the industrial base and the capacity we have, we have the capacity to get there. It may not be exactly matched to the perfect set of ships to get there, but we have—

Mrs. LURIA. Were you trying to say it is like a pick and choose? Like, if they can build something in Wisconsin, in Representative Gallagher's district, we will just build that even if it is not what you want just so we can get to 355? Is the number important or the capability? I am getting even more confused.

Secretary GEURTS. So, I apologize for confusing you. What I am saying is we have the industrial capacity within the United States to build that many ships in 10 years. There are some areas where—

Mrs. LURIA. But what we are doing to our industrial base and our suppliers, and there is no better example than with the *Virginia*-class submarine in delaying the submarine, is the fact that they want to invest. They want to build the ships. They want to hire and train the workforce, but we keep changing the plan. And last year at these hearings, I brought up the 30-year shipbuilding plan as an example. Well, if the 30-year shipbuilding plan changes every single year in years 1 to 3, not the end of it, 20 to 30 years from now when we could expect there are changes, but if it changes the immediate plan every year, how is it a plan? How can the industrial base plan for that?

And moreover, I believe last week, Acting Secretary Modly also said at a Brookings Institute breakfast that the number wasn't even 355. It is 390 or more in this much-anticipated force structure assessment. So, can you comment further on that, give us some insight? And then the 390, what is that timeframe? Is that also within a decade?

Secretary GEURTS. Ma'am, I guess I will hold my comments in terms of industrial base to the 355. And I believe the question was is it possible. It is certainly possible. There is not a fundamental limitation to get there, other than the dedication of resources. Three hundred ninety, again, it is a different set of numbers, different set of assumptions. I am not going to comment on the kind of timeline to get to that part. I am more responding to the NDAA on the administration's position that we aim to get to a 350-plus Navy. We can do that from the industrial base side. Certain ele-

ments of the industrial base are more limited than others, submarines being one, but we have the capacity to—

Mrs. LURIA. I mean, think about the workforce and the industrial base. One-quarter of the shipbuilding and repair that happens in the entire country happens in Hampton Roads, right where Mr. Wittman and I live and work. And we talk to these suppliers and industrial base partners every day when we are back in the district, and we hear about their challenges.

Even if you just look at the submarines, we spoke to the suppliers of the fuel for our submarines. You know, we put them in a precarious situation when the demand signal is not steady enough for them to be able to predict and maintain the activity that is absolutely essential to maintain that critical national security pipeline of fuel for our nuclear reactors, for our carriers and our submarines. And I think that this year's budget with this removing the *Virginia*-class submarine puts that supply chain at risk.

And to come in and say that there are no constraints on the industrial base? I mean, I truly think that that sounds like we are tone deaf to what we are hearing every day from our industrial base, specifically in an area like Hampton Roads where a lot of this work takes place.

So, I believe my time is about to expire, so I yield back.

Mr. COURTNEY. Thank you, Mrs. Luria.

General Kelly.

Mr. KELLY. Thank you, Chairman.

I just started—I think you guys are doing a great job. I think you guys may be getting beat up over other people's issues, but I just want to state this. I was here in 2016 when I came on this committee, and we fought extremely hard with Chairman Thornberry and Ranking Member Smith at the time and now vice versa to get you guys the budget, the top line, that every single service asked for, and we did away with CRs [continuing resolutions]. We have had one in the last 3 years.

But we continue to get pushed back on us we don't have a large enough budget. It is a flat-line budget, all these things. We fought extremely hard. We took hard votes on both sides of the aisle. We got beat up over it. We have given the Navy, Air Force, Army, Marine Corps every single thing that you asked for, without exception. The personnel numbers, the operations, maintenance budgets, the new ships, everything. We planned for that thing, and it goes back to what Mrs. Luria was talking about. And then we keep changing it every year. And the bottom line is capabilities driven. We have got to have the right ships in the right mix at the right time. But we can't decide that this year, change that plan next year.

Ingalls is in my district—or not in my district, in my State. I consider the whole State, I guess, my district. But it is hard. We just told them we are not going to build a \$630 million *America*-class LHA [landing helicopter assault ship] due to reprogramming of the budget. So, when are we going to fix that? When are we going to build that ship? What are we going to do to get back in line?

Secretary GEURTS. Yes, sir. For that ship, actually in the 2021 budget, we have accelerated that. It was going to be a 2024 ship. We have actually accelerated it to a 2023 ship. I will acknowledge

the reprogramming of the money. We will have to put that in the budget to make up for the money that was reprogrammed to execute that ship, but the Department of the Navy is committed to that ship. In fact, like I said, we have accelerated that in the budget.

And to the point, I think my comment on the industrial base got a little bit—I didn't present it clearly. I understand that it is all about consistency and long strategic planning and having stability in the industrial base. I have heard from others that we don't, you know, even if—

Mr. KELLY. No, I think you did. Let me reclaim my time because I have got very short, and I just want to talk on some really—General Atomics is in Tupelo, Mississippi, and they are—the second *Virginia*-class submarine, which is built by them, did it fall out of the budget as a result of concerns you had with the industrial base or was it strictly budgetary?

Secretary GEURTS. Sir, it was, from my perspective, strictly an affordability issue.

Mr. KELLY. And then I want to talk just a little bit about something else that is pretty near and dear to me. Recently, I was at the Surface Navy Association annual symposium, and we had discussions about boat and ship requirements from shore-to-ship medical evaluation, and we had some hard questions. And we have got to have the soft power which are also necessary for us Marines and Army guys who want to make sure we have a place to get evac'd [evacuated].

Where are we and what are you doing for our medical evacuation, and what are we going to do to have those plans in place?

Admiral KILBY. So, sir, I will start and get joined either by General Smith or Secretary Geurts. But in the last, I would say, 2 years, we have recognized—we have tried to revitalize the logistics approach. One of those Rs, we call them, five Rs, is to resuscitate a vein. To that end, we, thanks to you, were able to program a kit in an EPF [Expeditionary Fast Transport] to add Role 2 care ambulance capability to medevac [medical evacuation] a larger number of sailors or Marines than we have had to in the past. I think that is absolutely where we need to go. We are continuing on that path to identify that requirement, but that is the start of that. That doesn't obviate the requirement for Role 3 care, and we are committed to taking care of our hospital ships and coming up with a more solvent plan for that in the future. But *Mercy* and *Comfort* are—they are both [Role] 3 care ships for now.

Mr. KELLY. Thank you. I mean, that matters. I will tell you, soldiers and Marines and the Navy and Air Force guys who are on the ground fight a lot harder when they at least know they have an opportunity to get that magic hour and to get back and to have a chance of lifesaving. That is really important. And also, the use of that in soft power when we have a Puerto Rico or somewhere where we have hurricanes, and you guys can roll in with those ships. It is just a great, great way for America to show we don't just flex our muscles, we help people, too.

And with that, I yield back, Mr. Chairman.

Mr. COURTNEY. Thank you, Mr. Kelly.

Mr. Golden.

Mr. GOLDEN. Thank you, Mr. Chair.

Secretary Geurts and Admiral Kilby, last year, in front of this committee, Vice Admiral Merz called the Flight III DDG 51 [*Arleigh Burke*-class destroyer] the most powerful warship on the planet. I noted that it has dual air and ballistic missile defense capabilities that he is really looking forward to seeing in the fleet starting in fiscal year 2023, you know, with that introduction that the Navy would be going Flight III all the way through.

I think it was just yesterday, I've got a story here that you might have seen where the EUCOM [U.S. European Command] commander, General Tod Wolters, was calling for two more destroyers to theater in EUCOM at Rota, I think specifically looking for ballistic missile defense purposes, just the ability to have a good, strong presence in the Black Sea, you know, and a good spot to be able to get into the Mediterranean and the Middle East, to get up to the North Atlantic, North Sea. But, of course, the Navy had expressed some concerns, I think in recent years, about pulling destroyers away from carrier strike groups. So I think, you know, plenty of evidence that we need to have the capacity to meet demand and not have to, you know, pick winners and losers in terms of what is the, you know, more important priority here.

So, I wanted to ask, current multiyear procurement for DDG 51s only goes through fiscal year 2022. What are your plans regarding fiscal year 2023 and the potential for another multiyear procurement for the next Flight III?

Secretary GEURTS. Yes, sir. In terms of acquisition, I will answer that and maybe ask Admiral Kilby from a warfighting perspective, but I would agree with your assessment. They are an awesome warfighting machine. We want to get as many of them out as we can.

In terms of acquisition strategy, as we look to that, you know, we have not laid any multiyear yet, but we have saved, you know, billions of dollars through those effective strategies. So, given the number of ships I believe we will be procuring in terms of DDG 51s after 2022, I think we will have another multiyear. We will put the geometry of that together as we kind of lock down the exact details of the shipbuilding plan.

Mr. GOLDEN. Yes, sir. And you are the second person that has noted the savings that comes with doing it that way. And having that flexibility, obviously, is a good thing.

Admiral KILBY. I would just add, sir, from an operational perspective, I echo everything everyone said. We need the Flight III DDG because of its attendant air and missile—or advanced missile defense radar, for all the capabilities it brings that Admiral Merz discussed last year and I reiterate this year. I think the path forward we have to work out. There is a large surface combatant in our future because the Flight III is dense. We have got about as much as we can get out of that.

Mr. GOLDEN. Maxed out. I know. I have gotten really familiar with the platform, but there is going to be a gap. We are not there yet.

Admiral KILBY. So, I don't think it obviates the utility of the Flight III, though, in the interim and maybe well into the future, so I just want to support that requirement and need for that ship.

Mr. GOLDEN. I am also just reiterating some of the comments of my colleagues. I have spent a lot of time up at Bath Iron Works. A lot of the members of this committee have highlighted, I think, legitimate concerns about the funding proposal for shipbuilding this year.

I wanted to take note of a second-order effect of just waxing and waning shipbuilding rates and the uncertainty that that causes with the workforce. We are not just talking about the companies themselves and their confidence levels; it is the workforce. One might always find a willing company, but they can't build ships without a skilled shipbuilding workforce.

You know, I could tell you with the DDG 1000, they started working with new tools, a new sequence of putting together a destroyer, then they were whipped ripped right back to going to the DDG 51. Now they are relearning an old skill set. We have a very skilled old workforce from the boom cycle now trying to, you know, be matched with a young, inexperienced workforce as we are coming out of a bust. That is the bathtub really. That is the need for consistency right there for the workforce. Before we lose these people as they go out and retire, we are trying to hire at the same time. Those young folks are looking for consistency. They want to know that this is a career and a good-paying job and that they should be making those investments in the skills that it requires to first get and then keep that job.

So, let me just encourage everyone to, please, you know, be supportive of the efforts of this committee to get you the resources that you need with consistency. You know, this is something the Secretary of Defense talked about in a letter to Chairman Smith just a few weeks ago, yet we only see 7 ships this year and 10 less than the 5-year projection than projected last year. That doesn't send a very strong signal to working men and women that might be thinking about making this a career.

Secretary GEURTS. Yes, sir. I was just up at Bath, and again, very impressed. The Vice, you know, actually went to all the shipyards other than ADDSCO [Alabama Dry Dock and Shipbuilding Company], and he had been in Newport News before. And again, I will reiterate, it is all about the workforce. It is about consistent, stable funding and programs. We are doing that in the programatics. Again, my comment is not that we don't care about the workforce, and that is not a constraint. My comment was we have the workforce now. We have the capacity now to generate 355 ships if we stay on it and we have consistency. There are some that question whether we could do it whether we had the resources or not. I don't question the ability of the industrial base to perform, as long as we have a steady and consistent demand signal.

Mr. GOLDEN. Thank you.

Mr. COURTNEY. Thank you, Mr. Golden.

Mr. Conaway.

Mr. CONAWAY. Thank you, Mr. Chairman.

Admiral Kilby, a couple of questions regarding two classes of ships, one apparently leaving and one coming. The LCS [littoral combat ship], you are going to retire four of those well in advance of their service life. Can you walk the committee through the rationale for that? And then on the large unmanned surface vessel

[LUSV], what is that beast? What is the propulsion system, weapons, why, and what will she be doing in the fleet? Can you walk us through both of those?

Admiral KILBY. Yes, sir. So first, LCS. Again, we follow the priority scheme I laid out: *Columbia*, readiness, capability, capacity. As we looked at our budget for 2021, we looked at how much money it would cost for DD—or for LCS 1 through 4, \$1.2 billion in the FYDP, and how much it would cost collectively to upgrade those ships which were our first models, \$600 million total. And we viewed that that money could be applied in other areas, in accordance with that prioritization scheme, to produce a better outcome. We didn't want to do it. I think there is great capability in the LCS class, and we need those ships in the future to have a mix to allow those ships to do what they are designed to do.

When I deployed on a carrier strike group as the commander in 2017, I used a destroyer to do maritime fisheries enforcement. That is not a great use for a DDG. It is a pretty good use for an LCS.

On to the unmanned surface vehicle. I think we are still in the prototype stage for that. We don't want to count those ships now. It is premature to do that, and we have work to do for you to have confidence in the testing and certification of that capability in the future.

So, I don't know that I have an idea on the propulsion system. There is a couple models out there that we are looking at now, but the idea of an LUSV would be to serve as an adjunct magazine for those frigates and other ships in a distributed maritime environment to allow us to have greater depth to operate against the adversary we think we are going to fight against.

Mr. CONAWAY. So, apparently, I have been around here long enough, I was actually at the launch of the USS *Fort Worth*, and so I have been here too long. Now she is being decommissioned, which is weird. I didn't think I would be here that long. But the LCS class in general since I have been here has been almost an orphan looking for a job. Let's make sure that this unmanned system isn't the same kind of beast where we come up with a good idea and then discover that we then have to find a mission for those ships at the same time. I appreciate your great efforts. Keep up the good work.

And I yield back.

Mr. COURTNEY. Thank you, Mr. Conaway. I don't think you have been here that long, you know.

Mr. Waltz.

Mr. WALTZ. Thank you, Chairman.

Gentlemen, I think you are hearing from both sides of the aisle, we have got to get our act together. I have run a company, and as a CEO [chief executive officer], the main thing that you have to have is predictability. You have to have it. And I don't see how our industrial base has predictability from a zigzag, seesaw plan that has been coming out of the Pentagon in this case.

And I think it is just worth noting—I know you all know this, but it is worth noting for the record. According to RAND, between 2014 and 2018, China launched more submarines, warships, amphibious vessels, and auxiliaries than the number of ships currently serving in the individual navies of Germany, India, Spain, and

the United Kingdom, and will continue to commission ships at a similar rate, which would put it on par with 100 submarines in the next 15 years. I don't see how with what you have come to the Congress with here, that we compete with that, to be completely blunt and candid. So, I think I would love to have a follow-on sit-down and understand this better, because clearly, I am missing something.

And I don't think—the bottom line is I think the Navy's pricing itself out of business. If you look at the cost of these ships with how we have to then compete, I just don't see with a—and I am glad some of my colleagues raised the issue, what we are calling a flat top line with tremendous increases in the last few years, with personnel costs that are trending to eat up more and more of that budget, how you recap, modernize, and procure. I am not seeing the math. So, I would ask for a follow-on to better understand that. If you want to address that now, and then I just have one followup—follow-on question.

Secretary GEURTS. Sir, happy to go through that in whatever level of detail you want. It is a very difficult equation, particularly when we are doing a generational replacement of our ballistic missile submarine force, which right now is about—going to be about 25 percent of the traditional shipbuilding budget. It will grow to about 33 percent.

Mr. WALTZ. But let's address the elephant in the room. One of the things that is driving up cost to an unsustainable level is unpredictability on the industrial base.

Secretary GEURTS. Yes, sir. I completely—

Mr. WALTZ. I mean, do you disagree? Do you agree or disagree with that?

Secretary GEURTS. I agree with your—

Mr. WALTZ. As a business owner, I mean, you are going to bake that into your product.

Secretary GEURTS. Absolutely. We are trying to manage some of the unpredictability by the multiyear block, by contracts that has allowed us to create some stability, but—

Mr. WALTZ. Mr. Geurts, it is irresponsible to the taxpayer, I mean, and the defense of this country. I mean, we have to do better. We are either going to have gaps in the outyear. At the same time that the size of the Chinese Navy eclipses ours, we are going to have all kinds of other debt and entitlement issues. We have to do better. And we all, I think, all want to be a partner here in helping you get there, but we have to do better than what we are receiving.

Just in my remaining time, on the ASW [anti-submarine warfare] piece, again, the 2nd Fleet stating the East Coast has seen an ever-increasing number of Russian submarines right off the Atlantic. The submarines are more capable than ever, deploying for longer period of times with more lethal weapons systems, but we are seeing cuts in the P-8 [aircraft]. And while we have had some good success in recapping the sonobuoy inventory, we are also seeing requests come over to recap sonobuoys that aren't even in production yet. Some things don't make sense there. I asked Secretary Modly and the Chief to come back to me on that. I would appreciate that follow-on.

And just back to my original point, the Secretary—the Acting Secretary in the posture hearing, you know, in a candid—I think a very candid moment said we are going to have to talk about more money for the Navy, I mean, just because the math doesn't add up. I don't see that happening. So, again, we have to—the cost driver to me is personnel and predictability to drive the cost of the individual platforms down, but I welcome a follow-on with you.

Secretary GEURTS. Yes, sir. Happy to follow-on both the subjects you raise.

Mr. WALTZ. Thank you. I yield my time.

Mr. COURTNEY. Thank you, Mr. Waltz.

And the last of our first round, because we have got a little time, looks like votes aren't until 4 o'clock, so we will have time for a second round.

But, Mr. Wittman, you bat cleanup.

Mr. WITTMAN. Thank you. Thank you. Well, gentlemen, thanks so much for joining us. I wanted to follow up on Mr. Courtney's original question.

Secretary Geurts, the budget request comes over for one *Virginia*-class submarine. The CNO says on his unfunded priority list that adding another *Virginia*-class submarine would be at the top of his list.

You talked around the issue of capacity in the industry. You talked in general that it does have the capacity to build more ships. Is there capacity in the industry to build that additional *Virginia*-class?

Secretary GEURTS. Yes, sir.

Mr. WITTMAN. Is the reason that additional *Virginia*-class was taken out of the budget because of financial reasons?

Secretary GEURTS. Yes, sir. It was affordability.

Mr. WITTMAN. Affordability. So, was it a matter of priorities? Was it a matter of someone saying, "Well, we are going to take some money out for strategic purposes," that the bill payer was the *Virginia*-class submarine?

Secretary GEURTS. Sir, you know, the SECDEF [Secretary of Defense] has a lot of different priorities he is balancing, and so, you know, I was not—you know, I shouldn't speak for him on how he evaluated all those priorities.

Mr. WITTMAN. If you were asked the priorities between the strategic funding that the money was taken out and the *Virginia*-class submarine, what would your professional judgment and opinion be to the SECDEF?

Secretary GEURTS. Sir, the SECDEF has to weigh a lot of those—

Mr. WITTMAN. I am just asking what your—I am just asking what your professional opinion would be.

Secretary GEURTS. I think, quite frankly, both are important. We need to be able to produce the weapons for our platforms, and we need to be able to produce submarines.

And to the point earlier, we also need to continue to look for ways, whether it is acquisition methods, creating more stability, enhancing the workforce, to drive the costs down of platforms. We have driven a lot of costs out so far. I think there is additional activities we can go. So, my job is not to make those strategic deci-

sions as much as offer the best ways we know how to get capability, right ships out there at the right time.

Mr. WITTMAN. But your job is to give the best professional advice up the chain of command?

Secretary GEURTS. Yes, sir. My advice was, we can execute that second 2021 ship should funding be available.

Mr. WITTMAN. Very good. Let me ask too—and you alluded to this partially before—building an additional *Virginia*-class submarine this year, and building 10 as part of the Block IV buy, de-risks *Columbia*. Is that correct?

Secretary GEURTS. Yes, sir. I think you are asking if we went to 2–2–2 across that multiyear, does that stabilize things and de-risk *Columbia*. A stable *Virginia* program is the number one risk reducer to a *Columbia* program.

Mr. WITTMAN. Got you. Let me ask about surge sealift capacity. We have been all over the place with creating the necessary sealift. We see that the authorization from Congress was to buy two used ships with the option to buy five additional used ships. We see that that is the direction the Navy proposed, but then we also now hear—well, excuse me, the Navy proposing to purchase used ships but also build new ships, a specific design for a specific purpose. Now we hear that there is also a plan to say we are going to move forward and just buy used ships. Can you give us some clarification as to what the path forward is for our Ready Reserve Fleet? Because you have the two and five authorization now. There is also a direction to say let's build a purpose-driven ship within the U.S. industry. So, can you clarify where we are and what is going on in timeframes for surge sealift?

Secretary GEURTS. Yes, sir. Again, I think we have all—we are all sensitive that we need to actually get after this problem in earnest, not just on the margins. The Navy laid in a program to, as rapidly as we could afford, lay in used ship purchase, two in 2021, another one in 2022, as well as laid in money in the outyears in 2023 for a future new-build ship.

The legislative proposal that came over from the administration, I think, reflects a concern and maybe a misunderstanding. I think we have already been working with the staff. I think there was a sense we were constrained as to going after the used ones, depending on the interpretation of that statute. I think there is likely some things we can do to work together. In my mind, we should try and buy as many of the used ones as we can—

Mr. WITTMAN. Yeah.

Secretary GEURTS [continuing]. Of that seven as fast as we can afford.

Mr. WITTMAN. Yes.

Secretary GEURTS. But quite frankly we also have to work together that buying very expensive ships for this mission is going to put at risk some of the other things we need to do. And so, I think there is more work to go. We had an idea of a common hull for everything. I think after our market survey results, that may not be the best answer, and so more work to go on our side on the acquisition options and costs so that we can get the right balance of quickly infuse some new used ships to get some of the really old

ships out of the Ready Reserve Fleet and then create a sustainable path for a new build.

Mr. WITTMAN. I think you are right. I think the delta we see between a \$60 million used ship and a projected \$500 million new ship is too big a delta. There is a lot of things that I think we can do, and we can have some continued conversations there. Let me ask one more question before I will go back for the second round.

I want to talk about unmanned. The Navy is pursuing unmanned surface ships with Sea Hunter and with unmanned underwater vessels with Orca. All those have yielded, I think, some good information. The key going forward, though, I believe, is this. We can take those as single systems, and we can test them, and we can say: Do they perform? Can they operate autonomously out there? And that is a fairly simple problem set and mission set. What we haven't done is to say, how do you integrate those platforms into the mission sets of a carrier strike group, of a destroyer squadron, of a submarine deployment, whether it is *Ohio*-class or whether it is *Virginia*-class? So the question now becomes: It is great to say, well, let's build a bunch of them, but just as Mr. Conaway said, the danger with that is building a bunch of stuff before we have a clear vision about how it is going to be integrated into the fleet, how that platform fights.

Secretary Esper said, not unmanned, but lightly manned. So, there is a whole dichotomy about how you even implement these elements. Give me some perspective on how the Navy sees the path forward. Listen, we need unmanned, but my deep concern is this, is that we are going to jump headlong into the deep end of the pool, and then we are going to do a bunch of stuff. We are going to go, you know what, some of this stuff doesn't work, and now we have got a bunch of platforms out there that we are going to retire early because we said wrong decision. And, listen, I don't mind us taking risks, but you take risk on the small scale; you say let's do two or three of these and fully figure out fleet integration, and then let's ramp up the building. But give me your perspective on it.

Secretary GEURTS. Yes, sir. I will kind of maybe from the acquisition and technology perspective, and Admiral Kilby or General Smith from a warfighting. I think the biggest risk in the unmanned platforms isn't the technology. It is the integration into the warfight and how to best use them. I saw the same thing in early days at SOCOM [U.S. Special Operations Command] on unmanned aviation. And finding out what things unmanned aviation was good for and what things it wasn't good for and getting that balance right.

There isn't, unlike a *Ford*, a huge technology leap or technology—there is some technology to work, and so I think a reasonable number of prototypes to get in the fleet in a reasonable number is important. We have been fairly—I would lean forward in the budget in terms of how many we have laid in as potential production. That has to be proven. We have to give ourselves and you comfort. We have been, you know, again fairly forward-leaning in that. We have options, obviously, to roll off of that.

What we are really trying to do now is get enough of them into sailors' hands so that they can help us decide where they add to the mission and then how best to integrate them. Admiral Kilby.

Admiral KILBY. Thanks. Just a quick addendum to that. One vehicle to do that is the Surface Warfare Development Squadron that was stood up in San Diego by Vice Admiral Brown. So that is under the command of Captain Hank Adams, and the benefit of having that in San Diego is, a lot of our West Coast COMPTUEXes [Composite Training Unit Exercises] happen off San Diego. So not only can we do the testing and certification, which I admit we owe you a better detailed plan. I have talked to both the SASC [Senate Armed Services Committee] and the HASC staffers about how to do that, but also that proximity of those exercises can allow us to employ those ships and see, and measure the effects and see how that integration works. So, I think that is one step of how we are going to instantiate that.

Also, we are going to use unmanned in RIMPAC [Rim of the Pacific Exercise] and our large-scale exercises. So, I think you will see increasing push from us to kind of employ those and then report back on what we see, sir.

Secretary GEURTS. And I think of this as a scale issue. One, can it do something, and then is it something we want to scale? Two separate, important questions, and we have got to get that balance right.

Mr. WITTMAN. I would agree. The scaling question includes, first, capability, and then capacity.

Secretary GEURTS. Yeah.

Mr. WITTMAN. Yeah.

Mr. COURTNEY. Thank you, Mr. Wittman.

So, we have finished the first round, and again we will now begin the second. I will start. And I am going to do the 5-minute clock for myself, you know, so we all get a chance to ask a second round of questions.

So, you know, you mentioned that we are now at the beginning of construction for *Columbia*, which is going to be, as Admiral Kilby said, you know, a top priority, and that has been reiterated for years. In 2014, Congress passed the National Sea-Based Deterrence Fund, and again, that was because we recognized the bow wave of this cost was fast approaching. Given—and I think the opinion of the Seapower Committee's belief that it is a strategic asset much more than really a Navy-only asset, we felt it was justified to take it off the shoulders of the shipbuilding account. So far, it is in operation, but it is still being sort of included in the top line of shipbuilding, and we are going to continue to raise that issue with this administration as we did with the prior administration.

One aspect of it, though, that was undeniably beneficial was the fact that we put in authorities to create more efficiencies in shipbuilding, continuous production authorities. Mr. Labs is here from the Congressional Budget Office, who analyzed that a number of years ago and determined that, in fact, it would provide real efficiencies, and at least help some cost relief in terms of the program.

With the budget this year, you know, the administration is requesting incremental authority, which I think we welcome in terms of the subcommittee. Can you talk a little bit about, you know, again, what that benefit is in terms of the contracting process you

are in right now, and what the downside would be if we did not include that incremental authority in terms of *Columbia*?

Secretary GEURTS. Yes, sir. I mean, *Columbia* will be unexecutable without the incremental funding authority. The authorities that have been in the fund have been tremendously useful. We have—you know, we have started advance construction on every one of the modules. We have leveraged continuous production to get ahead of issues, smoke out problems that have plagued us in the past, missile tube welding being one of them. So those authorities have been tremendously useful, but without the incremental authorities for the first two *Columbias*, the way we have it set up right now, we will not be able to execute.

We will likely also need your help in the event that there is a CR, that, assuming the Department will request an anomaly, we will need your help with that. Because our intent, you know, to meet the timelines we have, we can't afford any delays. We are working hard on the contract and getting that—negotiating and having that all in place, and I report very good progress on that, but we will have to get that moving as quickly as possible, as soon as 2021 budget turns over on the 1st of October.

Mr. COURTNEY. Well, if you are saying that it is unexecutable, that is about as much clarity as we could ask for in terms of getting us to move forward.

In my last few minutes, I wanted to actually go back to just a housekeeping issue, which is some of the reporting on the delays in Block IV that was in the, you know, some of the press last week. And, number one, Block IV contract, just like Block V and its predecessors, and the same with DDGs or the block contract with carriers, those are fixed-price contracts. Is that correct?

Secretary GEURTS. Yes, sir, they are.

Mr. COURTNEY. So, any delays which were reported in the reporting, I mean, the fact is, the taxpayer didn't bear the burden of any delays. Is that correct?

Secretary GEURTS. No, sir. And then—and recall on Block IV, we also accelerated and we gave ourselves a goal of accelerating those deliveries by 6 months from our nominal Block III. And so, in the reporting you saw—quoted a delay, but it was a delay against an accelerated contract delivery goal we had set.

Mr. COURTNEY. And again, when we talk about delivery, I mean, there is obviously the contract date, as you point out, which you tried to accelerate, but then there is the construction delivery day. And then there is delivery to the fleet. And in fact, the Block IV submarines have actually been performing well in terms of the final, real test of, you know, quality and, you know, ability of the Navy to use the submarine. So, again, could you talk a little bit about that delivery to the fleet versus contract delivery date?

Secretary GEURTS. Yes, sir. I mean, some of the reporting, which I will call interim milestones and contract delivery dates, are important. But what I measure my performance on is delivery to the fleet. And even with the dates we talked about in terms of contract deliveries, we are still forecasting Block IV to deliver 5 months earlier, on average, than Block III to the fleet, somewhat remarkably 3 years earlier than Block I boats in terms of span time. And with very high quality.

Mr. COURTNEY. Because that just reinforces the question of execution ability because I mean, in fact, it is a positive trend that we have been seeing with Block IV.

Secretary GEURTS. Yes, sir.

Mr. COURTNEY. Yeah. Thank you.

And Mrs. Luria.

Mrs. LURIA. Well, thank you. And I wanted to go back to the comment that you made initially, Secretary Geurts, was no constraints on the industrial base. Well, I had a few minutes to think about that during this time. You know, clearly, we are talking about shipbuilding overall here in this budget, but we are also talking about maintenance. And the cheapest ship we have is the ship that we have, if we maintain it properly and train the crew and man it and equip it. And so, I was just thinking through my head, looking around the waterfront in Norfolk, Norfolk Naval Shipyard. We are in a situation now where CVN 77 is in Norfolk Naval Shipyard for a 28-month availability. I brought this up last year. Design, *Nimitz*-class, first availability, docking availability in their life cycle. It was 10½ months. It has extended over time. I understand that now we would anticipate that to maybe be 16, but that is fully a year over what is anticipated. And the reason for that is capacity because we prioritized the MTS [moored training ship] conversion, we prioritized the refueling of the *Wyoming*, because we had a problem with manpower and the public shipyard being able to accommodate that work. But it is all one ecosystem that is tied together. And if you look across the waterfront in any fleet concentration area, we are struggling to get these availabilities done on time, and that is not because there are no constraints in industrial base. There is a limited amount of manpower. There is a limited amount of facilities, and the facilities that we have, as you have noted, are aging, and we are not investing in them appropriately. The public shipyards, for example, the shipyard modernization, we need to put a significant investment in that. Do you agree? And so, I am just kind of stuck on this "no constraints" thing, because I think it is completely incorrect.

But I wanted to move on to something else more quickly that some of my other colleagues brought up. You know, Mr. Conaway said that, you know, the LCS seems to be a platform looking for a mission. The CNO quoted at the SNA [Surface Navy Association] West Symposium I read, that, quote/unquote, for LCS, progress is being made on various mission modules, ASW, AMW [anti-mine warfare], surface warfare. But where are we with these mission modules, what is our plan, and what truly is the capability that we are deploying them with? And maybe Admiral Kilby is the one who can respond to that.

Secretary GEURTS. Yes, ma'am. All right. There are a thousand constraints on the industrial base, and I am happy to talk to you. I guess what I was saying was, if we get stability and efficiency, even in ship repair, we are not as efficient using the resources we have because of instability because of some of the business models. My only—I think the raw capacity exists if we work our way up there. But I will talk to you maybe separately on that because I think what I am trying to communicate is not being communicated clearly by myself.

In terms of LCS, Jim, if you want to talk about where we are, warfighting perspective.

Admiral KILBY. Yeah, thanks. So just the three separate rules, ma'am. One, the ASW package has a variable depth, active sonar, which would be very useful in the case of the——

Mrs. LURIA. I don't need a full summary of what their capabilities are. Like, what is the deployability of them? Are they installed on the ships? Are the modules ready? Are they fully developed, and our sailors trained, and are they using them?

Admiral KILBY. The surface warfare module is ready to go. The ASW module will be ready shortly, and the mine warfare one will be last one due. That is why we spent——

Mrs. LURIA. So, they are almost ready, but we are about to start decommissioning this class of ships? I mean, do you see where I am going with this? There is a credibility issue here, and now you want to come build something new with these unmanned surface vessels, which once again, we haven't fully developed the concept or the technology in order to build them and/or employ them effectively.

So, you keep coming to the table asking us to build new things, but we don't know how we are going to use them, how they fit into our strategy, and why they are important. And so, if we have to make choices, you know, we've got to rack and stack it. Nuclear deterrent is the cornerstone of our national security. It puts the *Columbia* submarine at the top. If you ask us where we need more capability, fast-attack submarines, we clearly know that there is a shortage there, yet we are cutting a *Virginia*-class submarine this year.

So it seems like a credibility issue because we are asking for things that we don't even know how we are going to use and haven't been developed technologically, yet we are not necessarily prioritizing both the capabilities that we know that we need and the industrial facilities such as the shipyard modernization that is going to support our ability to maintain those assets. If you care to comment.

Admiral KILBY. Yeah. Just back to the LCS 1 through 4, ma'am, again, it was not a we don't think those ships are valuable; it was an affordability decision, that the cost to maintain those ships and the cost to modernize them, \$600 million, was viewed as not as great——

Mrs. LURIA. That is exactly my point, Admiral. That wasn't what we thought when we came here and asked for the money to build them in the first place. We thought that they were going to be fully capable. We were going to develop them, deploy them exactly as designed, but that is not what happened. And I probably don't need to remind you as well of the *Ford* and the designs that we put in with catapults, arresting gear, dual band radar, and weapons elevators, all of which were designed but not operational as designed when first built.

And just quickly, you know, the CNO also said at SNA West that, you know, the elevators, he gave an assessment that four are complete, seven will be done by the end of the summer, and then four more, the remaining four, by the end of 2021. But he also said, we are not repairing them; we are building them. So, we are at this

point in the ship's life when it should have already deployed, and we are just now building them. Like it doesn't—

Mr. COURTNEY. Last question. Go ahead and answer.

Mrs. LURIA [continuing]. Make sense.

Secretary GEURTS. Yes, ma'am. For the weapons elevators, it is finishing the construction of those, not repairing previously constructed—

Mrs. LURIA. I do not accept that answer. I have spent hours on the *Ford*. I have climbed in those elevator shafts, and I know that when you built them the first time, you thought you built them properly. So, if we are going to do semantics between building and repairing something that was built wrong, we could do that all day, but you didn't intend to build them twice and delay the deployment of the ship by 6 years when you first started building it. Is that correct?

Secretary GEURTS. That is not the way we intended to build that ship.

Mr. COURTNEY. Thank you.

Mr. Wittman.

Mr. WITTMAN. Thank you, Mr. Chairman.

Lieutenant General Smith, I wanted to follow up on the Commandant and his vision in the planning document for where the Marine Corps is going. He talked about a smaller amphibious ship that would operate in a more distributed way. I think that concept is something that he has talked about in response to having the ability for the Marine Corps to be more flexible and more adaptable, to have a little less predictability about where it is located, to be able to mitigate some risk, be able to reduce some risk. Can you give us an idea about this concept and how this vision would be implemented based on this year's budget? Because I know our interest is saying: Well, how much of the direction in the Commandant's Planning Guidance can be executed in this year's budget? So, kind of give me an idea about that concept and then where it starts this year and what path it will be on.

General SMITH. Yes, sir. So, the Commandant has stated that this budget, 2021, is the point upon which we pivot to the future force, to his vision, and you will see that then instantiated in 2022, 2023, and 2024. As far as the concept, the concept of—it is in his Planning Guidance that it would be illogical to place all of your resources into a few large amphibs. It is not that they don't have value, because they do. We like to say that an advanced expeditionary—the EABO, expeditionary advanced base operations, the best advanced—or expeditionary advanced base, is a floating mobile platform that moves 17 to 20 knots a day, which Texas math at 17 knots a day is 408 nautical miles in a day.

A mix of those ships or of a future light amphibious warship and the, quote, traditional amphibious warship, gives someone like me, as a former 3rd Marine Expeditionary Force commander out in the Pacific, tremendous flexibility because getting to the first island chain and then operating within the first island chain, two very different things.

And if we are going to impose costs, to your point, sir, and I know to Chairman Courtney's position too, about the pacing threat of our adversaries, they are constantly moving. We have to be able

to impose costs and challenges on them. A mix of those warships, traditional and lighter, gives that operational flexibility to the Fleet Marine Force commander in support of the fleet commander, guys like Admiral Kilby in the future or Admiral Sawyer in the past, so that we can truly impose a cost on a pacing threat.

We have to be able to move within that first island chain, and the lighter amphibious warship is going to allow us to do that. I hope that answers your question, sir.

Mr. WITTMAN. Yeah, I think that gives us some concept. Tell me about this too. I know that as well as having smaller ships that are distributed, the idea too is to be able to support Marines on land. So, instead of having to do forceable entries all the time, you actually have some Marines situated in the region and then move them around. Say, hey, listen it is a flexible, adaptable force, our adversaries don't quite know where it is, or how it is going to operate, or what quite its opportunities are there, is that a complement to the ships that you talk about being there in theater, the larger number of smaller ships and moving them around? Can you give us a little idea on that?

General SMITH. Sir, it is absolutely complementary. An expeditionary advanced base, for example, that unit that may go in there, 50 to 60 Marines, that provides maritime strike in support of that fleet commander, once that unit is ashore, they can conduct moves across the land and not need to return to the sea base for some period of time. It could be hours or it could be days. And the force that we are designing has that ability to stand in, to persist inside the weapons engagement zone, not just the equipment but the training and the organization, so that that is a truly lethal, credible threat that is highly mobile and then returns to the sea base at a point of our choosing, not the point of an adversary's choosing.

Mr. WITTMAN. So, your intention is to begin that execution in this year's budget?

General SMITH. Sir, this is the pivot. Some of the things General Berger took over and obviously had just—gosh, the budget was largely done by the time he became the Commandant, he made some significant changes in 2021. A lot of it was in training and education so that when these systems come online, his focus is, I have to have the unit that is prepared to use it. If Moore's Law, writ large, comes into effect, that unit has to be ready to execute using the systems available at the time. We can't find some—some technological solution and then have to create a unit to employ it.

Our HIMARS units, our High Mobility Artillery Rocket Systems, for example, can fire a missile that actually strikes a ship. We are the littoral combat force. Why would we not do that? If we don't do that now, we will do that as part of this budget, sir.

Mr. WITTMAN. Very good.

Thank you, Mr. Chairman. I yield back.

Mr. COURTNEY. Thank you, Mr. Wittman.

Mr. Golden, you get the final word.

Mr. GOLDEN. Thank you, Mr. Chair. Boy, General Smith, I am getting excited listening to you talk about this.

General SMITH. That makes two of us, sir. I get excited as well.

Mr. GOLDEN. I can tell. You know, I just want to follow up on that. I have been reading the Commandant's planning and guid-

ance, following the blogs that are out there with Marines, you know, at the lower levels talking about this and thinking about it.

Look, I was on deployment in Afghanistan right up on the border of Pakistan in a platoon-plus unit with just the LT [lieutenant] and a gunny [gunnery sergeant] as the people running the show, well out in advance, very self-sufficient, very flexible. Loved it. I have been on a completely different kind of deployment in Iraq. So, I love what you are saying right there about the 50- to 60-men unit.

But, you know, one thing that comes to mind for me, as the Commandant talks about this pivot back towards being on the Navy ship, I only got to go on one short deployment cycle out off the coast of Virginia and do a splash, come back in, spend all of about 5 days on the ship. I did 4 years Active Duty, and on top of that, time in the Reserves.

I feel like this is such an incredible opportunity, and the challenge for the Marines to be getting back to its foundational, you know, mission. And I just got to say, things don't happen so fast here, you know, kind of like I would compare it to that platoon I was in, in Afghanistan versus, like, trying to move around a division.

Here in Congress, it sounds nice that you are going to start, you know, thinking about the next budget cycle to implement the Commandant's guidance. Start coming to talk to our offices now, talking to these committees now. Because if you start engaging next January, you may run into some unanticipated roadblocks. I am extending an invitation to you, to the Commandant, to come to my office or anyone on this committee, I am sure; you know, Mr. Wittman would be more than excited to do that.

I wanted to ask you very quickly about that, though. You know, the training that goes into getting young Marines, young leaders, that have been fighting in the Middle East back onto the Navy platform and ready to fight. You know, I envision fighting on the ship, fighting off the ship, fighting ashore.

Last week, when Commandant Berger was here, he said that the Marine Corps has benefited greatly from being a joint partner in the Close Combat Lethality Task Force and that the Marines have no choice but to continue that important work. Next—you know, last week, I had the Army here, or maybe that was a couple days ago. I lose track of time in this place. We had the Army here. They said they were going to take that—halfway take that job into the Army Department and no longer have it be joint with the Marine Corps. You know, to me, that is the difference between cooperation and integration and coordination, like you were just talking about. And you may have a young Marine trigger puller, like an enlisted guy like myself, or a young officer there in cooperation, but it is not the same thing as integration in a joint service leadership team running that task force. And I have a lot of concerns about changing it from what it has been. Fighting in the environment you are talking about is much different than the Army mission, or at least it should be. So, I wanted to ask if you have any concerns with the proposal to move that program into the Army, instead of continuing the joint task force as General Mattis and others, including Army Major General Scales, envisioned to begin with.

General SMITH. Sir, flipping the tables, thank you for your service. Usually gets said the other way around, but thank you.

Mr. GOLDEN. Thank you for yours.

General SMITH. Thanks, sir. So, I just met with General Murray, commanding general of the Futures Command. I also lose track of time. So, I can't remember if it was Monday or Tuesday this week. But I actually don't have any concerns about the CCLTF, the Close Combat Lethality Task Force, begun by then Secretary Mattis and actually run by a guy that I fought with in Iraq, a guy named Joe L'Etoile, commanded 2/7 [2d Battalion, 7th Marines] and I had 1/5 [1st Battalion, 5th Marines].

Sir, we are so tightly tied here within the naval component, but I think people forget that we are extremely closely tied in with the Army component. We are daily in contact and in collaboration, true collaboration, with the Army on systems. And so, when that Close Combat Lethality Task Force goes back to the Army as the lead, it will have Marines still in it, sir.

We are still completely committed because what we owe you is, when you can buy in bulk, quote/unquote, and save the taxpayer money, if we are at the 85 percent solution, we can't be different just to be different. We have to be together with them. Because we still share a—although we are the maritime component, we have to have the ability to project power ashore and sustain ourselves ashore, which is more similar in many ways to the Army.

And I would say General Murray and I and his deputy are very closely tied in the CCLTF. I don't have concerns about that going back to the Army, sir. I really don't. I feel like we have been included, and we will continue to be included, coordinate where we can. Certain things as a naval character force are different and have to be so, but wherever possible, sir, we have to be in line with them.

Mr. GOLDEN. My top concern obviously is decisionmaking authority. Let's make sure the Marines that are there are getting the top-level support they need to speak up and make sure that we are thinking about the Marine Corps as well.

And in closing, I guess the last word, Saturday, 9 a.m. I have got an appointment to get that buzz cut right up to about like yours. I try and do it once a month instead of every Sunday.

General SMITH. I know a couple of good barbers, sir.

Mr. GOLDEN. Semper Fi.

General SMITH. Semper Fidelis, sir. Thank you.

Mr. COURTNEY. Great. Well, thank you, Jared, and we will look forward to seeing you next week, you know.

So, well, thank you to the witnesses for being here today. I think, as you can tell, the members are passionate about, you know, our subcommittee's work, and we appreciate, again, that it was a good, frank discussion today, and it is going to continue obviously through the markup process.

So, with that, I will declare the hearing adjourned.

[Whereupon, at 3:30 p.m., the subcommittee was adjourned.]

A P P E N D I X

MARCH 4, 2020

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

MARCH 4, 2020

Chairman Joseph Courtney Opening Statement
“Department of the Navy FY21 Budget Request for Seapower
and Projection Forces”

March 4, 2020

The Seapower and Projection Forces subcommittee meets this afternoon to hear testimony from the Department of the Navy on the fiscal year 2021 budget.

Before us today are Assistant Secretary of the Navy for Research, Development and Acquisition James Geurts, Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities, Vice Admiral James W. Kilby, and Deputy Commandant for Combat Development and Integration Lieutenant General Eric Smith. Gentlemen, thank you for being here today.

On February 10th, the Department of Defense presented to Congress a Navy budget that is jarringly at odds with their own stated goals of achieving a 355 ship fleet. Instead of the 10 ships we expected to see this year, we received a proposal, as the Congressional Research Service reported, for just seven – two of which are tug boats. Instead of 54 ships through 2025, we have a budget that cuts that number by 22%, to 42 ships across the next five years.

This budget represents the lowest number of combatants requested in nearly a decade. And, to put this plan in context, it puts us at a shipbuilding rate and fleet size over the next five years below what was projected under the last administration – which was pursuing a 308-ship goal at the time.

One of the most infuriating changes in this budget, however, is cutting the Navy’s program of record for production of two Virginia-class submarines per year to one. This comes as combatant commanders have repeatedly warned of the looming reduction in attack submarine force levels that will see the fleet decline nearly 20 percent within this decade, beginning ironically in 2021 – the same year the President's budget strikes a Virginia-class boat.

Congress has strongly supported the two-a-year build rate and, specifically, the second 2021 attack submarine. Led by this subcommittee, the conference report for last year’s NDAA stated the clear position that Congress expected the Navy to budget for two submarines in 2021. We authorized and funded a \$200 million increase advanced procurement to support procurement of this submarine. To date, we’ve provided at least \$1.1 billion towards this boat.

This baffling move was made even more confusing based on the testimony we have received so far.

Last week, for example, the House Armed Services Committee heard testimony from the Chairman of the Joint Chiefs of Staff that it was not be best military advice to pull an attack submarine out of the budget. The Acting Secretary of the Navy explained that he was informed of the decision only after last minute budget moves were made without Navy input. The Chief of Naval Operations indicated that his top unfunded priority is the restoration of funding for a second attack submarine.

And the Secretary of Defense, despite submitting and defending a budget that cuts a submarine in 2021, stated that he strongly believes we need even more attack submarines than currently planned.

On February 12, Ranking Member Wittman and I wrote to the Secretary of Defense requesting the Navy's 30-year shipbuilding plan by February 27. Our hope was that this plan would help our subcommittee make sense of the change in direction this budget represents for shipbuilding and submarines.

I say "request," but in reality this plan is required by federal statute to be submitted with the budget. That requirement is clear. It does not say the Secretary may present a 30 year plan at a time of his choosing. It says clearly that "the Secretary shall."

A few days ago, the Secretary wrote to Chairman Smith last week indicating his position that the submission of the budget's five year planning projection is sufficient.

Let me be clear -- a five year plan is NOT sufficient according to the law. This subcommittee has produced shipbuilding marks as part of the NDAA year in and year out, relying on that requirement to make long term investments which is inherent to shipbuilding, unlike other Pentagon acquisition programs.

This decision is even more puzzling given that in the last few days we have seen senior defense and navy leaders talk about a need for a fleet bigger than 355 ships -- perhaps as high as 390.

Yet, all Congress will see before we mark up the defense bill this year is a limited five year plan. A five year plan that, as a matter of plain fact, will puts us on a path to barely reach more than 300 ships within the next five years, let alone 355 or 390 anytime soon.

As our witnesses and the members of this panel know all too well, shipbuilding is a long game, with progress measured not just in years, but in decades. Without a fuller understanding of what informs this request and where it goes from here, 2021 risks being a "lost year" in shipbuilding that will take years to recover from.

So to our witnesses here with us today, I say that we can and must do better.

Our panel has a hard-earned reputation for punching above its weight and producing tangible results for our Navy and Marine Corps. You can expect to see us do so again this year as we begin work on the 2021 defense authorization mark for seapower programs.

With that, I yield to the Ranking Member, Congressman Rob Wittman.

**Opening Remarks of the Honorable Robert J. Wittman
for the
Seapower and Projection Forces Hearing on
Navy Fiscal Year 2021 Budget Request for Seapower and Projection Forces
March 4, 2020**

I want to thank Chairman Courtney for yielding and thank our three witnesses for testifying today.

The administration has been consistent with their drive to expand the capacity of the United States Navy. President Trump foresaw the great power competition and called for a 355-ship Navy. Unfortunately, his vision and foresight have not been replicated in the budget requests. This relentless drive on behalf of legacy curmudgeons to hold back implementation of the national defense strategy will continue to delay required reform. It is apparent that we need to move toward a maritime strategy that will require both long range strike and naval power. Yet, the budget request continues to emphasize COIN operations and legacy force structure allocations. We have to do better.

Of all of our nation's defense procurement programs, shipbuilding is by far, the longest, most complex of any acquisition program. Shipbuilding requires years of planning, billions of dollars to capitalize the shipyards, and lengthy periods of ship construction. Yet there are some in the administration who continue to believe that the industrial base is a faucet that can be shut on and shut off. Some believe that in the short term we can add shipyards to expand our ship construction capacity. The reality is starkly different. I believe that this shipbuilding budget request is an attempt to begin to turn the faucet down. We are actually on the precipice of putting a number of shipyards out of business. And unfortunately, the administration's overestimation of the capacity and elasticity of the industrial base will have negative repercussions for a very long time.

Central to these concerns is the budget request to order a single submarine. We are on an inextricable path to reduce our attack submarine force structure from 51 to 42 submarines. The combatant commanders are begging for more undersea strike capacity. Yet, this budget requests seeks to perpetuate this egregious deficit.

The administration compounds this shipbuilding deficit by an accelerated ship retirement schedule that includes 4 Littoral Combat Ships, 4 cruisers and 3 amphibious ships. Some of these ships have only been in commissioned service for six years! The math on these retirements, compounded with an anemic shipbuilding request, points us in the wrong direction.

Furthermore, the administration continues to ignore the plight of our nation's sealift. The navy may point to the budget request to procure two used ships in fiscal year 2021. Unfortunately, the administration also endorsed a legislative proposal that would virtually eliminate the any new ship construction effort for these sealift vessels. General Franks, the then 7th Corps Commander during Desert Storm understood the value of these forces when he was quoted as simply

saying "Forget logistics, you lose." In sealift, the only change from last year is that our sealift force has aged another year, can only accomplish 40 percent of required tasking and the administration is prepared to accelerate the decline of this essential logistics force.

As to the Marine Corps, I am actually delighted with the vision that the Commandant has placed before our nation. I continue to be impressed with this change and look forward to more actionable items to implement a long-needed turn to the future of military conflict. My hope is that the Marine Corps is timely in implementing these needed changes.

Again, I appreciate the Chairman for having this important hearing and I yield back the balance of my time.

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THE HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

STATEMENT OF

THE HONORABLE JAMES F. GEURTS
ASSISTANT SECRETARY OF THE NAVY
RESEARCH, DEVELOPMENT AND ACQUISITION ASN(RD&A)

AND

VICE ADMIRAL JAMES W. KILBY
DEPUTY CHIEF OF NAVAL OPERATIONS
WARFIGHTING REQUIREMENTS AND CAPABILITIES (OPNAV N9)

AND

LIEUTENANT GENERAL ERIC SMITH
DEPUTY COMMANDANT, COMBAT DEVELOPMENT AND INTEGRATION
COMMANDING GENERAL, MARINE CORPS COMBAT DEVELOPMENT COMMAND

BEFORE THE

SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES OF THE
HOUSE ARMED SERVICES COMMITTEE

ON

THE DEPARTMENT OF THE NAVY FISCAL YEAR 2021 BUDGET REQUEST FOR
SEAPOWER AND PROJECTION FORCES

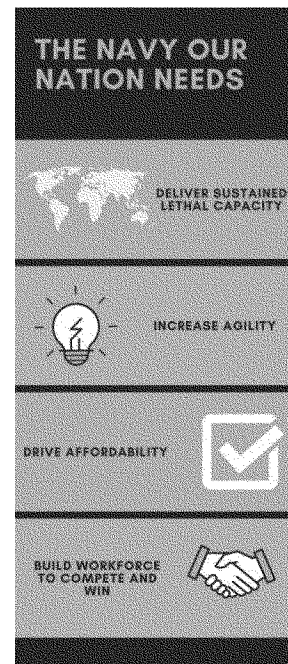
MARCH 4, 2020

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THE HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

Chairman Courtney, Ranking Member Wittman and distinguished members of the Subcommittee, thank you for the opportunity to appear before you today to address the Department of Navy's Fiscal Year (FY) 2021 budget request. First, we would like to thank Congress and this Committee for your leadership and steadfast support of the Department of the Navy acquisition and research programs. Your efforts to fully fund the FY 2020 request for 12 ships helps to provide the stability and predictability in funding that will enable us to build the Navy the Nation Needs, the maritime component of the National Defense Strategy.

Dominant naval force and a strong maritime strategy are the primary engines of our National Defense Strategy. As we continue to face rapid change in the global security environment, including greater global trade and greater unpredictability, our national security posture must likewise change to adapt to the emerging security environment with a sense of urgency and innovation. This requires the right balance of readiness, capability and capacity as well as budget stability and predictability. It requires us to deliver relevant, effective, capability to our Sailors and Marines, and requires a constant focus on and partnership with the industrial base. They are a key element to our national security.

The character of war has changed, and so must our approach to developing the world's most lethal military force. We are no longer fighting against the great powers of the 19th and 20th centuries, and conflict is no longer limited to the domains of land, sea and air. The rapid pace of technological innovation means our adversaries have unprecedented access to new tools and technologies. To maintain overmatch means our Navy must maintain warfighting readiness to enable the operational reach, resilience and sustainment that will enable the best Naval forces in the world to operate forward where and when we choose. We are currently on year three of a transformational journey to increase readiness recovery, improve acquisition outcomes and deliver greater lethality, which has seen marked improvement in speed and scale of acquisition, maintenance avails, and recapitalization efforts. These



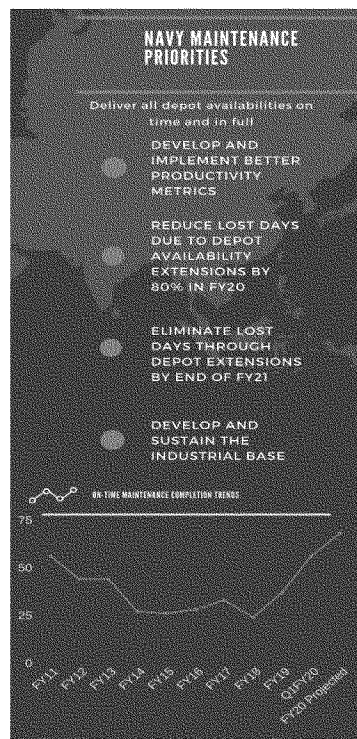
improvements are enabling the Department to better achieve our objectives of building a more lethal force with greater performance and affordability. We will continue to focus our efforts on four key priorities: deliver and sustain lethal capacity, increase agility, drive affordability, and develop the workforce.

Deliver and Sustain Lethal Capacity

Since the start of FY 2019 we have delivered 10 relevant and capable ships to the Fleet including an *Arleigh Burke* class destroyer, a *Virginia* class submarine, five Littoral Combat Ships, two Expeditionary Fast Transport ships and one Expeditionary Sea Base. Today, the Navy has 79 ships under contract with 47 ships in construction. We expect to take delivery of 12 more ships in FY 2020, and plan to award an additional eight ships this year. The Marine Corps achieved Initial Operational Capability (IOC) on the Joint Light Tactical Vehicle

(JLTV) more than four months ahead of schedule, expediting the delivery of this key battlefield vehicle to the warfighter. On the aviation side we delivered over 125 new manned aircraft and 15 unmanned aircraft to Navy and Marine Corps units, improving capability and enabling the divestiture of less affordable and less capable legacy systems. Additionally, we achieved our goal of over 80 percent Mission Capable F/A-18 fleet by October 1, 2019. Efforts this year will focus on sustaining these advances.

Ship maintenance continues to be a priority focus area for the Department. We are grateful for the strong support we received from Congress as we work to leverage data analytics to provide better predictability and maintenance of our ships, and identify and close performance gaps. In particular, we appreciate your support for a pilot program for private contractor shipyard maintenance in the Pacific. This approach will improve our ability to



contract well in advance of an availability start, absorb ship schedule changes from operational demands, and address changes in availability scope. We began executing this authority in February, and our 2021 budget request continues to capitalize on this opportunity by extending the pilot. Predictable stable funding in this area is crucial to incentivize private yard growth.

To support our focus on sustainment, we established a Deputy Assistant Secretary (DASN) for Sustainment to develop, monitor and implement policy and guidance that will enable the Department to better plan, program, budget and execute our sustainment mission. DASN Sustainment will oversee and manage Navy and Marine Corps sustainment and life-cycle management policies, allowing the Department to improve and align the complex drivers of maintenance and modernization completion – that in turn will increase our output to the Fleet.

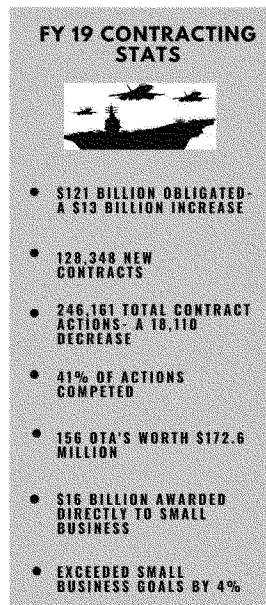
Navy-wide focus continues on making the USS *Gerald R Ford* ready for operational use. Going into 2020, CVN 78 will be deployed for 50 percent of the time certifying and testing systems and training the crew, while also being used for pilot generation, which is a critical need for carrier airwing readiness. We established a civilian and government team of experts to work with the shipbuilder to get *Ford*'s seven remaining Advanced Weapons Elevators (AWEs) completed prior to the end of the post deployment test and training phase. All 11 elevators will be completed by April 2021, which is the end of the current phase. The *Ford* will be the most capable aircraft carrier ever deployed and our Navy and Industry partners are focused on delivering this capability to the Fleet.

Increase Agility

Delivering the right capabilities at the right time and sustaining our competitive advantage as a naval force requires an integrated, enterprise approach to business process improvement and modernization. We are moving beyond transactional ways of doing business and towards a fully integrated enterprise, linking our requirements and acquisition processes and integrating these processes with industry to become more agile, accountable and efficient. An example of a fully integrated effort is the Frigate program, where an interactive Conceptual Design process included a robust dialog with industry, which fed into the requirements documents and development of the RFP. We will be better able to compete and win by expanding that integration and continuing those efforts at scale and at speed.

We conducted our first Wartime Acquisition Support Plan (WASP) industry engagement with the leaders of traditional and non-traditional companies onboard the USS *Gerald R Ford*. This collaborative engagement allowed our acquisition workforce and program managers to gain valuable insights and recommendations on industry surge capabilities to support the Navy's growing requirements. We will continue these regular industry engagements to build our response capability and ensure we are ready as a Navy to anticipate surge capacity in our industrial base and respond to any contingency.

In addition, we continue to take deliberate actions to challenge bureaucracy. In 2019, the Department cancelled 28 percent of our acquisition-related instructions and streamlined the remaining 72 percent. A thorough review of SECNAV 5000.2F – the primary instruction implementing the defense acquisition system – eliminated duplicative processes and resulted in a 65 percent reduction in page count. By removing the bureaucratic obstacles that slow innovation, we are becoming a more agile organization, better-focused on delivering mission requirements to the Fleet.



Drive Affordability

Building and sustaining our Navy requires creative and aggressive contracting methods to achieve the right capability. The Department has achieved over \$25 billion in savings through the use of agile procurement and more advantageous contracting approaches. For example, we executed the two-carrier buy (CVN 80/81) contract with Huntington Ingalls Industries – which accounted for over \$4 billion in savings. We achieved additional savings through ship and aircraft Contractor Support Services reductions, process improvements, and Multi-Year Procurements for programs such as the DDG 51, *Virginia* class Submarines, V-22, and SM-6. Innovative contracting methods including block buys and smart negotiations supported a seven-fold increase in the number of Other Transaction Authority (OTA) contract awards, two times the number of active Cooperative R&D agreements, numerous

prize challenges, and multiple cases of using FY 2018 pricing to accelerate FY 2019 awards.

Last year the Department executed over \$121 billion in contracts, a 12 percent increase over obligations in the previous fiscal year, to approximately 20,000 industry partners. This work was awarded using 18,000 fewer contract actions – all while reducing the contract modification workload by more than 15 percent. Over 40 percent of the work was awarded through competition, while exceeding small business goals (18 percent actual vs. 14 percent goal) and awarding \$16 billion direct to small businesses.

Build a Workforce to Compete and Win

A key aspect to increased lethality and readiness is the development of the workforce needed to compete and win. By focusing on our public shipyard and acquisition workforce, we were able to drive efficiencies in the system and better enable the execution of Department priorities. Navy shipyards increased their workforce by 40 percent in the last 10 years, transforming how they train new employees through the use of virtual and hands-on learning centers. The shipyards standardized and reduced regional variability in processes across the public shipyards, and developed “safe-to-fail” areas where artisans can experiment with new and innovative techniques to improve throughput. Through continued transformation efforts, the naval shipyards have successfully reduced the duration of training for an inexperienced worker, in some cases by as much as 50 percent.

For our acquisition professionals, the Department has issued a new Acquisition Workforce Strategic Plan establishing the vision for shaping the future acquisition workforce. We provided commercial online training to expand training opportunities, increased experiential learning through industry rotations, and conducted understanding industry courses at public universities for over 300 members of the acquisition workforce. The Navy is embarking on the development of a Talent Management System to capture and leverage a data-driven solution leveraging commercial best practices for the Acquisition Workforce to develop, retain, and reward people to meet current and future organizational needs. These efforts help ensure we have the right people, with the right skill set to deliver critical capabilities to the Fleet. We focused our Acquisition Workforce Funding to attract talent that will infuse the civilian workforce targeting critical skill gaps such as STEM and Information Technology. The Navy also leveraged Section 1111 hiring authorities to hire high quality acquisition and technology experts with a focus on Supply Chain and Sustainment challenges.

The Fiscal Year 2021 President's Budget Request

The President's FY 2021 budget builds on these initiatives in order to provide the best-balanced force in support of the National Defense Strategy, enabling us to deliver the people, the platforms, and the capabilities necessary to protect American interests around the world. The budget builds on prior investments while making the adjustments necessary to deliver greater efficiency and effectiveness.

The FY 2021 request continues key investments in advanced technologies and modernization of our current Seapower and Projection forces, prioritizing the recapitalization of the strategic ballistic missile submarine, the *Columbia* class, which remains the Navy's highest acquisition priority. A healthy industrial base critical to meeting this demand, and the Department greatly appreciates strong congressional support for our nation's vital shipbuilding program and industrial base expansion. The FY 2021 budget supports the sustainment of our readiness recovery to deliver credible ready forces now, and the aggressive pursuit of increased lethality and modernization with the greatest potential to deliver non-linear warfighting advantages. This includes the prioritization of force design and the delivery of Naval Expeditionary forces capable of imposing cost with distributed, lethal power, and the delivery of capable capacity within the constraints of our available resources.

Given the budget topline constraints, the FY 2021 budget prioritizes a more capable and lethal force over a larger force that would be less capable, less ready and less lethal. It includes procurement of 44 battle force ships within the Future Years Defense Program (FYDP), and shows a realistic approach to planning the future force within projected budgets. The plan remains mindful of the need to keep the shipbuilding industrial base loaded at an effective level that encourages industry investment in capital improvements, capital expansion, and a properly sized world-class workforce.

Sustaining that force structure through the maintenance and modernization will be the key to ensuring those assets can meet operational demands over their design service lives. The Navy continues to execute a number of initiatives that will facilitate a more adaptable and reliable industrial base for ship repair, while providing a foundation to support the workload forecasts of our industry partners. These include improvement in processes to plan and schedule the right work; more realistic assessments of the cost and duration of work; awarding contracts earlier; making more efficient use of existing industrial facilities and drydocks, and preparing for the future by investing in industrial equipment and personnel

training to promote a healthy industrial base. Continued implementation of these essential steps will reduce the maintenance backlog affecting our ships today, and to enable sustainment of the Naval Fleet of the future.

Summary

Thank you for the strong support this Subcommittee has always provided to our Sailors and Marines. The Department of the Navy continues to instill affordability, stability, and capacity into our programs in order to deliver capability to our warfighters faster and be as effective as possible within our resources. With Congress' support, we can ensure the Department's strategic deterrence, readiness, lethality and capacity will continue to deliver superior naval power around the world both today and tomorrow.

Programmatic details regarding Navy and Marine Corps capabilities are summarized in the following section.

U.S. NAVY AND MARINE CORPS SEAPOWER CAPABILITIES

Ships

Submarines

Ballistic Missile Submarines, coupled with the TRIDENT II D-5 Strategic Weapons System, represent the most survivable leg of the Nation's strategic arsenal and provide the Nation's most assured nuclear response capability. As such, the *Columbia* class program remains the Navy's number one acquisition priority program and is on track to start construction in October 2020 and deliver to pace the retirement of our current ballistic missile submarines, deploying for its first patrol in FY 2031.

The FY 2021 President's Budget supports the funding required to begin lead ship construction and continue lead ship design and advance construction activities with a plan to achieve a target of 83 percent design completion at construction start, as compared to the 43 percent at start of *Virginia* class. General Dynamics Electric Boat and Huntington Ingalls Industries-Newport News will procure component and commodity material based upon construction start and supplier lead times in order to support lead ship construction start in October 2020. The FY 2021 President's Budget request also funds Continuous Production of Missile Tubes to support procurement of Common Missile Compartment material for the U.K.

Dreadnought class submarines being executed under the Polaris Sales Agreement. The award was coordinated with the *Virginia* class program to maximize efficiencies across the procurement of all large diameter tubes. Also included in the FY 2021 budget are many development efforts to make submarines more capable.

The Navy will build on past success with the FY 2020 award of the Block V multi-year procurement (MYP) contract for the construction of nine ships, with options for additional ships. Starting with the second ship, these submarines will introduce the *Virginia* Payload Module and all Block V ships will have Acoustic Superiority.

The Navy, the shipbuilders and related suppliers recognize that vigilance in the execution and oversight of the *Virginia* and *Columbia* programs is critical. In FY 2020 the Navy will use the \$123 million provided for industrial base support to align shipbuilder-procured material procurements with *Columbia* class funding with funds budgeted for *Virginia* class and CVN for common components and vendors. Additionally, the Navy is implementing Continuous Production on selected shipyard-manufactured items to reduce cost and schedule risk, and help strengthen the industrial base with a focus on critical vendors. Advance Construction activities began June 2019 at General Dynamics Electric Boat and Huntington Ingalls Industries-Newport News to proactively manage schedule margin and reduce controlling path risks for *Columbia*.

Aircraft Carriers

CVN 78 completed Post Shakedown Availability (PSA)/Selected Restricted Availability in October 2019, culminating with a highly successful sea trial. During the PSA, the Navy and our industrial partners completed production and certified four AWEs, repaired the ship's propulsion system, completed upgrades to the Advanced Arresting Gear (AAG) and corrected over 96 percent of the sea trial discrepancies. The ship is now in an 18-month Post Delivery Test and Trials (PDT&T) phase where the crew certifies the fuel systems, conducts aircraft compatibility testing, exercises the flight deck, and tests the combat systems. We will also complete production and certification of the remaining seven AWEs during PDT&T. The Navy continues to see progress in the testing of new systems aboard USS *Gerald R Ford* (CVN 78). AWEs have been cycled over 5,400 times, including 1,500 at sea, and are performing as designed. CVN 78 successfully completed Aircraft Compatibility Testing (ACT), with over 200 launches and recoveries of different type/model/series aircraft

during its at-sea period in January. Successful completion of ACT is an important milestone towards achieving Flight Deck Certification expected in March 2020. The ship is expected to conduct several thousand launches and recoveries between now and completion of PDT&T. Ready for USS *Gerald R Ford* for deployment is a Navy priority and the Department is working collectively with the Navy shipbuilding industry to transition CVN 78 into Fleet operations. The *John F Kennedy* (CVN 79) was christened on December 7, 2019, launched two-months early on December 16, 2019, and is 68 percent construction complete. When compared to CVN 78, CVN 79 is performing at a 16 percent man-hour stepdown. CVN 80 construction is three percent complete by construction man-hours and CVN 81 has commenced material procurement. Additionally, CVN 80 is on schedule to meet its first major construction milestone, keel laying, in the second quarter of FY 2022.

The *Nimitz* class Refueling Complex Overhaul (RCOH) is key to both the maintenance and modernization of each carrier in support of the second half of its service life. The RCOH is refueling the ship's reactors, modernizing its capabilities, and repairing ship systems and infrastructure. CVN 73 successfully undocked in September 2019 and the RCOH is 68 percent complete with re-delivery planned for December 2021. CVN 74 RCOH advance planning efforts remain on track to commence RCOH in January 2021. CVN 75 will begin RCOH in FY 2025.

Large Surface Combatants

The *Arleigh Burke* class (DDG 51) program remains one of the Navy's most successful shipbuilding programs with 67 ships delivered to the Fleet. The FY 2018-2022 MYP maximizes affordability and stabilizes the industrial base. These Flight III ships will provide enhanced Integrated Air and Missile Defense with the AN/SPY 6(V)1 Air and Missile Defense Radar (AMDR) and AEGIS Baseline 10. AMDR meets the growing ballistic missile threat by improving radar sensitivity and enabling longer range detection of increasingly complex threats. The program demonstrated design maturity through its successful completion of all developmental testing. AMDR is in production and on schedule for delivery with the first Flight III ships. The 2021 President's Budget requests funding for the procurement of two ships of the MYP contract. The \$520 million increase in FY 2020 Advanced Procurement funding will be used to procure Long Lead Time Material for FY 2021 Flight III ships and to bolster the surface combatant supplier base.

Complementing the DDG 51, the DDG 1000 *Zumwalt* class guided missile destroyers provide multi-mission surface combatants designed to provide long-range, offensive surface strike capabilities. The DDG 1000 ship is on track for final delivery at the end of March followed by continued testing and a PSA in support of achieving Initial Operational Capability (IOC) by September of 2021. DDG 1001 commissioned on January 26, 2019, is currently undergoing combat system installation and is expected to complete in July of 2020 following further combat system activation and test. Construction on DDG 1002 is over 87 percent complete at General Dynamics Bath Iron Works with HM&E delivery planned for December 2020.

In the FY 2021 budget request, the Navy has budgeted \$46 million of R&D funding for the Large Surface Combatant (LSC). As part of the Future Surface Combatant Force, LSC will fill all the roles and missions of a DDG-51 with additional capability and capacity critical to the future fight. LSC will enable the ability to launch large missiles with extended ranges, and provide a new hull form and electrical/propulsion plant for increased efficiency and survivability, while reestablishing service life allowances for future growth to pace the threat. The LSC will reduce combat system development risk by utilizing mature technologies that leverage the DDG 51 FLT III Navy standard program of record combat system elements and reduce engineering system development risk by land based testing of the propulsion and electrical system integration prior to detail design. FY 2021 funds will be used for the maturation of requirements analysis to draft a Capabilities Development Document, develop a new LSC land-based technology development plan, and initiate a collaborative government and industry effort necessary to develop the LSC preliminary design.

The Navy partnership with industry will include both design and shipbuilding contributors driving to a stable requirements baseline, and a ship that will have been designed for producibility as well as flexibility.

Small Surface Combatants

Reemergence of a Great Power Competition and the pivot to the Indo-Pacific requires a more capable Small Surface Combatant for operations in contested environments. FFG(X) is the evolution of a ship design with increased lethality, survivability, and improved capability to support the National Defense Strategy across the full range of military operations as part of a more lethal Joint Force. FFG(X) Capability Requirements are mature and reflect the needs to

support the National Defense Strategy's "Blunt" and "Contact" layers to deny adversary aggression and manage conflict escalation in our global operating model. Existing Fleet requirements and detailed analysis have been refined through early engagement with industry in a collaborative Conceptual Design process that completed in June 2019. The FFG(X) program is managing development risk by combining proven ship designs with mature, best-of-breed Government Furnished Equipment designated combat system elements. The Navy is confident in the capability FFG(X) will deliver to the Fleet. FFG(X) is in a full and open competition source selection for the Detail Design and Construction Contract, which ensures competitive pricing and drives best value capability. Contract award is expected by the end of FY 2020. The FY 2021 budget procures the second ship of the class and continues RDT&E efforts to deliver critical warfighting capability to the Fleet on time. This supports the steady profile growth of the program, which will see increased annual procurement starting in FY 2023.

The Littoral Combat Ship (LCS) program has delivered 21 of the 35 total planned ships. The program plan for these ships is: four dedicated test ships; eight Surface Warfare (SUW) ships; eight Anti-Submarine Warfare (ASW) ships; and 15 Mine Countermeasure ships. The initial four ships designated as test assets will complete testing and decommission by the end of FY 2021. The Navy is beginning to backfit an Over the Horizon Weapon System (OTH WS) on all LCSs for increased lethality. The award in May 2018 of the Naval Strike Missile contract for OTH WS brings a technologically mature weapons system and extends the offensive capability of the ship. Starting with the deployment of USS Montgomery (LCS 8) in June 2019, a total of nine LCS will have completed their inaugural deployments to 7th, 5th or 4th Fleet by the end of FY 2021, providing a significant increase in contact layer assets for Fleet Commanders which will continue to grow as the remaining ships are delivered to the Fleet.

Amphibious Ships

Amphibious warfare ships are a cornerstone of the Nation's global forward presence. They continue to play a pivotal role in responding to world crisis and supporting a broad range of missions across the spectrum of conflict. Today, these ships are persistently forward deployed, competing below the level of armed conflict while living within the range of enemy fires, building partner capacity, and deterring enemy aggression. Partnered with industry we

are committed to delivering the most capable multi-mission amphibious warfare ship on the planet.

America class (LHA 6) will replace the decommissioning LHA 1 *Tarawa* and aging LHD 1 *Wasp* class ships. USS *America* (LHA 6) recently deployed as the centerpiece of the *America* Amphibious Readiness Group/Marine Expeditionary Unit with the F 35B operating from the flight deck. USS *Tripoli* (LHA 7) delivered on February 28, 2020. The ship will focus on moving the crew aboard and prepare for commissioning and sailaway later this year. Fabrication has begun on LHA 8, with 26 units erected that will support a FY 2024 delivery. LHA 8 will include a well deck to increase operational flexibility and includes a reduced island structure that increases flight deck space to enhance aviation capability. All LHAs will be F-35B capable.

San Antonio class (LPD 17) provides the ability to embark, transport, and land elements of a landing force by helicopters, tilt rotor aircraft, landing craft, and amphibious vehicles. The LPD 28 is 65 percent complete and planned for delivery in September 2021, while the LPD 29 is 25 percent complete and planned for delivery in the fourth quarter of FY 2023. LPD 28 and LPD 29 leveraged many design innovations and cost reduction initiatives, including the first install of the Enterprise Air Surveillance Radar (EASR) on LPD 29, as the class transitions to Flight II, integrating more high-level capabilities. The Navy awarded the first Flight II ship, LPD 30, in March of 2019 with a planned delivery in the second quarter of FY 2025. Additionally, the Navy intends to place LPD 31 on contract by fall of 2020. The future amphibious force structure and composition are being evaluated as part of the larger ongoing Integrated Naval Force Structure Assessment.

Light Amphibious Warships

In support of tasks within the range of military operations, which includes Littoral Operations in a Contested Environment (LOCE) and Expeditionary Advanced Base Operations (EABO), the Navy will commence with Concept Studies to evaluate the next generation medium lift intra-theater amphibious platforms and logistics ships. These studies will primarily focus on commercial designs tailored for military application to enable maneuver, mobility and naval sustainment (Refuel, Resupply, and Rearming) for our integrated naval forces conducting distributed maritime operations.

Connectors

The Ship to Shore Connector (SSC) program provides the capability to rapidly project assault forces within the littoral operational environment to accomplish Unified Campaign Plan missions and ensures the Joint Force Commander's ability to conduct amphibious operations maneuvering over-the-beach, over ice, mud, rivers, swamps and marshes. The Landing Craft, Air Cushion (LCAC) 100 class craft are the functional replacement for the legacy LCAC craft, which began reaching end of their service life extensions 2015. The Department remains committed to maintaining this critical non-displacement craft capability with the LCAC extended SLEP (E-SLEP) initiative and the SSC program despite its recent developmental setbacks and commensurate reductions in procurement quantities quantities in FY 2020 and FY 2021. The Navy continues to work with our industry partners on a joint technical assessment to remediate issues discovered in the September 2019 Builders Trials. The FY 2021 budget request reallocates funding from the SSC program to E-SLEP to improve and upgrade these versatile platforms, and ensure the connection between the combat power and logistics sustainment of the sea bases to the expeditionary forces. The Navy is also replacing its aging Landing Craft Utility fleet in the LCU 1700 program which will restore LCU's complementary heavy lift payload in a more rugged, reliable, and affordable independent operations capable non-displacement platform.

Auxiliary Ships, Expeditionary, and Other Vessels

Expeditionary support vessels are highly flexible platforms that are used across a broad range of military operations supporting multiple operational phases. The Expeditionary Sea Base (ESB) is part of the critical access infrastructure that supports the deployment of forces and supplies to provide prepositioned equipment and sustainment with flexible distribution. The Navy took delivery of the USNS Miguel Keith (ESB 5) in November 2019. The ESB 6 and ESB 7 Fixed Price Incentive contract was awarded in August 2019 with planned deliveries in FY 2022 and FY 2023. The Expeditionary Fast Transport (EPF) program provides high speed, shallow draft transportation capability to support the intra-theater maneuver of personnel, supplies and equipment for the Navy, Marine Corps, and Army. EPF 11 delivered in December 2019. EPF 12 and EPF 13 are under construction with deliveries planned in FY 2020 and FY 2021, and EPF 13 and EPF 14 awarded in March 2019. An enhanced medical capability in support of Distributed Maritime Operations is planned for EPF 14.

The Combat Logistics Force (CLF) consists of T-AOE fast combat support ships, T-AKE dry cargo and ammunition ships, and T-AO fleet replenishment oilers. CLF ships fulfill the vital role of providing underway replenishment of fuel, food, repair parts, ammunition and equipment to forward-deployed ships and embarked aircraft, to enable them to operate for extended periods at sea. The *Kaiser* class (T-AO 187) fleet replenishment oilers will be replaced with the *John Lewis* class fleet replenishment oilers, designated T-AO 205 class. T-AO 205 is 76 percent complete and planned for delivery in June of 2021. The two follow-on ships of the class, are 32 and 19 percent complete, respectively.

The Department began construction this fall on the *Navajo*, a combined towing, salvage, and rescue (T-ATS) ship. T-ATS is based on existing commercial towing offshore support vessel design, and will provide ocean-going tug, salvage, and rescue capabilities to support Fleet operations. The Navy will exercise contract options for the two FY 2020 ships later this year, and the FY 2021 budget request increases T-ATS procurement for a total of two ships.

Strategic Sealift

The Navy has begun the first steps in executing its sealift recapitalization plan called *Sealift that the Nation Needs*. This three-phased approach includes the Service Life Extensions of select Surge Sealift vessels, acquiring used vessels, and a new construction shipbuilding program. The Navy's long-term strategy recommends assigning new construction common hull vessels to the Maritime Prepositioning Force (MPF) as delivered, ensuring the Fleet has the latest capabilities to support employment across the full range of military operations. Existing MPF ships would rotate to surge, preserving capability and maintaining the requisite square footage to meet USTRANSCOM sealift capacity requirements. The FY 2021 budget request increases resources for operations and sustainment to improve current readiness, maintains service life extensions, increases used vessel acquisition for a total of two in FY 2021, and maintains investments for new construction sealift industry studies and preliminary design of the flagship T-AKR(X) Strategic Sealift vessel.

Sustainment, Modernization and Service Life Extensions

The Navy has undertaken a multipronged approach focused on increasing accountability and improving productivity in both public and private shipyards. In our public

yards, the Navy is growing the capacity of the shipyards to meet the workload demand, improving the training and productivity of the workforce, and making the needed investments in our shipyards to ensure they can support our growing needs. In the private shipyards, the Navy has focused on improving the completeness, accuracy, and timeliness of planning; working with the Fleet to adjust maintenance schedules to level load the ports, revising acquisition strategies to improve stability and predictability, and streamlining Navy inspection points to improve efficiencies.

The fiscal realities facing the Navy make it imperative to maintain our in-service ships to achieve their expected service lives and maintain their relevant combat systems through modernization efforts. The FY 2021 President's Budget includes funding for the modernization of three destroyers to sustain combat effectiveness, ensure mission relevancy, and achieve the full expected service lives of the AEGIS Fleet. Service life extensions can be targeted, physical changes to specific hulls to gain a few more years, or a class-wide extension based on engineering analysis. The Navy has evaluated the most effective balance between costs and capability to be removing the service life extension on the DDG 51 class; extending the services life of the most capable ships in the cruiser fleet while removing the four cruisers that have the least effective ballistic missile capability; and delaying the accelerated retirement plan for the mine countermeasure ships by one year.

Shipyards Infrastructure Optimization Plan (SIOP)

Maintaining and improving public and private ship repair infrastructure capacity is essential to conducting required maintenance of a growing Navy. Planned Naval Shipyard investments and completion of Naval Shipyard optimization analysis are a necessary step to improve public shipyard productivity and performance. The Navy is outlining a strategy for the optimal placement of facilities and major equipment at each public shipyard, including a 20-year investment plan for infrastructure to ensure we can continue to support the world's finest naval force now and into the future. The plan focuses on three major areas for each of the Navy's four public shipyards: dry dock recapitalization; facility layout and optimization; and capital equipment modernization.

Phase II of the SIOP is well underway with the development of the shipyard digital twins, the commencement of requisite facility engineering studies and the environmental planning activities at Pearl Harbor Naval Shipyard. The Area Development Plans (ADP) for

the four public shipyards are scheduled to be completed in FY 2022, with the program moving into the execution of the SIOP upon completion. Concurrent with the ADP effort, SIOP is moving forward with fact-of-life dry dock projects and other facility and capital equipment investments required in meeting the demands of the Navy's Fleet Commanders. The SIOP is also rapidly developing a first-of-its-kind Dry Dock Production Facility for Pearl Harbor to demonstrate the efficiencies that will be gained by moving the work closer to the ship in a state-of-the-art industrial facility. These efforts represent a substantial capital investment to ensure that America's shipyards will continue to keep our Navy in peak fighting condition for decades to come.

Unmanned Surface and Undersea Vehicles

Unmanned systems continue to advance in development and will be key enablers through all phases of warfare and in all warfare domains. The Navy is using a Family of Systems strategy to develop and employ unmanned surface and undersea capabilities that augment and relieve stress on the manned force, and increase the cost imposed on our competitors.

This year in the surface domain the Navy will commence low-rate production of a modular Mine Countermeasures Unmanned Surface Vehicle; award a contract for the first prototype medium unmanned surface vehicle (MUSV) to provide distributed sensing capacity to the surface force; continue evaluation of the Marine Corps' long range unmanned surface vessel (LRUSV); and award large unmanned surface vessel (LUSV) conceptual design contracts while continuing to mature and demonstrate the necessary technologies leading to a unmanned capability to provide distributed lethality as a part of the Future Surface Combatant Force. Additionally, the Navy will award a Multi Award Contract Indefinite Delivery/Indefinite Quantity to provide the key enabling technologies for the unmanned surface Family of Systems.

In the undersea domain, the Navy has commenced fabrication of Orca Extra Large Unmanned Undersea Vehicle (XLUUV). Competitive RFPs will be issued in FY 2020 for initial production of Snakehead, the Large Displacement UUV, and for production of a Medium UUV that supports both the submarine launched Razorback environmental sensing mission, as well as the Maritime Expeditionary Mine Countermeasures UUVs mission.

In support of these new capabilities, the Navy is also investing in enabling

technologies, such as autonomy, command and control, energy, and payloads, as well as establishing the interoperable standards and open architectures for ease of technology transition. These technologies and standards are the foundation necessary to ensure integration and transition to the fleet using a disciplined approach.

The Navy has undertaken an aggressive approach through competitive prototyping in collaboration with industry to accelerate these new technologies utilizing the new authorities granted by Congress over the past few years, such as middle-tier acquisitions and acquisition agility legislation. This affords the Navy the ability to prudently prototype, experiment, and demonstrate new capabilities prior to commencing with Programs of Record. Unmanned vessels are key elements in the future naval force and the Navy fully intends to leverage the progress to inform new concepts of operation, new means of integrating unmanned and manned vessels, and new capabilities afforded by these advances.

Combat Systems

The Department continues to field the most capable and lethal surface and submarine combat systems in the world. AEGIS combat system capability continually evolves to deliver additional warfighter improvements to the AEGIS Fleet. AEGIS Combat System Baseline 9 delivers unprecedented offensive and defensive capabilities, including offensive strike and ASW, and simultaneous air and ballistic missile defense on destroyers and Air Defense Commander capability on cruisers. AEGIS Baseline 10 will incorporate the AN/SPY 6(V)1 Air and Missile Defense Radar (AMDR) for DDG 51 FLT III ships providing significant performance improvements over the AN/SPY 1D(V) radar and expanding the sensor coverage and enhancing the Navy's ability to perform the Integrated Air and Missile Defense mission.

Utilizing open architecture that takes full advantage of evolving technology to rapidly deliver real-time, reliable, and actionable information to the warfighter, the Department continues working towards breaking the paradigm of hardware-software dependent deliveries. Using virtualization technology, the AEGIS virtual twin system, a prototype of the AEGIS Virtual Combat Management System, is able to run AEGIS Weapon System code in a fraction of the original hardware space. The AEGIS virtual twin successfully executed its first live-fire engagement this past year. Additionally, the Navy successfully tested the Virtual Laboratory on Ship (VLOS), a virtualized Undersea Warfare Combat System (AN/SQQ-89 A(V)15), during a weeklong underway period. VLOS represents another important step forward in the

Navy's efforts to speed combat system element development and software upgrades.

The Department continues to aggressively pursue affordable systems that are employable from multiple platforms. Leveraging the investment in AMDR, scaled variants of the AN/SPY-6(V) are planned to replace the AN/SPY-1 radar on select existing DDG 51 FLT IIA ships to become the primary Air Search Radar for carriers, amphibious ships and the guided missile frigate (i.e. EASR). The use of a common core technology and support strategy enables significant life cycle efficiencies in maintenance support, training, and overall cost for the Navy's primary surface ship radars.

The Navy continued to equip its submarines with the ever-evolving undersea combat system utilizing bi-annual hardware Technology Insertions on even years and software Advanced Processing Builds on odd years. This process leverages commercial off-the-shelf (COTS) technologies via the Acoustic Rapid COTS Insertion program mitigating COTS obsolescence while providing more capability improvement at lower costs.

Weapons

Missile Programs

SM-6 missiles provide theater and high value target area defense for the Fleet, and with Integrated Fire Control, has more than doubled its range in the counter-air mission. SM-6 Block I declared Full Operational Capability in December 2017 and SM-6 Block IA successfully achieved IOC in October 2019. The Navy awarded a five-year MYP contract for up to 625 SM-6 missiles in December 2019. The FY 2021 President's budget continues funding for the upgraded SM-2 Block IIIC and the SM-6 Block IB missiles as rapid prototyping pathway middle tier acquisition projects. SM-2 Block IIIC leverages investments made in SM-6 Block I and Evolved Sea Sparrow Missile (ESSM) Block II to enhance performance against numerous threats and to increase depth of fire. The SM-6 Block IB seeks to provide an extended range capability in response to Joint, Fleet and Navy Urgent Operational Needs by integrating a new government developed rocket motor onto an existing SM-6 Block IA seeker.

ESSM provides another layer to the Navy's defensive battle-space. ESSM Block 2 is on track to achieve IOC for AEGIS platforms in FY 2020 and Ship Self-Defense System platforms in the 2022-2023 timeframe.

The inner layer of the Fleet's layered defense is the Rolling Airframe Missile (RAM)

designed to pace the evolving anti-ship cruise missile threat and improve performance against complex engagement scenarios.

Offensive Missile Strategy

The Navy's offensive strike systems consist of a broad family of current and future weapons that together can and will strike from the sea, air, and land. These weapons capitalize on key system attributes (e.g. speed, range, lethality, survivability, and commonality) with a strong focus on delivering 'multi-domain' capabilities. The Department's Offensive Missile Strategy (OMS) supports a wider, more systematic approach towards delivering offensive weapons balance to increase overall force effectiveness to address emerging threats.

Our current OMS construct has three pillars. First, the Department will sustain relevant weapon systems. Our objective is to preserve the readiness and capacity of our key strike weapons inventories. Second, the Department will pursue strike weapon capability enhancements. Under this initiative, the Navy will develop near-term capability upgrades to enhance existing weapons that provide critical improvements to our current long-range strike weapons capabilities (e.g. Maritime Strike Tomahawk (MST), LRASM V1.1, SM-6/Block 1B, and the Naval Strike Missile). Third, the Department will develop next-generation strike missile capabilities to address emerging threats.

The OMS is reviewed annually based on current capabilities and emerging threats, and updated to leverage analytical processes/study updates. The results are used to inform annual RDT&E and procurement funding priorities to achieve an optimal mix of offensive strike missile system capabilities. The 2020 OMS is currently being finalized and is a classified document. Additional details about next generation weapons development can be provided in a classified setting.

Directed Energy

In FY 2020, the Navy provided Congress its path forward for shipboard integration of High Energy Laser (HEL) systems and the risk reduction plan to continue to improve technology while growing the industrial base for these systems. Initial capabilities, such as Solid State Laser – Technology Maturation (SSL-TM) on USS *Portland* (LPD-27), have been fielded for shipboard experimentation and integration. This type of operational experimentation is valuable for the Navy's long term consideration of other ship classes as host platforms for

laser weapons. In the FY 2021 budget request, the Department will continue advancing capabilities of laser weapons to meet ship defense missions. The Department is also collaborating and partnering with OSD and other Services to mature these advance technologies to defeat more challenging threats and shape future acquisition of these systems.

Manned Naval Aviation

With the support of Congress, the Navy and Marine Corps continue to implement our “Vision for Naval Aviation 2025”. This framework informs our Naval Aviation investment priorities across the triad of warfighting capability, capacity, and strategic wholeness; placing the right capability in the hands of the warfighter in the most affordable manner possible.

Airborne Early Warning Aircraft

The E-2D Advanced Hawkeye (AHE) is the Navy’s carrier-based Airborne Early Warning and Battle Management Command and Control aircraft. The E-2D AHE provides Theater Air and Missile Defense capabilities and is a cornerstone of the Naval Integrated Fire Control system of systems enhancements.

This year the program will take delivery of five aircraft. In the third year of a 26 aircraft MYP contract (FY 2019-2023), the FY 2021 budget requests \$749.3 million in APN for four aircraft and Advance Procurement for FY 2022 aircraft. The FY 2021 budget also requests \$309.4 million in RDT&E to continue development, integration, and test efforts to outpace the evolving threat. Modernization priorities include Naval Integrated Fire Control development and test, Theater Combat ID and National Technical Means integration, ALQ-217 Electronic Support Measures and Survivability updates, Cyber Protection, Counter Electronic Attack, Secret Internet Protocol Router chat, Crypto Modernization/ Frequency Remapping, Multifunctional Information Distribution System/Joint Tactical Radio System Tactical Targeting Network Technology, Sensor Netting, Data Fusion, and Hawkeye Cockpit Technical Refresh.

Maritime Patrol Aircraft

The P-8A Poseidon combines the proven reliability of commercial 737 airframes with modern avionics, military communications, and advanced sensors and weapons to provide a

range of advanced warfighting capabilities. P-8A capabilities include full-spectrum, wide area, cue-to-kill Anti-Submarine Warfare; Anti-Surface Warfare; and networked Intelligence, Surveillance, and Reconnaissance (ISR). Continued congressional support enables the P-8A program to complete the replacement of the legacy P-3C Orions. P-8A squadrons now deploy continuously to all areas of the globe.

The warfighting requirement is 138 aircraft, including US Naval Reserve squadrons and quick reaction capable aircraft, with 120 aircraft funded. Boeing intends to initiate P-8A production line shutdown activities in FY 2021 if no additional P-8A orders are received. As of January 2020, 91 US aircraft have been delivered. The final production lot contract award is projected for FY 2020.

P-8A has three increments; Increments 1, 2 and part of 3 are fielded. The final Increment 3 modifications, Engineering Change Proposal (ECP) 6 and 7, will provide new system architecture and updates to include the addition of Networked Enabled Weapons capabilities, satellite communication updates, track management enhancements, sensor fusion capabilities, and Multi-Static Active Coherent Enhancements. ECP 6 successfully completed Critical Design Review in December 2019, will begin test aircraft integration in FY 2020-2021, and support developmental and operational testing in FYs 2022-2024. ECP 7 is the software improvement, being executed concurrently with ECP 6, that completed Critical Design Review in 2018 and is scheduled to commence P-8A integration in FY 2021 and IOC in FY 2025. The FY 2021 request includes \$207.3 million in RDT&E for integration of ECP 6 and ECP 7 to complete baseline capability fielding, and rapid development efforts for evolving threats, and \$260.6 million in APN for fleet modification kits, deficiency corrections, safety upgrades, and production line shutdown activities.

KC-130J

The KC-130J remains a force multiplier for deployed Marine Air-Ground Task Force (MAGTF) success, bringing increased capability, performance, and survivability with lower operating and sustainment costs. The KC-130J is in high demand as it provides tactical air-to-air refueling, assault support, close air support and Multi-sensor Imagery Reconnaissance capabilities in support of Special Purpose MAGTFs and deployed Marine Expeditionary Units. The FY 2021 budget requests \$448.0 million in APN to procure five KC-130Js through the USAF MYP contract, and \$120.2 million in APN for targeted improvements including

increased survivability through advanced electronic countermeasure modernization, Link-16 digital interoperability, and obsolescence upgrades for Harvest HAWK ISR/Weapon Mission Kit and Hellfire variant compatibility and improved full motion video data-link.

Tilt-Rotor Aircraft (USMC MV-22 Osprey and Navy CMV-22B)

Marine Corps MV-22 Ospreys currently have a permanent presence in INDOPACOM, CENTCOM, and EUCOM, and supporting crisis response missions for AFRICOM. In December 2019, Special Purpose MAGTF rapidly responded with additional security at the U.S. Embassy in Baghdad, Iraq using the unique speed and range of the MV-22. The Marine Corps plans to procure 20 additional aircraft through the MYP (FY 2018-2022). The MV-22 readiness program, comprised of Common Configuration-Readiness and Modernization (CC-RAM) and nacelle improvements, is the MV-22 community's optimized plan to increase mission capable rates by 15 percent. The FY 2021 budget requests \$90.3 million in RDT&E for continued MV-22B development and product improvements; \$341.6 million in APN for 3 MV-22s and long-lead materials; and \$312.8 million for modifications, of which \$168.3 million is for CC-RAM.

The Navy is continuing development of Carrier On-board Delivery (COD) mission aircraft, leveraging MV-22 investment to recapitalize the legacy C-2 fleet with CMV-22B tilt-rotor aircraft. CMV-22B's first flight occurred in December 2019 and the aircraft transitioned into developmental test in January 2020. The FY 2021 budget requests \$42.3 million in RDT&E for continued development, testing, and product improvements; \$632.7 million in APN for six CMV-22Bs and long-lead materials; and \$23.2 million for readiness and interoperability improvements.

CH-53K Heavy Lift Replacement Program

The CH-53K remains the only fully marinized, heavy-lift rotorcraft capable of supporting current and future warfighting concepts for the naval force. In the past year, CH-53K has executed a Government/Industry Joint Program Plan, demonstrating significant progress in executing development and flight test activities. Notably, the most significant technical challenge of Exhaust Gas Re-ingestion and associated engine integration issues has been resolved, and demonstrated in flight test in fall 2019. To date, the CH-53K has flown more than 1,680 flight test hours toward the completion of flight test and is currently 40

percent complete with development test in support of operational test. During FY 2021, the program will continue to execute developmental test flights including ship board operations, begin modifying system demonstration test article aircraft into the production configuration to support operational test, and perform initial pilot and crew training for operational test.

The FY 2021 President's Budget requests \$406.4 million in RDT&E to continue the CH-53K development and test, and \$1.0 billion in APN for procurement of seven low rate initial production aircraft, including advanced procurement and initial spares.

Unmanned Naval Aviation

The Department has placed a priority on the development and fielding of unmanned systems leading to a fully integrated manned and unmanned fleet. Unmanned technology will not replace our Sailors and Marines; instead, it will unlock their full potential as the Navy integrates this technology within our total force structure.

MQ-4C Triton

The MQ-4C is a critical capability and capacity enabler in the Navy's Maritime ISR&T transition plan. Under this initiative, Triton fills a vital role for the Joint Forces Maritime Component Commander by delivering persistent and netted maritime ISR, and furthers our plan to retire legacy EP-3E aircraft as MQ-4Cs are delivered to the Fleet. FY 2021 investments reflect a production pause that allows for full programmatic focus on Multi-INT development to support delivery of previously procured air vehicles and control stations to achieve IOC in FY 2022.

The FY 2021 budget requests \$11.1 million in RDT&E to continue Triton baseline development activities, \$178.8 million in RDT&E for Multi-INT modernization, and \$163.6 million in APN for procurement of key elements of support costs. These support costs include trainer/training equipment, peculiar ground support equipment, government and contractor production team, interim contractor support for the Baseline Early Operational Capability, aircraft spares, and retrofit of one control station to the Multi-INT configuration.

MQ-25 Carrier Based Unmanned Aerial System (UAS)

The Navy remains fully committed to unmanned carrier aviation as an integral part of the future carrier air wing (CVW). Reflecting this commitment, MQ-25 is designated a

Maritime Accelerated Acquisition Program with a requirement to deliver the world's first carrier-based UAS no later than 2024, only six years after awarding the Engineering and Manufacturing Development contract. In keeping with this directive to deliver a mission critical capability to the Fleet as rapidly as possible, the MQ-25 program successfully completed the first test flight of the contractor-owned MQ-25 test asset on September 19, 2019, just 13 months after contract award. This testing provided early learning and discovery for major systems and software, allowing for adjustments significantly earlier in the development process than traditional acquisition programs. MQ-25's primary mission is a carrier-based tanker to extend the range, reach, and lethality of the CVW with its secondary mission as an ISR platform. MQ-25 tanker aircraft will be a force multiplier, reducing the use of F/A-18E/Fs for recovery and mission tanking and freeing these tactical aircraft to execute their primary strike fighter mission role, increasing strike fighter capacity within the CVW. A key MQ-25 enabler for CVW operations is the Unmanned Carrier Aviation Mission Control System (UMCS) and its associated infrastructure on shore and aboard carriers. The UMCS is required to command and control the MQ-25 air vehicle and payload.

The FY 2021 President's Budget requests \$266.97 million in RDT&E to complete the procurement of three system development test article aircraft under a fixed-cost contract, to continue development of the MQ-25 air system and UMCS, and \$60.9 million in OPN for installation of UMCS aboard aircraft carriers.

Counter Unmanned Aircraft Systems (C-UAS)

The Navy continues implementation of integrated C-UAS solutions designed to protect high value and critical naval assets afloat and ashore as well as basic defensive measures at priority shore installations against the threats posed by unmanned aircraft systems. Our C-UAS efforts focus on maintaining commonality of current C-UAS solutions while rapidly evaluating, improving and implementing an integrated family of systems to meet evolving threats afloat and ashore. We are rapidly pursuing refinement of material solutions, threat-based mission assessments, development of advanced target discrimination and defeat capabilities while continuing installation, integration, improvement and sustainment of C-UAS capabilities at priority sites/installations and afloat platforms. We continue to engage with the Army as the designated C-UAS Executive Agent (EA) and provide support in standing up the C-UAS Joint Capabilities Office. Additionally, in partnership with the C-UAS EA, we plan to

refine an open architecture solution for common C2 system, as well as, identify or develop additional detect and deter capabilities to integrate into the C-UAS family of systems.

MAGTF Expeditionary UAS (MUX)

The MAGTF Expeditionary UAS (MUX) will provide a competitive advantage to naval expeditionary forces operating in contested maritime and littoral spaces. The MUX family-of-systems will include land-based and sea-based platforms conducting scalable multi-functional Command, Control, Communications, Computers and ISR, Maritime Surveillance, Electronic Support, Electronic Attack, Airborne Early Warning, and Data Communications Relay. MUX is currently envisioned to be a modular land-based MALE-T platform and small-tactical platforms that are shipboard-compatible and runway-independent. The family of systems will provide a multi-mission, long-range, long-endurance platform that will complement MV-22 and F-35 operations in a contested maritime environment. The FY 2021 President's Budget requests \$22.6 million for research and development and prototyping requirements.

Marine Corps Ground Programs

Fleet Marine Forces will support the naval and joint force by persisting as "stand-in forces" inside the range of adversary fires, sustaining contact with our allies and partners overseas, and competing below the level of armed conflict, but always ready for a peer fight. To do this, the Marine Corps will fight at sea, from the sea, and from the land to the sea and will continue to project multiple elements of power via air, ground, and surface capabilities. In partnership with the Navy and deployed in a variety of manners – on ships, connectors, aircraft, and on the ground – Fleet Marine Forces will deter enemy action and, if necessary, be prepared to defeat peer adversaries in contested environments.

Ground-Based Long-Range Precision Fires

The Marine Corps' highest ground modernization priority, a Ground-Based Anti-Ship Missile (GBASM) capability, will provide anti-ship fires from land as part of an integrated Naval Anti-Surface Warfare campaign. This forward-deployed and survivable capability will enhance the lethality of our naval forces and will help to deny our adversaries the use of key maritime terrain.

The Marine Corps' GBASM solution is the Navy Marine Expeditionary Ship Interdiction System (NMESIS), consisting of an unmanned Joint Light Tactical Vehicle-based mobile launch platform, called the Remotely Operated Ground Unit for Expeditionary Fires (ROGUE-Fires), and Naval Strike Missiles (NSM). The NSM is identical to the Navy's Over the Horizon Weapon System deployed on the Littoral Combat Ship and will provide the Marine Corps with a missile capable of sea-skimming, high-g maneuverability, and the ability to engage targets from the side, rather than top-down. This maximizes lethality and missile survivability. Enhancements made to the High Mobility Artillery Rocket System and the development of the Ground Launched Cruise Missile will further strengthen the capabilities of the entire naval fires enterprise.

Combat and Tactical Vehicles

The Ground Combat and Tactical Vehicle (GCTV) Strategy continues to provide a framework for portfolio management and enterprise decision support. The Marine Corps is investing approximately 32 percent of its modernization resources into GCTV systems within the FYDP. The overarching combat and tactical vehicle investment priority is the modernization of Assault Amphibian capability through the Amphibious Combat Vehicle (ACV) program as the means to replace the legacy Assault Amphibious Vehicle.

ACV will be a family of vehicles of various configurations, including personnel, command and control, recovery and 30-mm cannon variants. The ACV Family of Vehicles Acquisition Objective is now 1,122 vehicles. Live Fire Testing of production vehicles began in 2019, and Marines are currently being trained on the vehicle. The Department will conduct Initial Operational Test and Evaluation later this fiscal year with a Full Rate Production decision to follow. As of January 22, three lots of Low Rate Initial Production totaling 90 vehicles have been awarded to BAE Systems. The program office continues to work with BAE on production ramp up. Full Rate Production contract award is anticipated in early FY 2021, with production reaching 120 vehicles per year delivered to the Marine Corps in the out-years of the budget.

Command and Control for a Degraded Environment

Command and control in a degraded environment requires a layered approach with the ability to adapt to changing electromagnetic environments beyond the line of sight. This

layered network approach, coupled with a command philosophy that allows commanders at all echelons the freedom to make decisions while operating within their higher commander's intent, provides a resilient, dynamic C2 structure that harnesses new and emerging technology to support decision superiority.

G/ATOR is a state-of-the-art, ground-based, short-to-medium range, expeditionary radar system designed as a single materiel solution to satisfy air surveillance, air defense, ground counter-fire and counter-battery, and potentially air traffic control mission requirements. Block I achieved Initial Operational Capability in February 2018 and Block II did so in March 2019. Full Operational Capability will be achieved in fiscal year 2025. G/ATOR detects the most formidable air threats to our forces and will out-pace our adversaries for years to come.

Networking On the Move (NOTM) provides Fleet Marine Forces with a robust, over-the-horizon and beyond line-of-sight, digital C2 capability while on-the-move and at-the-halt. NOTM provides maneuvering forces with the ability to seamlessly conduct digital C2 through access, collaboration, and exchange of tactical voice, video, and data while using a full suite of Combat Operations Center tactical software applications and services to support decision-making, fires, and increased multi-domain situational awareness from anywhere in the battlespace. NOTM provides access to three external network enclaves (NIPR, SIPR, and Mission Specific) via wideband satellite communications services, and bridges aerial Link 16 networks to ground forces to increase lethality of dispersed forces. Mounted and dismounted users are connected to these network enclaves via Type 1 encrypted wireless local area networks. NOTM is purpose built to support our naval and joint concepts that require our forces to fight distributed while allowing commanders the ability to effectively command and control forces in a contested all-domain environment.

CAC2S provides the tactical situational display, information management, sensor and data link interface, and operational facilities for planning and execution of Marine manned and unmanned aviation missions in support of the fleet. CAC2S eliminates the current dissimilar legacy systems and adds capability for aviation combat direction and air defense functions. It provides a single networked system that integrates Marine manned and unmanned aviation operations with joint aviation C2 agencies. The Marine Corps intends to fully field CAC2S by FY 2021.

Air and Missile Defense

In great power competition, forward bases and legacy infrastructure will likely be vulnerable to an enemy strike; therefore, the Marine Corps must ensure our forces possess the capabilities required to mitigate those threats for themselves, the fleet, and the joint force. Additionally, naval forces around the world face risks posed by adversaries with ready access to low-cost asymmetric capabilities – whether traditional rockets or unmanned systems – that can strike our forces. With the increasing lethality of these low-cost systems as well as long-range precision fires, air and missile defenses provide critical capabilities for the Marine Corps to protect personnel, equipment, and installations and to persist as the Nation’s “stand-in” naval expeditionary force.

The Marine Air Defense Integrated System (MADIS) family of systems is the Marine Corps’ primary program for providing short-range surface-to-air fires and electronic attack capability. The MADIS is being developed in three versions: a JLTV-integrated version, a light version, and an installation version. In July 2019, the light MADIS successfully defeated a hostile Iranian unmanned aerial vehicle in the Strait of Hormuz.

The Marine Corps also continues to pursue the Medium Range Intercept Capability to provide a defense against cruise missiles. A demonstration in August 2019 at White Sands Missile Range successfully evaluated the integration of the Israeli Tamir missile and Battle Management Control system with the Marine Corps CAC2S and G/ATOR.

James F. Geurts
Assistant Secretary of the Navy
(Research, Development and Acquisition)
12/5/2017 - Present

On Dec. 5, 2017, Mr. James F. Geurts was sworn in as Assistant Secretary of the Navy for Research, Development & Acquisition (ASN (RD&A)), following his confirmation by the Senate November 2017. As the Navy's acquisition executive, Mr. Geurts has oversight of an annual budget in excess of \$60 billion and is responsible for equipping and supporting the finest Sailors and Marines in the world with the best platforms, systems and technology as they operate around the globe in defense of the Nation.

Mr. Geurts previously served as the Acquisition Executive, U.S.. Special Operations Command (USSOCOM), at MacDill Air Force Base (AFB), Florida, where he was responsible for all special operations forces acquisition, technology and logistics. In this position his innovative leadership and technological ingenuity provided rapid and affordable acquisition that positively impacted the USSOCOM acquisition work force and the special operations forces capability on the battlefield. These contributions were recognized by both private and public institutions during his tenure to include earning the Presidential Rank Award, USSOCOM Medal, William Perry Award and Federal Times Vanguard Award for Executive of the Year.

Prior to Senior Executive Service, Mr. Geurts began his career as an Air Force officer where he served as an acquisition program manager with engineering and program management leadership positions in numerous weapon systems including intercontinental ballistic missiles, surveillance platforms, tactical fighter aircraft, advanced avionics systems, stealth cruise missiles, training systems and manned and unmanned special operations aircraft.

He has over 30 years of extensive joint acquisition experience and served in all levels of acquisition leadership positions including Acquisition Executive, Program Executive Officer and Program Manager of Major Defense Acquisition Programs.

Mr. Geurts is a distinguished 1987 ROTC graduate from Lehigh University where he received a Bachelor of Science in Electrical Engineering. He holds a Master of Science in Electrical Engineering from Air Force Institute of Technology, Wright-Patterson AFB and in National Security Resourcing from Industrial College of the Armed Forces, National Defense University, Washington, D.C. Mr. Geurts also attended executive leadership and international studies programs at Harvard Kennedy School and George Washington Elliot School.

Vice Admiral James W. Kilby
Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities

Vice Adm. James Kilby is a native of Pound Ridge, New York, and a 1986 graduate of the United States Naval Academy.

Kilby's sea tours were on USS Sampson (DDG 10), USS Philippine Sea (CG 58) and two tours on USS San Jacinto (CG 56). He commanded USS Russell (DDG 59) where he received the Vice Adm. James B. Stockdale Award for inspirational leadership. His major command was on USS Monterey (CG 61) and included her maiden Ballistic Missile Defense (BMD) deployment in 2011.

His shore tours included the Naval Postgraduate School, two tours in Office of the Chief of Naval Operations' Surface Warfare Directorate (OPNAV N96), Navy Personnel Command's Surface Warfare Division (PERS-41) and the Aegis BMD Program Office in the Missile Defense Agency.

Kilby's first flag assignment was standing up Naval Surface and Mine Warfighting Development Center (SMWDC). Following this, he served as commander, Carl Vinson Strike Group and deployed to the western pacific in 2017. His most recent assignment was as Director, Warfare Integration (OPNAV N9I).

He assumed his role as Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities (OPNAV N9) in July 2019.

Updated: 10 October 2019

Lieutenant General Eric M. Smith
CG, MCCDC & DC, CD&I

Lieutenant General Smith is from Plano, Texas and entered the Marine Corps in 1987 through the NROTC program at Texas A&M University. After completing The Basic School and Infantry Officer's Course, he was assigned to 2nd Battalion, 3rd Marines; participating in Operations Desert Shield / Desert Storm. Following a tour as an Officer Selection Officer, he attended the Amphibious Warfare School and then reported to 2nd Battalion, 2nd Marines for duty as Commanding Officer of Weapons and Echo Companies. During this tour he participated in Operation Assured Response in Monrovia, Liberia.

After a tour as a Marine Officer Instructor at Texas A&M University, he attended the United States Army Command and General Staff Course. His next assignment was as the Naval Section Chief at the U.S. Military Group in Caracas, Venezuela from 2001-2003.

From 2003 until 2006, he served in the 1st Marine Division as the Division Current Operations Officer; Executive Officer of Regimental Combat Team 1; Commanding Officer of 1st Battalion, 5th Marines; and Assistant Chief of Staff G3. During this period he completed two deployments to Iraq in support of Operation Iraqi Freedom. Subsequent assignments were as a student at the Marine Corps War College, Senior Aide to the Commandant of the Marine Corps, and Director of the Fires and Maneuver Integration Division at the Marine Corps Combat Development Command.

From 2009 until 2012 he served in the 2nd Marine Division as the Assistant Chief of Staff G3 and Commanding Officer of 8th Marine Regiment; completing a one-year deployment to Afghanistan in support of Operation Enduring Freedom.

In June of 2012 he reported for duty as the Director of Capability Development Directorate, and in May of 2013 he was assigned as the Senior Military Assistant to the Deputy Secretary of Defense.

From July through November of 2015 he commanded Marine Corps Forces Southern Command in Miami, Florida, and was then transferred to the Pentagon to serve as the Senior Military Assistant to the Secretary of Defense.

From February 2017 until June 2017, he served as the Assistant Deputy Commandant for Plans, Policies and Operations. From June 2017 until July 2018, he served as the Commanding General, 1st Marine Division. From August 2018 until June 2019, Lieutenant General Smith served as the Commanding General, III Marine Expeditionary Force.

On 13 June 2019, Lieutenant General Smith assumed responsibility as the Commanding General, Marine Corps Combat Development Command, and the Deputy Commandant for Combat Development and Integration, Headquarters, U.S. Marine Corps.

**WITNESS RESPONSES TO QUESTIONS ASKED DURING
THE HEARING**

MARCH 4, 2020

RESPONSE TO QUESTION SUBMITTED BY MR. BERGMAN

Admiral KILBY. MyNavy HR uses simulation-enhanced training to train Sailors to existing and new Fleet technologies. Recruit Training Command (RTC) and follow-on Advanced Schools (A-Schools) use simulation embedded in targeted learning events to enhance training. Specifically, RTC uses tactile and technological simulation while transforming recruits into basically trained Sailors by reinforcing the five warfighting competencies of firefighting, damage control, seamanship, watch standing, and small arms handling and marksmanship during basic military training and recruits' culminating event, Battle Stations 21 (BST-21). BST-21 encompasses a 12-hour, 17-scenario based evolution aboard the training simulator USS Trayer. The different scenarios, many modeled after actual Navy incidents, challenges recruits physically and mentally in the warfighting competencies. Upon successful completion, recruits graduate and either attend a follow-on rating specific A-School or directly report to the Fleet. If attending an A-School, MyNavy HR further exposes the Sailor to simulation-enhanced training to develop their skills in their rating-specific Fleet technology. [See page 12.]

QUESTIONS SUBMITTED BY MEMBERS POST HEARING

MARCH 4, 2020

QUESTIONS SUBMITTED BY MR. WALTZ

Mr. WALTZ. There has been a lot of discussion in the full committee about the Navy's decision to end P-8A procurement at 119 aircraft. Last week, Acting Secretary Modly testified that the P-8A Poseidon is "is the most effective platform that we have, for not only wide area search, but also localization, so that we can actually find, fix and ... finish a Russian submarine." He called it "an incredible weapons platform."

I am particularly concerned about the Navy Reserve squadron at NAS Jacksonville, FL, that operate older P-3 Orions. Last year, this committee authorized three new P-8A aircraft for NAS Jacksonville. The recent reprogramming, however, dropped that number to two total, and I'm afraid that won't be sufficient to operate the same mission.

Can you tell the committee the status of VP-62 at NAS Jacksonville if it is limited to two new aircraft? And what impact could that have on the Navy's ability to continually monitor the East Coast for adversarial submarine threats?

Admiral KILBY. The warfighting requirement for the P-8A is 138 aircraft. The aircraft appropriated to the Navy in the 2020 budget increased the P-8A program of record to 119 aircraft. A program of record less than 138 aircraft accepts increased risk with regard to defense and deterrence capacity. This capacity risk can be mitigated with our Reserve Force. The Navy receiving two additional P-8A aircraft allows our Reserve personnel to begin the process of transitioning away from the P-3C toward the P-8A. VP-62 personnel would be the first to transition due to the training infrastructure that exists at NAS Jacksonville, FL. A full Reserve squadron transition of both VP-62 and VP-69 would require 10 additional P-8A aircraft. Without the required number of aircraft in each Reserve squadron (six per squadron) there will be increased risk with regard to our ASW defense and deterrence capacity.

QUESTIONS SUBMITTED BY MR. VELA

Mr. VELA. CNO has mentioned it will cost \$600M per ship to upgrade the first four LCS ships. What systems would have to be upgraded to keep these ships in the service to their expected service life? How does modernizing a LCS cost more than modernizing a DDG with Aegis Baseline 9?

Secretary GEURTS. The \$600M mentioned by the CNO is the total estimated cost to upgrade LCS 1-4 (not per ship). The average upgrade cost for one of these first four LCS of \$150M is comparable to a DDG 51 Aegis Baseline 9 modernization. LCS 1 through LCS 4 were built to a different technical baseline than the LCS 5 And Follow (LCS 5AF) ships. LCS 5AF incorporated lessons learned from the first four ships and included changes accounting for obsolescence incurred between the 2004 awards of the first four ships and the 2010 awards of the LCS 5AF ships. The CNO's cost estimate for LCS 1 through LCS 4 included costs associated with regular maintenance and modernization over the FYDP, upgrades to bring the ships to the same configuration of the LCS 5AF ships and the upgrades included in the Lethality and Survivability (L&S) package which increase ships' defense and structure. The lists of upgrades that comprise those changes follows. LCS 1 & 3 Upgrades Air Conditioning and Refrigeration AN/WSC-9(V)1 Navy Multiband Terminal Automatic Identification System Aviation Support Command & Control Processor (C2P) Common Data Link Management System Compressed Air Systems Engineering Control System Fire Detection and Suppression Systems Fuel & Lube Oil Systems Gas Turbine Engines Intelligence Carry-On Program Main Propulsion Diesel Engine Maritime Shipboard Terminal MK-160 Gunfire Control System (GCS) MK20 Electro Optical Sensor System (EOSS) Decoy Launching System/NULKA Personnel Protection and Hazardous Material Potable Water Seawater/Firemain System Surface Electronic Warfare Improvement Program (SEWIP Lite) Ship Structures Shipboard Habitability Ship's Service Diesel Generator Tactical Common Data Link Total Ship Computing Environment Uninterrupted Power System Watercraft Launch and Recovery Waterjets Weapon Systems LCS 2 & 4 Upgrades ADSI Multi-datalink System AN/ARC 210 VHF/UHF AN/WSC-9(V)1 Navy Multiband Terminal Anchoring/

Mooring/Towing C2P Common Data Link Management System Chilled Water System Coatings and Corrosion Control Cranes and Lifts Damage Control/Bio Defense Doors and Closures Engineering Control System Fuel & Lube Oil Systems Hydraulics/Ride Control Identification Friend or Foe Intelligence Carry-On Program Main Propulsion Diesel Engine Maritime Shipboard Terminal MK-160 GCS MK20 EOSS Multi-Vehicle Control System Navigation Networks/CCTV/IVCS NULKA Over the Horizon Missile PSC-5 UHF SEWIP Lite Ship Structures Shipboard Habitability Ship's Service Diesel Generator Tactical Common Data Link Total Ship Computing Environment Waterjets Weapon Systems

Mr. VELA. Last year you testified to the SASC that shipbuilding funds would be important to keep a stable workforce for building LHA-9. What is going to be the impact to the workforce now that those funds have been reprogrammed?

Secretary GEURTS. The Navy greatly values the capability that LHA-class ships bring to the Fleet, and the FY 2021 budget request accelerated LHA 9 from FY 2024 to FY 2023. Even with that acceleration, the 4 of 2 funding appropriated by Congress in FY 2020 for additional acceleration was early to need. The Navy is committed to the program and will request funding in future budget years to fully fund the program in order to best support workload stability and the shipyard's workforce, within our overall budget constraints. The Navy will also award a LHA 9 Long Lead Time Materials contract in April 2020 to help provide stability to the industrial base and minimize any workforce impacts by maintaining the accelerated ship construction schedule.

Mr. VELA. The CNO has put out a lofty goal to have all ship maintenance availabilities end on time. How is the acquisition strategy evolving to support the CNO's objective and does firm fixed-price contracting continue to be the right contract type? What authorities does the Navy need from Congress to improve ship delivery from maintenance availabilities? What lessons have been learned for ship maintenance and modernization during your tenure, and what policies have you put in place to leverage those lessons learned?

Secretary GEURTS. The Navy is working to support the CNO's objective for on-time delivery of ships from maintenance availabilities. The acquisition strategy will continue to use fixed priced type contracting while implementing new approaches to: provide stability and predictability to the industrial base; improve the completeness, accuracy and timeliness of planning; adjust maintenance schedules to level load the ports; and streamline Navy inspection points to improve efficiency. Revised acquisition strategies—including vertical and horizontal groupings—will provide increased workload stability and predictability, incentivizing industry to grow the needed capacity. Vertical groupings for ships with similar start dates will include multiple overlapping availabilities within a single solicitation. The Navy awarded the first three-ship vertical grouping contract in February 2019 for USS Arleigh Burke (DDG 51), USS Bulkeley (DDG 84) and USS Gunston Hall (LSD 44). Horizontal groupings for ship availabilities occurring in a series will include sequential availabilities within a single solicitation. The first horizontal grouping contract was awarded in September 2019 for USS Chosin (CG 65) and USS Cape St. George (CG 71). By awarding multiple availabilities, industry gets a backlog of work that creates confidence in hiring and retaining a skilled workforce and investment in infrastructure. Additionally, the Navy has worked with the Fleet to make maintenance schedule changes when necessary to level load the ports, ensuring that there is sufficient capacity to execute the planned work within the port. The Navy has submitted a FY 2021 legislative proposal requesting Congress provide additional flexibility to use expired funds under 31 USC § 1553(c) for changes in contract scope for work on ship overhauls, modernization, maintenance and repair, and mitigate delays in ship availabilities that result from the time-consuming upward obligation process. In addition, the Navy has requested funding in our FY 2021 budget to continue the pilot program that authorizes private contract ship maintenance for the Pacific fleet through the Other Procurement Navy 5 of 2 (OPN) account. We will continue to monitor the progress of the OPN pilot with the Commander, Pacific Fleet to determine how this new flexibility improves performance and efficiency in ship maintenance.

Mr. VELA. How will Marine Corps modernization requirements evolve as a result of the Commandant's Planning Guidance? Can you provide some examples of where the Marine Corps is partnering with the Army Futures Command?

General SMITH. The Commandant's Planning Guidance directs the Marine Corps to realign our efforts to pursue capabilities for a more lethal force in order to counter peer adversaries. As a result, in the fiscal year 2021 budget request, the Marine Corps has sought to modernize by reallocating funds to our highest priority requirements. These key investments include ground-based long-range precision fires, unmanned systems, air and missile defense, command and control systems for

a degraded environment, ground mobility modernization, and emerging capabilities. The Marine Corps will continue to wargame and experiment our concepts and plans through a constant, analytical, and iterative approach. We will make adjustments to our modernization requirements along the way, and as the smallest service, we will aim to be the most nimble. The Marine Corps Combat Development Command and Army Futures Command are in direct contact and collaborate in every instance possible. We are partnering on programs for the individual Marine and Soldier, such as personal protective equipment, radios, individual weapons, and polymer ammunition. Additionally, the Marine Corps and Army are currently collaborating on larger programs, such as the joint light tactical vehicle and ground-launched missiles.

