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Before the

Subcommittee on Seapower

COMMITTEE ON
ARMED SERVICES

UNITED STATES SENATE

HEARING TO RECEIVE TESTIMONY ON
ON MARINE CORPS GROUND MODERNIZATION
AND NAVAL AVIATION PROGRAMS
IN REVIEW OF THE DEFENSE AUTHORIZATION REQUEST
FOR FISCAL YEAR 2020 AND
THE FUTURE YEARS DEFENSE PROGRAM

Wednesday, April 10, 2019

Washington, D.C.

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10   U.S. Senate

11   Subcommittee on Seapower

12   Committee on Armed Services

13   Washington, D.C.

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15   The subcommittee met, pursuant to notice, at 10:02 a.m.

16 in Room SR-232A, Russell Senate Office Building, Hon. David

17 Perdue, chairman of the subcommittee, presiding.

18   Subcommittee Members Present: Senators Perdue

19 [presiding], Ernst, Tillis, Hawley, Hirono, Blumenthal and

20 King.

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1   OPENING STATEMENT OF HON. DAVID PERDUE, U.S. SENATOR

2 FROM GEORGIA

3   Senator Perdue: Good morning.

4   Before we begin this hearing this morning, I would like

5 to observe a moment of silence for the three marines that we

6 lost this week and the contractor at Bagram Airfield in

7 Afghanistan. Our thoughts and prayers are with the families

8 in this time of loss. So if you will indulge me, I would

9 like us to take a moment of silence. Thank you.

10   [A moment of silence was observed.]

11   Senator Perdue: Thank you.

12   It is a reminder that this is a dangerous business that

13 you and your men in your commands -- men and women in your

14 commands face every day. So our thoughts are with those

15 families.

16   The Senate Armed Services Subcommittee on Seapower

17 convenes this morning to examine Navy and Marine Corps

18 aviation programs and Marine ground programs in review of

19 the defense authorization request for fiscal year 2020 and

20 the future years defense program.

21   We welcome our four distinguished witnesses: the

22 Honorable James F. Geurts, Assistant Secretary of the Navy

23 for Research, Development, and Acquisition; Lieutenant

24 General David H. Berger, Commanding General of the Marine

25 Corps Combat Development Command and Deputy Commandant for

1 Combat Development and Integration and the nominee to be the

2 next Commandant; Lieutenant General Steven Rudder. We will

3 not talk about call signs for these next two witnesses this

4 morning. But Deputy Commandant of the Marine Corps for

5 Aviation; and Rear Admiral Scott Conn, Director of Air

6 Warfare for the Office of the Chief of Naval Operations.

7 Thank you for being here this morning, gentlemen.

8   In this subcommittee's first public meeting, we

9 received testimony regarding shipbuilding, which provided

10 great insight into how the Department is addressing this era

11 of great power competition, as described in President

12 Trump's National Defense Strategy.

13   In this hearing, we intend to further that effort and

14 focus on naval aviation, as well as Marine ground programs.

15 Specifically, we hope to address how the Navy and Marine

16 Corps are adjusting their aviation and ground modernization

17 strategies to support the National Defense Strategy.

18   The world is more dangerous now than anytime in my

19 lifetime in my opinion. We face complex threats from China,

20 North Korea, Russia, Iran. Now more than ever, our Navy and

21 Marine Corps need capable fleets and robust air and ground

22 force capabilities in order to deter aggression, project

23 power, and support our allies.

24   Not since the end of the Cold War has air power been

25 forced to operate in a contested environment both to project

1   power and to provide fleet defense. The ability to operate

2   in a complex threat environment requires the Navy to develop

3   and field cutting edge capability while modernizing current

4   weapon systems and maintaining an extremely high level of

5   training and readiness.

6   I look forward to hearing from our witnesses today

7   about the Navy and Marine Corps plans to balance these

8   competing priorities to balance a more modern and lethal

9   force as quickly as possible.

10   Additionally, I would like to review a number of other

11 aviation-related topics, including the future carrier air

12 wing and the balance of fourth and fifth generation

13 aircraft, as well as manned/unmanned teaming with UAV; depot

14 maintenance capability and performance to ensure our weapon

15 systems are ready for the high end fight; next, F-35

16 integration into the fleet and its performance both deployed

17 and in training; next, psychological episodes in the Navy

18 and Marine Corps aircraft -- I am sorry -- physiological

19 episodes in the Navy and Marine Corps aircraft actions

20 underway to solve underlying issues.

21   The threats posed by our adversaries equally apply to

22 the Marine Corps ground elements. The ground combat element

23 and logistics combat element, two critical parts of the

24 Marine Air Command Task Force, must also modernize to meet

25 these new threats while maintaining a high level of

1   readiness. I look forward to hearing how the Marine Corps

2   intends to modernize and field new equipment to meet

3   challenges facing the future battlefields and ensure our

4   marines have the tools they need to win in battle.

5   This subcommittee will continue to work with the Navy

6   and Marine Corps to build aviation and ground capabilities

7   ready to defend our national interests, while demanding the

8   best use of every taxpayer dollar.

9   I look forward to our witnesses' testimony.

10   I now recognize Ranking Member Senator Hirono.

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1   STATEMENT OF HON. MAZIE K. HIRONO, U.S. SENATOR FROM

2   HAWAII

3   Senator Hirono: Thank you very much, Mr. Chairman.

4   And I also welcome our witnesses this morning. Thank

5   you for your service.

6   I echo a lot of what the chairman has always said, but

7   repetition is also good because it sticks in our minds.

8   So in today's discussion, we will examine how the

9   Department of the Navy's fiscal year 2020 budget request for

10   Navy and Marine Corps aviation programs would help increase

11   readiness, address shortfalls in munitions, pilots, and

12   maintenance personnel, and modernize our strategic

13   deterrence capabilities. We will also hear from our

14   witnesses about how the budget request supports Marine Corps

15   ground modernization programs. Navy and Marine Corps

16   aviation programs play a critical role to supporting and

17   advancing our country's strategic interests in the Indo-

18   Pacific region, including from bases in Hawaii.

19   As we consider the fiscal year 2020 budget, we need to

20   consider the significant challenges we face in naval

21   aviation. In particular, we need to hear more about how the

22   new National Defense Strategy will impact the Department of

23   the Navy's aviation programs. One such challenge will be

24   meeting the guidance of the Secretary of Defense to achieve

25   a level 80 percent readiness in the tactical aviation

1   inventory.

2   Another challenge will be to ensure that our flying

3   operations are as safe as we can make them. We all

4   understand that flying operations are inherently dangerous.

5   Nevertheless, our hearts are touched whenever we lose any of

6   our brave men or women in training operations, and

7   specifically we regret the recent loss of the AH-1 crew in

8   Yuma, Arizona. I hope you will extend our condolences to

9   their families.

10   In a broader sense, we need to understand whether there

11   may be some pattern accidents in Marine Corps or Navy air

12   operations. Navy and Marine Corps pilots have been

13   experiencing problems with the environmental control systems

14   in certain aircraft, mainly F-18's and T-45's, that have

15   resulted in what the chairman referred to as physiological

16   episodes. While most of these episodes have not led to

17   accidents, they are troubling nonetheless.

18   Last year, we enacted a provision in the fiscal year

19   2019 NDAA that establishes a national commission on military

20   aviation safety to review aviation safety issues. In

21   particular, this commission is charged with reviewing the

22   rates of military aviation mishaps between fiscal years 2013

23   and 2018 compared to historical aviation mishap rates and

24   making an assessment of the underlying causes contributing

25   to unexplained physiological episodes. The commission is

1   not due to report its findings until March 2020. So we need

2   to be sure that the Navy and Marine Corps are taking

3   appropriate measures to reduce accidents in the meantime.

4   In recent years, naval aviation has faced challenges of

5   a high operational tempo and uncertainty in the fiscal

6   environment. We need to hear from the services what

7   progress is being made to address these problems.

8   I would also like to discuss what the Department of the

9   Navy is doing to address corrosion, a significant issue that

10   costs the Department $20 billion a year. I will continue to

11   support efforts to help prevent and treat corrosion, to

12   mitigate its impact on the readiness of our forces.

13   This hearing will also provide a chance to discuss some

14   of the ongoing issues with the F-35 program. I am

15   interested in learning more about how the Navy and Marine

16   Corps view the F-35 Joint Program Office's plans to

17   modernize the F-35 fleet on a faster pace than was

18   envisioned for the original block 4 upgrade program.

19   I would also like to hear about the investments the

20   Navy and Marine Corps are making in training and maintenance

21   operations, as well as about problems in the Marine Corps

22   CH-53K program and what steps the Department is taking to

23   correct the cost growth and schedule delays in this program.

24   Finally, as we evaluate the budget request for the

25   Marine Corps, we must also make sure our marines have

1   modernized ground platforms. The fiscal year 2020 budget

2   request includes $3.1 billion for Marine Corps procurement

3   and $623 million for research, development, test, and

4   evaluation funding. The budget request supports the

5   continued development of the amphibious combat vehicle. The

6   ACV is a new armored personnel carrier, and it will support

7   expeditionary maneuver warfare for ground combat forces. In

8   addition, the Marine Corps continues to procure a joint

9   light tactical vehicle, which provides increased protection

10   and performance over the legacy Humvee fleet. I welcome an

11   update from our witnesses on the status of both of these

12   programs.

13   Thank you again, Mr. Chairman, and I look forward to

14   hearing from the witnesses.

15   Senator Perdue: Thank you.

16   I think, Secretary Geurts, you have an opening

17   statement?

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1   STATEMENT OF HON. JAMES F. GEURTS, ASSISTANT SECRETARY

2 OF THE NAVY FOR RESEARCH, DEVELOPMENT, AND ACQUISITION;

3 ACCOMPANIED BY LIEUTENANT GENERAL DAVID H. BERGER, USMC,

4 COMMANDING GENERAL, MARINE CORPS COMBAT DEVELOPMENT COMMAND

5 AND DEPUTY COMMANDANT FOR COMBAT DEVELOPMENT AND

6 INTEGRATION; LIEUTENANT GENERAL STEVEN R. RUDDER, USMC,

7 DEPUTY COMMANDANT FOR AVIATION, HEADQUARTERS UNITED STATES

8 MARINE CORPS; AND REAR ADMIRAL SCOTT D. CONN, USN, DIRECTOR,

9 AIR WARFARE, OFFICE OF THE CHIEF OF NAVAL OPERATIONS

10   Mr. Geurts: Yes, sir.

11   Chairman Perdue, Ranking Member Hirono, and

12 distinguished members of the subcommittee, thanks for the

13 opportunity to appear before you today to address the

14 Department of the Navy's fiscal year 2020 budget request.

15   Joining me today are Lieutenant General Dave Berger,

16 Deputy Commandant for Combat Development and Integration;

17 Lieutenant General Steve Rudder, Deputy Commandant for

18 Aviation; and Rear Admiral Scott Conn, Director of Air

19 Warfare.

20   With your permission, I intend to provide a few brief

21 remarks and put my statement in for the record.

22   Senator Perdue: Yes, sir.

23   Mr. Geurts: I would like to start by thanking the

24 subcommittee and all of Congress for passing the 2019 bill

25 on time. On-time receipt of the full budget allowed us to

1   expedite the delivery of lethality and readiness to our

2   sailors and marines while achieving cost savings through

3   more efficient contracting and more efficient programs. It

4   also helped stabilize the industrial base and supply base,

5   both of which are key to our success.

6   While we gain great benefit from an on-time 2019

7   budget, we are once again threatened by the prospect of

8   returning to harmful effects that impact our service

9   readiness and our modernization as a result of a continuing

10   resolution for the coming year. Budget uncertainty

11   associated with a continuing resolution adds instability,

12   inefficiency, delays contracting, and delays fielding of

13   critical capabilities while introducing unneeded risks into

14   warfighting readiness.

15   Even more devastating to our recovery would the return

16   of Budget Control Act limitations. Budgets commensurate

17   with the sequestration caps would not only immediately

18   reverse the progress we have made to date but would inflict

19   a disastrous impact on our future readiness and

20   modernization.

21   Our 2020 budget request recognizes our continued focus

22   to fully restore our readiness while ensuring we develop and

23   field the technologies and capabilities that will ensure we

24   maintain our competitive military advantage. The budget

25   submission delivers the aviation and ground vehicle

1   readiness and modernization investments required to deliver

2   on the National Defense Strategy. It demonstrates our

3   continued commitment to ensuring our sailors and marines

4   have the equipment they need to execute our national

5   security.

6   While we are here to discuss our 2020 budget request, I

7   would also like to recognize the sailors and marines who are

8   engaged in combat and operational activities around the

9   world as we speak, three of which gave the ultimate

10   sacrifice earlier this week. Thank you, sir, for

11   recognizing them at the beginning of this hearing. We keep

12   their loved ones and their teammates in our thoughts and

13   prayers.

14   We have also offered our full support to our Japanese

15   partners as they lost an F-35 earlier this week, and we are

16   committed to giving them all the support we can as they work

17   through that issue.

18   Thank you for the strong support this committee has

19   always provided our sailors and marines, and thank you for

20   the opportunity to appear before you today. We look forward

21   to answering your questions.

22   [The prepared statement of Mr. Geurts and General

23   Berger and the prepared statement of Mr. Geurts, General

24   Rudder, and Admiral Conn follow:]

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1   Senator Perdue: Thank you, sir.

2   I will be very brief. We are going to have 5-minute

3 rounds, and we will get started now.

4   You know, I would like to open up with the financial

5 side of this conversation before we get into the equipment

6 and the other parts. You mentioned in the last 2 years, we

7 have had no CRs, continuing resolutions, and an on-time

8 appropriation last year. 187 times in the last 45 years

9 since the 1974 Budget Act was put into place, Congress has

10 used a continuing resolution.

11   I have been exploring this for a couple years, and I

12 was on the Harry S. Truman Monday of this week. I asked

13 specific questions of operating people. I have talked to

14 marines in Maron, Spain. I have talked to marines in

15 Australia, everywhere I go, Air Force people in Alaska.

16 Anybody that will sit still and listen to me, I want them to

17 tell us how the CRs affect your fighting capability and the

18 people on the ground, the morale, and the realities of

19 funding maintenance and procurement. That is open for the

20 air guys, the ground guys.

21   Secretary, do you want to start that? But I would love

22 to get your thoughts and specific examples of how this

23 really affects the military in your area of command.

24   Mr. Geurts: Absolutely, sir. And thank you for your

25 interest in recognizing the impacts.

1   I will outline, I would say, it at the macro level in

2   big numbers that have B's alongside of them, which is

3   important. And then I would ask my teammates here to kind

4   of give it more at the deck plate level and what does it

5   mean all the way down to the unit level. And I think both

6   of them are critically important.

7   To the Navy, we see a $20.4 billion impact if we go to

8   a CR for the full year next year. Of that, about $5.2

9   billion would be new start programs that we could not

10 execute. About $5.3 billion would be production rate

11 increases that we have budgeted that we cannot execute, and

12 about $9.9 billion of that are for funds where we have

13 programs that are growing or need that funding and will be

14 capped at their current level.

15   So that is $20.4 billion. That is a big number at the

16 macro level, which impacts ships. It impacts aircraft. It

17 impacts ground vehicles. It impacts research and

18 development. It impacts manpower. It impacts us across the

19 board, all our depot maintenance across the board. And it

20 is not just programs. It is people. It is depot workers.

21 It is highly trained workforce that if there is uncertainty,

22 they are going to move to different jobs. And so not only

23 will it be a delay, it will be a multiplier effect because

24 we will not only lose either those workforces in the depots

25 or on the flight lines or in programs, but the chance to

1   recover them will have kind of a lasting multiplier effect.

2   Senator Perdue: That is $24 billion. Your allocation

3   for naval operations --

4   Mr. Geurts: $20.4 billion.

5   Senator Perdue: $20.4 billion. So is that for fiscal

6   year 2020? Correct?

7   Mr. Geurts: That is for fiscal year 2020. If we have

8   a CR the entire year, there is $20.4 billion of effort we

9   are not going to be able to execute based on the way the

10   CR --

11   Senator Perdue: So directionally, that is around 10

12   percent of your naval operating budget this next year. Is

13   that correct?

14   Mr. Geurts: Yes, sir. And it is big platforms like

15   the additional submarine we are trying to get underway, an

16   additional destroyer we have planned. It is our helicopter

17   replacement system so we can train pilots for all for our

18   helicopter fleets -- that program. It is our new frigate.

19   Based on the testimony yesterday the CNO had, you know, that

20   is a game-changer for us. It impacts across the board at

21   the big program level.

22   Now, I would like to have the witnesses next to me also

23   describe what does it mean at the human element, kind of at

24   the unit level and at the deck plate level because impact on

25   programs is important. Probably even more impactful is the

1   morale and the impact at the human level throughout our

2   formation. General Berger, if you would like to add in.

3   General Berger: Just a couple thoughts. I think at

4   the Title X service headquarters level, clearly covered. At

5   the unit level where General Rudder and I and the Admiral

6   are probably more comfortable talking about, they already

7   have a plan for the following year long before October

8   comes, which is going to cost money, going to cost money to

9   train, going to cost money to deploy forces that are

10   scheduled to deploy. It costs money to purchase the

11   ammunition. It costs money to move the force to where you

12   want to train. If you are on the east coast and you are

13   going to Twentynine Palms to train, all of that costs money.

14   So you forecasted all that and built a budget based on what

15   you thought you were going to get.

16   So when you go into a CR at the unit level, the first

17   question for them is they do not know how long. It is for a

18   given period, but their experience is we may have a second

19   one and a third one and a fourth one. So they begin the

20   year without a knowledge of either, A, what the total budget

21   is going to be or, B, how long are we going to be in this

22   CR. So they have all these decision points about when I

23   will buy airlift, when I will start to move equipment based

24   on what they are guessing they might get.

25   And inevitably what happens is exercises get canceled.

1   Sometimes stuff is moved, but the force cannot get there, so

2   you have wasted money. Or you move past the point where you

3   would buy the airlift and now it is more expensive because

4   if you do it 60 days out it costs one price. If you do it

5   within 30, it is another price.

6   I am going to ask General Rudder if he has other

7   thoughts.

8   General Rudder: That was a great explanation of the

9   deck plate.

10   And I would offer on top of that is our depots. In the

11   past couple years, we have been able, with the budgets that

12   this committee and both sides have given us, to hire back in

13   the naval FRCs alone 2,900 artisans, engineers, and

14   logisticians. I think the CR does not necessarily make them

15   go away, but it makes the hiring process and retention

16   process that much more challenging.

17   So we are now in a place at our depots we think of our

18   depots now like a weapon system. And we have got the right

19   people in place. We are still training many of those

20   because they are new joins even in fiscal year 2018, but we

21   are now producing on-time products that are going directly

22   back into the squadrons and they are flyable products,

23   whereas before, we were delayed, we were struggling. So I

24   would offer just for the support structure itself, CRs with

25   2 weeks, 3 weeks, 4 weeks start/stop creates a lot of

1   uncertainty in our support structure.

2   Admiral?

3   Admiral Conn: There are a number of new starts that I

4   can mention. I think you are aware of some of them. Let me

5   just go to one point.

6   I had a meeting yesterday with the top gun CO and two

7   lieutenants that are on his staff. And we went over in a

8   classified setting the pacing threat. We went over what we

9   had planned in 2018, what was budgeted in 2019, what we are

10   requesting in 2020, where we are going in 2021. If we go

11   back to a CR, that stuff gets blown up. And what we are

12   transmitting to those lieutenants is we are not committed to

13   winning.

14   Senator Perdue: That is why I asked the question, sir.

15   Great answer. Thank you.

16   Senator Hirono?

17   Senator Hirono: Thank you very much.

18   In fact, the chairman and I have been very focused over

19   the past several months on our continuing use of CRs. And

20   we are in an environment now where I think we have concerns

21   about our readiness posture for all of our services, and I

22   would say that that is one of the biggest negatives of

23   continuing to rely on CRs to keep things going.

24   Having said that, though, I do not know what the answer

25   is to force Congress not to resort to the CRs, to force all

1   of us to come to terms with what we need to do in terms of

2   funding. And we hear from all of you all the time about the

3   need for stable funding and that is the greatest thing that

4   we could do to help you do your jobs. And sad to say we

5   have fallen short of that. We will try.

6   Admiral Conn, the Navy strike fighter shortfall

7   estimate has fluctuated widely over the past several years.

8   In simple terms, there are two pieces to solving the strike

9   fighter inventory gap: buying new aircraft and extending

10   the service lives of the ones we already have.

11   According to budget documents, the Navy has lost some

12   ground for near procurements since last year. Over the

13   period from fiscal year 2019 through 2023, the Navy had

14   planned to buy 308 tactical aircraft. This year over the

15   same period, the Navy only plans to buy 289 aircraft, even

16   taking into account congressional adds to the fiscal year

17   2019 budget.

18   Admiral, why have you reduced the planned aircraft

19   procurements over the FYDP?

20   Admiral Conn: Quite frankly, some of the reduction in

21   aircraft were to pay bills. Some of them were to get

22   wholeness in certain weapon systems, F-35, C2D2, block 4.

23   It came with a bill that we had to pay.

24   Senator Hirono: You had to transfer some money in

25   order to do that with the block 4. Did you not?

1   Admiral Conn: In terms of the budget year.

2   Senator Hirono: Yes.

3   Admiral Conn: Not in year of execution. And then as

4   well as in the 20 I understand.

5   In terms of the strike fighter inventory management,

6   our lowest point based on PB20 budget is about a 51 aircraft

7   deficit in fiscal year 2020, and that decreases to single

8   digits by fiscal year 2024. That is through the F-18

9   procurement that is in PB20. It is the F-35C procurement

10   that is in PB20. And it is also the service life

11   modernization effort, taking those block 2 Hornets making

12   them block 3, get them to 10,000 hours. When you add up all

13   those numbers, that is what is driving it.

14   We are finally in a position of buying or producing

15   more aircraft than we are burning up every year in terms of

16   flight hours. That is going to allow us to get out of older

17   airplanes, provide best of breed opportunities for the

18   Marine Corps. It is going to provide us to be able to start

19   to strike in some of our old airplanes, block 1's that will

20   never be block 3's. It provides enormous opportunity in

21   this budget request.

22   Senator Hirono: So when do we get to that point that

23   you are describing that situation? How many years will it

24   take for us to --

25   Admiral Conn: We get to single digits strike fighter

1   inventory management by fiscal year 2024.

2   Senator Hirono: Fiscal year 2024. We are probably

3   going to keep asking as you during every fiscal year whether

4   we are getting to that goal. Thank you.

5   Again, Admiral, I understand that depot throughput of

6   aircraft at the fleet readiness centers has improved over

7   the last couple of years. Has this improved productivity

8   contributed to improving the strike fighter shortfall

9   situation that we talked about?

10   Admiral Conn: Yes, but let me be very brief here. We

11   have had, since January, a naval sustainment system effort

12   in place and working with industry where we bring in some of

13   the best of industry to look at the various functions we do

14   to maintain our aircraft at the depot level, at the squadron

15   level, how we do engineering, how we do supply. And we have

16   seen some pretty good results from the targeted focus in

17   Lemoore, California and FRC Southwest.

18   We have been able to reduce our planned maintenance

19   intervals on Super Hornets from 120 days to 60 days. And

20   the quality of the product is better. It is getting on a

21   flight schedule within a week, let alone weeks or months.

22   We have been able to reduce our turnaround time, 40

23   percent to some of our highest degrader lists, generators,

24   interrogators, displays in cockpit.

25   We have been able to drive down backlogs in our rudder

1 service zoners that were keeping aircraft down. We had a

2 backlog of over 60 of those parts in January. We got it

3 down to zero, zero in March.

4   All that is allowing us to improve the mission

5 capability rates. In January, we had about 257 mission-

6 capable Super Hornets. Last week, we had a high, a snapshot

7 in time, of 304 in that time period.

8   Senator Perdue: Is that 80 percent?

9   Admiral Conn: That is short of 80 percent. 80 percent

10 would be 320 of the roughly 400 PMAI aircraft.

11   Senator Hirono: I commend you for that. That took a

12 lot of very focused effort to make those kinds of changes

13 and reduce those times.

14   Admiral Conn: It took effort but not a lot of money.

15   Senator Hirono: Which is really music to our ears.

16 Thank you very much.

17   And for the Navy-owned shipyards -- can I just ask one

18 more question of the Admiral? The Navy has begun a

19 multiyear, multibillion dollar rehabilitation program that

20 was long overdue, and I think you had talked about that just

21 now. But what plan of action is the Navy implementing to

22 further improve depot throughput on the F-18 SLEPN, thereby

23 improve F-18 aircraft availability to the fleet? So

24 specifically regarding F-18's.

25   Mr. Geurts: Ma'am, maybe I will take that. Then

1   Admiral Conn can give the kind of operational.

2   So similarly to our shipyards, which were in dire need

3   of recapitalization, we are doing the same thing on the

4   aircraft side. Some of it is in situ, as Admiral Conn said,

5   reenergizing the teams, re-laying out what we can within the

6   facility. That brings you to a place but not all the way.

7   We have invested our normal legislation that says 6 percent

8   of the working capital fund in the facilities. We are at 10

9   percent right now. So we are making up for not having the

10   investment we needed to have in there.

11   And as General Rudder said, we are treating the depots

12   as a weapon system in the fact that we cannot generate the

13   force needed if they are not operating and we do not think

14   of them every day as the key vital enabler for our combat

15   power today. And so we are looking at both immediate

16   investment in people talent and equipment, as well as long-

17   term investment, so that we have them rigged. As we get

18   this readiness improved, we need to sustain that improved

19   readiness. I do not want a sugar high where we bump up real

20   quickly and we have not made the long-term investments that

21   does not allow us to stay up on step. And so that is where

22   we are working across all of our different FRCs to make sure

23   that they can sustain this improved performance we are

24   seeing.

25   Senator Hirono: So do you have a plan for modernizing

1   the fleet readiness centers that is analogous to the Navy

2   shipyard modernization plan?

3   Admiral Conn: We do.

4   Senator Hirono: Good. Thank you.

5   Admiral Conn: And there are three specific examples,

6   if I may. We are investing $42.5 million in this budget to

7   go after some modernization of our FRCs. Multi-access

8   moving machines is one. If you have a landing gear, and you

9   have to drill five holes with the equipment we have today,

10   you put the landing gear down, you line it up with the

11   drill, you drill a hole. Then you got to move the landing

12   gear, realign the drill, and drill a hole. The multi-access

13   machine does all the work. You do the labor once. It

14   reduces timeline. It reduces scrap rate.

15   Another one is a cold spray booth. When we get tail

16   hooks or landing gear in the FRCs, the first thing you have

17   to do is remove the paint. We scrape it and sand it. Cold

18   spray booth -- you put it in the machine. It removes all

19   that material quicker, and there is less chance of damage to

20   that equipment in the process.

21   It is getting our FRCs into the 21st century because

22   they are a weapon system that attacks our readiness

23   challenges.

24   Senator Hirono: Thank you.

25   Thank you, Mr. Chairman.

1   Senator Perdue: Senator Hawley?

2   Senator Hawley: Thank you, Mr. Chairman.

3   I had the chance to sit down with General Neller a few

4   weeks ago, and we talked about a number of things, but one

5   of the issues he raised with me was his concerns about the

6   CH-53 King Stallion and the issues that we are having there.

7   Secretary Geurts, maybe I will direct this question to

8   you. Can you give the committee an update on the CH-53 and

9   the problems we are encountering there?

10   Mr. Geurts: Yes, absolutely. When I came on board now

11 December 2017, that was a program, as I looked at it, that

12 was not where it needed to be. We were not achieving the

13 test points that we needed to at the rate we needed to, and

14 we did not have a real plan to deal with fixes we needed to

15 make in the production aircraft after we discovered them in

16 test. It was not anybody's individual fault. It was just

17 the way we set the strategy was not working for us.

18   And so we took a pause. I took a pause on awarding the

19 production contract. We took a hard look at the team and

20 restructured the test program, really focusing on what do

21 the marines need day one.

22   It is an incredibly important helicopter. General

23 Rudder can explain operationally why. My job is to deliver

24 it with confidence.

25   So we have re-laid out the test program. We have

1   redone our production contracts, and we have included in

2   that negotiation on these contracts we are about ready to

3   award incorporation of the known fixes into the production

4   lot as opposed to retrofitting them after delivery, as well

5   as some capacity in those aircraft to deal with problems as

6   we discover them in the future so we can reduce a

7   concurrency risk, which was really what was bothering.

8   The good news is we have a design that provides the

9   capability. We have tested the hardest parts. So we are

10   fairly confident that we have got the design right. We have

11   some issues we got to work through. And that was the whole

12   goal in that restructured program.

13   So I am in the final stages of getting ready to award

14   that production contract. I would expect that in the next

15   coming weeks. When we do that and we have the restructured

16   test program, that to me gives us a solid program with which

17   then we can go execute and be measured against our

18   execution.

19   Senator Hawley: But you are satisfied that the design

20   is where you want it. You think you have got those issues

21   ironed out.

22   Mr. Geurts: I think we have the major ones ironed out.

23   We are still in the middle of a test program, but we have,

24   to the program's credit, tested a number of what I will call

25   the hard points and, as General Rudder would probably say,

1   corners of the envelope. So I am comfortable. I mean, we

2   got thousands of hours on flying the aircraft. There are

3   some things we need to fix. I want those fixed in the

4   production airplanes when they roll off. I do not want them

5   to have to be a retrofit after the fact. That was the whole

6   idea of our program restructure.

7   Senator Hawley: General Rudder, let me just ask you.

8   The CH-53 sounds very capable. However, do its capabilities

9   justify its premium price over, say, the CH-47? Are we

10   going to get bang for the buck here? To be honest with you,

11   I was disturbed by General Neller's comments, and he

12   expressed pretty significant frustration to me about the

13   status of this program. So is it worth it is what I am

14   asking you.

15   General Rudder: I think if we step back and we look at

16   this program as a heavy lift helicopter, it is the only one

17   that this nation has that can do what it can do. And if you

18   look at what this helicopter has done this past year, we are

19   restructuring it because we have learned the hard way about

20   concurrency, and the Secretary is doing a great job

21   negotiating that concurrency in. So when the marines get

22   it, they will get a good product.

23   But there is no other helicopter in the world that has

24   lifted 36,000 pounds, can take this 100 miles ship to shore

25   with 27,000 pounds at 100 miles and go back and forth all

1   day long. So when you look at the hours this thing -- it is

2   flying today -- over almost 1,500 hours of test time.

3   Now, we need to fix deficiencies. Some is seat

4   cushions, the handholds, the engine gas reingestion. And

5   the vendor and the program office are going to fix these,

6   and we are going to hold them accountable to fix it. But if

7   we look at the future of what this nation is going to have

8   to do with the NDS and distributed operations, you are going

9   to need logistics. You are going to need heavy lift because

10   we are going to be distributed. We are going to be eating a

11   lot of gas. And this is the ship-to-shore connector that

12   will do it for us. There is nothing else out there in the

13   inventory. I know you mentioned CH-47. We could talk about

14   those numbers offline, but that will not get there.

15   And I think the last thing I will say is for the Marine

16   Corps, it has got to be shipboard compatible. I have to be

17   able to put it on the ship, hold it, park it, and that is

18   one of the challenges we have with any of the Navy marine

19   aircraft is that shipboard compatibility.

20   Senator Hawley: Thank you very much.

21   Let me just ask briefly, Admiral, in the time I have

22   remaining here. Let me ask you about the F-35C. Now that

23   it has reached initial operating capability, what is its

24   operational readiness rate? Are you satisfied with that?

25   Where are we?

1   Admiral Conn: The FA-147 IOC in February -- part of

2   this is the numbers. I have 22 of those airplanes right

3   now. Seven of those are in that squadron. They will get

4   their tenth as they begin the workup. We have seen anywhere

5   from 60 percent MC to 80 percent, in excess of 80 percent

6   MC. It depends on which day we are talking about. But

7   remember for the PMAI piece of the F-35C, that is seven

8   airplanes right now. So you see some big fluctuations.

9   Senator Hawley: Thank you.

10   Thank you, Mr. Chairman.

11   Senator Perdue: Senator King?

12   Senator King: Thank you, Mr. Chairman.

13   We have been talking mostly about hardware. I want to

14   talk about people for a bit. I know the Air Force has a

15   significant pilot shortage and mechanic shortage. Bring me

16   up to date on the Marines and the Navy on those two areas.

17   Admiral? There was a GAO report that said this is a

18   persistent problem.

19   Admiral Conn: It said 9 percent shortfall overall, 26

20   percent shortfall in first tour aviators. Part of that is

21   tied to our T-45 when we had to red stripe and we had to

22   shut down for a period of time. We knew that challenge was

23   coming. We are going to have to extend people in

24   assignments or rotate people or squadrons run the

25   maintenance for basic phase. Maybe we do not push those

1   people to them. So that is in terms of where we are.

2   I think some of the authorities you have given us in

3   terms of bonuses, the department head bonus and the increase

4   in rates has had some impact across most type model series.

5   We have seen no impact to the VFA community.

6   Senator King: Talk to me about recruitment rates.

7   Where are we? Are we bringing in as many pilots as we are

8   losing?

9   Admiral Conn: We are bringing in our goal. Now, do

10   people get a vote when they have the option to get out?

11   Senator King: That is the second part of my question

12   is retention.

13   Admiral Conn: Retention? We are seeing a lot of

14   experience, and they are all very good, but some of our best

15   are deciding to go to other things. We are in a competition

16   for talent. The airlines are continuing to hire. But some

17   of these folks are going to grad school. Some of them are

18   starting their own business. The economy is doing well.

19   There are choices. There are sacrifices that we have. It

20   is a challenge that we have. And it is particularly at the

21   more senior levels is where we are seeing the challenges the

22   most.

23   Senator King: Senator Cotton and I about a year ago

24   had what amounted to a focus group with young Air Force

25   officers about flying and why we are losing them. And

1   interestingly, the discussion did not turn on money. We are

2   never going to compete with the airlines.

3   Admiral Conn: True.

4   Senator King: It turned on flying.

5   Admiral Conn: Correct.

6   Senator King: And the concern was getting onto a track

7   that led you to too much time behind a desk, and these are

8   people that joined the service in order to fly. Lifestyle

9   and length of deployments and ability to actually have time

10   in the airplane seemed to be the more important factors.

11   Are you looking at those?

12   Admiral Conn: We do a survey for every pilot that

13   decides to leave. Three factors: not doing what they

14   signed up. They are not flying enough, which means we need

15   to get our readiness where it needs to be to get them in the

16   air.

17   Two, there is some quality of life issues more so in

18   our non-fleet concentration areas, Lemoore being one of

19   them.

20   Three, is the pay gap that is coming up in the surveys

21   that we have done.

22   So the additional authorities for the bonuses, quality

23   of life issues in Lemoore, and everything --

24   Senator King: Quality of life and time in the cockpit

25   is on you.

1   Admiral Conn: It is.

2   Senator King: That is a management challenge.

3   Admiral Conn: Absolutely.

4   Senator King: And I take it a similar story in the

5   Marines?

6   General Rudder: Yes, Senator. We look at really three

7   big bins, and the flight hours is one of them. Pilots want

8   to fly, and for certainly the young pilots. All of these

9   readiness issues we talk about, we want to get to a

10   percentage which looks really good, but what that translates

11   to is flight hours. And if you look at the Marine Corps, in

12   fiscal year 2016, we were at 13.5 hours per pilot on

13   average.

14   Senator King: Per?

15   General Rudder: Per pilot on the average per month.

16   In 2017, we were at 15.4 hours per month per pilot. And in

17   2018, we are at 17.9. And now we stand around 17.1. So in

18   that regard, I think some of the younger pilots are

19   beginning to fly now.

20   Now, the deployment. Some things that are out of our

21   hands a bit and that is we are still in combat. And if you

22   are an AV-8B pilot, you are either on the boat, you are

23   getting off the boat, or you are getting ready to go on the

24   boat again. I mean, it is a pretty quick turn, and we are

25   running those folks pretty hard. The same with the V-22.

1   So then you look at incentives, and incentives are

2 something that it is not all about money and we hear that

3 loud and clear. But it does help in some of the higher

4 grade officers where they have got to make some tough

5 choices.

6   Senator King: You are saying all things being equal,

7 money helps.

8   General Rudder: Money helps. It really does.

9   Senator King: It is hard to argue with that.

10   General Rudder: It is. It is hard to argue with that.

11   Senator King: I have just got a few seconds left.

12   Mechanics. That is a bottleneck too. Is it not?

13   General Rudder: So we have initiated for our higher

14 qualification mechanics -- we have given them a reenlisted

15 bonus. We first started doing it a couple of years ago.

16 And what that has equated to is out of the 1,500-1,600

17 reenlistments, if you had the collateral duty inspector or

18 quality assurance representative duty, which is a higher

19 qualification of mechanics, you were going to get $20,000 to

20 enlist for 4 years. And the deal was that you had to

21 stabilize in that squadron. So with the numbers that we

22 were able to reenlist with that program, it equated to about

23 10 qualified mechanics per squadron that we were able to --

24   Senator King: Are you getting them?

25   General Rudder: We are.

1   Senator King: Because my concern is that if we get

2   into a situation where we are short of both mechanics and

3   pilots and we end up with longer deployments and more of

4   those kind of activities, it becomes a downward spiral that

5   aggravates the problem. I take it you are attentive to

6   that.

7   General Rudder: Yes, sir. I agree.

8   Senator King: Thank you, Mr. Chairman.

9   Senator Perdue: Senator Tillis?

10   Senator Tillis: Thank you, Mr. Chairman.

11   Gentlemen, thank you for being here and for your

12 service.

13   General Rudder, I am kind of curious. I want to get an

14 update on the F-35 and specifically some of the work we are

15 doing down at Cherry Point. We have made some of the

16 initial appropriations for the lift fan facility -- if you

17 google the cradle of civilization in God's country, it is

18 pretty much close to right there and home to about 45

19 percent of the Marine Corps. But other than that --

20   But, no, I am interested in seeing how that is going,

21 how the deployment is going. I know that we have had some

22 information on the production of the Joint Strike Fighter.

23 I do not know if we are shifting to the right, but I would

24 like to get an update first on Cherry Point, what we are

25 doing down there at FRC East, but then more broadly the

1   program. I will start with you, but I am happy to have

2   anybody else.

3   General Rudder: You are referring to really two

4   products that we have ongoing this year.

5   One is the repair facility that North Carolina really

6   helped us very graciously with that. The repair facility is

7   on contract. It should be done by 2020, January of 2020.

8   So that is on track.

9   And then the other side of that is the lift fan test

10   facility. So they will go hand in hand. That should go on

11   contract this year, and it is going to be a 2-year build.

12   So I would imagine that by 2021, we will have that up, and

13   then it will take another year or 2 to qualify that lift

14   fan. But that will be very important for the F-35B because

15   there are only a few places in the country that you can

16   actually test --

17   Senator Tillis: Mainly at Rolls Royce in Indiana.

18   Right?

19   General Rudder: That is correct, Senator.

20   Senator Tillis: And with the current production

21   schedule -- I know at one time when we were first talking

22   about it, we were tracking towards their capacity tapping

23   out at about the end of 2020, beginning of 2021. I do not

24   know if the production schedule has lifted some of that

25   pressure off, but that is what I was particularly concerned

1   with.

2   General Rudder: I think that 2023 is kind of the

3   target that we are looking at, and somewhere before that, we

4   will go to either a longer first shift or a dual shift test

5   fan, lift fan facility workload before we get ours qualified

6   in North Carolina.

7   Senator Tillis: Mr. Chair and for the committee,

8   General Rudder alluded to it, but I want to thank the

9   members of the general assembly and the governor because we

10 went out and reached out to them and told them the economic

11 impact that it was going to have down in the State. And we

12 wanted to make it very clear that the State is solidly

13 behind them. So they appropriated $5 million out of their

14 general fund in North Carolina for the use of the Navy and

15 for the Marines to actually accelerate that project.

16   I will tell you, though, there was a learning there

17 because I went to the speaker and the Senate leader a few

18 years ago. They had the first seed money, and then they

19 went back and added more money. And we have this money that

20 the State is wanting to give the Federal Government, and I

21 had to work a little bit and intervene to get to yes because

22 we were having some sort of procedural review breakdown

23 where they go, well, before we take this check from a State

24 entity, we have got to assess this. So I think that that is

25 one thing. If we want to incent other States to do this

1   when it is in our mutual interests, we want to make sure

2   that that process is streamlined. But I appreciate the end

3   result. I think it is where we ultimately wanted to go.

4   The other question I have, since I have a limited

5   amount of time -- I know what your priorities are. I tend

6   to agree with them and will do everything I can to support

7   them. But I think you also need to do some modeling based

8   on gaming out how the appropriations process is going to go.

9   And if you come in and do a sensitivity analysis, this is

10   what you can do if we appropriate the money you want.

11   But I think we also need to understand what specific

12   programs will be directly impacted. Hopefully, you are not

13   going to peanut butter it and make them all go slower. Some

14   may, just based on priorities, have to be on hold. I think

15   that it will help us work on both sides of the aisle to say

16   these are the material consequences if you get less than you

17   expect to get. And we need to know that beforehand so

18   people know the consequences versus just come up with a

19   generic funding level and then 6 months later, we find

20   everybody starts hemming and hawing because they do not

21   recognize what it is ultimately impact.

22   The last question I have for you all really relates to

23   the future. Now that we see unmanned and other technologies

24   on the near term horizon, I think the other thing that would

25   be helpful in the future is say to what extent are some of

1   these new and emerging technologies going to impact some of

2   your current thinking about already committed to

3   capabilities. So we have got near-term opportunities that

4   probably will not affect near-term priorities for fielding

5   capabilities, but they could in the longer term. And I

6   think that the sooner that we get that so that we get people

7   less obsessed with hitting a number based on what we know

8   today and more focused on the general capabilities that you

9   think are the best for lethality and projection of power, I

10 think that would be very helpful to us.

11   Mr. Geurts: Yes, sir. And just briefly I would say my

12 experience has been, especially coming from special ops, it

13 is an either/and. It is not an either/or. And the real

14 strength is each have their benefits and challenges. And

15 our experimentation approach -- and I will give a shout out

16 to the Marine Corps of actually getting it in the hands of

17 the operational units and letting them experiment with it

18 and really figure out that right balance and how do those

19 each help each other versus compete each other between

20 unmanned and manned and autonomous and manned I think is

21 really where the opportunity lies. It is not one or the

22 other. It is to figure out how to get both the unique

23 capabilities playing best together and operational design

24 will win.

25   Senator Tillis: The best and highest use. But I think

1   that that feedback will be helpful because it will be

2   instructive to our future planning, future production

3   priorities.

4   Thank you all. Thank you for your service.

5   Thank you, Mr. Chair.

6   Senator Perdue: Senator Blumenthal?

7   Senator Blumenthal: Thank you, Mr. Chairman.

8   Major Berger -- well first of all, welcome to all of

9   you and thank you for your service.

10   Major Berger, I was -- I am sorry. General Berger. A

11   bad way to begin --

12   [Laughter.]

13   General Berger: I have been called worse by my wife, a

14   lot worse.

15   [Laughter.]

16   Senator Blumenthal: Well, it sounds like you and I are

17   in the same boat in that regard.

18   General Berger, I was interested to see a recent

19   article -- and I am sure you are familiar with it -- by

20   Dakota Wood about MARSOC basically arguing against the

21   request that is made in the 2020 budget to increase the

22   billets for MARSOC, in fact, arguing that it ought to be

23   disbanded entirely. And I think this is a fundamental

24   question for the Marine Corps, and I would be very

25   interested in your views on that.

1   General Berger: I just want to make sure I understand

2   the question, Senator. Is the question should we expand

3   MARSOC, do I think we should expand it?

4   Senator Blumenthal: I am sorry. The article argues

5   that, in effect, MARSOC ought to be disbanded. It is an

6   article that was printed I believe by the Heritage

7   Foundation, and it is written by a marine strategist who

8   worked in the Marine Corps Forces Special Operations Command

9   between 2012 and 2013, Dakota Wood. And the article is not

10   necessarily the topic of the question, but more the argument

11   made in the article, which is that MARSOC should be

12   disbanded because those billets and those resources could be

13   better used in a more -- to use a word that perhaps fits, a

14   more traditional Marine Corps function. And I wonder if you

15   could expound a little bit on why the Marine Corps is asking

16   to expand MARSOC, and why you think disbanding it would be a

17   bad idea.

18   General Berger: When the Special Operations Command

19   was formed, the Marine Corps did not jump into that game at

20   the time, as most people are aware. We waited. The Army,

21   Navy, and Air Force formed their service components, and the

22   Marine Corps watched from the bleachers to see where things

23   would go.

24   When we create Marine Special Operations Command, it

25   was after a great deal of deliberations, some of which

1   General Rudder and I were more junior to but watched and

2   listened and followed along.

3   At this stage, I would tell you they have -- my

4   personal opinion or our opinion -- that they have developed

5   farther, faster than most thought possible perhaps not

6   because they are wearing the Marine uniform. But we operate

7   sort of as a joint force every day with aviation and

8   logistics and ground. So it was a natural fit for them.

9   And the small unit level leadership that they depend on is a

10   natural fit coming from the Marine Corps.

11   I think they are vital. I think the Special Operations

12   Command and the joint force is better for them. The

13   adjustment of each services' special operations force is an

14   ongoing debate or discussion about what is needed going

15   forward. And that I am not qualified to talk about, sir.

16   Senator Blumenthal: Thank you.

17   Let me ask because my time is limited -- this topic of

18   MARSOC is one that I would like to pursue in the future.

19   But for now, let me move on to a discussion that I had with

20   the Army and Air Force in similar subcommittee hearings

21   regarding combat equipment for women, a topic I know

22   everyone on this panel is familiar with.

23   When I asked the Director of the Army Acquisition

24   Corps, Lieutenant Ostrowski, about this issue, he said the

25   Army has made ongoing adjustments. Just yesterday, I asked

1   the folks from the Navy and I have asked the Air Force as

2   well.

3   I wonder if you could describe for us what the Marine

4   Corps is doing to make sure that this gear, whether it is

5   body armor or other personal equipment, takes account of the

6   needs and so forth of female members of the Marine Corps.

7   General Berger: I can tackle that, Senator. Most of

8   us sitting up here wore the original like OTV or whatever it

9   was called in the mid-2000s. There was small, medium, and

10   large, and you usually did not get whatever size you were

11   after anyway.

12   In between then and now, huge progress and beginning in

13   2012 I think with a great deal of effort towards expanding

14   the fit to fit female marines. We now wear plate carrier

15   vests, and all the way from the 2 percent to the 98 percent,

16   it is a solid fit. It was designed with them in mind, not

17   as an afterthought. But the plate carrier vests we wear

18   right now were designed with female shapes and sizes in mind

19   from the beginning.

20   Senator Blumenthal: Thank you very much. My time has

21   expired. Thank you for being here today.

22   Senator Perdue: Admiral Conn, would you talk about the

23   current fleet of airplanes? In the last decade since

24   sequestration, we had a 25 percent disinvestment in the

25   military. So that is from a static number. It does not

1   count what should have increased with inflation, et cetera.

2   So 25 percent has put you in a position today where you are

3   flying more fourth gen than you would like. Would you talk

4   about the mix of fourth gen-fifth gen today and your future

5   vision of how you would interface the fifth gen planes as

6   they start to enter into your fleet?

7   Admiral Conn: Number one, we will not get to our

8   program 50-50 mix until 2030.

9   Number two, our first fifth gen aircraft will deploy in

10   fiscal year 2021.

11   When I look at the weapon system that flies off our

12   carriers, known as a carrier air wing, I look at the

13   combined capability because we can carry 60 to 70 aircraft,

14   elevated sensors. We can throw mass at the problem.

15   I foresee the F-35 operating forward, sensing,

16   collecting, and relaying information back to a weapons

17   truck, known as a Super Hornet. I see the E-2D involved in

18   relaying critical information to all those fighters out

19   there while the EA-18G Growler, with next generation jammers

20   providing coverage.

21   So it is that system of systems, and quite frankly, it

22   is where the whole is greater than the sum of the parts.

23   And that is why we can do the 50-50 mix because of the

24   capabilities and capacities that we can put on our aircraft

25   carriers. And that is relevant until about the end of the

1   next of the next decade, 20.

2   And then we are going to have a NGAD discussion, next

3   generation air dominance. The A-way will be complete in a

4   couple months, report out this summer, which will inform

5   future choices. I see greater unmanned capacity going on

6   our air wings, and we are going start with the MQ-25 that we

7   are going to field as soon as possible that is going to

8   extend the operational reach of that air wing. We are going

9   to look for opportunities. Part of this is when I look to

10   the future, I look to the past. PBYs and you look what they

11   did in World War II, out there operating far from the fleet,

12   relaying actionable information to decision-makers,

13   something that we probably need to look at and start getting

14   after.

15   Senator Perdue: You talk about getting information

16   from a little different parts, and the sum of the parts

17   equaling more than the whole. Does that include integration

18   with what the Air Force is trying to do with ABMS right now,

19   the advanced battle management system, with the Army?

20   Admiral Conn: One, we will have the tactical grid that

21   I think the joint force is going to have to plan.

22   Two, I am looking for weapons' quality to track

23   information from anywhere that I can get it, either internal

24   to the carrier strike group or battle strike force or

25   external. I do not care where it comes from. I just want

1   it in those cockpits, sir.

2   Senator Perdue: Thank you.

3   General Berger, real quick. The Marine Corps started

4   to field the JLTV in its 2019 request, and you have

5   increased the numbers requested since then. At the same

6   time, the Army -- and this may be just their decision to

7   reallocate dollars -- has actually slowed it down. I am not

8   trying to read anything into that. But what is your

9   assessment of the JLTV program today, and what feedback are

10   you getting from your marines as they are beginning to

11   operate that?

12   General Berger: Thanks, Senator, for the question.

13   Your assessment is accurate in terms of the Army

14   delaying a full rate production decision, which we think

15   will be in May now, unless you have heard something

16   different. But they did that because there were three

17   aspects of the vehicle they wanted the vendor to continue to

18   work on before they went to a full rate production decision.

19   In our budget, we procured 14,000 this year. They are

20   being fielded this month. They will deploy this year on

21   board ship.

22   So how are they doing? I think we will know the answer

23   to that within a month or 2 because marines will begin

24   driving them later on this month, and they will go on

25   deployment later on this year.

1   We are happy with the vehicle. It does things that the

2   Humvee could never be able to do.

3   Senator Perdue: In that vein, I have a few seconds

4   left. Let me go ahead and get this out of the way too --

5   this question for you, General Berger. Since canceling the

6   expeditionary fighting vehicle, the EFV, in 2011, you have

7   chosen to pursue a more measured multi-phase acquisition

8   strategy, and you moved toward combining the ACV 1.1 I

9   believe and the 1.2.

10   Can you give us an update on that strategy? Do you

11 still have confidence that is the right direction? And how

12 do you see that fitting in, and when can we expect to

13 deliver that vehicle?

14   General Berger: Thanks, Senator.

15   It is in test right now, and the reason -- I will not

16 speak for the Secretary. We are happy as a Marine Corps

17 when a system is doing better when you had forecasted, which

18 is why the Secretary was able to do it. The 1.1 was doing

19 so well that we can move faster. We are happy with that

20 vehicle as it is moving through test so far. The marines

21 are happy driving it compared to the AAV that they are

22 operating.

23   And I will ask Secretary Geurts if he has any other

24 comment.

25   Mr. Geurts: Yes, sir. I mean, it was my decision to

1   put those together. And we did that.

2   I will applaud the team, a really smart government

3   team, that thought on how to capitalize up-side opportunity.

4   We spent a lot of time managing down-side risk. We are not

5   in the acquisition community nearly as proficient as taking

6   advantage of something. And so the team did a lot of work

7   to test to the 1.2 requirements even though it was a 1.1

8   design. So that allowed me to have the confidence that we

9   have the data, that we were already testing it. The

10   operator feedback was what we wanted. So they thought

11   proactively, and then we put an acquisition strategy that

12   allowed us to accelerate. That brings gear to the fleet

13   faster. It is much more cost effective, and now we can

14   focus some of that R&D on what is past 1.2, not just redoing

15   the R&D just for the sake of redoing it.

16   Senator Perdue: Yes, sir. Thank you.

17   Senator Ernst?

18   Senator Ernst: Thank you, Mr. Chair, very much.

19   And thank you, gentlemen, for being here today. I

20   truly appreciate the time that have given to the committee

21   and for your service as well.

22   We know that we have to support a multi-domain

23   dominance. That is critical to our NDS. And we know that

24   we have to have advanced ground forces and we also need to

25   be able to support our aviation assets as well. So thank

1   you for that.

2   I would like to start, of course, talking a little bit

3   about aviation and the opportunity that we might see in the

4   future. One of the biggest challenges that we do have in

5   aviation right now is pilot shortage and understanding how,

6   one, can we either recruit and train more pilots or are

7   there other ways of doing business that we need to look at

8   in the future and that would include autonomous systems?

9   And I understand. I get a lot of pushback from some of

10   our pilot friends out there. I was able to go out about a

11   year and a half ago and bag some traps on the Abraham

12   Lincoln. It as a great honor to do that. But in the

13   absence of additional pilots, we do need to look at other

14   ways of doing business.

15   So with that in mind, what steps have the Navy and the

16   Marine Corps taken as far as developing manned or unmanned

17   systems that can be utilized in the future? General Rudder,

18   would you like field that first?

19   General Rudder: One of the interesting projects we are

20   doing right now with our K-MAX helicopter -- we bought two

21   of these to use in Afghanistan as an autonomous logistics

22   delivery system and we -- because of the graciousness of

23   Congress allowed us to have funds for that this year. So we

24   are trucking them back to Connecticut to have them

25   retrofitted to get them back flying again and having them

1 retrofitted with some systems that will make them

2 autonomous. We hope to get them back next year, and that

3 will allows us to go back and experiment more with

4 autonomous systems.

5   So what we have found is although you have logistics

6 that you need to get to the right place at the right time,

7 you also need a workhorse that just does this automatically.

8 And we are hoping that this research project will allow us

9 to really get in the autonomous part of that particular

10 system.

11   Also for our MUX, our MAGTF unmanned expeditionary

12 system, that we are developing now, a group 5 system that

13 can come off the ship, we would like to have that be an

14 autonomous early warning electronic warfare asset. It has

15 long loiter persistent time that does the job of what an

16 E-2D would do off the carrier, but it does that for the

17 amphibious ready group. So we are working on that.

18   All these things lead into artificial intelligence. It

19 is all tied together. But I think you are exactly right.

20   And I will offer one comment as I back out of the mike

21 is sometimes there is nothing unmanned about unmanned. Some

22 of our most precious assets right now are the folks that fly

23 our unmanned systems right now. So autonomy is key to try

24 to alleviate the human link in that.

25   Senator Ernst: I appreciate that. Thank you.

1   And we have talked about this as well, for us ground

2   pounders, the logistical trains that we have using

3   autonomous vehicles. So the fact that we might look at that

4   as an aerial delivery system is pretty important as well.

5   So thank you for that.

6   Mr. Geurts: Ma'am, maybe if I could, just one quick

7   add.

8   The other thing that we are doing is looking it at both

9   architecturally and programmatically. So on the carrier, we

10 are going to have one common data link to talk to anything

11 unmanned so that we do not get into the situation of we have

12 to have 10 different unmanned data links intended for war

13 rooms and all that. So when we talk about forward, when we

14 talk about where we are going forward, it is to open up our

15 ability to take whatever comes. And so as that vehicle,

16 whatever it looks like, is discovered, invented by whomever,

17 we can quickly integrate it into the weapon system and not

18 have to wait years and years for another carrier cycle to

19 get through. The same with the amphibious cycle. So you

20 need both pieces.

21   Senator Ernst: Thank you, Secretary.

22   Admiral?

23   Admiral Conn: I have a list of capabilities that looks

24 like a pyramid, and at the top are three things:

25 automation, manned/unmanned teaming, and artificial

1   intelligence. I see that as accelerating the observe,

2   orient, decide, act, make quicker decisions, provide more

3   lethal actions. I see those required to drive simplicity

4   down to the tactical level because our tactics are overly

5   complex right now because we are facing overmatch. We have

6   to use those tools. And as we get a better understanding of

7   what automation really means, in light of a pacing threat

8   where an enemy gets a vote and mother nature gets a vote,

9   what is the true capability of that? And the artificial

10   intelligence -- that is going to better inform where we are

11   going in the future. But we have Triton going out this

12   year. We have MQ-25 coming as soon as possible that we need

13   to leverage that work and get a better understanding of

14   those attributes.

15   Senator Ernst: Sure. Thank you.

16   And if we could talk a little bit too about emerging

17   technologies. I chair the Subcommittee on Emerging Threats

18   and Capabilities, and there are a lot of technologies that

19   -- and Secretary Geurts, we have discussed this before. But

20   respective to aviation and ground combat, what do you see as

21   the most important emerging technologies that maybe we need

22   to be focusing on?

23   Mr. Geurts: I would put it in a couple categories.

24   One, as Admiral Conn put this, autonomous, a decision aid

25   kind of area, whether that is unique to the platform itself

1   or in the larger, either in a strike group or in the overall

2   fight.

3   And then I think there is a whole new category -- we

4   have been working on it for a while -- on different weapons,

5   directed energy, a whole range of different ways so that we

6   get away from our only kind of answer is a 1,000-pound

7   something that has got to get transferred out that you only

8   have so many of because if we are going to operate at the

9   rate, we are not going to have time to steam bombs around.

10   And then the third piece is how do we network in,

11   connect everything together. So to Admiral Conn's point, I

12   do not care where the sensor is, I do not care whose

13   nameplate it is on the tail, whoever can get the sensing

14   information to the shooter the quickest with the right

15   decision aids will win.

16   And I would say those are kind of the three macro

17   technologies. How to operationalize those is really

18   important because you can have the technology, but getting

19   them into -- and continuing to invest in experimentation at

20   unit level, at battalion and higher level is absolutely

21   critical.

22   And then the final piece is it is not technology but it

23   is thinking, is how do we continue -- and we are doing a lot

24   of work on our acquisition programs, again to be able to

25   insert the technology much faster than we are right now. I

1   mean, there is a whole range of technologies in software

2   development. I think if we can get the technology

3   development put together, then operationalize it, and

4   quickly integrate it, we will be in really good shape.

5   Senator Ernst: Thank you. I appreciate it. My time

6   has expired. Thank you very much.

7   Senator Perdue: Senator Hirono?

8   Senator Hirono: Admiral Conn, I was very interested in

9   what you just said about that we are facing an overmatch.

10   With whom? Are you talking about Russia, China, or who?

11   Admiral Conn: Yes, ma'am.

12   Senator Hirono: And this is why your pyramid, which

13   was kind of an intriguing way to frame it, that you are

14   looking -- what was at the top of the triangle?

15   Admiral Conn: Artificial intelligence.

16   Senator Hirono: And so how much investment are you

17   putting into developing AI?

18   Admiral Conn: I think AI may mean different things to

19   different people. The algorithms that we are developing and

20   our fusion engines for decision aids is probably the best

21   example.

22   Senator Hirono: So in terms of the monetary request,

23   are you putting enough into the kind of research and

24   development that you have to do for AI?

25   Admiral Conn: I do not think this is simply an

1   aviation discussion, and I will ask the Secretary if he has

2   any comments.

3   Senator Hirono: Sure.

4   Mr. Geurts: Yes, ma'am. And I would be happy to take

5   for the record kind of a full accounting. We have some

6   investment in the S&T arena, and then we have some much more

7   focused investment kind of on the platform piece. And so if

8   it is okay, I just will take the question for the record to

9   lay that out.

10   [The information follows:]

11   [SUBCOMMITTEE INSERT]

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1   Mr. Geurts: And then I guess working closely with the

2   joint community because at some point -- I do not again care

3   where the algorithm comes from. And so if the Joint AI

4   Center is building out or one of the other services, we are

5   doing a lot of investment in looking at our data so that we

6   will be able to apply those algorithms quickly to the data

7   we have. And I think you need both halves of that equation.

8   Senator Hirono: So if you are saying that we should

9   not be operating in a siloed way, therefore we have to make

10   whatever appropriations, whatever amounts -- those resources

11   have got to go as far as they can. So you will have to be

12   working in conjunction.

13   But I am curious to know if resorting to AI -- I should

14   not say resorting. But if we are looking to AI and unmanned

15   systems, et cetera, that is going to become an increasingly

16   important part of the readiness frame, then I would be

17   interested to know a bigger picture of how you see the

18   resources going toward those kinds of developments.

19   Last year, I asked the witnesses -- this is for General

20   Rudder and Admiral Conn. I asked the witnesses at the

21   Seapower aviation hearing what changes have been reflected

22   in the fiscal year 2019 budget to adjust to the new National

23   Defense Strategy. And I cannot say that the witnesses were

24   able to identify significant changes. There have been

25   changes made to other parts of the budget, but I cannot

1   identify any specific changes from the strategy change in

2   Navy aviation programs.

3   So for both of you, could you describe how you believe

4   the Department of the Navy aviation programs have been

5   changed to reflect the new NDS? General Rudder?

6   General Rudder: I think when we talked last year, the

7   NDS was still in write, but we were tracking it with our two

8   adversaries, our two competitors. And we were already

9   planning to develop and field programs to meet that. For

10   example, we were already fielding our first F-35 squadron,

11   which is one of our largest long-range strike that fits into

12   the NDS long-range strike. We were in the process of -- and

13   we had already, last time we talked, fielded the MFA 121 to

14   Asia, our first F-35 squadron. We took it full-up round out

15   of Yuma and immediately deployed it forward into Asia.

16   This year, we have two more squadrons that are

17   operating. One just got back from its first combat

18   deployment. And currently when you look at the USS Wasp out

19   there right now, you have got 10 F-35's that are on that

20   deck, and they are steaming to the South China Sea and

21   providing presence and working with our Philippine

22   counterparts. So that long-range strike is down range.

23   What we did a little bit this year is because we have

24   an agreement with the Navy to support them with their

25   carrier operations is what you saw is a little bit of a

1   change, a tweak between our F-35B and our F-35C numbers

2   where we are endeavoring looking to buy 10 F-35C's. That is

3   so that we can support the carrier deployment schedule. The

4   Navy has their first deployment with VFA 147 in 2021, the

5   MFA 314 will be the second Marine Corps squadron. It will

6   be the second F-35C deployment and the 2021 and the 2022.

7   So in that case, we kind of adjusted that a little bit.

8   We did look at ramping up Sage 53K, and we are kind of

9   going to hold steady on that right now. But we are still

10   tracking to do that. That is for a protective maneuver, NDS

11   protective maneuver. That and the MV-22 is what is going to

12   be the last tactical mile, if you will, for distributed

13   operations for logistics distribution.

14   Senator Hirono: So are you saying that we are sending

15   more assets or replacing more assets or having more assets

16   ready to go into the Indo-Pacific AOR?

17   General Rudder: I think the other things that we have

18   tried to do is -- there are three kind of new things on

19   there right now. And it has to do with adversaries. We

20   know that for the NDS, we have to do and practice our

21   adversary requirements greater. So we have some F-5's in

22   there that we bought, and we are also getting ready to pull

23   the trigger on more experimentation with our unmanned

24   expeditionary system. So all these are coming together as

25   protective maneuver, strike, and also the unmanned systems.

1   Senator Hirono: Admiral?

2   Admiral Conn: I cannot say this was driven by the

3   National Defense Strategy, but I think it is reflective of

4   what the words are in it. If you look at the weapons that

5   will IOC inside this FYDP, LRASM this year, small diameter

6   bomb next year, high altitude ASW weapon going on our P-8's

7   going after a submarine. That is also in 2020. MALD,

8   miniature air-launched decoy -- that plays an important role

9   if we are going to do some missions in the South China Sea.

10   AARGM-ER, all those weapons that have greater lethality,

11   greater range are IOCing inside of the FYDP. And then JSAL-

12   ER is just outside the FYDP.

13   The National Defense Strategy talked heavily about

14   readiness, and I think we have had that conversation and the

15   investments we made, not just asking for money, but looking

16   at ourselves in the mirror for process capabilities and our

17   people, what do we need to do better and using industry to

18   help ourselves in that process.

19   Senator Hirono: Thank you.

20   Thank you, Mr. Chairman.

21   Senator Perdue: Senator King?

22   Senator King: Thank you, Mr. Chairman.

23   I want to talk about Marine Corps ground modernization.

24   Where are we, General -- I guess "General" applies to both

25   of you guys. Whoever wants to respond -- on the ACV and the

1   JLTV? Is the ACV a unique thing to the Marine Corps? That

2   is a unique product.

3   General Berger: It is.

4   Senator King: And where does it stand in its

5   development process?

6   General Berger: It is in testing as we are sitting

7   here this morning. It went to a milestone C last summer,

8   passed that fine. And then I think in January, Secretary

9   Geurts looking at the progress that was made on 1.1 testing

10 against actually 1.2 criteria, it was moving so fast and

11 doing so well, they merged the two together into a single

12 one.

13   Senator King: Good progress. We are beyond

14 requirements and prototypes.

15   Mr. Geurts: Yes, sir. In fact, I was up at the

16 production plan up in York 2 weeks ago. They are ramping

17 into production. I was very satisfied with the progress we

18 are making there. And we did an operational assessment

19 before we made the milestone decision. So we got good,

20 independent test feedback. We are in initial production

21 right now. We have actually cranked a lot of the feedback

22 from the operational assessment into the production line

23 from the start, which I was very happy to see. And then we

24 will go into an independent IOT&E cycle as we continue to

25 ramp up the production rate.

1   Senator King: And the JLTV -- where are we in that

2 process?

3   Mr. Geurts: Yes, sir. Partnered with the Army. The

4 Marine Corps is kind of on the front end of that buy. That

5 has gone through an OT cycle.

6   Senator King: Are the two vehicles, the Army and

7 Marines, the same?

8   Mr. Geurts: They are common vehicles.

9   Senator King: Good.

10   Mr. Geurts: As the chairman mentioned, they are

11 adjusting their production rate a little bit on the back

12 end. That is okay. It does not impact us. We will take

13 all the capacity we can get and field that as quickly as we

14 can. General Berger can talk operationally, but from an

15 acquisition and sustainment standpoint, that would be a

16 great vehicle to replace all our Humvees as soon as we can.

17   Senator King: We are well along that pipeline.

18   Mr. Geurts: Yes, sir. It is a full-rate production

19 decision. Right now, it is scheduled for May.

20   Senator King: Good.

21   Ground-based radar, the GATR, and the ground-based air

22 defense. Are they unique to the Marine Corps, or are those

23 also joint with the Army?

24   Mr. Geurts: Right now, sir, they are unique, although

25 I would say they are getting some interest. They are

1   progressing again well. We have done initial --

2   Senator King: Just so the Army does not come in and

3   say they need to develop their own radar system. You are at

4   the apex of this. I hope we do not have to develop separate

5   radar systems for two sets of people on the ground.

6   Mr. Geurts: Correct, sir. My favorite form of R&D is

7   rip off and deploy. So if they have got something we can

8   adopt, we will. We have done that in a number of, I would

9   say, smaller ground elements. On the vehicle side, we are

10   well-teamed on JLTV, and we have had conversations with them

11   on the radars.

12   Senator King: Good. Rip off and deploy I like. Hold

13   onto that principle.

14   General Berger, we have talked about people. We have

15   talked about systems on the ground. How about logistics of

16   getting your men and women to the battlefield? How do we

17   stand on ship to shore and also onshore? How are you

18   feeling about the logistics?

19   General Berger: Of course, some it is going back to

20   the future, the way we were trained and operating 20 years

21   ago. But the past 18 years of operating out of forward

22   operating bases where you could pile as much sustainment as

23   you want and protect it and operate from there, that fit the

24   operating environment of the Middle East. It does not fit

25   the operating environment that is our primary theater now.

1   So we are going to need more connectors, a family of

2   connectors, I think going forward because connectors to us

3   before today was a way to move from ship to shore. But

4   connectors now are ship to shore, shore to ship, shore to

5   shore, and we need the vertical. We need the surface. We

6   need it all. If we are going to disperse and be able to

7   operate in a distributed manner and sustain that force, our

8   view of what connectors is is going to have to broaden.

9   Senator King: And it seems to me we are also going to

10   have to think about a contested environment, GPS disruption,

11   communications disruption. Is that part of your thinking in

12   terms of designing these systems? The cyber part of this --

13   the other side has a pretty high level of capability. That

14   is something we are going to have to be thinking about it

15   seems to me.

16   General Berger: It is the Commandant's number one

17   priority, is command and control in a contested environment

18   for the reasons you just stated, Senator. We have to write

19   it into our requirements, every one, all of our systems. If

20   there is a system that we have that cannot function under an

21   adversary's pressure, then it is not going to last very

22   long. It is going to go quiet.

23   Senator King: I understand at the Naval Academy, they

24   are now back to teaching celestial navigation.

25   Admiral Conn: I was not fortunate enough to go through

1   the academy, sir, but I think I have read that in the

2   article.

3   [Laughter.]

4   Senator King: But I think there is an important point

5   there, that to the extent we rely entirely on electronic

6   devices, if our adversaries can disable those devices, I do

7   not want people not figuring out how to get from point A to

8   point B.

9   Mr. Geurts: Yes, sir. I think we have also got to not

10   only think of a contested environment at the last tactical

11   mile. I think as the Secretary mentioned yesterday, you can

12   be in a contested environment just trying to get off the

13   pier. And so we are looking across -- you know, obviously,

14   how the threat presents itself can change, but we are

15   thinking about the threat in a different way, not just once

16   we cross some line in the ocean, that is when the threat

17   will now be on us. With cyber and some of these other

18   threats, their ability to impact you much earlier and

19   differently in the fight is something we are really looking

20   closely at across both the Navy and the Marine Corps.

21   Senator King: Mr. Chairman, let the record show that

22   Secretary Geurts paid attention to Secretary Spencer

23   yesterday.

24   [Laughter.]

25   Senator King: Thank you.

1   Senator Perdue: I do have a follow-up question on the

2 GATR. The GATR, compared to other systems that are being

3 developed, though, has an air traffic control dimension.

4 Does it not? Specifically because of the Marine

5 requirement. I do not think the other systems have that.

6 It is irrelevant, but I mean, that is a major part of what

7 you are trying to develop. Is that not true?

8   General Berger: That is correct.

9   Senator Perdue: With regard to the data links, I am

10 very interested in how you managed to protect the hardening

11 of that.

12   But I want to come back to what you just said. General

13 Berger, I think you have said this in a hearing or in a

14 private conversation. The days of sailing across the ocean,

15 piling stuff on a beach, and getting into a fight on our

16 terms at our time, those times seem to be past us. It is a

17 time now where you have to fight your way to get in the

18 fight I think are your words.

19   Talk to me a little bit about sealift. This looks like

20 to somebody outside that this is a big investment that you

21 only need when you need it, and it is hard to maintain it

22 when you are not using it. Talk to us about how you manage

23 that requirement, which we see is so important, and how you

24 would protect it as it gets to the fight.

25   General Berger: There is a broad view of

1   prepositioning for the Army and the Marine Corps and the

2   Navy, some of which is a prepositioning in set locations

3   that you may or may not choose to harden, and that lessens

4   what you would have to bring in.

5   And the second part of that is a afloat maritime

6   prepositioning capability that both again the Army and Navy

7   and Marine Corps have. We both think we are going to have

8   to relook that going forward because that was built on a

9   premise that you would have secure, benign ports that you

10   could drive up next to in your 38-foot draft vessel and

11   unload, as we did in Desert Shield/Desert Storm, and just

12   keep cycling them in. That is a different operating

13   environment. We need to be able to do those kind of things

14   at sea to a connector. And it may be then on to another

15   connector. Some will be prepositioned forward either afloat

16   or ashore. And then the rest that is brought in -- the

17   distribution of that sustainment is varsity level stuff.

18   Senator Perdue: I have one last question, and this is

19   for each of you. As you look at the 2020 budget, what are

20   the risks in that budget? Let me try to explain what I

21   mean.

22   We all know that when you put a budget together, there

23   are those things that you take risks in in order to fulfill

24   the mission, whether it be in a business or in the military.

25   In this environment, without going classified, can you talk

1   about that? We will ask that question again in a classified

2   arrangement eventually, but for today, can you talk about

3   what is at risk in this budget that we need to know about?

4   Mr. Geurts: Sir, maybe I will start and then certainly

5   allow my teammates here to jump in.

6   I mean, certainly there are some high profile decisions

7   that were made in the budget, one of them being retiring a

8   carrier at its midlife. Some of them were slowing down some

9   acquisition programs, a ship-to-shore connector being one of

10   them because of some challenges in that program.

11   Senator Perdue: I am sorry. Was that a budget

12   restriction or was that just the technical delay in

13   developing that capability?

14   Mr. Geurts: It was a realization of where that

15   capability was. And so it was not a conscious decision we

16   did not need them. It was a decision that we had not

17   ordered the previous production ones. But you are always

18   putting at risk sometimes -- you know, can you make it

19   through that production gap? And so we had to balance a lot

20   of the pieces. And so some were fighting risks. General

21   Berger, could probably talk about what we did on the AAV and

22   some of the legacy systems.

23   And so the art of this is understanding how soon can

24   you get rid of a legacy piece that you have to sustain and

25   supply and all that, which by definition has some usable

1   capability but may not be the capability you want going to

2   the future and making hard decisions about I may retire that

3   even though it still has some usable capability left, but if

4   I do not, I have no ability to generate that 2.0 force. So

5   you saw us making some of those decisions in the ground

6   vehicles. You saw us make some of those decisions in large

7   capital assets like the carriers. You are seeing us make

8   some of those decisions in some of the C4 systems. My job

9   as the acquisition guy is inform the warfighter what those

10 balances are, the risks that I can deliver in the future

11 versus the risk of not having the thing you want to get rid

12 of so that we can make informed decisions.

13   And so I would say generically that large risk is in

14 retiring legacy as soon as you can otherwise you can never

15 generate the dollars and resources available to then

16 modernize because over time you will just put all your money

17 into keeping the old car in your driveway and never get

18 enough money to buy the new car you really need for the

19 mission going forward.

20   Admiral Conn: The only thing I would add is there is a

21 capabilities discussion and a capacity discussion, sir. I

22 agree with you. Capability is probably best in a classified

23 session.

24   I would say the capacity discussion, in terms of where

25 we are accepting risk, is reflected on the CNO's unfunded

1   list for the capabilities for MILCON to high priority

2   weapons, sonabuoys that we put out a lot of in recent years.

3   So that is where I would look to see where the risk is and

4   get in front of that.

5   Senator Perdue: Yes, sir.

6   Anything else?

7   General Rudder: I think I would just, I think, tag

8   onto what Secretary Geurts says. You know, when you make

9   balancing acts with the budget, one thing that Admiral Conn

10   and I have agreed to is we are going to fill our readiness

11   accounts to the max extent right off the bat, the max extent

12   executable for that particular year because readiness is

13   what the marines and sailors deserve on the deck.

14   The other thing that we look at is we look at our

15   legacy systems, for us, the 53 Echo, the legacy Hornet, the

16   risk that we take to make sure that they are funded and the

17   readiness is up and they can maintain the capabilities,

18   deployment cycles that we are asking them to do every day.

19   We take risk at the speed in which our vendors can give us

20   the aircraft that we ask for and the speed at which we can

21   bring on new technology. And the F-35 and the 53-K is just

22   two of those examples where we need to ramp those in and by

23   2030 be out of the 53 Echo and be out of the legacy Hornet.

24   And so that is the balancing acts we do each year with the

25   budget.

1   Senator Perdue: Senator Hirono?

2   Senator Hirono: Just a few more.

3   So, Mr. Secretary, are you saying that not refueling

4   the Truman is because it did not meet the capability need in

5   the future?

6   Mr. Geurts: No, ma'am. I guess what I was saying was,

7   as we discussed in the last hearing, we had to make

8   decisions based on cost of maintaining legacy equipment

9   versus opportunities to modernize. And the Truman is a

10 quite capable aircraft carrier, survivable. As we

11 mentioned, carriers will be a part of any future Navy as we

12 see it. But it does have some limitations and it does not

13 have some of the growth potential that the Ford class gives

14 us. And so that was an area where we consciously took some

15 risk to enable us to move towards a 2.0.

16   Senator Hirono: I think a lot of us -- and maybe I am

17 just speaking for myself and possibly Senator Wicker. We

18 have concerns about not refueling the Truman. That is a

19 major asset as far as I can see. So further discussions

20 probably will occur along those lines.

21   Mr. Geurts: Yes, ma'am.

22   Senator Hirono: Admiral Winter, the head of the F-35

23 Joint Program Office, JPO, laid out a strategy to modernize

24 the F-35 by transitioning the F-35 software to an open

25 systems architecture with new capabilities being released

1   every 6 months. That is a really fast pace. I do worry

2   about whether the software will be adequately tested and

3   whether aircrews will be adequately trained.

4   So for Admiral Conn, is the F-35 modernization program

5   that I just talked about on the correct path with going to

6   an open system with such speed with which we are going to

7   change the software?

8   Admiral Conn: On the right path, yes. If I figure

9   from a deployment perspective, aircrew, our training in that

10   aircraft to go on deployment, there is a certain time when

11   you chalk the line, depending on how complex that change may

12   be where you do not go on deployment with it because if you

13   cannot train to it, you are not going to be able to execute

14   those capabilities. But having that potential to update on

15   that periodicity is interesting.

16   Now, I do not think all these 6 months you get a major

17   change every time, and so you put out a major and then a fix

18   and then a major and a fix. But I just reiterate whatever

19   the cycle is, you have to be able to train to the

20   capabilities that come with that upgrade before you deploy.

21   Mr. Geurts: Yes, ma'am. As you know, on our submarine

22   force -- it is probably our most mature -- I am doing

23   rolling software and hardware updates as the planning battle

24   rhythm. We have learned some good lessons in terms of the

25   right speed for that. And so I would say having the

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1 software fixed and choosing to deploy it in the aircraft are

2 two different decisions.

3   And so I fully support their ability to continue to get

4 the software upgraded. It is a conversation with the

5 operational commanders on when do you actually put that into

6 deploy the aircraft and fully support Admiral Conn's we have

7 to train before you put it out there in the fleet.

8   Admiral Conn: The Secretary put it more eloquently

9 than I did.

10   Senator Hirono: I understood you. Do not worry,

11 Admiral.

12   Thank you.

13   Senator Perdue: Senator King?

14   General, I think we have exhausted our questions for

15 the committee, but I am encouraged by the participation of

16 the committee.

17   I want to give you just a piece of information to take

18 back to your troops as we finish up this preparation for the

19 NDAA, and that is this. There are five members of this

20 subcommittee who are involved in the CR debacle. Senator

21 Hirono and I are two different parties, but we are

22 likeminded about that. Talk is cheap. But we do have 2

23 years -- that did not happen by accident -- that we actually

24 proved that it can be done. Last year, we actually got the

25 full defense authorization done and the defense

1   appropriating done before we had the problem with funding

2   the last 25 percent of our government.

3   But I want you to know and I want your troops to know

4   that we are committed to try to fix this devastation. It

5   has been here since 1974, and it is not going to be fixed

6   easily. But it can be fixed.

7   We are staring down the barrel this year. We are

8   halfway through the fiscal year, and we have not started the

9   appropriating process at the level where we need to, have

10   not even finished the authorization. Today we have 36

11   legislative days between now and 31 July. 36. And if we do

12   not get it done by then, then all hands on deck because when

13   we come back from the theoretic State break work period of

14   August, there are only 10 work days left in September. So

15   we know that is not realistic. So we are pushing all the

16   buttons to try to get the House and the Senate to face up to

17   this 31 July interim date.

18   Senator King?

19   Senator King: Mr. Chairman, I completely agree with

20   you, and I think we can do it. We proved last year that we

21   could. I will leave it to you to deal with the other end of

22   Pennsylvania Avenue because that is part of this discussion.

23   Senator Perdue: No question. But I think we are all

24   aligned on that. I think the Democratic Party, the

25   Republican Party, and the White House are all aligned that

1   CRs are bad.

2   But the problem is because of political gridlock here,

3   sometimes we back into it as an easy release valve. I have

4   never had a release valve in any budget I ever put together.

5   I do not think you guys have many release valve. This is a

6   release valve that Congress has, and we have got to stop it.

7   So I just made a comment, no promises, but just a

8   comment for your troops because I know. I was on the Truman

9   just this week and we had these conversations. I know what

10   it does to morale. I understand it is devastating to all

11   the pipeline and the supply chain for maintenance, as well

12   as procurement.

13   So last comment. Thank you very much for your

14   testimony, your service.

15   Good luck in your confirmation hearings, General.

16   And God bless you all. Thank you very much.

17   [Whereupon, at 11:36 a.m., the hearing was adjourned.]

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