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HEARING
ON
NATIONAL DEFENSE AUTHORIZATION ACT
FOR FISCAL YEAR 2021

AND
OVERSIGHT OF PREVIOUSLY AUTHORIZED
PROGRAMS

BEFORE THE
COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES
ONE HUNDRED SIXTEENTH CONGRESS
SECOND SESSION

FULL COMMITTEE HEARING
ON
**THE FISCAL YEAR 2021
NATIONAL DEFENSE AUTHORIZATION
BUDGET REQUEST FOR THE
DEPARTMENT OF THE ARMY**

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**THE FISCAL YEAR 2021 NATIONAL DEFENSE
AUTHORIZATION BUDGET REQUEST FOR THE
DEPARTMENT OF THE ARMY**

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Tuesday, March 3, 2020.

The committee met, pursuant to call, at 10:30 a.m., in room 2118, Rayburn House Office Building, Hon. Adam Smith (chairman of the committee) presiding.

OPENING STATEMENT OF HON. ADAM SMITH, A REPRESENTATIVE FROM WASHINGTON, CHAIRMAN, COMMITTEE ON ARMED SERVICES

The CHAIRMAN. We will call the hearing to order. And let me say this is an incredibly well-mannered group. When 10:30 hit, everyone sat down and was quiet, without even saying anything. I appreciate that.

We are here this morning to hear the posture hearing on the Army's budget request for fiscal year 2021, based on the President's budget request. And we are joined by Secretary McCarthy and General McConville, the Army Chief of Staff, to hear their testimony and thoughts on those issues.

There are obviously no end of challenges within meeting our national security needs within the Army. I would like to focus on three in my opening statement, and I have a longer, more detailed, more dry statement for the public record.

But, first of all, the big thing is the Army Futures Command. This was a huge move, and I know this was also part of the blank slate review and the "night court" exercise that the Army underwent when Secretary Esper was the Secretary of the Army and has continued since.

What has that told us? I know it is very early in the process, but there was a very laudable goal to try to figure out, okay, things have changed, technology is incredibly important, there is a lot going on, what systems are we spending money on that we shouldn't be, where do we need to reinvest. Learning more about how that process is moving forward is incredibly important.

Second, on personnel matters, this year I believe the Army did meet its recruitment goals. I know the previous year they had not. I would love to get an update on how recruitment is going. We have obviously heard, you know, considerable concerns about the number of age-eligible people in the U.S. who are actually physically qualified to even serve in the military. Is that becoming a problem in terms of getting the personnel that you need to get where you are at?

And then the readiness issue. We all know that, as a result in part of our commitment to Afghanistan and Iraq for the better part of a decade or more, we had to shift goals, and that hurt overall readiness. Then, of course, we had the Budget Control Act and 6, 7 years' worth of budget shutdowns and threatened shutdowns and the continuing resolutions, and all manner of insanity that made it difficult to budget.

I am going to point out again it is good this year we have a budget deal. Hopefully, we will be able to get it done closer to October 1, but there has been some consistency put into it. How has that affected our ability to meet our readiness goals?

And then overarching all of this, for all of the services and throughout the national defense, is we have the National Defense Strategy, which is an excellent document I think that lays out the challenges we face. We all know Russia, China, North Korea, Iran, transnational terrorist groups, broadly speaking, that is the threat environment we face. How do we meet that?

One of my continuing concerns here is if you take each one of those and say, "Okay. What do we have to do to make sure that we are completely protected?" and you try to do all five, there isn't enough money or personnel in the world that I am aware of to meet all of those goals. So how do we prioritize? How do we, as the military loves to say, manage risk intelligently?

And I think Secretary Esper and I have talked about this a lot, and he shares the frustration. People coming in here constantly saying, "Here is the threat. We are completely and totally unprepared. We have to do all this stuff in order to meet it. But, by the way, we don't have the resources to meet it."

That is not a very productive exercise, to my mind. Once we know what the resources are, I think we can put together a realistic strategy to meet those threats, instead of sort of being in panic mode all the time.

Lastly, before I yield to the ranking member, I want to recognize that we started late this morning because you had to be at a funeral for Antonio Rodriguez, a member of the 7th [Special Forces] Group, who was killed in Afghanistan. And while we have significantly reduced our presence and our OPTEMPO [operations tempo] in Iraq and Afghanistan, it is not done, and we still have men and women from our country who are putting their lives on the line every day. This is a stark reminder of that. We need to remember them, honor their sacrifice, and do everything we can to support our troops and our families.

With that, I will yield to Mr. Lamborn, ranking member. Mr. Thornberry is ill this morning, so Mr. Lamborn is sitting in. I yield to Mr. Lamborn any comments he may have.

[The prepared statement of Mr. Smith can be found in the Appendix on page 55.]

**STATEMENT OF HON. DOUG LAMBORN, A REPRESENTATIVE
FROM COLORADO, COMMITTEE ON ARMED SERVICES**

Mr. LAMBORN. Well, thank you, Mr. Chairman, and thank you for those last remarks in particular. Well said.

Secretary McCarthy and General McConville, on behalf of Ranking Member Thornberry, and my colleagues and myself, thank you

for your dedicated service to this Nation, your support to every soldier and each of their families, and for being here today to provide testimony on the Army's fiscal year 2021 budget request.

Today we expect to have a good discussion over how the Army is operationalizing the National Defense Strategy, with this budget request, and to include how the Army is manning, training, and equipping the force to address both near- and long-term challenges posed by great power competitors like China and Russia.

In this context, and with flat budgets likely to be the norm, I appreciate the Army's reform efforts to find savings within its current budget in order to increase investment for its six modernization priorities. The fiscal year 2021 budget request includes \$12.7 billion for research and development and \$24.1 billion for procurement.

General McConville has stated that, quote, "While we have managed to sustain the readiness gains the Army has achieved in fiscal years 2018 to 2020, and further invest in our six modernization priorities, our progress is at risk in future years if we don't have real growth of 3 to 5 percent in our budgets going forward."

Clearly, making hard choices will continue to be required, and my hope is that we can work together to continue striking the right balance to fund both current readiness and needed modernization. From what I understand, the Department of Defense has made progress in maturing the capstone concept for joint operations, and that the Army has been designated as the lead service to develop the supporting logistics concept.

Providing logistics support in a contested environment is no small challenge. My hope is that we will begin to see some serious effort to reduce the demand for operational energy. I am most concerned about reducing our reliance on fossil fuels for both the new systems we plan to buy, and for the legacy systems we will continue to operate for decades.

Approximately 75 percent of the convoys and forces performed in Iraq and Afghanistan were to transport fuel and water. This is a serious operational vulnerability.

The current and projected readiness of the surge sealift fleet is critical to our ability to protect the Army. Although this is clearly a Navy requirement, it is also inextricably linked to the Army's relevance, and I hope we find a path to recapitalize this essential capability.

I also look forward to hearing from our witnesses about the Army's way ahead with the sustainable readiness model. This critical concept has helped the Army smooth out the readiness—smooth out readiness through many units' experience after deployments. Maintaining the higher operations tempo has come at the cost for the 1 million men and women serving in all three components of the Army—Active, Guard, and Reserve.

I am encouraged by this improvement and hope that with some minor adjustments this concept will continue to serve the Army well.

Finally, I look forward to hearing an update on the Army's progress in implementing the military housing privatization initiative reform that we passed in a very bipartisan way in the fiscal year 2020 NDAA [National Defense Authorization Act]. We know that

some of the provisions will take some time to implement, but this committee is fully committed to keeping faith with our military families.

Thank you, Mr. Chairman, and I yield back.

The CHAIRMAN. Thank you.

Before hearing from our witnesses, one programming note. We are going from last to first; the last shall be first. So we are doing reverse order on our questioning today. So for your preparation, we will start with the most junior member and work our way back up once we get to questions.

But, with that, I will yield to Mr. McCarthy for his opening statement.

**STATEMENT OF HON. RYAN D. McCARTHY, SECRETARY OF
THE ARMY, DEPARTMENT OF THE ARMY**

Secretary MCCARTHY. Chairman Smith, Ranking Member Thornberry, and Mr. Lamborn, excuse me, distinguished members of this committee, thank you for your continued support to the Army and our people.

In 2018, the National Defense Strategy [NDS] outlined the current and future threat picture, drastically changing the Army's focus. The strategy outlined great power competition, specifically Russia and China, who are rapidly investing to modernize their formations.

In order to achieve national objectives laid out in the defense strategy, including deterrence, the Army, with the support of Congress, developed three distinct priorities of readiness, modernization, and reform, and aligned our budget against the same. Two and a half years into our modernization efforts, we are here to continue what we collectively started.

This budget request builds upon the funding authorities that Congress provided over the past 2 years. Together, we are creating irreversible momentum towards a ready, modernized, multi-domain Army, capable to meet future demands highlighted in the NDS.

Our fiscal year 2021 budget request is \$178 billion. Sixty percent of that top line is invested in our people and towards operations and maintenance, with the remainder of our available budget aligned towards our modernization priorities.

Despite a fixed top line and flat budget, demand for Army forces continues to rise. The Army currently fulfills 60 percent of the overall combatant commanders' [COCOMs'] demands, with no projected decrease in COCOM demand. Demand, paired with the need to bring new systems online, will require us to grow the budget 3 to 5 percent real growth in the outyears.

Readiness remains the Army's number one priority. We remain ready today, capable of dynamic force projection. Take, for example, this year on New Year's Eve we pushed a brigade-size element on a no-notice cold-start emergency deployment.

Within hours, soldiers from the 82nd Airborne Division went from holiday parties to wheels up on a C-17. Within a day, soldiers were operating in the Middle East. Nearly half of our brigade combat teams are at the highest levels of readiness, pulling us from a readiness trough to a readiness peak over the last 3 years.

On modernization, we are rapidly developing new technologies across 6 modernization priorities and 31 signature systems, all geared towards meeting the demand of the future battlefields.

The creation of Army Futures Command has allowed us to combine the stakeholders together and rapidly increase the speed of the modernization process. We are seeing real results. Prototypes that began in fiscal year 2018 and 2019 are maturing, with real capability landing in fiscal year 2021 and fiscal year 2022.

In this fiscal year, we will increase soldier touch points, test shots, capability demonstrations, and the fielding of our formations. The Army is investing \$800 million across the next 5 years' defense plan towards cloud computing, which is central to our modernization effort.

Long-range fires, including Extended Range Cannon Artillery, Precision Strike Missile, and hypersonic missiles, are flying further and hitting their targets, increasing our reach and lethality, essential deterrents in the joint fight. We have invested \$1.3 billion towards these efforts, and continued funding will allow the Army to field a road-mobile battery in fiscal year 2023 for hypersonic missiles.

New aircraft in our future vertical lift portfolio are flying hundreds of test hours as we fly before we buy. We have seen great advances in our soldier lethality portfolio for individual kit, with the integrated visual augmentation system that links multiple sensors to multiple shooters and multiple command and control nodes, ultimately increasing lethality and survivability of our men and women.

The demand for Army forces, paired against a flat budget, has forced tough fiscal decisions. In-depth program reviews will continue in fiscal year 2021, with a total target of an additional \$9.1 billion in programs that will be delayed, reduced, or eliminated.

The Army will continue to show fiscal responsibility with taxpayer dollars. We view every dollar as we do with ammunition: each bullet matters and is aimed at a target.

With Congress' steadfast support, we are here to finish what we collectively started. I would like to share the floor with my teammate, General McConville, and I look forward to your questions.

[The joint prepared statement of Secretary McCarthy and General McConville can be found in the Appendix on page 57.]

STATEMENT OF GEN JAMES C. McCONVILLE, USA, CHIEF OF STAFF, U.S. ARMY

General McCONVILLE. Chairman Smith, Mr. Lamborn, distinguished members of the committee, I also want to thank you for the opportunity to be here today and for the support you all continue to give to our Army and our people, our soldiers, our families, our civilians, and our soldiers for life, our retirees and veterans.

As of this morning, the Army has over 190,000 soldiers deployed to 140 countries all around the world. Those soldiers form the leading edge of an Army that stands ready to fight and win whenever and wherever it is called. We are currently demonstrating Army readiness with our Defender 20 exercise in Europe, the largest of its kind in 25 years, and we will do the same in the Pacific in the fall on a smaller scale. Both exercises will further strengthen not

only our readiness to deploy U.S. Army forces, but they will also increase our ability to fight alongside our allies and partners and deter those nations or groups who wish America harm.

Going forward, we will sustain the tactical readiness of our units while at the same time ensuring we are strategically ready to mobilize, deploy, and sustain our combat forces in a way that supports how we will fight in the future. To ensure the Army will be ready and can win in the future, we must also modernize, as the Secretary and I have discussed with many of you.

The National Defense Strategy has focused us on great power competition, but great power competition does not have to mean great power conflict. A ready, modern, and multi-domain Army provides the Nation's strategic leaders with the flexible options to compete below the threshold of armed conflict while maximizing deterrence.

With timely, adequate, predictable, and sustained funding, we will deliver an Army that will never be outranged, outgunned, or overmatched. But to get to the Army that we need in the future requires transformational change, not incremental improvements.

Our fiscal year 2021 budget requests support that supports transformational change. It aligns our resources with the National Defense Strategy and our Army priorities. It also balances the demands for readiness now and allows us to invest in the future.

Our budget request maintains 58 brigade combat teams, 23 aviation brigades, and 6 security force assistance brigades across the Regular Army, the Army National Guard, and the Army Reserves. It enables 24 combat training center rotations, including 4 for the Army National Guard. It funds strategic readiness, including dynamic force employments to Europe and the Indo-Pacific and the maintenance of key prepositioned stocks and ammunition.

It provides modest end strength growth to meet expanding operational requirements and promotes interoperability with allies and partners through combined exercises with countries around the world. In terms of modernization, I request support for the continuing development of the Army's multi-domain operations concept, which will inform our contributions to the emerging joint war-fighting concept.

Our request funds multi-domain task forces in Europe and the Pacific to increase Army's capability in both competition and conflict, and a budget request supports critical steps in research and development that will allow us to deliver key systems across our six modernization priorities. Our budget request also funds key quality of life improvements, like housing and child care, to take care of people.

Finally, our budget helps us win the war for talent by moving us from an Industrial Age personnel management system to a 21st century Information Age talent management system, with the continuing implementation of the Integrated Personnel and Pay System and initiatives like the Talent-Based Branching, the Army Talent Alignment Process, and the Battalion Commander Assessment Program.

Thank you for your time and for your support to our Army. I look forward to your questions.

The CHAIRMAN. Thank you both. I don't have any initial questions. I have had the opportunity to meet with both of you gentlemen, speak to you a number of times.

So I will begin by yielding to Mrs. Trahan for 5 minutes.

Mrs. TRAHAN. Thank you, Mr. Chairman.

And thank you, Secretary McCarthy and General McConville. The Army's Futures Command is focused on delivering capabilities aligned to the Army's six modernization priorities to the battlefield in the next 5 to 10 years. But the Army's laboratories, alternatively, should be focused on longer term groundbreaking science and technology development for the next generation of warfighting, say, in the next 20 to 30 years.

The Army's great laboratories, including Natick Soldier Systems Center in Massachusetts, now align under AFC [Army Futures Command] and they are doing excellent work supporting the Army's priorities today through 2028. But how will Futures Command champion and prioritize the necessary long-term scientific and technology research required for our next-generation Army of the future?

Secretary MCCARTHY. Ma'am, we conduct—when we did the merger for Army Futures Command, a lot of it was we needed to take a look at how the investments were performing across our lab network, both internally and externally. So General Murray has been in the process of a review of the entire S&T [science and technology] portfolio, so that we could take a look at where was the best engineering and science talent worldwide that can support our objectives.

Much of that we realize was that we were spreading the money around and didn't have strategic relationships that aligned with the investment portfolios. To your point, from a near-term research to, you know, the much more disruptive 2020 changing of technology, but it would ultimately change the way we fight.

So he has been in that process. We have made some adjustments, and we will probably make another adjustment by fiscal year 2022 when we drop that budget next year.

Mrs. TRAHAN. Thank you. I am just going to switch gears because there has been a myriad of factors that surge from the escalation created by the Soleimani attack. And I am worried about our ability to properly diagnose those affected with the invisible wounds of war, especially after the Iranian ballistic missile attack on Al Asad airbase on January 8.

And the latest update shows that as many as 110 U.S. service members suffered from traumatic brain injury, or TBI, as a result of the blast. And, you know, while the President categorized some of these injuries as headaches, we know that it is much more than that. They are much more serious than headaches, as these conditions are often linked to suicide, PTSD [post-traumatic stress disorder], et cetera.

So, I am wondering if there is a reliable way to determine who has a brain injury and who does not, in theater. And I am also wondering if the Department is broadly leveraging commercial available technologies that quantitatively measure and record blast overpressure exposures, because I understand that technologies have been fielded successfully in combat environments as early as

2011 through DARPA [Defense Advanced Research Projects Agency].

General MCCONVILLE. Yes, Congresswoman. You know, over the last 19 years, we have seen a lot of blasts with our soldiers, and I think the Army, and really the military, has been on the cutting edge of concussion research because we are very concerned with traumatic brain injury, which also leads to post-traumatic stress and some of the terrible things that go along with that.

But we do have the capability, and quite frankly, we actually changed the culture, where when someone is near a blast, you are going to get checked out. It is no longer take a punch in the head and just kind of, you know, get after it and get back in the fight. What we have learned is, if you get exposed to a blast, you have a good opportunity to recover if you get the proper medical support.

And so what we do now, anyone that is involved in any type of blast, whether it is an IED [improvised explosive device], or in this case those are very large theater ballistic missiles that hit into Iraq with 1,000-pound capabilities, is we have diagnostic cases, or we have diagnostic systems, MACE 2 [Military Acute Concussion Evaluation 2], which allows us to test the soldiers at the point of contact. And those that need more testing, we start to move them back through our medical system, and that is what we have done with these soldiers.

Many were returned back to duty. About 70—about 37, I think, is the number actually came back here. And we will make sure that they get the best care that this country has to offer, and, you know, there is some terrific scientists that have done some incredible work in that area and we want to make sure they get to that level.

Mrs. TRAHAN. You bet. And if there is anything that Congress can undertake to ensure that those technologies are more rapidly fielded, we would love to work with you on that.

General MCCONVILLE. Okay.

Mrs. TRAHAN. So thank you. I yield back.

The CHAIRMAN. Thank you.

Mr. Lamborn.

Mr. LAMBORN. Thank you, Mr. Chairman.

And I have two questions, and then later we will go to Mr. Waltz and proceed accordingly. But, first, let me ask this. General McConville, in the fiscal year 2019 NDAA, the Army was directed by Congress to procure four batteries of an interim indirect fire protection capability against mortars and artillery, after having deliberated for years over what form this capability should take.

Now, the Army has procured two Iron Dome systems as a result of this NDAA requirement. So, it seems that while the Army continues to evaluate this enduring indirect fire protection capability, the Iron Dome capability appears to be a battle-proven system and a known quantity and is something we have on hand.

Could you please update this committee on the status of the Army's plans for indirect fire protection capability, which is very justified and is a threat that we face? And does the Army have plans to procure an additional two batteries of Iron Dome? And how does Iron Dome fit into these plans?

General MCCONVILLE. Yes, Congressman. And, first of all, we are very concerned about the indirect fire and really the threat to our soldiers from any type of system, whether it is unmanned aerial systems, it is theater ballistic missiles. And where the Army is going is right now, as you said, we went ahead and have purchased two Iron Dome batteries. They are standalone static batteries that provide a certain capability. They are combat proven.

But where the Army is going to is a layered defense for aerial missile defense. We see that in the future as something we are very concerned about. We want to be able to tie every sensor to shooter. The way we see the future is multiple radars will be tied into an integrated battle command system, which we will be able to apply the appropriate shooter a response to whatever that threat is. And that response could be directed energy, which we are working on right now.

It could be a high-powered microwave, which we are working on right now. It could be some type of gun system, which we have the capability to do right now. It could be a missile system at the lower and higher level, what you want to do.

But what we don't want to do is be in a position where we are shooting Patriot missile systems or even larger missile systems at small, unmanned aerial systems, where the value analysis doesn't [inaudible] out.

So, we are not—you know, as we talk to Iron Dome, and they bring it on board, we are going to get a chance to get our soldiers on board. We are broadcasting the type of system that we want and what we need in the future, and we want them to compete along with other U.S. companies that want to be in—that want to compete for this long-term capability.

Mr. LAMBORN. Okay. Thank you. I look forward to seeing how that continues to fit into the evolving plans. I think it is a very proven and critical defense.

And, secondly and lastly, for both of you, I want to ask about the current strength of our Patriot and THAAD [Terminal High Altitude Area Defense] forces. A recent Army study increased the THAAD battery requirement from seven batteries to eight. But this eighth battery was not in the Army's fiscal year 2021 budget request and can only be found in the Missile Defense Agency's unfunded priority list.

I know we are investing in a new Patriot radar and other modernization initiatives. However, THAAD and Patriot batteries are among the most deployed units in the military, and I am concerned that we might be spread too thin. And this was brought to the attention of the American public when our soldiers in Iraq were targeted by a ballistic missile attack recently.

Do you feel the Army has the missile defense force structure to meet current global requirements?

General MCCONVILLE. I think the Army has what it needs, because it has what it has right now. And if we innovatively employ those systems, we have what we need. We are taking a look again, getting to how we work in the future, when we take a look at places like the Middle East.

How do we work with partners that have Patriot capability that can defend themselves? And what we are looking at in some cases

when it comes to air missile defense is advising and assisting our partners, so they use their capability to defend their bases and their critical infrastructure, and that we can use our systems to take care of our soldiers and our bases, is where we want to go in that.

Now, the secret, though, at least from—not the secret, but the end state for us is really tying in multiple sensors with multiple shooters, and THAAD and Patriot are part of that equation.

Mr. LAMBORN. So, you do feel you need that eighth battery even though it is not in your request.

Secretary MCCARTHY. Sir, the MDA [Missile Defense Agency] is the one that developed the THAAD system, and they fund that through the Missile Defense Agency. We have been—we work that in concert with the Missile Defense Agency.

With respect, also, to the Patriot systems, we are working with the manufacturer to increase capacity and with our allies and partners to increase the sales, and to General McConville's point about an advise-and-assist capability, so that we can bring our batteries home and have our allies do more their share.

Mr. LAMBORN. Okay. Thank you, Mr. Chairman. I yield back.

The CHAIRMAN. Thank you.

Mr. Golden.

Mr. GOLDEN. Thank you. Secretary McCarthy, earlier this month in speaking about the Close Combat Lethality Task Force, Secretary Esper mentioned that—and this is a quote—“What we are going to do probably is transition it to the Army, because something like that needs a strong foundation of backbone upon which its ideas can then filter out.”

Do you support this organizational restructuring?

Secretary MCCARTHY. Absolutely, sir. In experiences that I have seen in the Department, the task forces bring a tremendous amount of energy towards an issue. But how do you harness that over the long haul? If you hearken back on recent history, the Mine-Resistant Ambush Protected Vehicle Program, or the ISR [Intelligence, Surveillance, and Reconnaissance] Task Force, or the Counter-IED Task Force, transitioning that to a program of record so institutionally you don't lose the tremendous momentum that was created. With respect to the Close Combat Lethality Task Force, it is remarkable what they have achieved in the last 2½ years.

We created the Army Futures Command. We have a soldier lethality investment portfolio. The investments that we are making, along with some of the task organizational changes, is fundamentally changing the task organization of rifle platoons, making them more lethal. So, this has been a big win for the Department.

Mr. GOLDEN. Look, I agree. I think this is critically important. As someone that served in an infantry unit, I think this is—

General MCCONVILLE. Can I just add on that?

Mr. GOLDEN. One second, though, General. One thing that I did also want to ask—and a concern that I have, Secretary and General McConville—Major General Scales, who, as you know, was a part of this early on, has expressed his concern about removing this from being a joint force structure endeavor, bringing this over to

the Army and leaving the Marine Corps behind. That is something I think Secretary Mattis, you know, envisioned as being a joint operation.

So, I wanted to ask, one, why move it just to the Army? And, secondly, if that is what we ultimately do, how are you going to make sure that the Marine Corps continues to benefit? Because the Commandant of the Marine Corps sat here just last week and talked about how important this was for the Marine Corps as well.

Secretary MCCARTHY. Well, I think the chief should comment as well, sir, but we are—I mean, we are totally integrated. When we have gone down to test the next-generation squad weapon or the IVAS [Integrated Visual Augmentation System] system, there are Marines that are from 1st Infantry Division. They have representatives from MCCDC [Marine Corps Combat Development Command]. So, it is a Marine/soldier-centered design on these weapon systems. We are investing jointly. So, I have been very encouraged by what I have seen. Every time we are there, we see Marines.

Mr. GOLDEN. Good. I want to continue to see it that way. Anything, General?

General McCONVILLE. The only thing, I think we should give tremendous credit to the Close Combat Lethality Task Force. Really, the Integrated Visual Augmentation System—we are calling it IVAS—that is transformational in nature.

And as the Secretary said, that is going to change the way our combat soldiers, whether they are in the Marines or Special Forces, they actually rehearse for missions and the ability to go and do it. And it is almost like bringing an iPhone-type capability compared to a dial-up phone to the Army and the Marines.

Mr. GOLDEN. I couldn't agree with you more, General.

General McCONVILLE. And what is important is we have Marines right now that are working on that system, so we don't have to develop it just for the Army. We have Special Forces that are working, and, again, that is a huge difference, along with the next-generation combat weapons that we are developing.

Mr. GOLDEN. I am glad you brought that up. That is my next question. But I couldn't agree with you more. I came to the hearing you had here last year and played around with the augmented, you know, system. I thought absolutely amazing and could make a huge difference. I just want to stress to you both I am committed to making sure the Marines continue to benefit as well.

But you did mention, General, the next-generation squad weapon. I know you are looking to get that out to a unit in fiscal year 2021. Could you just say a word or two about what kind of attributes you are looking for with this new weapon? What do you hope to accomplish with it?

General McCONVILLE. Well, there are two weapons involved. It is really a next-generation carbine rifle and also a squad weapon. And what these weapons will have is the capability to go through anything on the battlefield out to about 600 meters, and that is what we need and that is what our soldiers and that is what our Marines and that is what our Special Forces need on the battlefield.

So, this will be a very lethal weapon, and it is pretty amazing how fast it is developing. And it will be even more amazing when

it—how it will link into the IVAS system. We are watching people with marksmanship that—much greater than they would have ever had with an iron sight.

Secretary MCCARTHY. We have got to get you down at Fort Benning. I went down and shot it last summer. Thirty percent lighter. The ergonomics are very unique, so it made it very easy to hold. It has 6.8-millimeter caliber rounds. It is going to be a big game changer for an infantry platoon.

Mr. GOLDEN. If you promise that I will get to shoot, then I am there.

Secretary MCCARTHY. Count on it, sir.

Mr. GOLDEN. Thank you very much. I yield back my 10 seconds here.

The CHAIRMAN. Thank you.

Mr. Waltz.

Mr. WALTZ. Thank you, Mr. Chairman, and thank you for your mention of Sergeant First Class Rodriguez.

Mr. Secretary, it was an honor to join you this morning at his funeral at Arlington, along with Representative Gaetz, a Ranger and Green Beret that it is worth noting had 10 years in the Army before he was killed. He was on his ninth tour in 10 years in the Army.

So, we are going to talk a lot today about Army budgets and preparing for great war competition, or great power competition, excuse me, and the wars we want to deter. But we cannot—we cannot in this committee, and I know you won't in the Army, forget the wars that we are in right now as we speak.

Along those lines, and going kind of big to small here, top line, top line likely is flat and likely going to stay that way, at least in my opinion. Personnel keeps eating up more and more of that budget in the outyears. How do we modernize, recap [recapitalize], and procure, with less and less budget over time? I know that is going to be just a matter of priorities. What are we going to do with and without?

Secretary MCCARTHY. So, Congressman, under current assumptions of a flat budget, we are faced with either flattening end strength or tiering the modernization strategy. So that would be within the portfolios choose divisions that you would scale first. So, nothing but really very difficult challenges without an increased top line.

Mr. WALTZ. Thank you, Mr. Secretary. Can you just tell us for a moment, what are we doing to prepare in the Army and particularly the Guard, for a pandemic? The Guard being down in every single community, again, you know, being from Florida, I know this verse well, and still a serving guardsman, we will be the front lines on both preparedness and response. And I just wanted you to take a moment to share with the committee what we are doing proactively to prepare.

Secretary MCCARTHY. If I could, sir. And I would also like the chief to comment as well. But, sir, over the last couple of months, our medical research and development community, which is just truly exceptional—men and women like Dr. Kayvon Modjarrad, who came to us from the World Health Organization. He is one of three people on the earth that has actually published on the

coronavirus. Dr. Nelson Michael, who was involved with how we traced Zika and Ebola virus. So, we have extraordinary people within the Army research and development community.

We have organized against three lines of operation: prevention, detection, and treatment. On the prevention front, it is really where is every soldier and family member on the Earth? And Vice Chief of Staff of the Army, General Joe Martin, leads this meeting every day and they are looking at where everybody is and making risk-based assessments. Do we turn off exercises? Do we deploy and PCS [permanent change of station]? Because a lot of this is we are still learning about what happened in China, and how will this—will it or will it not proliferate? And to what extent?

So, making these choices literally by individual and by unit every day. So that is the first thing on the prevention front, and it is continued learning.

We are working on a vaccine in concert with NIH [National Institutes of Health] and CDC [Centers for Disease Control and Prevention]. Dr. Michael is a protégé of Dr. Fauci at NIH, so we have great relationships. But they are testing on animals right now, so it will ultimately get to a human sample within a couple of months is what we are looking at hopefully.

Mr. WALTZ. That is great.

And then, Mr. Secretary, if I can take the rest for—

Secretary MCCARTHY. Yes, sir.

Mr. WALTZ [continuing]. The record.

[The information referred to can be found in the Appendix on page 77.]

Mr. WALTZ This committee and a prior NDAA commissioned or directed a commission on national service, which is due—its report is due in the coming month. My colleague Ms. Houlahan and I, along with several of our other colleagues, have a national service bill. This is not a return to the draft. You do not necessarily have to be in uniform. It is national service across the board, and we believe we can incentivize that.

I just want to get your assurance that I can't imagine that you would see this as competitive from a recruiting standpoint. I think, in fact, it would be complementary to have kids out in their community, Boys and Girls Club, Habitat for Humanity, but how do we get back to a sense of leadership, followership, discipline, and doing it with people that don't look like us.

And I would think that would be absolutely great for the Nation, great for the Army, but I just wanted to get your thoughts on the record.

Secretary MCCARTHY. Sir, any tool that we can have define the best and brightest talent in the country to serve in uniform or as a civil servant, we would want to go get them. So, it would be a great opportunity. I would like to learn more.

[The information referred to can be found in the Appendix on page 77.]

Mr. WALTZ. Thank you. If I could just get a question for the record. One, your dependency on space assets. A lot of people don't associate Army with space. And then, two, how the National Guard is using its civilian skill set database, particularly in IT [information technology] and in AI [artificial intelligence]—excuse me, not

in IT but in AI, and how is that informing our recruiting for cyber and for—we were just over in the JAIC [Joint Artificial Intelligence Center]—and for the recruiting challenges there. Thank you so much. Thank you both for your service.

[The information referred to can be found in the Appendix on page 77.]

Secretary MCCARTHY. We will go down there this month, sir.

Mr. WALTZ. Rangers lead the way.

The CHAIRMAN. Ms. Escobar.

Ms. ESCOBAR. Thank you, Mr. Chairman.

Secretary McCarthy and General McConville, thank you so much for being here. Thank you for your service. It is good to see you both again.

And thank you also for mentioning Sergeant First Class Rodriguez from Las Cruces. He was the constituent of my neighbor, Congresswoman Torres Small, and we all mourn the loss and his passing, and our thoughts and prayers are with his family. So, thank you for that.

Secretary McCarthy, I am very concerned about the impact of continued MILCON [military construction] project deferrals, and I would like to get your insight on the path forward for us. Last year, \$3.6 billion was taken from MILCON accounts across DOD [Department of Defense], putting a number of the Army's critical infrastructure projects at risk of delay or cancellation. At Fort Bliss, this meant a safety-driven improvement to our access roads was put on hold.

I also worry about the ripple effect of delays on projects slated for future years, and that we may be failing to prioritize strategic investments that are necessary as we face the specter of great power competition.

For example, Fort Bliss' top MILCON priority is a railyard improvement. As the largest joint mobilization platform in the DOD, they can already accommodate a throughput of 70,000 annually. However, they cannot presently meet Army standards for an armored brigade combat team deployment timeline because of the current track design.

The necessary improvements would cost just \$29 million and are imperative to meet the mission requirements. This is a sound investment, the Army's premier power projection platform for over-seas contingency operations.

Secretary McCarthy, when Secretary Esper was in your role last year, he said MILCON priorities for the Army begin with readiness and power projection. Do you share his view? How do you see this kind of rail improvement fitting into those priorities?

And, General McConville, would love your perspective as well.

Secretary MCCARTHY. Congresswoman, incredibly important. We conducted an emergency deployment readiness exercise from a brigade out of Fort Bliss last year, heavy unit that went to Europe. They got the entire brigade on the ground in about 9 days, remarkable performance, but we have got to do everything we can to reduce that span time, to get units from no-notice to anywhere in the world.

So incredibly important. We will continue to work and find ways to invest in these projects, to your point, because that is how we

are going to be able to have the dynamic force projection necessary to meet national objectives.

Ms. ESCOBAR. Thank you.

General MCCONVILLE. Congresswoman, I would add to what the Secretary said, is when we look at readiness, there are two pieces to readiness, so to speak. One is strategic readiness; one is tactical readiness. Tactical readiness means the units are ready to go. They are all trained, they are equipped, and everything else like that.

And strategic readiness is the ability to get them to the fight, and that is what we did with that brigade. And we know we need to improve those capabilities because that is how we do dynamic force employment is to have the ability for strategic mobility, and all of those come into play, and those are prioritized, and, you know, we certainly support them but we have got to prioritize within the budget we have.

Ms. ESCOBAR. Thank you. And speaking of strategic readiness, are there any lessons learned emerging from the Defender Europe 20 exercise regarding our mass deployment capabilities?

General MCCONVILLE. Yeah. What we are learning is, again, and we are just starting to deploy right now, so we learned an awful lot from that brigade that came out of—the 1st Armored Division did a wonderful job. They got a no-notice deployment also. And what you will find is with the deployment is sometimes, whether it is the various facilities in countries that we go to, we learn a lot about that. And that is part of the reasons we want to test those capabilities, and that is why we are testing it in Europe.

We have an airborne jump going in there. We are doing—we are drawing our prepositioned stocks. We are also shipping equipment over there to different ports, and then the ability to move it through Europe is something that we will learn and share with our allies and partners to make sure that we can do this in a conflict.

Ms. ESCOBAR. Thank you. El Paso is a vibrant military community, as you both know full well, with one in five residents connected to Fort Bliss in one way or another, and an excellent spirit of collaboration for the Army's work. Particularly as MILCON programs are being deferred, our committee has been eager to see swift implementation of the Defense Community Infrastructure Program [DCIP].

We heard last week from Secretary Esper that the early work to implement DCIP is underway. Just super quick, are you involved in these discussions?

Secretary MCCARTHY. Yes, ma'am.

Ms. ESCOBAR. Yes. Okay. We would love guidance as soon as possible, please. I know my time has expired, and I yield back. Thank you both.

The CHAIRMAN. Thank you.

Mr. Bergman.

Mr. BERGMAN. Thank you, Mr. Chairman.

And thanks to Secretary McCarthy and General McConville for being here. Time is finite, so I will get right to the questions.

This budget recognizes the importance of large-scale exercises in multi-domain operations seeking growth of strategic readiness exercises like Defender Europe and Defender Pacific. While these exercises are critical, there are also extensive exercises happening

here at home. For example, Camp Grayling in Michigan is host to the DOD's largest joint Reserve Component, collective live-fire readiness training event, Northern Strike.

Last year the exercise included over 7,000 personnel from 20 States and 7 countries, to include the likes of Latvia, Lithuania. This year Liberia and the U.K. [United Kingdom] are also joining.

What is your take on the need to expand and enhance exercises like Northern Strike in order to support the Army's top priority of multi-domain operations? And, by the way, there is an invitation on the table if you haven't attended and can make it in August.

General McCONVILLE. Well, Congressman, I am very excited about these type of exercises, because first of all their home station, they are dealing with the Reserves, which I think is very, very important. There is a lot of capability up there. There is live fire involved, and also the fact that you have seven countries. And, you know, part of our strategy is to train with partners and allies, and so we have interoperability and we have the ability to know each other before we actually enter into a conflict.

So I support these type of operations. They have to be nested within the budget we have. But I think they are very, very important for future readiness.

Mr. BERGMAN. General McConville, back to you. The Army National Guard and the Army Reserve—let's kind of focus on the Army Reserve right now—has historically reported lower readiness levels than the Active Component. That is to be expected, because you are not there full-time. And yet they are shouldering a pretty significant portion of the Army's logistical capabilities.

What is your assessment of the current readiness of the Reserve Component? And as the Army seeks to grow the Reserve within this budget, what are you doing to ensure that they are optimally manned, trained, and equipped to mobilize?

General McCONVILLE. Well, first, Congressman, we are very proud of our Reserve forces. We have asked an awful lot of them over the last 18, almost 19 years of combat. They have been side by side with us in every place we have been. And as far as their readiness, we are concerned about their OPTEMPO. What we will move to is more of a focused readiness for Reserve forces to give them more predictability.

We can't have them ready at the same level as Regular Army units all the time. But as they come into windows and we can get them to the appropriate dwell time, we can train them up to be the right level of readiness, and then employ them in line with the promises we made, either 1:4 or 1:5 deployment to dwell levels. And we are working that with the Chief of the Reserves.

Mr. BERGMAN. Okay. General McConville, it seems like all of my questions are focused on you, but that is okay. You know, as the Army seeks modernization in its ground combat and tactical vehicle systems, how is modeling and simulation being utilized to realize potential savings, to rapidly field capabilities, to get the training up? And how is the Army looking to leverage virtual prototyping?

General McCONVILLE. Yeah. I think modeling and simulation is absolutely critical, and it really comes down to, I want to say, resources. We can save money up front by modeling, simulating,

whether it is designing prototypes, and actually it is amazing what you can do with a computer right now before you actually build prototypes.

If you take a look at the strategy we have right now for the Optionally Manned Fighting Vehicle, that is exactly what we are doing is we are going to make competitors show us a detailed design that we can actually model and simulate with before we go to prototype and before we finalize our requirements. So, we make sure we have the right requirements in place and we don't waste money along the way for development.

And the same thing with training, and even testing out our systems. We are experimenting and simulating with the type of units that we are going to develop for multi-domain operations, so we know whether they will be successful in combat or not.

Mr. BERGMAN. Well, you know, and I see my time is running short here, I will just say I was really excited. A couple of months ago, I went over across the river and saw IPPS-A [Integrated Personnel and Pay System-Army] and how the Army is going to do the integrated personnel system.

There is no one—I will just say specifically to the Reserve and Guard Components. Nobody joined to go to a drill center and have someone hold a piece of paper and say, "Is this your signature?" Or here is another PowerPoint training. They went—they joined to go to the field to be capable, and I am counting on you all with the support that we have here to take that modeling and simulation, turn it into real training, so it's combat capability and readiness when we need them.

With that, I yield back, Mr. Chairman.

The CHAIRMAN. Thank you.

Ms. Sherrill.

Ms. SHERRILL. Thank you, Chairman Smith.

Secretary McCarthy, General McConville, last week we heard from the Secretaries of Defense and the Navy, as well as Chairman Milley and CNO [Chief of Naval Operations] Gilday. At the top of many of our minds was the recent reprogramming action by the Department of Defense.

To begin, I would like to take this opportunity to echo the concerns Ranking Member Thornberry expressed last week that these reprogramming actions substitute the judgment of the administration and the Department of Defense for the judgment of Congress, and I believe they pose a serious threat to our readiness efforts.

To that end, I would like to discuss the zeroing out of several National Guard and Reserve equipment and modernization accounts, including the entire Humvee [High Mobility Multipurpose Wheeled Vehicle] modernization fund. As you know, the National Guard uses the Humvees not only on overseas deployments but in their disaster response missions here at home.

In my home State, Guard units were absolutely crucial to the response to Superstorm Sandy. Every year, significant natural disasters require National Guard response. In fiscal year 2020, Congress recognized the need to ensure the National Guard is fully equipped and ready to respond by appropriating nearly \$1 billion for National Guard equipment and modernization.

In fact, for more than 37 years, Congress has addressed the equipment needs of the National Guard by providing funding for improved equipment needed but not requested by the senior service of each. And at no time in those 37 years has the DOD explicitly gone against the will of Congress and abused the reprogramming authority like this.

The most recent reprogramming zeroed out that appropriation, and I am concerned that this undermines the relationship between this committee and the DOD as well as undermines and undervalues the contributions of our National Guard. I think it also undermines our ability as a country to respond to natural disasters and thereby makes our citizens less safe.

So, General McConville, what impact will these reprogramming decisions related to National Guard modernization have on the Guard's ability to respond to natural disasters here at home?

General MCCONVILLE. Well, as you know, it was \$801 million from the Army that was reprogrammed, \$100 million in HEMTTs [Heavy Expanded Mobility Tactical Trucks], \$100 million in Humvees, and then \$395 million out of the NGREA [National Guard and Reserve Equipment Account] fund for the National Guard, and \$205 million out of the Reserve fund. And, you know, what that is going to—it was determined that the southwest border support was a higher priority than those elements and is—

Ms. SHERRILL. Not by Congress.

General MCCONVILLE. That is correct. And, you know, from our standpoint, what that is going to deprive is, as you said, the National Guard will not have those Humvees, the other units will not have those HEMTTs, and there were some other requirements that the National Guard from—a lot associated with—you know, from the capability to put out fires, the capability to conduct operations with night vision capability that were in the NGREA fund that will not be funded.

Ms. SHERRILL. And Secretary McCarthy and General McConville, I fully support the Army's focus on modernization. And I know Picatinny Arsenal is key in the development efforts for long-range precision fires [LRPF], which has been identified as the Army's number one modernization priority.

Can you update the committee on the LRPFs, the programs, and how the Army is working with industry and academia to further modernize?

Secretary MCCARTHY. Yeah. That portfolio in particular is performing very well from a tactical-range artillery, the Extended Range Cannon Artillery, which is on a pallet and pin system. We tested those out in Yuma last fall, doubled the range from about mid-30-kilometer range to north of 70, with wraparounds hitting with precision.

The Precision Strike Missile, which was a—is the ATACM [Army Tactical Missile System] it is replacing, which is—at the operational level has twice the value. And we are—now that we are in a post-INF [Intermediate-Range Nuclear Forces Treaty] world, we will be able to prosecute distances in the north of 600 kilometers. It conducted a test that was range constraint last fall and hit with precision at 240 kilometers. So it is going to increase this test regime in this calendar year. Very excited about that.

And, in particular, from a strategic standpoint with hypersonics, this is a joint interest program, and I emphasize the word “interest” that we are working with the Navy, the Air Force, and the Missile Defense Agency. We are defining economies of scale and the buys. We are sharing test data.

The teams are fully integrated. We have two test shots this year with hypersonics. And that we will—we are looking to field a battery by fiscal year 2023 deployable. So north of \$1 billion invested, just in this year alone. We are very excited and put a lot of energy behind the long-range fires portfolio.

Ms. SHERRILL. I will submit a question for the record because my time has expired. I would love to hear how you are partnering with industry and academia and further efforts on that. Thank you.

[The information referred to can be found in the Appendix on page 77.]

General MCCONVILLE. Absolutely.

The CHAIRMAN. Thank you.

Mr. Mitchell.

Mr. MITCHELL. Thank you, Mr. Chair.

And thank you both, gentlemen, for being here today. As my colleagues know, time is short, so I will get quickly to the questions.

Let’s continue on with the discussion of the Optionally Manned Fighting Vehicle. As you are both aware, I had the opportunity to meet with program leadership about that program. The Army had identified a need to update those, to get a new vehicle, began a prototype solicitation, and then surprisingly abruptly canceled that.

The concerns I expressed, I don’t know, a month, 6 weeks ago, were about schedule delays, cost overruns, and a dilution of the capabilities of that vehicle as we then go forward. So my question for both of you continues to be what guarantees the Army is going to offer that we are not going to see significant schedule delays and cost overruns, given we have canceled that and we are now going back to square one? Can either—anyone tackle? Whichever.

General MCCONVILLE. Congressman, I would like to take that, if I could. As you know, we took a step back from our approach on the Optionally Manned Fighting Vehicle. You know, some people—I would like to say we learned early, and we learned early before we invested a lot of money in the system, which was not the way we did things in the past.

We learned that we were going down a road with requirements that industry could not meet, so we took a step back, we took a look at our approach, and what we have done is we have put out a paper on characteristics that we want vice requirements. As soon as we say “requirements,” what happens to industry, that means they have to meet the exact prescriptive requirement.

So we have actually changed the process. We are talking about characteristics. We will go to an initial design and bring the field down small. We will go to a detailed design, which talks about simulation.

Mr. MITCHELL. And I agree.

General MCCONVILLE. And then we will go to prototypes, which will allow us to get the requirements right before we invest a lot of—

Mr. MITCHELL. What is going to happen to the schedule, in your opinion, General?

General MCCONVILLE. What is—

Mr. MITCHELL. What is going to happen in the schedule?

General MCCONVILLE. Well, I think the schedule—

Mr. MITCHELL. What delays are we going to have?

General MCCONVILLE. What I think is going to happen with the schedule is we have got a better shot of getting the vehicle we want in a more timely manner at the cost we need. So the schedule is set up to bring industry partners along, both those that are going to design the vehicle, but also those that bring technology into the system that may be non-traditional partners. And that is where we are going to get transformational change.

Mr. MITCHELL. I agree with your assessment about the process and the procurements. I sit with Mr. Banks on the Future of Defense Task Force. One thing that has been clear to us is that, as procurements have been done, we have not only talked about the problem, we have also identified, quote, “requirements” that may or may not allow for innovation, and they have caused issues with procurement.

In this case, we have at least one contractor, but several have put major money, significant money and energy, into doing a prototype. If we are going to—and now we pulled it. If we are going to get private sector money involved, we are going to get innovation needed from venture capital, those types of things, we need to focus more on laying out the problem and then let them come up with ideas rather than have them focus significant sums of money on a prototype only to be told we changed our mind. That certainly has not helped with getting people to invest, and assist us in what we need for the future.

Secretary MCCARTHY. Congressman, that is exactly it. If you—where the chief and I got personally involved with this one in particular is we went and looked and adopted a similar acquisition strategy to that of the Integrated Visual Augmentation System, where we used the authorities that were granted to us by this committee, other transaction authority, where we could put more—create, allow the contractor to unleash the engineering talent of these companies to helping us solve the problem.

So by bringing in more of these contractors, they can develop these prototypes. They can come forward and help us solve the problem. Because the points the chief was making, this is entirely about outcomes. And at times, when we go into the 5000 Series mode and it becomes ultra-specific on requirements, they are not going to bring their better ideas.

So a lot of the changes that have been made over the last couple of years from the authorities you all granted, we are using them now.

Mr. MITCHELL. Well, let me restate today, I still await more specific details on adjustments in the schedule that was originally for this procurement, are they putting this in the field, frankly, and then what we anticipate for schedule/cost changes for this compared to what we originally projected. I still await those, I think the committee does as a whole, and we would like to see this as

soon as you have a moment, some time to look at that. It is critically important, as you well know.

Let me change gears a little bit, but similar theory. The advanced combat engine is another topic that is a concern. It is for a similar reason. There is an argument there that there is a commercially available, off-the-shelf engine that will do what it is that we are now trying to procure for and we are putting government money into doing. Have you looked at that? And why are we investing in developing our own version, if in fact there are engines that do that? I understand there are.

General MCCONVILLE. We will take—I know there are engines out there right now. That is part of the process about when we put characteristics. What we are trying to do with our acquisition system is change from a linear Industrial Age system where we develop our own. If industry has got it, we want to put the characteristics out there, so they can bring it in.

What we are trying to do—and we are having success in a lot of the areas—is drive before we buy, and fly before we buy. And if they have an engine, what we are trying to get our acquisition professionals—bring it on in, show us what you have got, don't have it on PowerPoint slides, and then if it works, why not use it.

Mr. MITCHELL. One moment—

The CHAIRMAN. The gentleman's time has expired.

Mr. MITCHELL. One moment, if I could. Just one second. I think you are having a problem with getting—because the people contend they have this, but I think you have got a middle layer that that information is not getting to you, and that I think needs to be a concern for all of us in terms of what we can spend on defense. So I appreciate your deference, and I yield back.

The CHAIRMAN. Thank you.

Ms. Torres Small.

Ms. TORRES SMALL. Thank you, Mr. Chair.

And thank you, General McConville and Secretary McCarthy, as well as my colleagues, for recognizing the sacrifice of Sergeant First Class Antonio Rodriguez. At his services in Las Cruces, I was struck by the family's love and sorrow and pride in him and the impact that had on his broader family in the community, from school kids just across the street from where the services were to his brothers and sisters in arms.

And that sacrifice reinforces for me all of our responsibility to protect our soldiers, both with the current threats that they face and the threats that they will face in the future.

And to that end, I have been reviewing the budget for the Army modernization programs, and it appears to be a mix of good and bad news. The good news is that the Army has increased production of proven systems and shifted about \$31 billion over Future Years Defense Program into higher priority modernization programs. But the Army still appears to be several years away from having new generations of systems and production.

General McConville, what, briefly, is the Department's plan to move from testing to production and training for use of these weapons?

General MCCONVILLE. Well, we think we have got a very aggressive method to get after the production. One of the things that—

you have given us the authority to do this with these other transaction authorities is the training is happening right now. So as we develop these new systems, soldiers are on them, and soldiers are telling us where we need to go.

And, you know, what we are trying to do is get the prototype. The way we used to do it was we would have people sit around for 5 to 7 years and write a prescriptive requirement document that might fill, you know, up to the top of this roof. And what would happen is industry would go down for the next 5 to 7 years trying to meet those requirements without much feedback from the operators that were going to use it.

And then we would end up with something, you know, 10, 12, 15 years from now, which was really no longer relevant to what we want to do.

Ms. TORRES SMALL. And I agree with you, 10 to 15, 12 years, is no longer relevant.

General MCCONVILLE. Right. So the systems—we are looking—

Ms. TORRES SMALL. I am pleased to hear that it is aggressive.

General MCCONVILLE [continuing]. At 2 or 3 years right now. The Secretary and I have talked. You know, the hypersonics, we are going to—we are going to be fielding a battery, a mobile battery, in 3 years.

Ms. TORRES SMALL. I am pleased to hear that you will be fielding a mobile battery of hypersonics in 3 to 4 years.

Now, our near-peer competitors, like China and Russia, are testing and fielding these types of weapon systems at a faster rate than the United States. Given that, just in a few words, what is the Department's level of priority to implement your plan of 2 to 3 years?

General MCCONVILLE. Well, I think as far as like long-range precision fires and hypersonics, it is the number one priority. We are moving out very quickly. I think we will see some news very shortly on where we are on that over the next couple of months and—

Ms. TORRES SMALL. Thank you. And number one priority, I am excited to see the announcements coming up in the next couple of months.

General MCCONVILLE. Sure.

Ms. TORRES SMALL. We are investing in this next generation of weapon systems to deter great power conflict. And at the same time, we also need reliable force structure, given the high level of day-to-day deployments in Afghanistan, Iraq, and dozens of other global hotspots.

How do we balance modernization and readiness?

General MCCONVILLE. Well, it is really three things. It is readiness, modernization, and end strength. And so—and what we are doing when it comes to end strength is we have modest growth. We could sit here and tell you we need this many people, but we know we are not going to get them. So we are making sure that every person counts that is in the Army, they are deployable, they are fit, and they can do their job.

As far as readiness, we are invested in readiness in the units that are most likely to go to combat because we have got to make sure we are ready now. We saw that with the 82nd Airborne Division. And at the same time, we are going to have to divest very

carefully systems that preclude us from investing in the future. We must invest in the future. We have done simulation experimentation to look at our future systems, with the concepts we are going to have, and that gets us the results that we need to have.

Ms. TORRES SMALL. Thank you, General McConville. And I appreciate that you are investing effectively and targeted. And would you agree, as Secretary McCarthy mentioned, that every bullet counts when it comes to priority?

General McCONVILLE. Every person counts. Every dollar counts.

Ms. TORRES SMALL. Every dollar counts. So you just told me about how we need to invest in next-generation weapons, especially hypersonic missile testing, and that every dollar counts.

Just last year White Sands Missile Range [WSMR] lost \$40 million in MILCON funding for a new consolidated information and technology facility when those funds were redirected to the border wall. The current IT facility at White Sands was built in 1962. It recently suffered from a fire because of an overloaded system. So the new facility was supposed to support new missile and weapons tests, including hypersonics. Without the new facility, the DOD could fall behind on its testing requirements.

General McConville, have you discussed the impact of the outdated IT facility with WSMR?

General McCONVILLE. I have not.

Ms. TORRES SMALL. How will the delay of the construction of IT facilities impact research and testing of new weapon systems?

General McCONVILLE. We will have to take a look. I will have to talk to them and make sure we understand. As we put the tests together, with hypersonics and some of the other systems, they will go to the tester that has the appropriate amount of equipment to do that.

Ms. TORRES SMALL. I would like to get some additional information for the record. Thank you.

[The information referred to can be found in the Appendix on page 78.]

General McCONVILLE. Okay.

The CHAIRMAN. Thank you very much. And I actually was visiting White Sands. I think that is a crucial issue. I mean, this is why the MILCON issues are important. They prepare us. They are part of readiness. In this case, the testing out there is enormously important to just about everything you do, make sure it works. So getting that up to date quickly is enormously important.

With that, Mr. Banks.

Mr. BANKS. Thank you, Mr. Chairman.

A moment ago, Mr. Mitchell mentioned our work on the Future of Defense Task Force. We are nearing the end of our task force. I co-chair it with Mr. Moulton on the other side. It is a purely bipartisan effort. As we near the end of our task force, all along the way we have been working closely with the Defense Innovation Board and other organizations to implement personnel changes and technology upgrades all across the Department.

The Defense Innovation Board recommended that the DOD, quote, "create various education and training opportunities for senior leaders to understand new technologies and innovation method-

ologies such as data science, artificial intelligence, machine learning, lean startup, and design thinking.”

Mr. Secretary, as you noted in your joint statement, quote, “The Army can no longer be an Industrial Age Army in the Information Age. We are shifting from simply distributing personnel to more deliberately managing our soldiers’ and civilians’ talents.”

I wonder, Mr. Secretary, if you could comment for a moment on how the Army’s Talent Management Task Force is doing in aligning with the recommendations of the Defense Innovation Board to educate senior leaders on capabilities such as artificial intelligence.

Secretary MCCARTHY. Yes, sir. Also, if I could ask that General McConville get to comment. The task force was his idea, so he has been the champion of this for several years now.

Really, a couple of factors. We need an integrated personnel and pay system. If you were to evaluate an individual today, you get an officer record brief and it will say 82nd 100th person to get jump wings. You don’t really have enough information about an individual to make the best decision possible. Is this the right person for the right job?

It is also an opportunity for the individual to know a lot about themselves, so for career management. Some of it also is philosophy and the manner in which we select individuals.

And, Chief, do you want to talk to them about the Battalion Commander Assessment Program?

General MCCONVILLE. Sure. Thank you, Secretary.

We are in a war for talent right now in the United States Army. Okay? And we are aggressively going after that. And the good thing is when we are competing for young men and women is they are not necessarily motivated by compensation. They are motivated by purpose, and they are motivated by being on a team and they want to make a contribution.

I would argue that the problem with our personnel system—I talked about this—it was Industrial Age. It treated everyone the same. Young men and women don’t want to be treated the same. We have tremendous talent in our National Guard and Reserves that is masked because they are a sergeant of infantry or a captain of engineers.

We look behind the curtain, we find out that they own an engineering design firm or they are data scientists or they have all of these incredible capabilities or they are good at infectious disease. And so what we need is an Information Age system that we are implementing right now in the National Guard that is going to go to the rest of the Army, the Integrated Personnel and Pay System, where we can recognize people by 25 variables, not 2 variables, on what their knowledge, skills, behaviors, and even the notion of what their preferences are, what they want to do and where they want to go. And we think this is the best way ahead, and we appreciate your support of the Integrated Personnel and Pay System.

Mr. BANKS. I agree with you very much. Let me shift gears for a moment. The Army has indicated that it plans to invest in advanced lasers capable of firing at higher power levels. The laser head is a core piece of a directed energy system, so these are critical investments.

However, I am concerned that similar efforts are not being made to invest in systems that power and cool these systems. In fact, DOD leaders have indicated thermal management is among the most significant challenges in directed energy development and could take millions of dollars and years of development to complete.

Mr. Secretary, why is the Army not pursuing a power and thermal management development plan knowing that that delay could add years to the fielding of directed energy systems?

Secretary MCCARTHY. Sir, we have been successful with a 50-kilowatt laser test on the Stryker vehicle. We are looking at how can we integrate upwards of 100 to 150 kilowatt on the same platform.

To your point, much of the challenge is the cooling—the integration of what would be the propulsion capability to execute the shots. But the big challenge for us is the platforms and our formations.

General Neil Thurgood from our Rapid Capabilities and Critical Technology Task Force is developing plans on that, and it will be reflected in our budget submittals in the future.

Mr. BANKS. Okay. That is all I have got. Thank you very much. I yield back.

The CHAIRMAN. Mr. Crow.

Mr. CROW. Thank you, Mr. Chairman.

Secretary McCarthy, General McConville, appreciate your continued service to the country.

At the beginning of the testimony, General McConville, you mentioned that we have 190,000 troops in 140 different countries. We also have over 20,000 joint troops deployed as part of Defender Europe right now throughout Europe.

Sitting here today, are you comfortable that the Army has sufficient coronavirus test kits, medical supplies, and the training, both OCONUS [outside contiguous United States] in our forward-deployed locations, but also at our posts throughout the world, to address the threat?

General MCCONVILLE. Well, we want to make sure we have more, Congressman. I am never satisfied with what we have. We are going to great lengths to mitigate the risk of all of our soldiers. You know, we are concerned about South Korea. We have stopped exercises. We are very concerned with some of our troops coming out of Italy. We have adjusted exercises.

And one of the things that we are doing with our task force is they say that they have the capability to rapidly develop tests that can handle a much larger in scale. So I am not—I am never satisfied with what we have. I think we can do better, and we want to make sure that our soldiers and families have every capability to protect them against this virus if it comes their way.

Mr. CROW. What do you need to do? What needs to be done, I would say, to make sure that you are satisfied, in a place where—

General MCCONVILLE. Well, I think what is being done is—the Secretary talked about these experts that at least we have—that work for the Army that have told us in about 2 or 3 months that they can develop—you know, with the right resources, and we have given them the resources, to go ahead and develop a test capability that is much larger in scale. We can do it small numbers now, 50,

60, so many a day, but we need to get up to thousands where we can really turn these.

We have the capability to test now, but I want to be sure that the tests are, you know, 100 percent. People say you will never get to that, but we have certain screening that we are doing for all of our soldiers coming back from Korea. We just had the 3rd Brigade of the 1st Cavalry Division come back, and they are getting screened all along the way, so we don't have someone—

Mr. CROW. Every soldier is being screened?

General MCCONVILLE. Yes. Yes, Congressman. Every soldier is being screened at multiple times during the redeployment to make sure that they don't have a problem with—

Mr. CROW. Let us know, you know, if there are additional resources that are needed to deal with it. And we said the same thing to Secretary Esper and General Milley last week as well.

Shifting gears here, Congressman Lamborn, at the beginning, was absolutely right in the opening statement that our reliance on certain fossil fuels is a vulnerability for us. The same applies for our installations as well. Actually, Congressman Bacon and I just started a Military Resiliency and Energy Caucus—that is MRE Caucus—which we are very proud of. It is a bipartisan effort to address this issue of our installations.

So I know the Army—a couple of installations, including Fort Hood, have gone to micro grids and trying to not only reduce operating costs, reduce carbon footprint, but also increase resiliency and address the threats from cyberattack as well.

Can you both comment on what the next phase of that buildout would be and what you are doing to move that forward with haste?

General MCCONVILLE. Well, we have other posts. As you may know, Hawaii has a power plant there on post that we can use. Fort Knox went to natural gas. They have that capability. And I will defer to the Secretary, but we have many posts that are very concerned about the ability for resilience, and also low-cost energy.

Secretary MCCARTHY. No, sir. To the chief's point, we have looked at this being a priority for the FORSCOM [U.S. Army Forces Command] installations, in particular, and then we will continue to flesh out a plan, put more investment towards this.

Mr. CROW. Is there more investment that is needed? I mean, do you need more resources from Capitol Hill to actually expedite those efforts?

Secretary MCCARTHY. I have to get more particulars for you, sir. But it would probably be good if we came and sat down with the caucus in particular, and it would probably be a good starting point.

Mr. CROW. Because what we do know is that, when we make those investments in the front end, it actually reduces operating costs on the back end. So you look at long-term costs. Those are investments that we could make that could actually reduce overall fixed costs in the future and free up resources for other efforts as well.

And then just last, dovetailing on Mr. Banks' thoughts on recruiting, we haven't been meeting our recruiting goals. We are projecting an increase in force structure. It is a tough job market. We need to hire, you know, talent that can address 21st century tech-

nology. What are we doing to change the model of recruiting to do those things?

Secretary MCCARTHY. Well, Congressman, you helped us in Denver, just last fall. But we changed our strategy to 22 cities around the country. We are engaging civic leaders. We changed our marketing firm to address the types of opportunities that exist in the U.S. Army, 150 different operational specialities, advancement in education, opportunity in financing for advanced education.

A lot of it was, is just getting more in touch with the 17- to 24-year-old generation. And it is also senior leader involvement. The chief and I go out to cities. We go with Members of Congress, and we meet with civic leaders to help us talk to those influencers to encourage young men and women for a life of service.

Mr. CROW. Thank you.

Secretary MCCARTHY. Yes, sir.

The CHAIRMAN. Thank you very much.

Mr. Gallagher.

Mr. GALLAGHER. Thank you.

Secretary McCarthy, you recently said, at CSIS [Center for Strategic and International Studies] I believe, that Army modernization costs and personnel costs are on a collision course, yet you are proposing to add an additional 2,400 Active Duty soldiers to Army end strength. Can you explain how you plan to mitigate that collision course?

Secretary MCCARTHY. Yes, sir. When you have 1:1 dwell, BOG [boots on the ground]-to-dwell time, we have to increase the size of the force. And we are on a trajectory to hit 492,000 in the Active force by the end of this FYDP [Future Years Defense Program].

But the point that I was trying to emphasize, without an increased top line, under current demand we will be faced in 2022 or 2023 with flattening end strength, tiering modernization, or reducing our ambition within our modernization efforts.

Mr. GALLAGHER. General McConville, could you explain the logic behind the Army requesting \$364 million to do a division-size Defender Pacific exercise in the Pacific? In other words, is there—how do I put this? Is the Marine Corps not currently postured to perform defensive and offensive missions in INDOPACOM [U.S. Indo-Pacific Command] such that Army needs to fill the void?

General MCCONVILLE. Well, first of all, the Marine Corps is a fabulous service. It does great things for the country, and I think we work together very, very closely. But what the Army brings is it brings mass, it brings a large capability.

And, again, you know, as we look at the National Defense Strategy, the priorities are China and Russia, and our partners out there in many of the leaders in the countries that—you know, whether it is Thailand or it is the Philippines or it is Indonesia, their armies want to work with us. And so I think it is very, very important that we demonstrate that we have the ability to move forces into that region, that we have the capability to train and interoperate with these countries that want to be our friends and partners, and that is what the importance of this exercise is.

Mr. GALLAGHER. So, in simplest terms, what would the Army do in a no-kidding WESTPAC [Western Pacific] contingency, for example, a war with China over Taiwan?

General MCCONVILLE. Well, I think what the Army does is it provides deterrence, just like, you know, if you want to go back to World War II, not that we are going to take islands, we don't know as far as what the threat is going to be, but here is what we do know is we know that the countries in the region that border the South China Sea want the Army's capabilities.

Right now they want our security force assistance brigades. They want us to advise and assist to build their capabilities. They want our multi-domain task force capabilities, at least the COCOM commander does. And almost to a country—and many of the ones I have met with—they want to train with our soldiers.

Mr. GALLAGHER. Secretary McCarthy, how does the Army plan to meet what is its primary joint mission, if I read correctly, in INDOPACOM, which is to defend our airbases and logistics hubs against low-flying cruise missiles?

Remember, in this committee, we identified that as really the modern day missile gap. In other words, we can shoot down IRBMs [intermediate-range ballistic missiles] and SRBMs [short-range ballistic missiles]. We can hit high-flying cruise missiles with Patriots. But we can't—that gap is that low-flying cruise missile. How do you intend to address that gap?

Secretary MCCARTHY. Two ways, sir. First and foremost, you have to have the footprint in that area of the world. So getting our forces west of the International Date Line with greater duration is critical. So the points the chief was making about the relationships—is it expeditionary basing, is it longer duration of the deployments in places like Thailand, the Philippines, and others. So that is critical.

The second, to your point, we are pursuing the Iron Dome system. We kind of have left our options open on the outyears with IFPC [indirect fire protection capability] because we need to get more data from the manufacturer, so we can see if adjustments have to be made to that system in order to meet a cruise missile threat.

Mr. GALLAGHER. What early successes could you point to for those who might be skeptical about the future of Army Futures Command?

Secretary MCCARTHY. Like all things, sir, it is new. It has to prove itself and deliver the results. But I think if you can look early on is that it has brought all of the stakeholders of the modernization continuum together, and it has got warfighters at the seat at the table talking about the characteristics of the weapon systems that they need. But it is as much materiel as it is the way that you fight, and recognizing that materiel will change the operating model.

So it has been critical to do this because, you know, obviously, we have been very busy the last 19 years, but changing our organizational construct so that the warfighters are at the table driving these materiel efforts in particular.

Mr. GALLAGHER. And for those who would point out that kind of Boston and Silicon Valley are really the hubs for this type of stuff, do you still think Austin is the place?

Secretary MCCARTHY. Absolutely, sir. We have footprints, that we have the Center for Army Analysis out at Berkeley, we have re-

search at MIT [Massachusetts Institute of Technology]. We have strong relationships there. And then Austin is one of the most entrepreneurial cities in America. We have a strong partnership with the University of Texas, which is a top-tier engineering and business school.

We are partnered with Capital Factory, which is an entrepreneurial footprint where you bring in small, medium-size—

The CHAIRMAN. I am sorry to interrupt. The gentleman's time has expired.

Ms. Houlahan.

Ms. HOULAHAN. Thank you, Mr. Chair.

And thank you, gentlemen, for coming. I am going to follow up on some of the questions of Mr. Crow, as well as Mr. Banks, regarding talent and specifically tech talent.

Last year, I introduced a bipartisan Armed Forces Digital Advantage Act, which establishes a policy to recruit, retain, and promote tech talent and digital expertise at the DOD. Much of the bill was enacted last year in section 2030 in the NDAA.

So I guess my questions, to follow-on on Mr. Banks and Mr. Crow's questions are, I did have the opportunity to go to—not related but somewhat related—the JAIC this week, and they did talk significantly about the struggle for tech talent, specifically about security clearances and the speed with which they were able to attain them and the fact that people were basically disappearing on them because they didn't want to wait, or onboarding problems where it was a struggle to get people hired fast enough before they had five or six other offers.

And then, frankly, they also talked about this—I know the narrative is that, you know, we are all patriots and we like to serve, and I served as well as an engineer, but the reality is when it is 2, 3, 5 times, 10 times salary differential, there is a struggle when you are trying to make that decision of service.

So can you talk a little bit about, since you are the largest service, what you are doing in these areas to make sure that we can retain and recruit tech talent?

Secretary MCCARTHY. Yes, ma'am. I would also like the chief to weigh in, if I could. We are partnering closer. We put footprints forward, like Artificial Intelligence Task Force, we put it on the campus of Carnegie Mellon University. We are on the campus of the University of Texas. We are trying to get closer to academia, so that we can try to encourage young men and women when they are in those formative years, like in college or graduate school, for opportunities in the civil service as well as the uniformed side of the house.

It is very challenging. Compensation is dramatically different from just a financial standpoint. There are authorities that have been granted by this committee that we can use to make them highly qualified experts and others. But still, it presents a challenge. You know, getting us better relationships with business and academia has been key, and we have been successful in a handful of instances.

Chief.

General McCONVILLE. I think it is really important that we expose these young—these extraordinary young men and women to

the Army. And you have given us the authorities now to do things like direct hiring, you know. And we talk at our level—we are talking about data scientists. I mean, that is one of the biggest things that we need to get.

We have been working with cyber, same type thing, and the system needs to be more flexible. You know, again, we have Industrial Age personnel, and I was former G-1 [Deputy Chief of Army Personnel]. We are trying to change that as we go forward. But what we have found is, you know, we—it is an anecdotal example, but for cyber sergeant, only about 10 of them in the world that can do what this sergeant can do. He wanted to stay in the Army, even though he is getting mid-six-figure offers. He said he would stay in the Army if we made him a GS-13 [General Schedule 13].

Now, the system initially was not going to do that because that is not what our system does; because he is an E-5, he should be a GS-6. But we have the capability to make him a GS-13. He is staying in the Army.

He can only do things that he is doing in cyber in the Army. No other place can he do that legally. And those are the type of things that we offer is—

Ms. HOULAHAN. Is there more that the Congress can authorize you to do? They commented at the JAIC that there was concern that we wanted to be able to create a number of billets that would exceed the Vice President's salary as an example. Are there other things that we can do to make sure that we retain these talented people?

General MCCONVILLE. I think that we are really looking hard at where we can direct-hire. We have done that for the engineers. The engineers now can do a lot of direct hiring. We have just got to make sure with these precise areas we can do the direct hiring that we need to do. Just like you said, you know, we go to a lot of these engineering forums, and they had it—before, when we went, okay, in 6 months we will try to get you on board. Now they can hire right away, but the direct hiring has a lot of capability.

Ms. HOULAHAN. I am sorry. With the last minute of my time, I wanted to completely change gears and talk about family housing and barracks. The budget that you all put forward states that the Army looks to address family housing and barracks, yet it looks like, according to the budget that you have put forward, you are looking to increase personnel but reducing family housing, your request by \$62 million, in MILCON by \$810 million. How do you reconcile that difference where you would like to increase the number of billets but you are decreasing the ways that you are supporting them?

Secretary MCCARTHY. We have to recapitalize about a third of the housing from—that are managed across our portfolio. And what we are looking at is some of these homes just have to be taken down. And what we are looking at is potentially external financing options through the companies that manage the on-post housing today, because it would require north of \$10 billion to essentially recapitalize the homes across the entire Army.

Ms. HOULAHAN. So the answer is you are looking to private industry to solve the issue?

Secretary MCCARTHY. Well, we are looking at potential options there, because of just the astronomical cost it would take to recapitalize the entire footprint.

Ms. HOULAHAN. I have run out of time, but I would really like to have a follow-on conversation about you because the private industry solution hasn't seemed to be working for us in the housing area. But I have to yield back. I appreciate it.

Secretary MCCARTHY. I will reach out, ma'am.

The CHAIRMAN. Thank you.

Mr. Kelly.

Mr. KELLY. Thank you, Mr. Chairman.

Mr. Secretary, Chief, it is great to see you all today. I want to start out just by talking a little bit about you, General McConville, and I get to see you up close sometimes and it is great. And, General McConville, this is for all of those soldiers out there. I hope they are listening. It is people first, winning matters, and Army strong. And you mean that.

And I want you to talk a little bit about that, because I know how much people—and I got to sit in when you talked about what you are doing for housing and all of those things that matter. And so I know that you are engaged in those, and thank you for that, because people truly matter to you, and I appreciate that.

But talk a little bit about what we are doing for data mining, and a little bit about your Battalion Commander Assessment Program. Just had General McGee in yesterday, great, great program, and what you are doing in talent management, because you have got some great ideas that are going to be the Army of the future.

General McCONVILLE. Well, thank you, Congressman, and, again, the Army is people. It is our most—it is our greatest strength. It is our most important weapon system. When I am talking about people, I am talking about our soldiers from the Regular Army, from National Guard, and from Reserves. The point I make is 53 percent of our soldiers are in the Reserves. We should never forget what they do for us.

And 88 percent of our sergeants above have families, so we cannot forget about our families. And we have 249,000 Department of the Army civilians who labor every single day, making things happen for us. And we cannot forget our soldiers for life, our retirees and our veterans, because we have an obligation to them.

So those are our people, and the feeling is that if we get our people in the right place, the right time, doing the right thing with the right resources, everything else follows. We will have readiness, we will have modernization, and we will have reform. And that is why our people are so important.

Now, I can talk a little about, you know, what we are trying to do as far as the Battalion Commander Assessment Program. Picture right now the NFL [National Football League] Combine is going on. We just did ours, but what we did is we took our battalion commanders who I consider the most consequential rank, because they influence the people below them, they are also our future leaders, and we ran them through a 5-day assessment, a 5-day assessment to make sure that they had all of the attributes that we thought they needed to be successful battalion commanders, and we had very good results from that.

Mr. KELLY. I am a great supporter of that program. I do have—my one concern is, like everyone else, I don't like the way that we went about this reappropriation of the budget. And I think the Guard took a huge hit on that, and it is hard to build trust when you tell guys we are going to field you in the future, but we are going to take away what we are going to field you.

So when we are talking about NGREA and those things, there is some long-term trust that we have got to work on. And I think, General McConville and Secretary McCarthy, I think you guys can help us if you let us know what your plan is, so that we don't lose a readiness gap in the Guard and Reserve in equipping and manning and all of those things. So I will take that for the record.

[The information referred to can be found in the Appendix on page 78.]

Mr. KELLY. The other thing I want to talk about is the Futures Command, and General Murray is doing great, great work down there. And I like what we are doing, and I hope you guys will brief us on where you are. But I want to make sure we are focusing on engineer equipment. You know, we are doing Defender 2020. I have got—my old engineer brigade is going downrange to support that. But the most complex things we do in war as an Army is river crossing and complex breaches. And I am not sure that our engineer equipment is any different today than it was when I got in as a second lieutenant in 1988.

What are we looking at in Futures for engineering equipment?

General McCONVILLE. That is a great question. And one of the reasons that we are going to Europe, and one of the reasons we are doing a wide gap crossing right now, is to demonstrate that we actually need that capability. A lot of the places we have been for the last 20 years conducting operations, we didn't do those type of—we didn't need that type of equipment. And when it came to priorities and you only have so much top line, you go to where you need.

But as we move into great power competition, and we look at the type of forces that we need to deter those potential adversaries, engineering equipment and even engineering units are absolutely key. We brought them back into the BCTs [brigade combat teams]. We got rid of them. We are bringing them back. And we are taking a look at the—we have recognized some of the gaps and we are going to put some programs together to fill those gaps.

Mr. KELLY. General McConville, I am going to leave my last just on kind of—on a comment, but you are from the great State of Massachusetts, and we built our Army on the Massachusetts Militia. The first Active Duty Army was built on the Massachusetts Militia.

We are a great Army, and we have never won a war that we have not engaged our National Guard. And so I just ask that when we are fielding and equipping, they are an operational force, and we have to equip them and man them. And then we also have to be cautious, but please—and I know you are doing that, but thank you for what you are doing.

The CHAIRMAN. Thank you.

Mr. Cisneros.

Mr. CISNEROS. Thank you, Mr. Chairman.

Mr. Secretary and General, thank you both for being here today. Mr. Secretary, I will start with you. Understanding the Army's desire to transform itself in the newly proposed multi-domain operation concept, this will require the Army to fully integrate with other services and have access to national-level capabilities. What is the level of buy-in and resourcing do you—do you have from the Department of Defense and the other services?

Secretary MCCARTHY. Sir, we meet on this topic every Monday with Secretary Esper, the chief, service secretaries, the unders, beaming in the COCOMs. The big part of us getting to an NDS implemented force is the joint warfighting concept. And you really look at two lines of operation there. In "the Tank" where the chiefs are going to look at this, that is how our disposition worldwide, the types of capabilities we need to meet the operational plans. General Milley is driving that.

And then, internally, to the business side, we have to look at our architecture, and then how do we communicate? That is as much as the—our integrated battle command system being complementary to the advanced battle management system that the Air Force is driving. So it is a command and control capability, but it is also the space.

We are going to need a common transport layer within the satellite architecture, so that we can transfer the data, which will ultimately be cloud driven. So, as I mentioned in my opening remarks, cloud architecture is something we are pursuing in the Army. The vice chief and Acting Under Secretary McPherson are the two running point on this for the Department.

So cloud architecture, our complementary command and control nodes, our disposition worldwide, as some of the questions we had before, where are our forces? Terrain matters. And then, ultimately, the satellite architecture.

Mr. CISNEROS. All right. Thank you.

General McConville, in fiscal year 2019, the Army experienced a total of 55 Class A mishaps and 61 Class B mishaps, which resulted in 28 casualties and approximately \$362 million in damage or lost equipment. These mishaps occurred in training and operational environments and were not combat losses. While it is understood that military training is inherently dangerous, the committee is concerned by these recent trends and questions as to whether changes are required to training program safety standards and/or range safety practices.

Can you comment on any reviews currently underway to review the safety of the Army training or any initiatives being implemented to improve safety and reduce the number of mishaps?

General MCCONVILLE. I can, Congressman. I am very, very concerned about some of the training exercises we had where we are starting to have vehicles rolling over and people not wearing seatbelts, and we lost some soldiers very tragically. And some of this is getting back to being around very large, expensive equipment, where we started maneuvering our forces, which was very different than what we were doing before.

All of a sudden when you have armored vehicles moving in very difficult terrain, we had to get back to some of the basics. So the focus is really bottom-up focus. It is getting back to the squad level.

It is getting back to the team level. It is giving the junior leaders a chance to learn how to do their jobs. Many of our more mid-rank and senior leaders are very, very experienced. You know, they have got multiple combat tours. They have been doing this business a long time.

But we bring 130,000 soldiers into the Army every single year. They are coming right off the block. They need time to learn how to drive their vehicles. They need time to learn how to maneuver the vehicles. And that is a changing focus that we think is very, very important, because we are not satisfied or certainly we have got to fix that. We cannot have that many accidents. We cannot lose soldiers in training, and we are doing everything we can do to fix that.

Mr. CISNEROS. So was there anything that you implemented? I mean, was there an overview of procedures or—

General MCCONVILLE. Well, there certainly was an overview of procedures. But as you do the analysis, if you find out that we are in vehicles and we are rolling over and we are not wearing our seatbelts—and if you are wearing your seatbelt, you survive, if you are not wearing your seatbelt, you don't. I mean, some of that is just basics that we need to get back to.

If you are in an assembly area and you are not ground—guiding your vehicles, and at night you start to make these—you make these mistakes that can result in tragedies that should not happen in the unit, this is basic soldiering. And we don't necessarily need to change our policies. We need to execute them and make sure that we have given our soldiers at the lowest level the training that they need to do to make sure that they are successful on the battlefield.

Mr. CISNEROS. All right. Thank you, General.

And just real quick—I have got 12 seconds left here—but, you know, we have talked before previously with both of you about the diversity in your officer corps and what you are doing. You are implementing it. Would love to come and talk to you more about that when we have some time.

The CHAIRMAN. We will have to take that for the record.

[The information referred to can be found in the Appendix on page 78.]

Mr. CISNEROS. Yes. Thank you.

The CHAIRMAN. Mrs. Hartzler.

Mrs. HARTZLER. Thank you, gentlemen, for your service. I want to start off talking about munitions. And, General McConville, we obviously have significant challenges in both capacity as well as capability, and our stockpiles have really been used in the last 15 years.

So I was wondering, what is your assessment of the risk in the Army's precision-guided and preferred munitions request?

General MCCONVILLE. Well, we have done a lot of work over the last 2 years. We have put billions of dollars into munitions, and I think that as we do an assessment of a possible situation that we would have been in, we quickly realized that we needed to invest in munitions, and we stood up that capability.

We are doing an assessment right now to make sure that we have the right amount, you know, as we look at what is the best

strategic way to take the amount of munitions we have so that each combatant commander has the necessary munitions in place, and we continue to invest in that as a priority within the top line that we have.

Mrs. HARTZLER. Yeah. So along with that is the industrial base. So what specific actions are you taking to manage stability, capability, and capacity risk in the U.S. munitions industrial base to include reducing critical supply chain dependency sourced from outside the United States?

General MCCONVILLE. Now, you know, in fact, General Perna is working that very, very closely. He is our AMC [Army Materiel Command] commander, and he has been taking a look at that exactly. We do not want to be dependent on one chain. We are doing some other things that when we look at where—how our ammunition is manufactured, where it is manufactured, and trying to keep competition in the system.

Mrs. HARTZLER. Good. I think that is key, so I am glad to hear that.

Secretary McCarthy, I understand that Army Futures Command has reached full operational capability, and I recognize the good work that the cross-functional teams are doing with respect to modernization.

But looking ahead, logistics and combat enablers, such as Army engineers that we just had a discussion with Representative Kelly about, they are going to be critical to any future conflict against a peer competitor.

And I know, General, I was encouraged to hear your response to my colleague that engineers are key, and that you are saying that programs to fill the gaps, you are seeing some gaps perhaps in the exercises that are going on over in Europe.

So this fits right in with my question. Are there any plans to stand up a cross-functional team that could be focused on logistics, equipment, modernization? And, if not, what is the Army currently doing—maybe you can expound on the programs to fill the gaps—to address these challenges related to logistics and combat enablers?

Secretary MCCARTHY. Ma'am, we wrestled with this a lot when we stood up—we made the six priorities and ultimately established the cross-functional teams. But what we recognized was that you needed representation on the cross-functional team, logistics, a leader that would represent that stakeholder on every one of the teams.

And General Perna handpicked these individuals, put them on these teams, because when you are developing these new weapon systems, it may require different enablers. So being on the front end of the process for most of the 31 signature systems, we thought it was best to have the individuals being represented. He has a hands-on approach, obviously, in all things that he does.

But one of the things in particular we are looking at is just how we—in the modernization enterprise, having a very senior configuration steering board, representation at the three-star level of the Futures and Concepts [Center] director, Eric Wesley; Combat Development, General Richardson; and Paul Ostrowski in ASA(ALT)

[Assistant Secretary of the Army (Acquisition, Logistics and Technology)]; Daly, the deputy of AMC—

Mrs. HARTZLER. Due to time, can I—

Secretary MCCARTHY [continuing]. So you have all of the stakeholders there.

Mrs. HARTZLER [continuing]. Can I interrupt you? So who is on that team that is addressing the engineer issues and with logistics and enablers?

Secretary MCCARTHY. General Ed Daly is the three-star, the deputy commander. So, at that three-star level, there is about six individuals that are key with driving all of these changes across the modernization continuum.

Mrs. HARTZLER. General, can you expand on what programs you are doing to fill these gaps?

General MCCONVILLE. Well, the programs that we are looking at right now is, you know, we do have some—as we did the analysis and we did simulation at—really, at Fort Leavenworth, we came back and did it—we did a comprehensive study on how we are going to fight in the future. And there are gaps as far as in bridges and engineering equipment, and we know what they are, and we have got to get them into the budget and the program based within the—with the resources that we have.

Mrs. HARTZLER. I would like to visit with you later more about some of the specifics. Obviously, at Fort Leonard Wood, we have the engineering school and—

General MCCONVILLE. Sure.

Mrs. HARTZLER [continuing]. Very, very important. I would like to switch to talking about the helicopters, UH-60M. This year requested 36; last year it was 74. So that is significantly less than we requested last year. Of these 36 requested this year, 13 are for Active Duty, 23 are for Army National Guard, which I actually have a Guard unit at Whiteman Air Force Base that flies these.

So what is the number requested—why is the number requested significantly lower than the number last year? And how will this impact units that are in the pipeline to receive the UX-60, the Mike models?

The CHAIRMAN. And that we will have to take for the record, unfortunately. The gentlelady's time has expired, so they can get back to you later. I can tell he was looking forward to giving you the answer on that one, too.

[The information referred to can be found in the Appendix on page 78.]

The CHAIRMAN. Ms. Horn.

Ms. HORN. Thank you very much, Secretary McCarthy and General McConville, for being here. I am going to pick up one of the issues that Congresswoman Houlahan addressed—as I am sure neither of you are surprised—that housing is a major issue for me and across our Nation. And I want to talk about that, because I am incredibly concerned still about the challenges that we are facing with privatized military housing, despite the fact that last week the Secretary—Defense Secretary Esper, they signed an agreement about implementing the tenant bill of rights. Three of the major provisions were not implemented. We will continue to follow up on that.

And the progress has been insufficient, to say the least. But while the overall request in the fiscal year 2021 budget was a substantial increase across our service branches, the fiscal year 2021 budget request for housing in the Army was actually decreased by 11 percent, and supporting and addressing the privatized housing and fixing the systemic and significant problems there was a 22 percent decrease.

So, Secretary, I am confused as to why facing these significant challenges—and, again, increase in the need for force structure—how we are going to address the ongoing challenges realistically and take care of our service members and their families with a 22 percent decrease.

Secretary MCCARTHY. Yes, ma'am. With respect to the bill of rights that you mentioned, three of the tenets weren't agreed to at this point because there is much work to do. And to your point, we are trying to earn back the trust of our families, so that is why 15 of the 18 will be implemented by May 1.

There may be some authorities we might need from the committees of jurisdiction in order to get a dispute resolution process in place to work on those maintenance history records.

With respect to the management, it has gotten better, but we have a long way to go, to your point.

Ms. HORN. Specifically, I want to know about why there was a decrease in the requested funding.

Secretary MCCARTHY. So on the profile, so much of it is about execution as it is on the investment decision of which homes do we recapitalize or ultimately knock down.

Ms. HORN. Okay. And I will follow up about the authorities needed, because the three that were not implemented cause me great concern. We have a lot of bipartisan support on addressing this issue. The ability to access maintenance history seems pretty basic to me, as well as some of the others that were at the heart of the tenant bill of rights we passed. So we need to make sure that we are getting the authorities that are needed and holding these companies accountable.

But I want to go ahead and switch gears now so we can cover a couple of other things, and I will ask both of you this next question.

So, as you know, Fort Sill in Oklahoma, Fort Sill Base is a critically important installation to the Army and to Oklahoma. And the Fires Center of Excellence there is doing an amazing job of training the next generation of artillery soldiers to face near-peer adversaries.

And looking at the investment of some of our near-peer adversaries, specifically China and its investment in long-range precision-strike capabilities, I would like—Secretary McCarthy, I will start with you—to talk about I am hearing concerns from them and other places about our ability to keep up in our investment.

So strategic priorities and timetables to modernize and update the long-range precision fires program.

Secretary MCCARTHY. Yes, ma'am. We have over \$10 billion invested across the FYDP in long-range precision fires. Extended Range Cannon Artillery, we are on track to having the four batteries by fiscal year 2023 fielded. We will have—on the Precision

Strike Missile, we are going to have batteries fielded by end of fiscal year 2022. The hypersonics, we will have a strategic capability fielded, deployable capability by first quarter 2023. So we have billions of dollars invested against this and a tremendous amount of energy from senior leadership.

Ms. HORN. General McConville.

General MCCONVILLE. Yes, Congresswoman. I would say for both fires and air defense we are ramping them up because of, really, the change in the fight we see. You know, when you are in irregular warfare counterterrorism, we weren't, you know, shooting large amounts of artillery. We certainly weren't shooting a long ways because of potential collateral damage.

But the way you deter near-peer competitors is with things like artillery and tanks, and so we are very aggressively investing in that. And what our potential competitors have is they have set up an anti-access, area denial capability that is going to be required to be penetrated. And that is why we need these long-range precision fires.

And like I said in my statement earlier, we don't want to be out-gunned or outranged in the future. So that is why we are investing in artillery.

Ms. HORN. Thank you very much. And I will be following up about the housing issues as well. Thank you.

The CHAIRMAN. Thank you.

Mr. Scott.

Mr. SCOTT. Thank you, Mr. Chairman.

Gentlemen, thank you for being here. I am one of those that is concerned about the term "near peer" being used as not necessarily an excuse, but a reason to get rid of systems that are effective and efficient that we use in combat today before a replacement system has proven themselves to be both effective and efficient.

And, General, I think you used the term that you like to drive it or fly it before we buy it. And sometimes the thing that will work and is proven that it will work is the thing we ought to stick with, especially until something has proven that it can be—they can do it better.

The Air Force has proposed to stand down a significant number of A-10s. I am concerned about the close air support mission. I am also concerned about the command and control aspect of combat for the Army.

And, specifically, I want to talk about ABMS [Advanced Battle Management System] right now. It is an Air Force system. It is—JSTARS [Joint Surveillance Target Attack Radar System] is your targeting system that the Army has depended on that is operated from—by the Air Force. It operates out of Robins Air Force Base. The Air Force made a decision that I very much disagree with not to go forward with the recapitalization of the new JSTARS in favor of ABMS.

General Wesley from the Futures and Concepts Center stated that the ABMS system cannot be the sole solution for the Army's multi-domain operation command and control. I was a little taken aback with these comments. I would assume that if it was going to be the command and control platform for the Army that the

Army would have been involved from the start with the development of the ABMS system. That is apparently not the case.

But what is the Army doing with regard to the warfighter multi-domain operational command and control requirements with regard to the Air Force and ABMS moving forward? And have you integrated people from Army Futures and Concepts Center with the Air Force to develop the ABMS platform and make sure that it works for the Army?

General MCCONVILLE. Yes, Congressman. What we are doing is the overarching concept—we have what we call multi-domain operations, but at the joint level there is going to be a joint all-domain operations. That is a joint warfighting concept that is being put together by joint force.

The joint all-domain command and control is the network that will allow us to talk to all of the services and links sensors to shooters. The Air Force has the lead on that. Their contribution is—as you said, it is the air battle management system. They are taking a look at that.

Our contribution to JADC-2 [Joint All-Domain Command and Control] is an integrated battle command system that ties all sensors to shooters. It is an integrated tactical network. It is a cloud, and it is data standardization. And what we are trying to do is bring these systems together, so that every sensor, every shooter from every service in the battlefield can communicate as we move in the future.

Mr. SCOTT. General, it is one of those things it is much easier said than done, if I am not—

General MCCONVILLE. No, you are absolutely correct. This is hard stuff. I mean, it briefs a lot better on PowerPoint.

Mr. SCOTT. Many of your aircraft, in fact, probably all of our aircraft, still operate on VHF [very high frequency]. Is that—

General MCCONVILLE. Well, not all, but we have VFH, UHF [ultra high frequency], Fox Mike [FM], and satellite communications. So most of them have multiple communications capabilities, so they can talk if something happens.

Mr. SCOTT. Point being that a soldier mic'ing up and talking to another soldier—

General MCCONVILLE. Sure.

Mr. SCOTT [continuing]. Is probably the same system we are going to use many, many years from now, I would think.

I am down to a minute, but, Mr. Secretary, the coordination among the branches and the leadership of the branches is a very serious concern of mine. And I know over the—you know, the duration of our Secretaries is, on average, 24 months or so. And so I am glad you are there. I wish you good luck, especially in the Army-Navy game. But I hope that you will stay on the Secretary of the Air Force about making sure that as they stand down systems that the soldier on the ground in the Army depends on, that they have another system that is ready to go before they stand down the system that—systems that are efficient and effective and that our soldiers depend on on a daily basis.

Secretary MCCARTHY. We had this very discussion last week, sir, on the Defense Planning Guidance, where we had senior leaders from all of the services meet with the SECDEF [Secretary of De-

fense] and talk about how the technical architecture for this has to be complementary, so that all of the services can then deploy their capability and fight jointly.

Yes, sir.

Mr. SCOTT. Well, if you take him to Benning, I am going to tag along with you.

Secretary MCCARTHY. It is a short ride for you, sir, I know.

The CHAIRMAN. Thank you.

Mr. Brown.

Mr. BROWN. Thank you, Mr. Chairman, and thank you, gentlemen.

I was recently informed that two Army medical research labs—the U.S. Army Medical Research Institute of Infectious Diseases at Fort Detrick and the United States Army Medical Research Institute of Chemical Defense at Aberdeen Proving Ground—are currently going through funding issues, including a hold on reimbursements in the Office of the Secretary of Defense.

These labs provide critical support, developing countermeasures and treatments to both chemical weapons and infectious disease, including the coronavirus. They played an instrumental role in the vaccine for anthrax, smallpox, and Ebola.

The coronavirus is having an impact on readiness. General McConville, you mentioned canceled joint exercises in South Korea. We also know that there is restricted access to public areas for service members in Italy. There is the offshore quarantine, basically, of all ships that have made port in the Pacific.

CENTCOM [U.S. Central Command] has ordered all military personnel in Saudi Arabia to stop non-essential travel. We have canceled joint military exercises in Israel, and at least one service member and their spouse in South Korea has been tested positive for coronavirus. It is having an impact on readiness.

General Milley says that the DOD is working feverishly on a coronavirus vaccine, but I have got concerns. And, Secretary McCarthy, you mentioned we have got a crackerjack scientist who is on the case. One person cannot do the job. The lab at Fort Detrick has some serious funding issues. It is a lab that operates on a reimbursement model. So when customer demand is down, they don't have the revenues to invest in human capital, the scientists that they need, or in modernizing their equipment. I don't think it is a sustainable model.

So the question for the panel: how do we ensure that these critical labs both have stable funding to maintain capability and that they can surge to meet crises like coronavirus?

Secretary MCCARTHY. Yes, sir. I highlighted earlier the extraordinary technical talent that exists, to your point, and that those were just the leaders of those efforts. There are some amazing individuals that work alongside them.

What has gone on over the last year was that the Army senior leadership recognized that the overhead rates for the labs were growing double-digit costs year over year. So what I am referring to there is the overhead administrative management and base operations, and it started trending in the 60s, and then it was north of 74 percent last year.

So we recognize we need stronger leadership to go in there to reduce the overhead cost, so you could put more dollars into the hands of the researchers. It was a management issue.

To your point, it was also a business model challenge. So from that standpoint, what General Murray is doing is looking at what they call a rate board, so you can stabilize the rates so when CDC or NIH or other government entities turn and say, "We need this world-class talent, here is the cost," it is a similar challenge that we face with our industrial base with the revenue that has to go into the depots.

And you want it to be consistent but still have surge capacity when you have extraordinary instances like the coronavirus. A lot of work—a lot of really good work has been done, but we still have a little work to go to get to the end of this fiscal year.

Mr. BROWN. And one of the things that I would suggest—and I did speak with General Murray and they do have a lot of work to do to improve the efficiency of that lab—is to seriously consider a core budget in addition to the reimbursable model.

You know, reimbursable models work well, but when demand is down, you have difficulty maintaining scientists and keeping equipment at the modern levels that they need. So I would hope that we are looking at a core budget.

If I could just quickly shift to Africa. I am pleased that we are sending a security force assistance brigade there. There is a tyranny of distance. There is also less sort of fortified bases in which to operate, unlike in Afghanistan. And this was all pointed out by Brigadier General Jackson. He is excited to go, but there are some challenges. Could you please reassure this committee that they will have the infrastructure, the logistics, the things that they need to do to get the job done.

Secretary MCCARTHY. Yes, sir.

General McCONVILLE. We will make sure they have what they need to get the job done, Congressman.

Mr. BROWN. I yield back.

The CHAIRMAN. Thank you.

Ms. Cheney.

Ms. CHENEY. Thank you very much, Mr. Chairman.

And, Mr. Secretary and General McConville, thank you for your service. Thank you very much for being here. I want to ask about Afghanistan. All of us I think—I know—on both sides of the aisle understand the need to make sure that we on the Hill are operating in ways that are worthy of the sacrifice of our men and women who put on the uniform.

We have a number of serious concerns about the Afghanistan agreement as it was released, including the extent to which we are making a number of concessions, the release, committing to the release by the Afghan government of thousands of Taliban fighters, committing to help to work to lift sanctions on terrorists, committing to withdraw our forces.

And I was pleased to hear over the weekend Secretary Pompeo make a number of assertions that would have given me comfort, a number of assertions about what we would find when we saw the full agreement and the full documents as they came to the Hill. He made assertions including that there were complex interlocking

verification mechanisms. He asserted that there would be a full and complete renunciation of al-Qaida by the Taliban.

I have read the documents and my concerns remain. I am not going to talk about what is in the documents. A number of them are classified, as you know, but the documents that have been sent to the Hill do not include those things.

So my question, first of all, to you, Secretary McCarthy, is, are there documents that have not been sent to the Hill?

Secretary MCCARTHY. I am not aware because I am not directly involved with that, ma'am.

The CHAIRMAN. I am sorry. I think I can help with that, because we have asked about that. My understanding is—and my staff can correct me on this—is just today all of the documents have been sent and will be available in some SCIF [Sensitive Compartmented Information Facility] today. That is my understanding.

Ms. CHENEY. And I have read those. I read them before the hearing, Mr. Chairman. Thank you. You are right. There were a number of documents that were made available that I went to read in the SCIF before coming here this morning, and those documents do not include in them the things that Secretary Pompeo said they would.

So my concerns still remain. The decisions about U.S. troop levels on the ground in Afghanistan, we have been assured, the American people have been assured, would always be based upon the national security interest, the counterterrorism threat that we face.

And when we are in a situation, as we seem to be now, where we have no verification agreement and we have a number of Secret documents, I would like to ask a couple of things. Number one—and I understand Secretary Pompeo said those documents could not be released to the American people because they would affect troop security.

The documents have been seen by the Taliban. So I believe that the American people deserve to know what agreement has been entered into in our name with the terrorists who harbored those who killed 3,000 Americans on 9/11. And I would like the assurances—both of your assurances that the documents, if either—that all of the documents have been delivered, in which case there is not a verification agreement, in which case we do not have the kind of full, complete renunciation of al-Qaida that Secretary Pompeo says we do.

So I would like your assurance that you will come back to the committee and let us know, is it the case that the documents have all been delivered, in which case those things do not exist, or are there additional documents that need to be delivered to the Hill?

Secretary MCCARTHY. Ma'am, we will definitely address your concerns with Secretary Esper.

[The information referred to can be found in the Appendix on page 80.]

Ms. CHENEY. Thank you. I appreciate that.

And then, finally, I would just ask for your commitment—both of you—that the decisions about U.S. troop levels on the ground in Afghanistan will be made based on what is necessary for our security. Either we need forces on the ground to conduct counterterrorism and intelligence operations or we don't.

And if we don't, then we ought to bring everybody home right now, and we ought not deploy a single additional U.S. service member. But if we do, then we have a moral obligation not to pretend the Taliban can take care of that security concern, that security threat, for us.

And I think that what we have seen with this agreement now concerns me as much as the Iranian nuclear deal did, now that I have seen the documents and now that there seems to be still no verification mechanism by which we are going to enforce any of the so-called Taliban promises.

So I would appreciate any response that you all have to that. Again, I appreciate your service. I think it is very important that the American people know what has been agreed to on our behalf.

Secretary MCCARTHY. Yes, ma'am. With conditions, base withdrawal was necessary. Yeah.

The CHAIRMAN. Thank you.

Mr. Keating.

Mr. KEATING. Thank you, Mr. Chairman.

Mr. Secretary, General, thank you for being here. A lot has been covered that I was going to address. So I want to just sort of drill down to a couple of things I am more personally involved in.

Number one, one of my other assignments here is chair of the Subcommittee on Europe and Eurasia on the Foreign Affairs Committee. And I want to underscore—and I know, General, you mentioned this in your opening remarks—the importance and how well-received exercise Defender Europe 20 has been. That is—and to the government leaders of our European allies, I can't tell you how important and how grateful they are for our involvement in that.

I wanted to get a sense—I know Germany and U.K. are very much involved and participating in this. But if you could, General, some of the other neighboring countries in the region, what their involvement might be and what you foresee, which is really the most important part of my question—

General MCCONVILLE. Yeah, Congressman. I had a chance to—

Mr. KEATING [continuing]. In the future.

General MCCONVILLE [continuing]. Go over—Europe was one of my first trips as chief of staff. And we do a conference for all of the chiefs of staff of the army at the time, and there was 37 countries there. And I personally met with 34 of those chiefs, and I can tell you that our commitment, our relationships, the ability to work with their militaries is extremely, extremely important.

They want U.S. leadership. They want us to participate. And, again, this exercise, you know, is one of those important ways of showing our commitment, that we can come there if they need us and it reassures our allies and partners in the region.

Mr. KEATING. Do you see any—what do you see foreseeable in the future about other regional—participating even more?

General MCCONVILLE. Well, I think—again, I talked to 34 out of 37, and not all are NATO [North Atlantic Treaty Organization] members but all want to partner. They all want to participate. There is other exercises going on that are not necessarily NATO exercises during the same timeframe. But I think they all share the same goals and really the same values. That is why I am not surprised. They want to be with us.

Mr. KEATING. It is so well received. I just wanted to communicate, which you already knew, but it is good to underscore it from the political side and the people you talk to, you know, in the Parliaments there.

Also, looking at another aspect, Open Skies Treaty is on a pause, but for the same kind of reasons. When I talk to General Walters and other people, keeping that cooperation is an important part of that. So do you have any—can you reflect on, you know, the importance? I know the Russians have violated it. I understand that. But I still think it has an importance for the same type of reasons, keeping our allies together.

General McCONVILLE. Well, I will defer to General Walters. He is a friend. He is a very wise person on that issue. And then the Secretary—but, you know, my experience—I said this in my opening statement—is great power competition does not have to mean great power conflict. In a way, really, you avoid conflict just through strength. And when we are united with all of our partners, and we are standing strong and everyone is standing side by side, no one is going to want to take us on.

And as far as these agreements, I think it is important that we have discussions with even those that we may not be getting along with the greatest. So there is room, you know, especially, if nothing else, military to military. We need to—

Mr. KEATING. I recall a rather—at times meeting together, and we need to thank you personally for that.

General McCONVILLE. We may not agree on everything, but we should—we should communicate with those, and I know that General Milley routinely does that even during these very tough issues, and even during some of these other situations going on. We are all communicating with our fellow chiefs.

Mr. KEATING. Quickly, the second thing that is kind of close to home—and close to your home, too, of Quincy—you know, a little south of that, about 50 miles, is Joint Base Cape Cod and Camp Edwards and the trainings there. Just a couple of points. You know, in talking to the folks there, they are concerned, too, about how you balance out maybe some of the environmental issues and the training, are there noise or land environmental issues, and how that affects training.

I am running out of time, so I will mention two that—the importance, too, of one of Army's most critical enablers in logistics, transportation, sustainment, is the Army National Guard, U.S. Army Reserve. In the training, the reports show them a little behind, but I see firsthand how that is improving. So if you can sort of address those two issues in 30 seconds.

General McCONVILLE. I know a little about the Massachusetts State Guard. In fact, hired Rich Johnson out of the—we brought him down here and made him a two-star. But I think it is very, very important, especially in places like Massachusetts where you don't have a whole lot of military anymore, that the people get to see them.

When we look about where we recruit, a lot of it is exposure and it is very, very important that the American people throughout the entire country have that exposure, and sometimes there are chal-

lenges with noise and some of those other types of things that go along with military training.

But that is sometimes the cost of freedom, so to speak, is we want to be—our soldiers have to train. They have to be ready, because I don't think anyone would want to send our National Guard soldiers off to conflict without being fully trained, because they are—you know, there are some noise issues. So that—

Mr. KEATING. Thank you. My time is up. And thank you again. I yield back.

The CHAIRMAN. Thank you.

Mr. ROGERS.

Mr. ROGERS. Thank you, Mr. Chairman. And thank both of you for your service to our country and for being here today.

Secretary McCarthy, in the fiscal year 2021 budget documents, the Army has requested \$1.4 billion for depot maintenance accounts, and my understanding is that will only support 64 percent of the identified requirements. Given the priority that the military leadership has put on readiness, how is funding only 64 percent of requirements going to meet that support near-term readiness and sustainment of the Army's organic industrial base?

Secretary MCCARTHY. Yes, sir. It is about a 17½ percent increase year over year from fiscal year 2020. What we are looking for is, how do we meet our near-term readiness goals but still have—not overcapacitizing of the depots but have the room to grow in the event of a large-scale ground combat operation. So we have seen challenges with other depots where we flushed too much revenue, hired too many people, and then when the revenues changed based off of operations, you are overcapacitized. You have people that don't have work.

So striking the balance at 64 percent helps us run smooth operations, grow the workforce, but still have the capacity or room to grow.

Mr. ROGERS. A perennial problem that we have had in the depot system has been carryover issues. I asked General Perna a couple of years ago to get me some language that he felt would remedy that, and he did last year, and we put it in the NDAA. Can you tell me, or are you aware, as to whether or not that has resolved that problem?

Secretary MCCARTHY. It has greatly enhanced his abilities. He is very encouraged by that, that we have shown some improvement.

Mr. ROGERS. I have been asking for AMC to give me—to report to me on how it has worked. Could you assure me that you would have AMC reach out to my office and give me some information as to how that language has worked? Because if we need to do a little more, you know, we have got another NDAA coming this year.

Secretary MCCARTHY. We will see him later this afternoon. We will definitely bring it up. Yes, sir.

[The information referred to can be found in the Appendix on page 78.]

Mr. ROGERS. I appreciate that.

And, General McConville, are the Army's training ranges currently capable of providing training to meet the Army's emphasis on multi-domain operations?

General MCCONVILLE. They are, Congressman, but there are some things that are going to—you know, as we get to longer range artillery, and we start to look at some of the systems, and we get to being contested in some of the systems that we are going to see, we are going to have to take a look at our ranges and make sure that they can accommodate that.

Mr. ROGERS. If there is anything that this committee can do to be helpful, be sure and let me know and we will try to make it—

General MCCONVILLE. And we will come back to you. But we are looking at that. We know there is going to be some changes. We have just got to make sure we know where they are going to be and what we need to do.

[The information referred to can be found in the Appendix on page 78.]

Mr. ROGERS. Excellent.

Thank you, Mr. Chairman. I yield back.

Ms. SPEIER [presiding]. I recognize myself for 5 minutes. Thank you both for being here.

Let me say to both of you, as subcommittee chair of Military Personnel Committee, I have been to 12 bases. Every base I have gone to I have asked to meet with the families. Every meeting I have had has complained about the condition of the housing units.

We spent a good part of the NDAA creating this new housing management office within each installation. So what I would like for you to do—maybe this is to you, General—is to report back to the committee on have they all been identified; and, if not, why not? And to the extent that they have been identified, how many complaints have been filed and what has been the review of those complaints and what has taken place?

I now want to move to another issue dealing with white supremacy. General, a Military Times survey in 2019 found that 36 percent of responding troops had seen evidence of white supremacists and racist ideologies in the military. This comes as violent white supremacist incidents increase across our country. It is indeed alarming to read that statistic. I want to know what you are doing to make sure that we identify those who associate themselves with white supremacists and what we are doing to process them out of the military.

General MCCONVILLE. Well, Congresswoman, first of all, there is no place for extremism in our military of any type, and we have a CID [Criminal Investigation Command] task force so to speak that takes a look at those type of extreme type of cases, and they are working very, very closely with the FBI [Federal Bureau of Investigation] to make sure that we can identify those who may be involved in those type of incidents. And then we are taking the appropriate legal actions to make sure that that does not occur.

Ms. SPEIER. Okay. General, would you report back to the committee about the number of incidents within the Army and what steps have been taken?

General MCCONVILLE. Sure.

[The information referred to can be found in the Appendix on page 79.]

Ms. SPEIER. Secretary McCarthy, last June an Army Appeals Court panel overturned the conviction of a West Point cadet named

Jacob Whisenhunt. A jury of officers had heard his trial, found him guilty of three counts of sexual assault, and convicted him to 21 years of confinement, yet three judges who were not present for the trial reviewed the case and decided for themselves that Whisenhunt wasn't guilty, setting him free.

They undid months of preparation, days of trial, and justice for a survivor in a mere three-and-a-half-page opinion. The panel concluded that though Whisenhunt and his victim had sex, it had to be consensual because, quote, "In the unique circumstances here, which included a noise-producing space blanket and numerous squadmates in very close proximity, it is hard to conclude beyond a reasonable doubt that appellant could complete the charged offenses without cooperation or detection."

No U.S. jurisdiction besides the military gives appeals courts the power to overturn cases based on their rereading of the facts. When this power leads to embarrassing miscarriages of justice, why does the military system need to keep factual sufficiency in place on the appellate level?

Secretary MCCARTHY. Congresswoman, I would have to defer to the legal counsel. I mean, this is outside of my particular expertise, but I would definitely want to look at this and come back to the committee.

Ms. SPEIER. All right. This whole issue of factual sufficiency existed before we had a military that had professional judges and free and qualified representation through the appellate level. So it is really antiquated. It does miscarriages of justice, in my opinion, so I would appreciate that.

[The information referred to can be found in the Appendix on page 79.]

Ms. SPEIER. Secretary McCarthy, contraception is critical for military readiness and for treatment of health conditions like endometriosis. According to the DOD, 95 percent of all women serving are of child-bearing age. Under TRICARE, there is no cost-sharing for Active Duty, but there is cost-sharing for non-Active Duty service members and family dependents to pay co-pays for birth control.

Now, some birth control can run as much as \$1,000 for an IUD [intrauterine device]. Under the Affordable Care Act, everyone has access to all forms of contraception without cost. So why is it we are imposing a cost-sharing on those service members and families? Shouldn't they deserve the same level of coverage as every other child-bearing-age woman in this country?

Secretary MCCARTHY. Congresswoman, that obviously seems reasonable. I will get with staff and get back to you on that as well.

Ms. SPEIER. Thank you. I yield back.

[The information referred to can be found in the Appendix on page 79.]

The CHAIRMAN. Thank you.

Mr. Wittman.

Mr. WITTMAN. Thank you, Mr. Chairman.

I would like to thank Secretary McCarthy and General McConville for prioritizing personnel and your efforts there, as well as readiness and modernization.

General McConville, I want to go to you. I have a series of six questions. Most of them are pretty short, straightforward, and I want to end with one that requires a little more elaboration. If conflict broke out today in the Indo-Pacific Region, would it be necessary for the Army to get there?

General McCONVILLE. Yes, Congressman.

Mr. WITTMAN. All right. Great. If conflict were to break out today in the Indo-Pacific, could the Army get there?

General McCONVILLE. Yes, I believe so.

Mr. WITTMAN. Okay. So you could get everything that is necessary to get there now as we speak.

General McCONVILLE. We believe so.

Mr. WITTMAN. Okay.

General McCONVILLE. I always like to say the proof is in the execution. That is why we are doing exercises like Defender 20, though. I want to see it—I want to be able to move it and come back to you and say those ships that were so ready to go, those planes that were ready to go, they actually are and they work.

Mr. WITTMAN. Based on your knowledge of all of the OPLANs [operations plans], do you think it should be a top priority of the Army to be able to get to the Indo-Pacific in case of a conflict? Question 1.

And the second one is either an affirmation or a question to me is, based upon all that you are doing to raise the readiness of the units, you can have the best brigade combat teams in the world, the best Stryker brigades, but if we have got something that happens outside of CONUS [contiguous United States], it can be great, but we have got to get them there.

So would you agree with that assertion that the key really is not just the training but being able to get them there and looking at the importance?

General McCONVILLE. I agree with that, Congressman. I think, you know, as you read the National Defense Strategy, dynamic force employment is one of the key tenets of the ability, and that is why the Secretary and I have made strategic readiness, the ability get there, as one of our key priorities.

Mr. WITTMAN. Do you think that surge sealift recapitalization is something that transcends service branches, so it is not parochial in how we should look at it as a force?

General McCONVILLE. Well, I think the Department of Defense should look at how we—you know, we are going to get top line, we are going to figure out who does what within the top line, and whoever gets that task to do it should be resourced appropriately to make that happen.

Mr. WITTMAN. As you look at those elements that are of high strategic importance to the United States, we look at B-21, ground-based strategic deterrence, the *Columbia*-class submarine, I would argue as part of that surge sealift is another element of strategic importance that transcends service branches.

Is it fair to say that as we look at the different service branches—Air Force funding B-21 with Navy funding *Columbia* against strategic assets—that we should look less parochially at surge sealift, or do you think that it should be something that falls under the Army's wherewithal on funding, because about 90 per-

cent of what the Army needs to get to the fight is going to be done by surge sealift?

General MCCONVILLE. Yeah. I think when it comes to resources, about who pays for it, you have got to take a look at the prioritization. As the Secretary said, we are pretty much flatlined in the Army. We are basically going to zero growth to keep that, and we are very highly deployed, and we need to modernize the Army for the future.

So a decision would have to take that into consideration of who would actually fund that without an increase in top line.

Mr. WITTMAN. Sure. If you look historically about how many of these missions have been funded in the past, we have a national fund that goes in, a national strategic deterrence fund, where money has gone in to be able to do things that are of issue across service branches. And whether it is aircraft or whether it is ships, we have done those things. So, in looking at things historically, and that we do have a National Sea-Based Deterrence Fund that could include surge sealift, would you think it a wise investigation to look at using that particular fund to put the dollars in necessary for surge sealift?

General MCCONVILLE. Well, what I would do is I think, at least for the Army, we need sealift to get our forces to the fight. And I would defer to those that are making the budget decisions about the best place to put those funds.

Mr. WITTMAN. But you would be straightforward in saying that where we are today, and what the Army would face in the future, that there is a delta there that we have to bridge as far as modernization and capacity within sealift?

General MCCONVILLE. Well, I think so. I know there has been studies done. I think there is—they said we require 9.2 million square feet of capability to go ahead and move our forces. You know, the word is it is good today. But as we look in the future, we are going to have to invest.

And there is three different ways of doing that—extending the life of the ships we have, buying used ships or actually building new ships, and there is probably some combination of both. But I think we need to really take a hard look at that, how we deal with that in the future.

Mr. WITTMAN. Just to put it in context, the requirement is to meet 85 percent of the need. And the most recent turbo activation took place September 17, only met about 40 percent of the demand. So while the Army may have the desire to get there, the desire versus the capability, the delta I think is pretty significant.

So anyway, with that, Mr. Chairman, I yield back.

The CHAIRMAN. Thank you. And I believe that concludes our hearing. I want to thank you gentlemen for your service and for your testimony. I look forward to working with you as we get our bill done this year, and get the appropriations bills done as well.

Thank you for a very informative hearing, and we are adjourned. [Whereupon, at 12:51 p.m., the committee was adjourned.]

A P P E N D I X

MARCH 3, 2020

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

MARCH 3, 2020

Statement of Hon. Adam Smith
HEARING ON
**The Fiscal Year 2021 National Defense Authorization Budget Request for the
Department of the Army**
March 3, 2020

We're here today to discuss the fiscal year (FY) 2021 budget for the Department of the Army and are joined by Secretary of the Army, Ryan McCarthy, and Chief of Staff of the Army, General James C. McConville. I'd like to welcome them and I look forward to their testimony, particularly on the Army's modernization plans, the state of our readiness, and the welfare of our soldiers and their families as well as the civilian workforce.

During last week's hearings I repeatedly reflected on the need to invest wisely in national security while being clear-eyed when it comes to resourcing identified strategic objectives. At those hearings, senior leaders have discussed the 2018 National Defense Strategy (NDS) and the defense budget request, and I've asked what tradeoffs and risk could be accepted to best confront the challenges identified by the NDS - an exercise requiring resource allocation and policy decisions. Along these lines, for today, I'm interested in knowing more about how the Army is diverting funds for Block 2 upgrades of CH-47F Chinook heavy lift helicopters and ground tactical vehicle procurement. This, in turn, delays fielding improved capabilities and increases risk in the industrial base. I'd like to know more about the Army's analysis and assessment of "acceptable risk" as a result of this budget and the associated force structure decisions.

Once again this year, the Army's modernization request continues an ambitious reorientation and focus on areas to support the NDS and its emphasis on technologies that are necessary to deter or defeat peer or near peer competitors. Overall, the Army's modernization budget request is stable relative to last year's request despite depending on the realization of challenging new technologies in a relatively short time. To fund this ambitious modernization plan, the Army has cut or reduced about \$2.4 billion from what Army leadership determined are lower priority programs - for example those programs related to counterinsurgency. After conducting this second year of "night court" program cuts, resulting in the cancellation or reduction of 80 programs, the committee is interested to hear how the Army will manage the related risk from these tradeoffs to ensure support for current weapon systems and at the same time maintain a sufficient industrial base. Further, what is the related risk to our counterinsurgency mission?

For many years, Army readiness has been challenged by high operational tempo and global demand for rotational forces. We've heard that these demands, combined with efforts to maintain a high level of full-spectrum readiness, continues to stress the force. As a result, we understand the Army is now reviewing its current Sustainable Readiness Model to determine what adjustments may be needed to maintain readiness without breaking the force. While that result is still

underway, we expect the Army will keep the committee informed on how changes to the force generation model will impact training and maintenance requirements, budgetary decisions, and readiness of the force.

That said, reviewing Army's personnel progress, I am slightly encouraged. The service exceeded its active duty end strength authorization for FY 2020 by 5,000 soldiers in order to help meet readiness shortfall in understrength units. On the other hand, the committee remains concerned that the Army has had challenges in the past projecting and meeting its end strength authorizations. The Army's FY2021 budget request also seeks a 2.8% increase in the number of full-time equivalents (FTEs) for civilian personnel, which would allow the Army to hire an additional 5,459 civilians. Army civilians support critical readiness capabilities such as combat training centers; range maintenance and operations; acquisition and modernization; cyberspace operations; facilities operations and sustainment; family services; prepositioned stocks; security services and force protection; and depot maintenance and arsenal operations.

Thank you again to our witnesses for joining us and I look forward to receiving today's testimony and getting updates on all of these topics.

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RECORD VERSION

**STATEMENT BY
THE HONORABLE RYAN D. MCCARTHY
SECRETARY OF THE ARMY**

AND

**GENERAL JAMES P. MCCONVILLE
CHIEF OF STAFF
UNITED STATES ARMY**

BEFORE THE

HOUSE ARMED SERVICES COMMITTEE

SECOND SESSION, 116TH CONGRESS

ON THE POSTURE OF THE UNITED STATES ARMY

MARCH 3, 2020

**NOT FOR PUBLICATION
UNTIL RELEASED BY THE COMMITTEE**

Finishing What We Started

Two and a half years ago, Army Senior Leaders developed the priorities of Readiness, Modernization, and Reform with the support of Congress. Today, the Army's senior leadership has changed, but our priorities have not, and it is people who are our foundation. This budget request builds upon the funding that Congress has generously provided over the past three years to continue our irreversible momentum towards a ready, modernized, multi-domain Army. We are building strategic readiness while sustaining tactical readiness. We are modernizing to ensure future readiness. And we continue to reform our systems to optimize resources.

To date, the strategic environment remains dynamic and great power competitors continue to invest significant resources to modernize their militaries. The Army must maintain a ready force to meet today's challenges, while implementing a transformational modernization effort to ensure the Army is prepared for future threats. The only way in which the Army can achieve our objectives is through our People. People – our Soldiers, Families, Army Civilians, and Soldiers For Life – our Retirees and Veterans – are the foundation of everything we do and are the greatest strength of our Army. We rely on their talent, initiative, innovation, and teamwork to drive the Army forward into the next great era of U.S. Army power-projection dominance.

We are grateful to Congress for the strong support provided to the Army in Fiscal Year 2020 (FY20). With this funding, the Army continues to build readiness to complete missions required by our national leaders, across the globe and with little notice, while taking actions to help our country compete with and deter near-peer competitors. At the same time, the Army continued aggressive modernization efforts to drive the transformational change necessary to ensure America's Army will also be able to win in the future against Great Power Competitors. Consistent funding levels and the continued support of the Congress are critical to achieve modernization. With Congress' steadfast support, we are here to finish what we collectively started.

The Army's FY21 Budget request totals \$178B. FY21 BASE requirement totals \$153.1B. FY21 Overseas Contingency Operations (OCO) requirement totals \$24.9B. This budget proposal continues to align resources in accordance with the National

Defense Strategy, provide substantial support to the Joint Force, and reinforce our Army priorities of Readiness, Modernization, and Reform. Moreover, it keeps the Army on a path to be ready today AND in a future where we know will be contested in every domain – land, sea, air, space, and cyber space. Through continued timely, adequate, predictable, and sustained budgetary support, the United States Army will remain ready today as we transform for the future.

Strategic Environment

The National Defense Strategy made clear that the world is complex and dangerous, requiring the Army be prepared against a range of current and potential military challenges. In particular, Russia and China are investing heavily in advanced military capabilities and seek to change the current global balance of power. Russia has the greatest capability to challenge U.S. interests today and is expected to deliver modern capabilities to its forces through the mid to late 2020s. China is our nation's greatest long-term challenge. By 2030, China is expected to be the world's largest investor in research and development, and to field a fully modernized force by 2035: investing in artificial intelligence (AI), robotics, energy storage, 5G networks, quantum information systems and biotechnology.

Great Power competition does not have to mean Great Power conflict. In accordance with the National Defense Strategy, the Army recognizes it must be able to compete below the level of armed conflict as well as fight and win against a near-peer competitor. Even if we may not confront Russia or China directly, we are likely to face their systems and methods of warfare as they spread military capabilities to others.

Additionally, regional state adversaries, namely North Korea and Iran, present significant challenges as they pursue advanced capabilities and weapons of mass destruction to gain regional influence and ensure regime survival. Moreover, transnational terrorist organizations continue to threaten our homeland and interests, as well those of our allies and partners. The Army must and will be prepared to defeat and deter highly capable adversaries while disrupting violent extremist organizations and simultaneously defending the homeland.

Today, the Army contributes to achieving objectives outlined in the National Defense Strategy by providing Combatant Commanders over 180,000 Soldiers in more than 140 countries. Army forces comprise 60 percent of Combatant Commander's requirements. This includes over 27,500 Soldiers supporting operations to the Middle East; over 10,000 Soldiers supporting operations in Afghanistan; 32,500 Soldiers in Europe supporting NATO and the European Deterrence Initiative; and over 21,000 Soldiers providing a forward American presence on the Korean Peninsula.

Fortunately, the Army does not fight alone. Warfighting is a human endeavor and establishing and maintaining relationships is critical to what the Army does. We rely on our allies and partners to posture ourselves for future threats, project power, deter and, if necessary, defeat our adversaries. This partnership allows costly and complex problems to be distributed and helps protect the industrial base through Foreign Military Sales (FMS). Having close partnerships enable faster innovation and cost-sharing towards change to our modernization priorities. In addition, partnerships create a shared understanding of the threat picture, and ensures interoperability so that the current delicate balance of power and relative global peace may continue. The Army must continue to compete for and retain allies and partners, as our adversaries will attempt to do the same.

Ultimately, America's Army remains prepared today to respond to other contingency operations, both abroad and at home. However, global demand continues to rise. In response to an increasingly uncertain global picture, the Army is investing in the research and development of the next generation of weapons and equipment needed to stay ahead of our adversaries. Through a disciplined prioritization of resources, the Army will remain postured to defend the Nation.

Readiness

Readiness remains the Army's top priority. We are evolving the way we approach and measure readiness in order to continue to complete missions outlined in the National Defense Strategy. Over the past two years of diligent focus across all three components, Army leaders have successfully rebuilt tactical readiness – the ability of Army units at the

division level and below to fight and meet the demands of their assigned missions. Over the last year, 74% of Active Component Brigade Combat Teams have been at the highest levels of tactical readiness.

In FY21, the Army will continue to focus readiness at the individual, squad / crew, and platoon levels increasing multiple repetitions in order to build upon the basic blocks of lethality. This focus, increasing lethality at the point of ground contact with the enemy, will thereby improve overall BCT readiness. The Army will continue to conduct habitual training using the Combat Training Centers (CTC) such as National Training Center (NTC), and no-notice Emergency Deployment Readiness Exercise (EDRE). Our forces must and will remain lethal and ready.

As the Nation's understanding of the global threat picture evolves, the Army must evolve with it. Tactical readiness prepares our forces to address the current host of adversaries as the last nearly two decades of combat demonstrates. Tactical readiness, however, is not enough to prepare us for competition and conflict against Great Power competitors. The Army must strike a balance between tactical readiness and strategic readiness and establish the logistical footprint need to accomplish both.

While preparing for the future fight, we will increase our efforts toward achieving Strategic Readiness. Strategic Readiness provides an advantage over our adversaries by demonstrating the Army's ability to rapidly mobilize, deploy, and sustain combat forces. Strategic Readiness will focus on the testing of new concepts, experimenting with new formations and understanding the logistical framework needed to sustain our forces.

Today, the Army is investing in Strategic Readiness by experimenting with new concepts and formations: Multi-Domain Operations (MDO), Multi-Domain Task Force (MDTF), and institutionalizing lessons learned during irregular warfare by employing Security Force Assistance Brigades (SFAB). The Multi-Domain Operations Concept supports the emerging Joint Warfighting Concept. In FY20, the DEFENDER exercises in Europe and the Indo-Pacific will further test and demonstrate our power projection capabilities with our allies and partners. FY21 exercises will expand to the Pacific.

We have institutionalized the lessons we learned during irregular warfare by employing Security Force Assistance Brigades (SFABs). SFABs continue to prove their

worth as an economy of force capability to meet the objectives of the National Defense Strategy by strengthening alliances and attracting new partners while competing globally and freeing conventional brigade combat teams to prepare for Large Scale Combat Operations. Last year, the Army activated the final SFAB, bringing the total to five active duty SFABs and one Army National Guard SFAB. The Army's goal is six fully manned, trained and equipped SFABs.

Additional key components to Strategic Readiness are systems of critical infrastructure that includes installation facilities – motor pools, maintenance bays and Supply Support Activities – and Strategic Power Projection platforms – the ports, roads, airfields and railheads – that move our troops and equipment from the installation to the battlefield. To test and assess our Strategic Readiness capabilities and support Dynamic Force Employment, we are conducting the DEFENDER series of exercises in both the Pacific and European theaters of operation to a size and scale not seen in decades. Additionally, the Army recently deployed one Battalion in 21 hours and one Brigade Combat Team in 122 hours to Iraq.

In order to overcome the logistical issue of equipping forces, while maintaining speed, the forward positioning of logistics becomes critical. The forward positioning of equipment, munitions and materiel enables Strategic Readiness for three key purposes: speed troops to the frontlines; ease strategic air and sea lift requirements for units deploying from the U.S.; and reassure allies and partners while deterring adversaries. Through a concerted effort, we have significantly improved the condition of Army Prepositioned Stocks (APS), configured-for-combat sets of equipment that are sized and constructed to meet theater requirements, and we work closely with the Combatant Commands to ensure APS are positioned and located where they can best achieve their desired effects.

In addition, we have also strengthened munitions readiness, ensuring munitions stockpiles are strategically positioned in the U.S. and abroad to enable flexibility and speed. We consistently and continuously assess forward-positioned equipment and stockpiles as the global environment changes to bolster our capacity and capabilities, and to meet COCOM requirements.

Moreover, the Army's Organic Industrial Base (OIB) – 26 depots, arsenals and ammunition plants – manufacture, repair, upgrade and modernize the Army's equipment, and are absolutely critical to both Strategic and Tactical Readiness. We are optimizing the OIB to three primary end states: support current unit readiness across the force; maintain the ability to meet wartime surge requirements; and modernize and retool to sustain the next generation of Army equipment. Through implementation of Repair Cycle Float, a new methodology that links OIB production and workload to Army readiness, we will fundamentally change and improve the way we resource and manage these critical facilities.

Tactical and Strategic readiness, combined with the logistical framework necessary for sustainment, are what enable the Army to remain ready today while simultaneously preparing for the future fight. Although the Army is still experimenting with concepts and doctrine, our new capabilities are very much real. FY21 strategic DEFENDER exercises in Europe and the Indo-Pacific will serve as our testing grounds as we continue to develop new methodologies for the future of warfare and modernize our Army to meet future great-power competition.

Modernization

The Army is two years into its most transformational change in four decades. Large-scale modernization takes time and patience. We have continued to prioritize the Army budget towards our 6 modernization priorities and 31+3 signature systems, ranging from hypersonic missiles, new squad-level weapons, to aircraft. Prototypes that began in FY18/19 are maturing, with real capability landing in FY21/22. In this fiscal year, we will increase Soldier touch points, test shots, capability demonstrations and the fielding of our formations.

Cloud technology is the foundation for the entire modernization endeavor. Because of the Cloud's importance, we are investing \$800M over the next five fiscal years into Cloud Architecture. Cloud investments will enable the inventory of data, migration of the data to the Cloud, and software development. Artificial Intelligence (AI) enables linking all sensors to all shooters and all Command and Control (C2) nodes. AI-enabled operations

turn information into actionable intelligence and understanding of the threat environment. The Army is making incredible strides with Cloud technology as well as our Six Modernization Priorities:

Long Range Precision Fires - We will improve the range and lethality of cannon artillery and increase missile ranges and capabilities to ensure overmatch. We will invest over \$800M in hypersonic to accelerate our strategic fire capabilities to neutralize and dis-integrate adversary formations and A2/AD networks, from extended ranges, to create windows of opportunity for the Joint Force to exploit. The Extended Range Cannon Artillery is on schedule for delivery in FY23. It will protect and support maneuver forces in the close and deep operational maneuver areas with an extended range out to 70km. The Precision Strike Missile is on schedule to conduct its maximum range test in 3QFY21 and deliver 30 missiles in FY23. It will realize greater range, lethality and survivability at a lower cost than ATACMS. The Army has requested \$1.7B for Long Range Precision Fires in the FY21 President's Budget to accelerate prototyping and initial fielding.

Next Generation of Combat Vehicles - The Army will develop the next generation of combat vehicles through technology development, experimentation, and rapid prototyping to ensure overmatch against near-peer competitors. These vehicles will employ greater firepower, mobility, and protection to successfully maneuver on more lethal battlefields. The Optionally Manned Fighting Vehicle (OMFV) will provide manned-unmanned teaming options with Robotic Combat Vehicles and other platforms to maneuver Soldiers to a point of positional advantage to engage in close combat and deliver decisive lethality during the execution of combined arms maneuver, while simultaneously controlling maneuver robotics and semi-autonomous systems. The OMFV is being designed with an emphasis on supporting weight, architecture, power, and cooling growth to enable spiraled capability as technologies mature. The Robotic Combat Vehicles (RCV) will support decisive mobility, lethality, survivability, increased situational awareness, and formation overmatch with unmanned platforms making contact with the enemy before our Soldiers, while delivering overmatch against future threats. The final RCV capability will be refined by three increasingly complex experiments and capability

demonstrations, displaying both government and industry platforms, between FY20-24 with a decision to procure or reassess NLT FY24.

The Armored Multi-Purpose Vehicle (AMPV) will replace the M113 Family of Vehicles with a modern and more survivable general-purpose, mortar carrier, medical evacuation, medical treatment, and mission command vehicles that can move at the pace of current and future combat vehicles and is able to incorporate future technologies. The first unit equipped with AMPV will be in FY22. Mobile Protected Firepower (MPF) is an armored vehicle that provides precise, large caliber, long-range direct fires for Infantry Brigade Combat Teams. The first unit equipped with MPF will be in FY25. We requested \$425M in the FY21 President's Budget to deliver these capabilities.

Future Vertical Lift (FVL) - We will increase our competitive aviation advantage with next generation aircraft designed to penetrate contested airspace and support independent maneuver from greater distances through extended range, endurance and lifting capacity. The most important FVL investments in-progress are the Army's development of the Future Armed Reconnaissance Aircraft (FARA), designed to address the gap left by retirement of the Kiowa; and the Future Long Range Assault Aircraft (FLRAA) to replace the venerable UH-60 platform. The FARA prototype fly off will begin in FY23. Initial FLRAA prototypes are expected in FY25. FARA and FLRAA will both conduct first unit equipping in FY30. Over \$800M is included in the FY21 President's Budget to develop initial designs and unmanned demonstration systems.

Network - The Army Network supports mission command and the continuous integration of combined arms and Joint capabilities. We will deliver a resilient and secure tactical communications network effective in the most challenging contested and congested electromagnetic spectrum and cyber environments starting in FY21. This network includes advanced information technology, hardware and software, and a reduced electromagnetic signature. We will deliver this network by fielding new capability sets, on a two year basis, that build off of each other and that are infused with commercial solutions and informed by Soldier-led experimentation. Inserting technology in two-year capability sets provides flexibility to augment and integrates IT capability as it emerges from industry. Capability Set 21 will be fielded to four Infantry Brigade Combat Teams in

FY21. We have allocated \$2.19B in the FY21 budget to build our integrated tactical network as part of our network restructuring.

Air and Missile Defense (AMD) - Advanced air and missile defense will protect our forces from adversary aircraft, missiles, and drones to enable joint operations. This includes both theater systems and short-range air defense, like the Maneuver-Short Range Air Defense (M-SHORAD), which will employ directed energy technologies. M-SHORAD is on schedule to deliver four battalions by FY23 equipped with missiles and cannons. Indirect Fire Protection Capability (IFPC) will defend fixed and semi-fixed assets primarily against sub-sonic cruise missiles and Unmanned Aerial threats with a residual capability against fixed and rotary wing aircraft. Thanks to Congressional support, an interim IFPC capability will be fielded in FY22 that will inform the enduring capability. The Lower-Tier Air and Missile Defense Sensor (LTAMDS) will deliver the next generation sensor that fully leverages the capabilities of the Patriot Missile Segment Enhanced (MSE) that is fully integrated into the Army Integrated Air and Missile Defense (AIAMD). The AIAMD initial operational capability is 3QFY22 with fielding to one battalion. The FY21 budget includes \$396M to rapidly deliver an initial AIAMD capability by FY22. An integral part of the AIAMD, the Integrated Air and Missile Defense Battle Command System (IBCS), which is a revolutionary command-and-control system that streamlines sensor to shooter capabilities for air and missile defense engagements. This enhanced tracking system delivers an unambiguous view of the operating environment, allowing commanders and air defenders to make critical decisions within seconds.

Soldier Lethality (SL) - We will equip and train Soldiers to extend overmatch through increased lethality, mobility and survivability against emerging threats. This includes improved weapons, sensors, body armor and training. The FY21 budget includes \$1.4B for rapid prototyping, development, and procurement of the Next Generation Squad Weapon (NGSW) Rifle and Automatic Rifle, Enhanced Night Vision Goggles (ENVG), Integrated Visual Augmentation System (IVAS) - Heads-Up Display (HUD) 3.0, and the Synthetic Training Environment (STE). IVAS is our best example of a departure from the traditional requirements process. We are working with non-traditional partners, like Microsoft, in three month sprints, using Soldier Touch Points during each sprint to refine

the product - to make sure we get it right. Funding enables a first unit equipped with IVAS in 4QFY21 and a first unit equipped with the NGSW Rifle, NGSW Automatic Rifle, and General Purpose Ammo in 4QFY22. We equipped the first unit with ENVGB in 1QFY20.

We remain committed to our six modernization priorities and 31+3 signature systems as they will be the next generation of weaponry for the U.S. Army to win decisively in the future fight. As we move forward with Army modernization, we will increasingly emphasize integration across our Cross-Functional Teams. As we work on all these efforts, we will conduct regular touch points with Soldiers – to make sure that we develop the right solutions for our force. As we modernize, we are committed to working closely with industry to explore and learn what’s feasible in terms of innovation, integration, manufacturing, and production. One key to getting modernization right is integrating concepts, force design, capabilities development, and S&T. Army Futures Command, which reached full operational capability this past year, was created to orchestrate that integration.

The Army’s transformational modernization efforts continue to build on consistent priorities and a ruthlessly aligned budget. To help ensure the Army has the resources to support this transformational modernization, reform becomes a critical step in that process.

Reform – Transforming an Industrial Age Army to the Information Age

The demand for Army forces, paired against a flat budget since FY 2018, forced tough fiscal decisions in our FY21 budget. In order to build and maintain readiness, continue transformational modernization, and support operations, the Army conducted in-depth program reviews, now known as “night-courts.” For the FY21 budget, ensuring success across the modernization portfolio puts further pressure on the liabilities side of the balance sheet, driving the Army even harder to aggressively pursue necessary reforms at every level and make tougher resourcing choices. In-depth program reviews continued in FY21, with an additional \$9.0B in programs reduced or eliminated.

- FY20-24 Deep Dive #1: eliminated 93 programs; reduced 93 programs.
- FY21-25 Deep Dive #2: eliminated 41 programs, reduced 39 programs.

Command Accountability and Execution Review (CAER) is an Army Senior Leader led fiscal stewardship program that has netted remarkable results. After 1 full year of implementation, the effort has reduced Operations & Maintenance (O&M) de-obligations (lost purchasing power) by 37% compared to historical norms and 50% compared to FY13. We anticipate continued improvements in CAER's second year of operation. These improvements help mitigate the loss of real purchasing power and allow the Army Senior Leaders to continue to prioritize towards modernization. CAER's progress has also resulted in a sharp reduction of Congressional marks due to unobligations.

While reform is critical to support the Army's modernization effort, the Army must also focus on its greatest strength...its People.

People

The greatest strength of the U.S. Army comes from our people—Soldiers, Families, Army Civilians and Soldiers for Life—our Retirees and Veterans. They represent the best our Nation has to offer. The Army People Strategy (APS) captures our People First philosophy and “winning matters” attitude. The APS guides how we will Acquire, Develop, Employ and Retain our future talent. Accordingly, taking care of our Soldiers and their families is key to Army readiness, modernization, and reform. Army culture is grounded in our enduring values of Loyalty, Duty, Respect, Selfless Service, Honor, Integrity and Personal Courage. These values are time-tested and provide a rock solid foundation. Building on this foundation, “This is my squad” concept emphasizes the positive behaviors that build cohesive teams. We will rely on strong leadership and cohesive teams to combat sexual assault and sexual harassment that tear the fabric of our organization. Furthermore, we must use cohesive teams and increase resiliency to stop the suicide epidemic plaguing our ranks. Every person matters.

We recognize that the force should have the best quality of life possible and Army Senior Leaders are constantly improving the way in which we care for our people. One example of investments into our people are the five focused Quality of Life priorities, which include housing, both family and barracks, transforming healthcare, improving and adequately resourcing Child and Youth Services (FY21 Request: \$475M); improving

Spouse Employment opportunities and minimizing the impact of Permanent Change of Station (PCS) moves. We have experienced significant shortfalls in these areas; and, therefore, are refocusing our attention and increasing our efforts. We brought Army leadership back into the housing equation, empowering tenants and holding partners accountable. Our people deserve safe, high quality housing. We are closely examining the healthcare transfer to Defense Health Agency (DHA). It is our duty to provide world-class healthcare to our force and families who sacrifice so much for the Nation.

The Army can no longer be an Industrial Age Army in the Information Age. We are shifting from simply distributing personnel to more deliberately managing our Soldiers and Civilians' talents. The Army Talent Management Task Force (ATMTF) is currently prototyping, piloting, or implementing 39 total talent management initiatives with the goal of implementing most of these initiatives by December 2020. Of these initiatives, the ATMTF is focused on seven major initiatives during FY20: The Army Talent Alignment Process (ATAP), Army Battalion Commander Assessment Program (BCAP), brevet promotions, merit-based promotions, flexible career paths (opt-into/opt-out of promotion boards), direct commissioning, and non-commissioned officer talent management. Army Senior Leaders approved each of these initiatives, and the ATMTF is working with all key stakeholders toward full implementation. Each of these initiatives bridges the gap between the Army's current centrally-directed, data-poor personnel management toward a 21st century data-rich talent management system which best leverages unique individual talents. The Army is working aggressively using the authorities granted by Congress to gain irreversible momentum towards implementation of a talent-based approach for the Total Force. To date, Congressional authorities have enabled us to direct commission seven cyber officers, approve 225 positions for brevet promotion, release the first merit-based promotion list (FY20 ACC MAJ), and establish a framework to adjust the effective date of rank for certain ARNG officers when Federal recognition of promotion was administratively delayed.

Another part of our shift to a 21st century talent-based personnel system is evolving our human resources information technology to improve the active-duty officer management and assignment process and reduce talent management gaps that were

limited by the legacy systems and processes. Notably, the Assignment Interactive Module 2 (AIM2) is a web based information system designed to fundamentally transform the effectiveness, efficiency, and transparency of the officer assignment process by facilitating communication directly between Soldiers, the units with requirements, and the Officer Personnel Management Director (OPMD). AIM2, which bridges the technology gap until full Integrated Personnel and Pay System-Army (IPPS-A) Release 3 fielding, enables the Army to accomplish a significant and historic milestone with the implementation of the new ATAP. For the first time, ~14,000 Active Duty Officers were afforded complete transparency of all available assignments. The first ATAP Cycle using the AIM2 interface saw nearly all eligible officers and units participate, collaborating throughout a 2-month open market window in October and November. This two-way collaboration resulted in 55% of officers and units receiving their first choice and roughly 80% of officers and units receiving one of their top 10% of preferences.

However, achieving a truly 21st century talent based system requires the integration of all components and all Soldiers onto one data rich environment. In this Information Age approach, we are fielding a new Web-based HR system known as IPPS-A. IPPS-A integrates personnel, pay and, talent management functions and will provide the Army with a data rich environment to understand their entire Soldier population across every component. IPPS-A will take the lessons learned from AIM2 and apply them across component and across all populations. To date, we have fielded IPPS-A to the Army National Guards of over 30 states and will finish fielding to all 54 states and territories by April of this year. Moreover, in December 21, the Army will field IPPS-A to all components and provide all components greatly enhanced talent management capabilities.

In light of increasing demand for forces, the Army will stay on a trajectory of modest growth across all of the Components in order to meet the increasing demand for forces across the combatant commands. We are an all-volunteer force that must attract and retain talent, which means recruiting remains crucial. The Army People Strategy established four lines of effort to win talent and keep it: acquire, develop, employ and retain talent. The Vision: Cohesive Teams...professional, diverse, integrated and ready to Win.

Finally, the Army has overhauled its Recruiting and Marketing enterprise, exceeding revised end strength goals in FY19, while simultaneously retaining quality Soldiers. We introduced our new recruiting campaign and accompanying advertisement of "What's Your Warrior?" The campaign showcases the 150 different career opportunities that the Army has to offer. We have modernized the way in which we approach recruiting, leveraging technologies like hyper-local, location-based recruiting to help find America's best and brightest who may be interested in joining our ranks. Using our Priority 22 Cities as a framework, the U.S. Army will continue seeking talent from every corner of our Nation.

Closing

The Army remains committed to our priorities of Readiness, Modernization and Reform. People are the strength and foundation of the organization. The FY21 budget request provides the necessary funding to achieve our modernization endeavor goals and fully support the NDS.. We continue to ruthlessly align every dollar towards our priorities in order to keep the Army a modern, lethal force capable of defending the Nation today and in the future. The Army thanks Congress and the American people for their continued strong support, which enables our ability to accomplish our mission. By providing timely, adequate, predictable, and sustained funding, Congress will ensure America's Army remains the most capable and lethal ground combat force in the world. Together with Congress, we are here to finish what we collectively started.

Ryan D. McCarthy
Secretary of the United States Army

Ryan D. McCarthy was confirmed by the U.S. Senate, Sept. 26, 2019, and sworn in as the 24th secretary of the U.S. Army, Sept. 30, 2019. McCarthy was unanimously confirmed by the U.S. Senate and appointed as the 33rd under secretary of the Army, Aug. 1, 2017.

As secretary, he has statutory responsibilities for all matters relating to the U.S. Army, to include the recruitment, organization, training, equipping, and care of 1.4 million active duty, National Guard, Reserve Soldiers, Department of the Army Civilians and their Families.

Prior to his confirmation as the under secretary of the Army, McCarthy worked for Lockheed Martin Corporation in sequential vice president roles responsible for the sustainment, customer solutions and program integration of the F-35 Joint Strike Fighter program and the company's global security policy.

McCarthy previously served as the special assistant to the 22nd Secretary of Defense Robert Gates, under Presidents Bush and Obama, where he advised as the secretary's representative to the White House, Congress, National Security Agencies and other Foreign Governments. He also served as the special assistant to the under secretary of defense for Acquisition Technology and Logistics and was responsible for policy development and coordination with the joint staff and uniformed services acquisition leaders on procurement and supply chain management policies. He also served as a professional staff member in the U.S. House of Representatives Committee on International Relations. Prior to his legislative experience, from 2002 to 2005, he worked as the vice president of Commercial Financing for the Hongkong Shanghai Banking Corporation.

McCarthy proudly served in the U.S. Army from 1997 to 2002 and was involved in combat operations in Afghanistan in support of Operation Enduring Freedom with the 75th Ranger Regiment, U.S. Special Operations Command.

He holds a Bachelor of Arts in History from Virginia Military Institute and a Master of Business Administration degree from the University of Maryland's Robert H. Smith School of Business.

McCarthy and his wife have been married for over 10 years and have one daughter.

Gen. James C. McConville
40th Chief of Staff of the Army

Gen. James C. McConville assumes duties as the 40th chief of staff of the U.S. Army, Aug. 9, 2019, after most recently serving as the 36th Vice Chief of Staff of the U.S. Army.

He is a native of Quincy, Massachusetts, and a graduate of the U.S. Military Academy at West Point, New York. He holds a Master of Science in Aerospace Engineering from Georgia Institute of Technology and was a National Security Fellow at Harvard University in 2002.

McConville's command assignments include commanding general of the 101st Airborne Division (Air Assault), where he also served as the commanding general of Combined Joint Task Force-101, Operation Enduring Freedom; deputy commanding general (Support) of the 101st Airborne Division (Air Assault), where he also served as the deputy commanding general (Support) of Combined Joint Task Force-101, Operation Enduring Freedom, commander of 4th Brigade, 1st Cavalry Division, Operation Iraqi Freedom; commander of 2nd Squadron, 17th Cavalry Regiment, 101st Airborne Division (Air Assault); and commander of C Troop, 2nd Squadron, 9th Cavalry Regiment, 7th Infantry Division (Light).

His key staff assignments include the U.S. Army deputy chief of staff, G-1; chief of Legislative Liaison; executive officer to the vice chief of staff of the Army; G-3 for 101st Airborne Division (Air Assault); J5 strategic planner for U.S. Special Operations Command; S-3 for 25th Combat Aviation Brigade; S-3 for 5th Squadron, 9th Cavalry; and S-3 for Flight Concepts Division.

McConville is a senior Army aviator qualified in the AH-64D Longbow Apache, OH-58 Kiowa Warrior, AH-6, AH-1 Cobra and other aircraft. His awards and decorations include two Distinguished Service Medals, three Legions of Merit, three Bronze Star Medals, two Defense Meritorious Service Medals, three Meritorious Service Medals, two Air Medals, the Joint Service Commendation Medal, two Army Commendation Medals, four Army Achievement Medals, the Combat Action Badge, the Expert Infantryman's Badge, the Master Army Aviator Badge, the Air Assault Badge, the Parachutist Badge, and the Army Staff Identification Badge.

McConville and his wife, Maria, have three children serving in the military.

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

MARCH 3, 2020

RESPONSES TO QUESTIONS SUBMITTED BY MR. WALTZ

Secretary McCARTHY. Army National Guard (ARNG) continues to posture itself to protect its mission readiness and best support current and future requirements.

Recognizing the ARNG's critical enabling role with the States, there are ongoing planning sessions to provide information regarding potential support to civilian authorities based on future impacts of the Declared National Emergency. The planning sessions are to anticipate and support ARNG personnel mobilizations supporting State missions under the direction of State Governors and Adjutants General. ARNG is prepared to provide quarantine facilities to affected civilian personnel (approximately 12,000 bed spaces). ARNG is providing commodity distribution, drive-thru testing sites, and other services to various State agencies (e.g., GA ARNG is using Clay NGC to house quarantined civilians).

While the ARNG is preparing to support, it must also protect its readiness. Therefore, it is taking actions to hold units from conducting exercises in countries with a Travel Health Notice 3 (avoid all non-essential travel); quarantining Soldiers returning from OCONUS missions for 14 days before returning to their homes; putting Permanent Change of Station (PSC) moves on hold through May 11, 2020; and rescheduling training at Combat Training Centers. [See page 13.]

Secretary McCARTHY. I agree that service to the nation is something we should all strive towards. I know this is also something that The National Commission on Military, National, and Public Service (the Commission) was reviewing as well; and I am looking forward to reviewing its report and the recommendations. [See page 13.]

Secretary McCARTHY. With more than 2,000 pieces of space-reliant equipment in each brigade combat team, it is critical for the Army to continue to identify and advocate for the warfighter focused requirements, capability development, and modernization of space-reliant equipment. Army space focused forces and capabilities will become even more important as we move toward the full implementation of the Multi-Domain Operations concept. The Army's increasing integration of space capabilities and applications to compete and win the land fight requires that the Army continue to design and develop space concepts and capabilities for integration into Army formations. The Army must continue to evolve service-unique capabilities required to enable space abilities that will achieve overmatch against our adversaries to meet Army Warfighter readiness and lethality requirements, now and in the future. [See page 14.]

Secretary McCARTHY. The Army National Guard (ARNG) has proven itself effective in recruiting top talent into high demand occupations such as Cyber, Aviation, and skilled trades—these are also referred to as low density Military Occupational Specialties (MOS). The ARNG has developed innovative marketing strategies, and recruiting campaign plans to fill Cyber and other high demand fields.

The Army intends to expand the Talent Management initiatives via the Integrated Personnel Pay System—Army (IPPS-A) to capture National Guard and Reserve personnel knowledge, skills, and behaviors. These talents, identified in Reserve and National Guard component Soldiers could then be utilized in those Soldiers' military and/or DOD civilian employments, if applicable.

We envision IPPS-A as a valuable tool through which service members will inform the DOD of their employment and skill sets utilized outside of duty. Leveraging IPPS-A data can be a viable resource for specialty recruiters who are targeting Soldiers to fill critical vacancies and shortages within low-density MOS' and branches such as Cyber. [See page 14.]

RESPONSE TO QUESTION SUBMITTED BY MS. SHERRILL

General McCONVILLE. Army Futures Command has established the University Technology Development Division, which serves as the primary link from the headquarters into academic partnership efforts and demonstrates the Army's commitment to partnering with academia to find solutions to modernization challenges. We now have approximately 300 academic partnerships with universities across the nation to support our modernization efforts into the future. The establishment of the

AI Task Force at Carnegie Mellon University in Pittsburgh, PA is an example of the types of academic partnerships we've established. Additionally, Army Futures Command created the Army Applications Laboratory in 2019 to help the Army evolve by connecting ideas from a broad range of nontraditional solvers—startups, entrepreneurs, tech companies, investors—to the right people and organizations within the Army to close capability gaps and field novel solutions. [See page 19.]

RESPONSE TO QUESTION SUBMITTED BY MS. TORRES SMALL

General McCONVILLE. I believe you are referring to the Information Systems Facility Military Construction Project at White Sands Missile Range (WSMR), which is a project on the 10 USD 2808 deferred list. There are no current impacts to any specific Army Modernization programs due to the delay. Risks for maintaining the aging equipment underlying the voice and data networks at WSMR will trend higher if we do not soon replace the aging facility. Delays in construction increase sustainment costs and operational mission risk for WSMR and its installation-critical services. If Congress approves the FY21 UFR requested for this important IT infrastructure project, the Army is ready to begin work. [See page 23.]

RESPONSE TO QUESTIONS SUBMITTED BY MR. KELLY

Secretary McCARTHY and General McCONVILLE. I agree with the Chairman of the Joint Chiefs of Staff's assessment that the reprogrammed funding would not have a significant, immediate, strategic negative impact to the overall defense of the United States of America.

As the Army fields modernized equipment, the priority will be to those forces expected to make contact with an adversary first—regardless of component. Nevertheless, there are plans to continue to provide the Army National Guard with modernized equipment. Examples include the AH-64E to replace older model Apaches, UH-60M Black Hawk helicopters to replace UH-60A models, the Next Gen Squad Weapon to replace some M4 rifles, and IVAS to replace current night vision devices. [See page 32.]

RESPONSE TO QUESTION SUBMITTED BY MR. CISNEROS

Secretary McCARTHY and General McCONVILLE. We are improving the diversity in our officer corps, and I look forward to having the opportunity to share our progress. In FY20, the breakout of commissions at the United States Military Academy (USMA) and U.S. Army Cadet Command (USACC/ROTC) is 65.8% white and 34.2% minority, which very closely reflects the U.S. population of 18–34 year olds with bachelor or higher degrees, at 65.1% white and 34.9% minority. Officer diversity in combat arms remains a focus and has steadily improved across both USMA and ROTC from FY18 to FY20, with the percentage of white cadets reducing from 71.9% to 69.6% and the percentage of non-white cadets increasing from 28.1% to 30.4% across these past three years. Female representation in combat arms also increased in FY20, with 68 women accessioning into infantry (IN) and armor (AR) branches, 12 more than last year. [See page 34.]

RESPONSE TO QUESTIONS SUBMITTED BY MRS. HARTZLER

General McCONVILLE. The Army's Black Hawk modernization strategy includes options to accelerate procurements, based on available funding. As a result, the increased procurement of 74 Black Hawks in FY20 enabled the acceleration of H-60M fielding across the Army by one year. Completion of H-60M fielding will occur in FY27 instead of FY28. The FY21 procurement of 36 aircraft supports the completion of the last active Army HH-60M requirement, aligns with the ARNG fielding strategy, and supports its request for accelerated modernization. [See page 36.]

RESPONSES TO QUESTIONS SUBMITTED BY MR. ROGERS

Secretary McCARTHY. Office of the Secretary of Defense Budget Guidance did not implement the use of the NDAA carryover language pending the ongoing GAO 19-452 carryover study. This study was published in July 2019 and recommended that the OSD establish a working group, in coordination with the Services, to develop and adopt a new carryover metric that provides reliable, complete, consistent, and

appropriate information. The Army is aligned with OSD and the other Services in support of developing a new calculation before the end of the 3rd quarter FY20.

Using the existing formula, the Army continues to decrease carryover overall and the Army projects to be under the allowable carryover amount at the end of FY21.

Our intention is to set up an engagement with your office after the working group completes its report. [See page 45.]

General McCONVILLE. The Army is committed to developing new technologies and revising doctrine to take advantage of technological advances. As these capabilities are delivered to the force, the Army training community will assess and adapt the range capabilities needed to employ modernized weapon systems within the confines of our installations. The Army must continue to have the capability to employ these modernized systems in a live training environment that allows units to train to the fullest extent possible. The Army appreciates the committee's interest and support as our needs and requirements change with technological advances. [See page 46.]

RESPONSES TO QUESTIONS SUBMITTED BY MS. SPEIER

Secretary McCARTHY. Essential to any system of justice is the public's confidence that the system is fair—to the community, a victim, an accused, and their Families. Our system of justice depends on those who prosecute and defend to do so zealously, and those who judge to do so independently—always adhering to their best understanding of the law and the facts. I am absolutely convinced that this system is fundamentally fair, at both the trial and appellate levels, and that it is professionally administered in good faith by women and men of conscience and character. Factual sufficiency review by the service courts of criminal appeals (CCA) is an important component of the military judicial system. Under Article 66(d), UCMJ, a CCA “may affirm only such findings of guilty, and the sentence or any part of the sentence, as the Court finds correct in law and fact and determines, based on the entire record, should be approved.” The use of this authority has been proven over time and has been used sparingly since its inception with the enactment of the Uniform Code of Military Justice. A review of the last three fiscal years shows the Army CCA exercised this authority to set aside a specification in only 1.6% of all cases.

Factual sufficiency review is not unique to the military. It is similar to the review New York appellate courts have used to overturn convictions. In *People v Taft*, 145 A.D.3d 1090 (N.Y App. Div. 2016), for instance, the NY appeals court applied a similar factual sufficiency standard to conclude that, “weighing the conflicting proof and inferences, we find the jury's verdict that the proof established beyond a reasonable doubt that defendant committed murder in the second degree and manslaughter in the first degree to be against the weight of the evidence.” Consequently, the court reversed the defendant's murder and manslaughter convictions. In *People v O'Neil*, 66 A.D.3d 1131 (N.Y App. Div. 2009), the NY appeals court reversed a jury's verdict convicting the defendant of sexual abuse of a child because it was “against the weight of the evidence” when “the record before us reveals that the victim's reliability is manifestly suspect.”

The careful, thorough evaluation of a conviction by service courts of criminal appeals strengthens the legitimacy and the effectiveness of the military justice system even when, in a few cases, there have been reasonable disagreements concerning the outcomes. Our Soldiers deserve a fair, comprehensive appellate review; one that balances the interests of the command, the community, the victim, and the accused. Such balance is essential to ensure justice. [See page 47.]

Secretary McCARTHY. Under the Affordable Care Act (ACA), everyone has access to all forms of contraception without costs as long as the private insurer is not exempt. When not activated for military duty, birth control prescription coverage for National Guard and Reserve Soldiers and their Family members is dependent on their private healthcare insurance coverage, which would then coincide with benefits under the ACA. Under the ACA birth control is provided at no out-of-pocket costs, as the full cost will be covered by the monthly premium paid. [See page 47.]

General McCONVILLE. While not all allegations of racist behavior or instances of extremist ideology result in a criminal investigation, Army CID is tracking seven criminal investigations initiated in 2019 involving Soldier participation in extremist activities. Six of the seven investigations involve white supremacist ideology. These CID investigations are ongoing in close coordination with FBI partners. One of these six investigations resulted in the arrest of a Soldier at Fort Riley, KS in September 2019. That Soldier is pending trial. [See page 46.]

RESPONSE TO QUESTION SUBMITTED BY MS. CHENEY

Secretary McCARTHY and General McCONVILLE. I have passed your concerns about access to documents to the Secretary of Defense as the Army is not in possession of the documents at issue. [See page 42.]

QUESTIONS SUBMITTED BY MEMBERS POST HEARING

MARCH 3, 2020

QUESTIONS SUBMITTED BY MR. TURNER

Mr. TURNER. Previously the Army claimed that the Optionally Manned Fighting Vehicle was an urgent need, that the technology needed to produce the OMFV was mature, and that the requirements were flexible and achievable. Then the Army completely canceled the contract and is going back to the drawing board. Is the need not as urgent as previously thought? Is the technology not achievable in the near future? What is the root cause on this 180 degree change in position?

General MCCONVILLE. The Army is absolutely committed to the development of the Optionally Manned Fighting Vehicle (OMFV), and it is imperative that we produce a transformational infantry fighting vehicle to maintain overmatch for generations to come as quickly as technology will allow.

We believe the technology is achievable. The main lesson the Army learned through the last OMFV solicitation was that we asked for a great deal of capability on a very aggressive schedule. Despite an unprecedented number of industry engagements—all of which allowed industry to help shape the competition—it became clear that a combination of requirements and schedule were too ambitious when integrated together.

Mr. TURNER. General McConville, you've placed a high priority on the Army's hypersonic weapon development program. Does the budget request fully support this effort? It's a great capability but it comes at a cost. What programs is the Army forgoing in order to fund this program?

General MCCONVILLE. Yes, the FY21 budget request fully supports the Long Range Hypersonic Missile (LRHM) program and allows us to field the first prototype battery by FY23.

The Army is requesting \$801 million for LRHM in FY 2021 and \$3.3 billion over the FYDP, an increase of \$1.2 billion over the FY2020 request. The Army decremented the Mobile Intermediate Range Missile (MIRM), but has not foregone it or any other Army program to fund the LRHM program.

Mr. TURNER. The recent Iranian missile attack in Iraq highlighted a critical gap in our integrated air and missile defense capabilities. In particular, Patriot and THAAD assets have limited coverage and lack interoperability. Last year, the Army finalized the purchase of two Iron Dome systems and is testing it as an interim solution. Do you feel the Army is acting quickly enough to respond to this demonstrated weaknesses in our defense? How, if at all, has the strategy for closing this gap changes since the attack at Al Asad?

General MCCONVILLE. As part of a Joint solution, the Army continues to develop a tiered and layered approach to defeat the various air and missile threats. The FY 21 Budget Request provides funding to critical air and missile defense (AMD) capabilities such as Patriot, Indirect Fire Protection Capability (IFPC), and Maneuver-Short Range Air Defense (M-SHORAD) that the Army will use to integrate AMD open architecture to task organize the appropriate sensors and shooters under the Integrated AMD Battle Command System across the Combatant Commander's operational, tactical, and close support areas. The Army is moving forward with the previously scheduled Limited User Test, an operational test that exercises warfighter participation, to address air and missile threats. The Army, in coordination with all Combatant Commanders, acts quickly to mitigate missile defense coverage gaps in their area of operations. The Army continues to work with the Central Command (CENTCOM) Commander to address regional requirements based specifically upon his defense design, while balancing global requirements presented by other Combatant Commanders. The attack on Al Asad serves to reinforce our view on the importance of air and missile defense and our efforts to close existing gaps.

QUESTIONS SUBMITTED BY MRS. HARTZLER

Mrs. HARTZLER. The Army is requesting to procure 36 UH-60M helicopters in Fiscal Year 2021. That is significantly less than the amount requested, authorized, and appropriated for Fiscal Year 2020. I understand that out of the 36, 13 are for the Active Duty and 23 are for the Army National Guard. Why is the number requested

significantly lower than the number last year? How will this impact units that are in the pipeline to receive UH-60M helicopters?

General McCONVILLE. The Army's Black Hawk modernization strategy includes options to accelerate procurements, based on available funding. As a result, the increased procurement of 74 Black Hawks in FY20 enabled the acceleration of H-60M fielding across the Army by one year. Completion of H-60M fielding will occur in FY27 instead of FY28. The FY21 procurement of 36 aircraft supports the completion of the last active Army HH-60M requirement, aligns with the ARNG fielding strategy, and supports its request for accelerated modernization.

QUESTION SUBMITTED BY MR. CARBAJAL

Mr. CARBAJAL. California is home to two Army University Affiliated Research Centers (UARC), with ICB located in my district at UC Santa Barbara. I have heard from constituents that there are discussions occurring within the Department of the Army about whether to realign long-standing UARC funding to Texas, in order to consolidate resources near Army Futures Command. In FY2019, California received the most Army university funded research in the country. Does the Army have any plans to reallocate funding from current UARCs in California to universities in Texas in the coming years?

Secretary McCARTHY. The Army does not plan to reallocate funding from University Affiliated Research Centers (UARCs) in California to UARCs in Texas. California's UARCs maintain essential research, development, and engineering "core" capabilities

QUESTIONS SUBMITTED BY MS. STEFANIK

Ms. STEFANIK. Secretary McCarthy, under the proposed Army budget, no funds were requested for the MQ-1 UAV (Gray Eagle) which provides a number of tactical advantages to the warfighter while conducting multi-domain operations. Additionally, I am concerned with the plan to replace the legacy MQ-1C aircraft of which 25 percent are approaching the end of their service life within the next three years.

What is the Army's long term plan for this aircraft and how do you plan on replicating its capability?

Secretary McCARTHY. There is no long range plan to replace the MQ-1C; it is a capable platform and the oldest MQ-1C will not reach its end of useful life until FY31. The Army did not request funding in FY21 because the program completed procurement of its acquisition objective in 2019. The Army will continue to modify MQ-1Cs, as required, to ensure they remain reliable and relevant. This continued modification plan will ensure the MQ-1's capabilities do not need to be replicated in the near future.

Ms. STEFANIK. Secretary McCarthy, as you are aware, Fort Drum is in my district and the installation is in need of updated and larger childcare centers. Under this year's Unfunded Requirements List, there are no requests to improve the centers, and under the Future Year Defense Program, there are no projected requests for childcare facility improvements.

Is there was a plan or strategy in place to provide the funding needed to improve these critical and necessary childcare facilities for the soldiers and families of Fort Drum?

Secretary McCARTHY. The quality of life for our Soldiers, their Families, and our civilian workforce is my #1 priority. In fact, Army senior leadership have made child development centers a top priority as we upgrade our facilities over the next 5 years. As such, I have directed GEN Perna, Commander, Army Materiel Command, to address child development center issues. The Army recently concluded our Facility Investment Strategy (FIS) wargame. During this forum, the Ft. Drum garrison commander briefed his childcare facility requirements: 3 renovation and modernization projects (R&M) and 1 new military construction, Army (MCA) project. That information will be used to shape the Army's future MCA and R&M efforts. The childcare requirements at Ft. Drum will be incorporated into the Army's FIS. GEN Perna will present FIS options to me for approval. The Army will be able to provide more details on the Ft Drum childcare improvement plan once the FIS is approved.

Ms. STEFANIK. General McConville, in the witness testimony provided it stated the Army will increase lethality at the point of ground contact with the enemy which will improve overall readiness of Brigade Combat Teams. The Secretary of Defense recently indicated he would likely move the Close Combat Lethality Task Force under the Army's oversight, which has been critical in rapidly equipping, training, and recruiting our close combat forces over the last two years. The task

force has greatly improved the lethality of our combat forces at the point of ground contact.

What is the Army's strategy for continuing the progress made under the task force, and who will oversee the program?

General McCONVILLE. Army and Marine efforts have been integrated since the inception of the Close Combat Lethality Task Force (CCLTF) and we plan to continue that model as the Army takes the lead. Both services will stay involved in the development and testing of new systems like the Integrated Visual Augmentation System and the Next Generation Squad Weapon. Soldier and Marine-centered designs will be refined through feedback at touch points with equipment and concepts in the hands of close-combat Soldiers and Marines. Army Futures Command will oversee the program.

Ms. STEFANIK. General McConville the Army continues to modernize its talent management procedures with programs like the Army Talent Alignment Process (ATAP) and the Battalion Commander Assessment Program (BCAP) both of which support your message of "putting people first."

Will similar talent management programs be implemented for the Army's Non-commissioned Officers (NCOs) and junior enlisted soldiers?

General McCONVILLE. Yes. We are currently in the study phase for enlisted talent management initiatives. The Army recognizes that everyone has talent, and great organizations employ individual talents to meet organizational needs by placing the right Soldier in the right job, at the right time, over time. The current talent management initiatives being studied and developed for Enlisted Soldiers and the Non-Commissioned Officer Corps are the Army Talent Alignment Process (ATAP) and the Enlisted Talent Maximization Structure (ETMS).

QUESTIONS SUBMITTED BY MR. VELA

Mr. VELA. Did you recommend to the Office of the Secretary of Defense (OSD) that \$1.7 billion in funding for the National Guard was ahead of programmatic need? What input did you provide for reprogramming funds to support the border wall? How many forces remain stationed along the border wall, and what activities are they conducting there?

Secretary McCARTHY and General McCONVILLE. I agree with the Chairman of the Joint Chiefs of Staff's assessment that the reprogrammed funding would not have a significant, immediate, strategic negative impact to the overall defense of the United States of America.

Concerning the border wall, while the numbers fluctuate, there are 3,846 Soldiers currently on the border (1,546 active duty military and 2,300 National Guard members) in support of the DHS/CBP southern border security mission. The Soldiers support the following four FY2020 DOD mission sets: (1) infrastructure support (fence repair, roads, and drainage); (2) operational support (motor transport maintenance and operations, training safety officer, heavy equipment operations, and admin support); (3) detect and monitoring support (camera operator, checkpoint observer, sensor maintainer, and mobile surveillance camera); and (4) aviation support (light/medium and heavy rotary wing support, fixed wing, and unmanned aircraft system).

Mr. VELA. The Army is looking to grow its force by 7,700 troops along with hiring 5,000 more civilians. With the Army looking to draw down forces in Afghanistan and potentially other parts of the world. Why is it necessary to grow the force?

Secretary McCARTHY. The Army requires continued increases of end-strength to reduce military risk in support of the National Defense Strategy. These increases support the transition from counter-insurgency operations to multi-domain operations, and the ability to defeat a near-peer adversary.

Mr. VELA. With the lack of military sealift available to take the Army to the fight, how does the Army plan to mitigate this problem in order to meet certain war plans? How much does the lack of sealift affect the time phased deployment of the Army in these plans?

General McCONVILLE. USTRANSCOM and the Navy are working to build readiness by recapitalizing the fleet through the procurement of used commercial vessels. The Army believes this recapitalization strategy is a fiscally responsible approach to improve readiness. If the risk due to declining sealift readiness becomes too great or the recapitalization plan does not materialize, the Army will need to consider increased theater presence and changes to our prepositioned stocks programs to meet COCOM requirements. This year, TRANSCOM will conduct Mobility Capability Requirements Study 2020 to validate force projection requirements for DOD. The

Army will review the results and gain an updated view on our posture and our ability to project forces in time to meet COCOM requirements.

Mr. VELA. What results have you seen in the Army's preparedness by exercising and operating with NATO? What value does NATO provide to the Army?

General McCONVILLE. Army exercises with NATO result in increased preparedness and interoperability with Allies/Partners across the globe. These events assist with understanding our collective capabilities and identifying collective shortfalls. As partners, we highly value our relationship with NATO and its ability to generate and provide land forces to support deterrence and competition.

QUESTIONS SUBMITTED BY MR. GALLAGHER

Mr. GALLAGHER. General McConville, it seems to me that regardless of the intensity of the conflict, the Army will always require food, ammo, and other logistical and sustainment items to be successful on the battlefield. Would you agree?

Furthermore, the Army's medium and heavy tactical wheeled vehicles are modernized vehicles that move supplies and equipment to and around the battlespace. Would you agree, General, that this fleet is critical to sustaining the Army's global operations?

Yet as I understand it, Army Futures Command will not have a dedicated cross functional team dedicated to the tactical wheeled vehicle fleet. Given that funding for the the Army's family of medium tactical vehicles continues to go down while funding for the heavy vehicles is zeroed-out in the outyears of the FY 21 budget request, I can't help but think that the enabling value of tactical wheeled vehicles may have been lost in the focus on the Army's big six modernization priorities.

Consequently, I'm wondering if there's been any thought about creating a cross functional team for tactical wheeled vehicles, or if not, how the Army is working to ensure we continue to maintain this critical enabling capability?

General McCONVILLE. I agree that logistics and the ability to transport necessary sustainment items are essential to any conflict and global operations. We are not, however, planning to create additional Cross Functional Teams at this time. The current CFT construct reflects our priorities for the capabilities our Soldiers will need to fight and win on a future battlefield. While there are many capability areas that are important to Army modernization, we do not want to dilute our efforts by making every capability a priority. We are, however, taking many of the CFTs best practices and applying them to other efforts.

The Army fully recognizes the value of its Tactical Wheeled Vehicle (TWV) fleet and has requested over \$1.2B in FY21 procurement funding for the TWV fleet and its associated trailers. The Joint Light Tactical Vehicle (JLTV), a key part of the TWV fleet, is one of the Army's highest modernization priorities. The Army is also moving forward with HMMWV modernization, FMTV procurement with the new FMTV A2 model, and an evaluation of the "Leader-Follower" autonomy applique kit for the Palletized Load System (PLS) fleet of vehicles. Concurrently, Army Futures Command is conducting a comprehensive TWV fleet study that examines TWV requirements in support of Joint All Domain Operations (JADO). The study, which began this year and is scheduled to be completed mid-FY21, will inform future force design and will address the required number of light, medium, and heavy tactical vehicles.

QUESTIONS SUBMITTED BY MS. HOULAHAN

Ms. HOULAHAN. The Army's FY21 Budget Highlights state, the Army looks to address family housing and barracks; yet, as the Army looks to increase in personnel, it has reduced its family housing request by \$62M, and military construction by \$810M. Can you please explain how the Army intends to provide its members and families adequate housing, support programs and childcare as it expands in size?

Secretary MCCARTHY. The additional \$50 million in 2-year funding that was appropriated in FY20 is being used to pay for privatized housing home inspections and oversight personnel. Although smaller than the FY20 enacted appropriations, our FY21 request increases the funding level for privatized housing staffing and oversight, and also provides an increase for repairs and maintenance to Army-owned family housing. The slight decrease in the FY21 Army Family Housing requirement is due to reduced inventory, as the Army is divesting 900 homes, some as a result of excess housing stock and others for replacement. Overall, the Army's budget request includes \$199M for Barracks and Family Housing construction.

The Army believes that clarification of budget scoring criteria used for military privatized housing transactions will support Residential Communities Initiative (RCI) companies' abilities to obtain additional funding from the private sector capital markets. That injection of additional private sector funding into RCI privatized housing projects will enable replacement or substantial renovation of condition challenged homes owned by RCI companies on an expedited basis.

I also want to highlight that the Army has developed a housing strategy to focus our investments to ensure that 100% of Army owned family housing is at a good or fair condition by FY26. Your support of our FY21 Army Family Housing request is vital to our ability to carry out that strategy and will allow the Army to bring 93% of its Army owned family housing to a good or fair condition by the end of FY21.

Finally, the Army intends to meet the demand for quality, affordable child care by focusing on increasing capacity through military construction and increasing the number of homes providing Family Child Care. The Army has initiated the design of new child development centers at locations with the greatest need (e.g. Hawaii and Alaska) and is planning to add a total of 10 child development centers by FY25. While the Army builds increased capacity, the Army intends to retain a higher percentage of child care professionals by increasing pay to be competitive with civilian care providers and providing support through the Army Fee Assistance program which already covers 14,000 children.

Ms. HOULAHAN. Can you please explain why the Army has decided not to implement the Block II upgrade throughout its entire Chinook fleet?

Secretary MCCARTHY. The Army decided not to implement the Block II upgrade throughout its entire Chinook fleet for several reasons.

First, in support of the National Defense Strategy, the Army shifted its focus to large scale combat operations against Russia and China and away from the counter insurgency fight in Afghanistan. The CH-47 Block II was developed to enable operations in the higher elevations and higher temperatures in Afghanistan.

Second, the Army's six modernization priorities are absolutely essential to defeat Russia and China, and with a flat Army Budget topline, the Army had to make some tough choices and find funding for the RDT&E for these priorities. The Army decided to delay the decision on Block II upgrade to the entire Chinook fleet to provide decision space with a relatively young fleet of aircraft while prioritizing the investments needed in support of the National Defense Strategy.

Third, the average fleet age for the Chinook is only seven years old with an economic useful life of 20 years. This makes the Chinook the youngest of our helicopter fleets. This put the Army in a position to delay the decision about the future of the Army's Cargo Fleet. This delay enabled the redirection of funds towards the development of the next generation Future Vertical Lift effort.

We will continue to assess the timing of future investment decisions required for the Army's CH-47F fleet readiness. As the Army modernizes its rotary wing fleet with its Future Attack Reconnaissance Aircraft (FARA) and Future Long-Range Assault Aircraft (FLRAA), the CH-47 will remain part of the enduring fleet for the foreseeable future.

QUESTIONS SUBMITTED BY MR. BANKS

Mr. BANKS. Given the fuel efficiencies, improved reliability and performance of the Advanced Medium Mobile Power Sources (AMMPS) over the legacy fleet of generator sets, the Committee commends the Army's use of AMMPS. These critical generator sets help ensure the readiness of the military by providing reliable electric power to the Network/Command, Control Communications and Intelligence (C3I), Air and Missile Defense, Long Range Precision Fires, Command Post and Combat Support/Combat Service support systems. Given the Army's modernization priorities, it is important for the Army to continue to keep in mind that power and the AMMPS program is a fundamental need for these initiatives to be successful. Could you please address the following questions:

Could you please inform the Committee of the Army's power generation requirements to support the Army Futures Command modernization efforts?

How does the Army plan to meet its power requirements?

I understand in August 2018, the Army awarded a contract to procure 15,240 AMMPS generators sets through 2023, however there are insufficient resources in the FY21 budget to procure these generators on the existing contract. What is the Army's plans to field AMMPS and fulfill the contract needs?

Secretary MCCARTHY. Army Futures Command capabilities and plans are nested within the Army's existing force structure and are supported by existing or planned

power generation systems. The Army's power generation requirement to support the Army Future Command's modernization efforts is primarily in the 5kW to 15kW power range. While current legacy systems across the Army are available to meet the needs of the identified capabilities being developed by Army Futures Command, the Army is: modernizing its power generation capabilities, specifically procurement of new 5kW to 15kW AMMPS systems that are more fuel efficient; will reduce its logistics footprint; and will take advantage of existing and planned smart power solutions. The new AMMPS systems associated with the contract in question, for example, have the lowest unit cost in the AMMPS family of generators. As systems are modernized, the existing legacy capabilities will be replaced. In all cases, the overall wattages, voltage, and output of the systems that exist or are planned/projected to exist, support the Army power generation needs. All will, or do, support existing and planned AFC/CFT capabilities.

The Army is the Lead Standardization Activity for DOD which means all Services (USA, USN, USMC, and USAF) use Army contracts to procure power generation capabilities. The Army has \$10.7M in customer orders in FY20 (\$2.2M—Air Force; \$3.9M—Navy; \$4.6M—other Army organizations) with anticipated/continued power generation procurement requirements from other services in FY21. The anticipated/continued service orders coupled with Army base funding requirements ensures contract fulfillment in FY21.

QUESTIONS SUBMITTED BY MR. WALTZ

Mr. WALTZ. Can you briefly describe the Army's dependency on space and American space assets for positioning, navigation, and timing (PNT) and mission success?

Secretary MCCARTHY. For the Army to operate today, and within the Multi Domain Operations Concept, we must have responsive, timely, and prioritized use of space-based capabilities. These capabilities are critical to mission success and must have the capacity to allow the Army to conduct mission command through communications links, synchronization and mass effects (fires and maneuver), and gain near real time intelligence for time sensitive targeting operations. Current space-based positioning, navigation, and timing (PNT) capabilities are the foundation for the Army to maintain situational awareness and deliver precision lethal effects. The Army is currently diversifying its capability to deliver PNT data in areas when GPS is denied or degraded.

Mr. WALTZ. Under current law, reservists are annually required to submit information about their civilian employer and job skills. Can you describe how this civilian skills database is used by DOD to ensure reservists skills are considered when assigning career or mission specialties?

Secretary MCCARTHY and General MCCONVILLE. The Reserve Component does not use the Civilian Education, Skills, Experience, and Certifications (CESEC) database to assign career or mission specialties. Instead, it is primarily used to maintain awareness of reservists who have critical skills necessary for national health, safety, and interest when considering which members to recall. This ensures that members with critical skills as civilians in their local communities and governments, including first responders, are not called to duty and retained in numbers in excess of the current need, depriving communities of those same skills.

The Army intends, however, to expand the Talent Management initiatives via the Integrated Personnel Pay System (Army) to capture National Guard and Reserve personnel knowledge, skills, and behaviors. These talents identified in components 2 & 3 could then be utilized in their military and/or DOD civilian employments if applicable.

Mr. WALTZ. Excluding the 173rd Airborne BDE operation in Northern Iraq in 2003, how many static-line, mass tactical, operations has the Army used in combat in the last 20 years? How do static-line parachute assaults fit into the Army's doctrine for fighting in the current strategic environment?

Secretary MCCARTHY and General MCCONVILLE. Since March 2000, the U.S. Army has executed 5 static-line, mass tactical, combat airborne operations, not including the 173rd Airborne (TF Viking/Combined Joint Special Operations Task Force—North). Three operations were in support of OPERATION Enduring Freedom in Afghanistan and the remaining two were in support of OPERATION Iraqi Freedom in Iraq. All five included elements of the 75th Ranger Regiment and each operation involved at least one company-sized element. The Joint Operating Environment envisions China and Russia employing a variety of political and military anti-access and area denial strategies to create standoff. As a global power with global interests, the United States must maintain the capability to project military force into any region of the world in support of those interests. Airborne operations

are one of four types of forcible entry—seizing a hostile area—that makes the continuous landing of subsequent troops and materiel possible. Airborne operations offer the Joint Force an immediate forcible entry option as they can be launched directly from the continental U.S. without the delays associated with acquiring intermediate staging bases or repositioning sea-based forces. Forcible entry operations are often the precursor to follow-on major operations and enable the Joint Force to seize the initiative.

Mr. WALTZ. Have there been any recent studies on the numbers and types of static-line parachute injuries based on a soldier's military occupational specialty (MOS), unit of assignment, or overall parachute proficiency (i.e., number of jumps or months/years on jump status)? Do you have any estimates on the costs to treat these injuries?

Secretary MCCARTHY and General MCCONVILLE. The US Army Combat Readiness Center (USACRC), the Army Airborne Board, and the Army medical community have conducted several studies from FY15 to the present to address paratrooper injury rates based on: (1) the type of parachute used; (2) the number of jumps; (3) military occupational specialties (MOS); and (4) specific units. The actual costs of injuries is difficult to determine. We use a Department of Defense formula to assign costs based on the severity of the reported injury to estimate injury costs. Using these figures, the total estimated costs of injuries reported to the USACRC from FY15 to the present is \$73M. Army Public Health Command has a study in review comparing injury rates and costs of paratroopers and non-paratroopers. This study includes all injuries and not just those associated with parachuting. In this three year study, non-paratroopers experienced 2.93 injuries per Soldier (500,093 injuries to 170,715 Soldiers), while paratroopers experienced 3.05 injuries per Soldier (96,338 injuries to 31,621 Soldiers), equating to roughly one injury per Soldier per year in both populations. The average direct medical cost for injuries was \$2,467 per paratrooper and \$2,831 per non-paratrooper. Annually, these estimates equate to a cost of \$822 per paratrooper and \$944 per non-paratrooper per year.

QUESTIONS SUBMITTED BY MRS. TRAHAN

Mrs. TRAHAN. I am concerned that in the Army's excitement to reach out to commercial, non-traditional vendors, the Army may risk selecting firms that:

Will not be able to manufacture products that are Berry Amendment and Trade Agreements Act (TAA) compliant;

Will not be in full compliance with the Department's cybersecurity policy;

Will still have Chinese components;

and due to this all, the proposals during competition will not be accurately priced.

Specifically, during the Army's Short Range Reconnaissance Small Unmanned Aircraft System competition, the Army's prototype selection process was held in a vacuum in which the ban on Chinese components, the Defense Federal Acquisition Regulation Supplement (DFARS) rules, and domestic content requirements did not exist. This effectively excluded the participation of several established vendors—and thereby limited competition—as cybersecure, Berry Amendment compliant vendors could not compete on price. It also required the Department to make substantive exceptions for the winning prototypes. I have significant concerns that the winning SRR bidders will not be able to meet the requirements related to domestic content, cybersecurity and manufacturability as the SRR program moves from the R&D phase into procurement.

Mr. Secretary and General McConville, I would ask that you take a closer look at the SRR procurement strategy and take action to ensure that our soldiers and the Army are getting the best technology available. Will you work with me to make sure that happens?

Secretary MCCARTHY and General MCCONVILLE. Yes. We will ensure the Army continues to comply with all applicable laws and regulations throughout the procurement process while ensuring Soldiers get the best technology available.

QUESTION SUBMITTED BY MR. BRINDISI

Mr. BRINDISI. General McConville, I commend the U.S. Army leadership for making tough decisions regarding the modernization of the Army's future force. I also appreciate the hard choices that you have had to make to ensure adequate funding across your top 6 modernization priorities. However, I am concerned that given the current priorities of the Army and the support that Congress has given the Army for long range assault aircraft, there may be a slight risk to future vertical lift if these programs are not adequately funded.

If the Army were to receive additional funding for the integration of key technologies on the platform, a risk mitigation effort, would the Army be able to execute these funds within the fiscal year?

General MCCONVILLE. Yes, increased FLRAA funding could be obligated during FY21. The Army recently awarded two Competitive Demonstration and Risk Reduction OTA agreements, and initiated Phase I with FY20 funding.

