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HEARING
ON
NATIONAL DEFENSE AUTHORIZATION ACT
FOR FISCAL YEAR 2025
AND
OVERSIGHT OF PREVIOUSLY AUTHORIZED
PROGRAMS
BEFORE THE
COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES
ONE HUNDRED EIGHTEENTH CONGRESS
SECOND SESSION
SUBCOMMITTEE ON SEAPOWER AND
PROJECTION FORCES HEARING
ON
**AIR FORCE PROJECTION FORCES
AVIATION PROGRAMS AND
CAPABILITIES RELATED TO THE
PRESIDENT'S 2025 BUDGET REQUEST**

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AND CAPABILITIES RELATED TO THE PRESIDENT'S
2025 BUDGET REQUEST**

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES,
Washington, DC, Tuesday, March 12, 2024.

The subcommittee met, pursuant to call, at 3:30 p.m., in room 2212, Rayburn House Office Building, Hon. Trent Kelly (chairman of the subcommittee) presiding.

OPENING STATEMENT OF HON. TRENT KELLY, A REPRESENTATIVE FROM MISSISSIPPI, CHAIRMAN, SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

Mr. KELLY. The subcommittee will come to order.

I ask unanimous consent that the chair be authorized to declare a recess at any time. Without objection, so ordered.

Good afternoon. This subcommittee covers Seapower and Projection Forces. Today we will hear about the projection part of the portfolio.

Before we do, I would like to welcome—who is not here and already, like, starting out bad—Mr. Nick LaLota from New York's 1st District.

Our witnesses this afternoon are no strangers to this subcommittee, and I want to take a moment to thank you and your staffs for the hard work and your service to this Nation. Although we don't agree about everything, you have gone out of your way to make yourselves available to this subcommittee, and I appreciate it.

More than ever, projection forces play an important part in the growing threats around the world. I know saying that has become somewhat of a cliché, but I have never seen a threat as great as it is today. In the last year, I have literally been around the world, and I am more concerned than ever.

This subcommittee has two legs of the nuclear triad, and the air portion with our bombers and tankers has been, and will continue to be, an unprecedented era of modernization. I would like to hear from the witnesses how we are going to balance the retirements of the B-1 and B-2 with the extensive modernization of the B-52 and the procurement of the B-21.

Also, as you know, the recent Mobility Guardian exercise identified the lack of secure communication links with the Air Force's airlift and air refueling fleet. I know we always ask commanders to tell us what they need, and in this case AMC [Air Mobility Command] took a lot of equipment to Mobility Garden—Guardian, and

identified what worked and what didn't, and what would get at the problem set the fastest. I would like to hear your thoughts on the lessons learned from that exercise.

Finally, I would like to hear your thoughts on increasing air refueling capacity. Admiral Paparo, in his nomination hearing last month, said, "I do have concerns about the ability of the Joint Force to refuel what will be a dynamic force operating within the AOR [area of responsibility] from bases on land."

Before we introduce the witnesses, I would like to turn to my friend, Mr. Courtney, and the ranking member, for his opening remarks.

[The prepared statement of Mr. Kelly can be found in the Appendix on page 29.]

STATEMENT OF HON. JOE COURTNEY, A REPRESENTATIVE FROM CONNECTICUT, RANKING MEMBER, SUBCOMMITTEE ON SEAPOWERS AND PROJECTION FORCES

Mr. COURTNEY. Well, thank you, Chairman Kelly.

And thank you again to both witnesses for being here today. This is the first budget hearing of our subcommittee after the release yesterday. And I think you know we are on a very truncated schedule for NDAA [National Defense Authorization Act] this year, so, you know, we are pleased that you are here and early, and, you know, hope that we can again use time efficiently as possible to make sure that we have a good mark later in the—in the congressional calendar.

You know, I would just, you know, say that, you know, that as we have done in past budgets, we will make some adjustments on a bipartisan basis. That is sort of the DNA of this subcommittee.

And in terms of just some of the concerns that I would like to at least leave with you here today, you don't have to necessarily answer all of them this minute, but the order by DoD [Department of Defense] to lift the grounding order for the B-22 Ospreys and return to operations after the three-month grounding is I think still an issue of great concern and highest interest on the subcommittee.

And, you know, we, again, really want to get a strong message and feedback back from, you know, all the services that use Osprey in terms of just, you know, what is the precise, explicit plan in terms of trying to reduce risk for that—for that platform.

Trent mentioned the bomber program, which, again, I am not going to belabor that. I think he articulated well, you know, what I think we are going to be looking for. And then, on the air refueling mission, pretty much the same thing, that we are going to make—you know, continue to track the remote vision system, which, you know, we think we made progress. I think the subcommittee drove some of that progress over the years when Mr. Wittman was chairman back in the day.

And, lastly, the VC-25B program, the Air Force One, you know, which is just sort of continuing to be an ongoing saga, and, you know, we really want to see that hopefully get a real sort of, you know, end date goal that we can sort of talk to our constituents about, and, you know, hopefully put to bed a platform that is way past its shelf life.

So, again, I have written remarks, which I would ask, Mr. Chairman, be entered for the record. And with that, I will yield back.

Mr. KELLY. Without objection. Thank you, Ranking Member Courtney.

[The prepared statement of Mr. Courtney can be found in the Appendix on page 31.]

Introducing our witnesses, Mr. Andrew Hunter is the Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics; and Lieutenant General Rick Moore is the Deputy Chief of Staff for Plans and Programs.

I understand, Mr. Hunter, Secretary Hunter, you are going to give one statement, so the floor is yours.

STATEMENT OF THE HONORABLE ANDREW P. HUNTER, ASSISTANT SECRETARY OF THE AIR FORCE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS; AND LIEUTENANT GENERAL RICHARD G. MOORE, JR., DEPUTY CHIEF OF STAFF FOR PLANS AND PROGRAMS, DEPARTMENT OF THE AIR FORCE

Secretary HUNTER. All right. Thank you very much, Chairman Kelly, Ranking Member Courtney, and distinguished members of the subcommittee. And thanks for having us here today to provide testimony on the Air Force's fiscal year 2025 President's budget request for our projection forces aviation programs and capabilities.

As you know, the Air Force plays an integral role in many priorities in the national defense strategy, including defending the homeland, deterring strategic attack, deterring aggression, and building a resilient Joint Force. Our Air Force capabilities underwrite the capabilities of the entire Joint Force, and we are uniquely suited to provide this element of the nation's defense. It is particularly true for long-range strike and power projection capabilities of the purview for this subcommittee.

The Department of the Air Force is ready to deter and prevail against today's threats. However, to maintain our advantage and improve our operational posture, we must continue immediate and significant capability modernization to keep pace with the growing military capabilities of the People's Republic of China.

The Secretary of the Air Force has made clear that we are out of time. While this budget request continues to focus and build upon the modernization called for by the operational imperatives and cross-cutting operational enablers the Air Force identified last year, our resources have been limited by the 2023 Fiscal Responsibility Act. The Fiscal Responsibility Act spending caps increase our risk and force difficult tradeoffs. Funding through continuing resolutions and restrictions on the retirement of outdated weapons systems also divert the focus from our military's ability to deliver decisive combat power.

To achieve a more competitive posture for the great power competition that we currently face, the Air Force has undertaken several initiatives to implement important changes centered on how we develop people, how we generate readiness, how we project power, and how we develop integrated capabilities. These changes follow up on our operational imperatives work, which highlighted the challenges of integration and the importance of tight partnerships between the operational budget and acquisition communities.

The organizational changes we are making at the Secretariat, and with our major commands, and at Air Force Materiel Command, institutionalize our lessons learned from operational imperatives and other key efforts. And we look forward to working with Congress as we organize into a more agile and integrated acquisition system that delivers capabilities quickly and at scale.

Let me turn to the request in our fiscal year 2025 modernization portfolio. As our modernization continues, the Air Force is gradually transitioning the current three-bomber fleet to a two-bomber fleet of next generation B-21s and modernized B-52s to provide nuclear and conventional global strike options for decades to come.

Since I testified to you last year, the B-21 program has made significant progress. We are executing the flight test campaign, and there are several aircraft in various stages of build on the final assembly line. Our fiscal year 2025 budget request also advances modernization for the B-52. It is the most extensive modernization on the platform's history.

The commercial engine replacement program, the radar modernization program, will ensure the B-52 fleet's viability and improve its operational availability through the year 2050. Last fall, the B-52 CERP [commercial engine replacement program] program transitioned from the middle tier of acquisition pathway, the rapid prototyping process, into a major capability acquisition or major capability—or MCA program. We are working to accomplish Milestone B for the program in 2024.

The demand of global operations, as both the chairman and the ranking member pointed out, require a critical mass of air refueling tankers with specific connectivity, survivability, and agility capabilities, generating at mission capable rates to meet timelines of the Joint Force and win the fight.

Our fiscal year 2025 budget requests RDT&E [research, development, test and evaluation] and procurement funding to continue uninterrupted tanker recapitalization. The KC-46A continues to provide operational readiness, flexibility, connectivity, and survivability to the global reach mission. To date, 139 production aircraft are on contract and 81 have been delivered to the warfighter.

The Air Force continues to work with Boeing to correct deficiencies for the remote vision system and the stiff air refueling boom. We are committed to ensuring these deficiencies are properly addressed and without undue burden on taxpayer or on the operators.

This budget requests funding for the procurement of 15 KC-46 and Lot 11 and associated support costs, along with the increased depot standup and the transition to organic sustainment that the Air Force requires.

Our goal is to get to our required future tanker capability, NGAS [Next Generation Air Refueling System], as soon as possible. Our tanker recapitalization effort is designed to ensure continuous tanker recapitalization between the delivery of the last KC-46 and the first deliveries of NGAS.

With the decision not to pursue the KC-Y last year, we returned to industry with a new and modified requirement in order to get after KC-135 replacement with the requirement necessary for that aircraft. We have received responses from Boeing and from Airbus,

and we are beginning to determine the acquisition strategy of the tanker capitalization program which will be decided later this year based on the information we receive from industry.

When we get to NGAS, it will deliver adaptive and agile platforms and emissions systems as part of a tanker family of systems by the mid-2030s. The NGAS AOA [analysis of alternatives] is considering a wide range of designs, including clean sheet designs and purpose-built aircraft to address projected threats and needed capabilities and leverage the benefits of full and open competition.

The NGAS AOA should complete in October 2024, and it will shape requirements and determine the technology development timeline for the path ahead. We are also standing up a future tanker program office to execute both NGAS and tanker recapitalization effort.

Our global operations also require strategic and tactical aircraft with specific connectivity, survivability, and agility, generating at mission-capable rates necessary to meet our timelines. Our 2025 budget request includes funds to continue modernization and sustainment of our airlift fleets, including both the C-17 and the C-5 and also the C-130.

Regarding executive airlift, the VC-25A program and Boeing successfully delivered the most recent aircraft to the Presidential airlift group on January 25, approximately 2 months ahead of schedule, in support of flight operations in 2024. So we are having good success with the VC-25A.

Ranking Member Courtney, as you indicated, VC-25B, we are continuing to execute and work with Boeing to execute that program. The structure of our arrangement with Boeing, as you know, essentially prioritizes cost over all other considerations, and that has had an impact on our schedule. But we continue to work with Boeing to deliver that important capability later this decade.

Sadly, last fall the Air Force lost eight airmen in a CV-22 Osprey mishap off the shore of Japan. As you indicated, safety and aircraft investigation boards have determined that a material failure of a component led to this mishap, and we need to do additional maintenance and procedural controls to mitigate that risk.

We are committed to doing a resumption of flight operations in a way that ensures a safe return to flight with the appropriate training for qualification of proficiency for the air crews and the right maintenance and procedural controls. Our fiscal year 2025 budget request continues development of modifications to increase CV-22 fleet reliability, capability, and survivability.

And since time is of the essence in capability development, I did want to say a personal thank you to the committee for providing the Department of Defense with Section 229 of last year's NDAA, what we call the "quick start provision" and the fiscal year 2024 NDAA. And we look forward to coming to you soon with information on specific initiatives that we will be seeking for the Department of the Air Force under this authority.

Thank you again for the opportunity to testify, and we look forward to working with Congress and our many Air Force communities that support us to maintain our necessary military advantage to secure our vital national interests.

Thank you.

[The prepared statement of Secretary Hunter and General Moore can be found in the Appendix on page 34.]

Mr. KELLY. And with that, Mr. Nick LaLota of the 1st District of New York has now joined us, the newest member of our subcommittee. Although you—he may have an accent, so we may need an interpreter, I will let him ask the first round of questions there.

Mr. LaLota, you have got my time.

Mr. LALOTA. Thank you, Chairman. I see which way this committee is going to go with me. Appreciate that. Not only do I get the front seat, but I get the ridicule from the gentleman without the accent behind me.

[Laughter.]

Mr. LALOTA. Special thanks to our witnesses for being here today and for allowing us to discuss the Air Force's projection forces program. The insights that you provide to our committee will be invaluable as we make our decisions on policy and on budgets.

Today I am eager to delve into discussions on how the President's fiscal year 2025 budget will affect our operational readiness, especially as it relates to China and Russia, how it will impact our local defense industrial base, and how it will ensure the Air Force's continued dominance in the skies.

Mr. Hunter, good to be here. Good to see you here, sir. You are the Air Force's top civilian for acquisition, technology, and logistics. Is that correct?

Secretary HUNTER. That is correct.

Mr. LALOTA. Excellent. Given your position and expertise, how will the Air Force's focus on competition with China and Russia impact its procurement of bombers, tankers, and airlift capabilities, sir?

Secretary HUNTER. Well, all of those capabilities are central to our ability to perform our missions in the Indo-Pacific Region. So they are highly prioritized.

We are working in the acquisition community closely with our operational community. That is one of the key insights of the operational imperatives work that we did last year that we are seeking to make a permanent part of our process as part of re-optimizing for Great Power competition.

We are working very closely with the parts of the Air Force staff that are working on our force design, and they are in effect developing the concept for a new Integrated Capabilities Command that will help ensure that we appropriately prioritize our requirements for that part of our force, that we do the right modernization and upgrades, and that we field the right systems in the future for air refueling and for airlift.

And so we are working very closely with that community on the standup of the Integrated Capabilities Command, have a complementary set of organizations within Air Force Materiel Command, to support that work, and then ultimately to build the systems that will fill out that part of our force design.

And I don't know, General, if you want to speak to that as well.

General MOORE. Yeah. Thank you, Mr. Hunter, and thank for the question, Mr. LaLota. So from the programmatic perspective, I would say all of these things are of great importance to the fight on China, as you have rightly pointed out. They sit, though, in bal-

ance with all of the other capabilities that it takes to prosecute war against a peer competitor.

And so we have a lot of analysis in the past two years that lets us move beyond a discussion of platforms to a discussion of end-to-end creation of effects. And we can see clearly where we have advantage and where we don't. And so where we have placed our investment in this budget cycle is in the places where we may not have the best advantage, and we have not sought to overinvest in places where we already gain an advantage. So all things in balance and all things along an entire chain of activities that allow us to create effects.

Mr. LALOTA. Thank you. And, General, I am going to stick with you on this. My understanding is that you spearhead much of the Air Force's plans and programs. Is that correct?

General MOORE. Yes, sir.

Mr. LALOTA. And does your portfolio include the Air Force's LC-130?

General MOORE. It does.

Mr. LALOTA. Thinking about Russia and China specifically, I am concerned because the United States relies solely, as I understand it, on the LC-130s operated by the New York Air National Guard, and the unique ability for transporting personnel, equipment, and supplies to remote locations in the polar regions.

And to accomplish this, I understand the LC-130s are specifically modified to operate in extreme cold and snow-covered environments. There are ski sleds from what I understand on these aircraft, making them the only large strategic aircraft capable of landing on ice and snow year-round in the world.

So thinking about that part of the world and what that might be used for in strategic competition, at least with China and Russia, but certainly in kinetic operations, I am worried about an overreliance on the LC-130 while concurrently that fleet is being allowed to deteriorate.

So I was wondering if you can comment, General, how does that current deterioration of the LC-130 fleet comport with our nation's strategic focus on conflict possibly with China and Russia, knowing that that conflict may extend to where this LC-130 is used mostly?

General MOORE. Yes, sir. So it is a great question. Not to mince words, but I think they do matter. The LC-130 is aging, as is the rest of our fleet. Forty-four percent of the Air Force's fleets are past their design life, and the average age of our fighter fleet is nearly 30 years.

I don't believe that the LC-130 fleet is deteriorating. Aging, I would think that that is reasonable. I don't believe that that fleet is deteriorating. In fact, there has been a substantial investment thanks to the committees in new engine mods, new propellers, to give them more ability to function, particularly in the ice mission.

So I think there also is an upgrade, by the way, for new skis or modified skis to keep the airplanes relevant and to keep them current. They have something like 15, 20 years of life left in them. So we have—thank you to the committee for a small amount of money to start an analysis of alternatives to look at what the replacement may be. But we don't view this as an urgent or emergent requirement.

The aircraft, as I mentioned, are aging, but they are aging gracefully along with the rest of our fleets. And all things in balance, as I mentioned, this is not a place where we would view the need for urgent investment, but we are conducting an analysis of alternatives to see what it is that might be able to come next.

Mr. LALOTA. Yeah. We would appreciate if good, smart, strategic folks like you continue to keep your eye on it. Understand it is not urgent right now, but my experience in this town specifically is we should plan a little more ahead. And if 10 or 15 years is your horizon, that is good news, but I hope that you, your predecessor, and his or her predecessor does anticipate that need in time.

General MOORE. Yes, sir.

Mr. LALOTA. Great. I yield, Chairman.

Mr. KELLY. I thank the gentleman for his questions.

I now recognize the ranking member, my friend, Mr. Courtney.

Mr. COURTNEY. Thank you, Chairman Kelly, again. And like you, I want to welcome Mr. LaLota to the subcommittee. I don't know what took him so long to get over here, but, you know, those Yankee fans, you know, they are kind of slow learners sometimes.

[Laughter.]

Mr. COURTNEY. So, anyway, thank you again to the witnesses. I just want to go back, Mr. Hunter, to the comments you made regarding Osprey where, again, in your written testimony also you describe the fact that, you know, some new sort of maintenance and tracking, you know, program is going to be put into place there. And I realize it is probably summer before they really are operational on sort of a regular basis again.

Has the Air Force or the Navy, who obviously is a big consumer of Ospreys, has this all been sort of put down in a document, in a reg? I mean, I really feel that that would be a useful and helpful thing in the wake of that terrible accident. And, obviously, it has not been the first time that is there.

I mean, when *McCain* and *Fitzgerald* had the terrible collisions, I mean, the Navy, you know, really, you know, put out a very explicit, you know, document that we actually codified, you know, an NDAA that sort of, you know, just changed the whole system in terms of, you know, releasing ships for duty. And if there was readiness issues that didn't comply with that, then, you know, basically you hit the safety brake.

And so, I mean, personally, I just feel like that, you know, the services really need to follow a similar model in terms of just, again, getting, you know, the public as well as families, you know, the pilots and the crews, to understand that something is different now.

Secretary HUNTER. Agreed, Congressman. And we do have very rigorous processes in place for what we do after an aviation accident. And, you know, the Safety Board recently concluded. It is about safe operation of the platform. We also have the Accident Investigation Board, which is a similar but separate process, that comes up with long-term recommendations, both engineering and relating to the, you know, CONOPS [Concept of Operations] methods of operation and maintenance that will, I am confident, will have recommendations for us that we will absolutely implement over the longer term.

I know that since all of the services operate the platform in a slightly different fashion and manner based on our different mission sets, each service has its own path to carry forward about how to resume operations and do that in the safest way, tailored to our mission set. And I know General Bauernfeind and his team are 100 percent focused on this.

And I agree with you. I think we are very committed to communicating with the families of those incredible service members that we lost to ensure that they understand what happened, but also how we are doing to make sure it doesn't happen to others, put them in the same situation.

Mr. COURTNEY. And I just want to say for the record, and I think Trent would agree, I mean, General Bauernfeind was extremely accessible. I mean, we talked to him within days of the incident, and we had another briefing. So, again, my comment is really just about, you know, again, we just need to see something that, you know, is explicit and public to really show, like you said, that, you know, something is different and something has changed. And, you know, people really took it to heart.

And I think that is what happened with McCain and Fitzgerald, and I think it has really—you know, really shown impressive results.

With that, I will yield back.

Mr. KELLY. I now recognize the former chairman of this subcommittee, who is my mentor and always is full of advice, Mr. Wittman from Virginia.

Mr. WITTMAN. Well, Mr. Chairman, thank you. Thanks so much for your leadership and for that of Ranking Member Courtney. You certainly have done an incredible job, and I want to thank our witnesses for joining us today.

Mr. Hunter, I want to begin with you. As we look at where we go to counter the threat from China, you talk about next generation air dominance as a system that has to be put in place for us to be able to operate in the highly contested environment we are going to find ourselves in. Part of that, too, is next generation air refueling systems, because, remember, we are going to be operating in at the very least a contested space, probably a highly contested space, so we have to make sure we have tanking that can also survive in that environment. You know, logistics becomes very important in that highly contested environment.

I wanted to get your perspective and ask where you see next generation air refueling systems going. Are you learning anything with what is being developed in NGAD? And I understand a lot of that is classified, but hopefully one is informing the other. And I want to make sure, too, that we understand operationally how those two programs are going to intertwine, and how do we make sure that we don't get one out in front of the other, because I think one is intimately tied to the other.

If you are going to operate with a next generation air dominant system, you had better be able to refuel in that same environment and support that aircraft. We know how important tanking is.

So what options are you considering to be able to hopefully get some of that capacity in place as quickly as possible? Obviously, 2027 is the metric. And are there options that we have to maybe

pull NGAS to the left? I know we have looked at what we can do to pull a lot of those platforms and programs to the left because of the growing threat from China.

Secretary HUNTER. Well, thank you, Congressman. Really excited to talk to you about this, and I agree with your sentiments exactly. These programs are closely related, both in their concept, how they operate within the force design, and also I am going to be pleased to tell you that—in the way that they are functioning and the way that they are working together.

I did want to note that the PB25 [President's Budget 2025] includes \$7 million for NGAS in order to complete the AOA, do some of the early stage modeling and simulation work that will support the AOA, and also standup future tanker program office that will manage both NGAS and the tanker recapitalization effort. So we do have funds in the budget. We looked to add to that as part of our next budget cycle process to complete the work throughout the FYDP [Future Years Defense Program].

The NGAS program is leveraging our NGAD program efforts. We want to leverage the government reference architecture for advanced mission systems developed by NGAD, which we intend to leverage across the Air Force force design, but in particular with NGAS, and they are also leveraging expertise from the agile development office to help them get started and take what I call the next gen approach to our acquisition programs, with large vendor pools, continuous competition, and iterations of capability that we can deploy on a relatively good timeframe.

So subject to our ability to identify the right resources for NGAS, I would certainly favor, if we can't accelerate the entire NGAS program, certainly getting after some of the mission system elements, such as connectivity that the chairman referenced in his comments, into today's force on the earliest timeline that we can.

Mr. WITTMAN. What is your vision concerning autonomy in those systems? You know, as we look at what the future battle space is going to entail, there are great opportunities I think to get humans out of the risk missions where, actually, autonomy can perform probably even better. And, you know, our most important asset are human beings, so our men and women in the Air Force, the Navy, the Marine Corps, the Army, the Coast Guard. You name it. That is our true asset.

So give me your long-term visions about how NGAS is looking at autonomy, because to me that is one of the areas where it makes sense. You know, if we are using ISR [Intelligence, Surveillance, and Reconnaissance], if we are using logistics like tanking, it makes sense that that be one of the first places that we look at autonomy. So give me your perspective on where NGAS is looking to incorporate autonomy as part of the future vision.

Secretary HUNTER. Yeah. I actually recently had the opportunity to fly on a KC-46 and observe how the crew operates, both in the flying of the aircraft and also with the boom operations. And I think there is a substantial opportunity to leverage autonomy in both areas of the airplane.

Interestingly enough, one of my takeaways was that the RVS [Remote Vision System] 2.0 is a key enabler for a potentially greater degree of autonomy in the refueling operation itself and the

boom operations, because the greater clarity of the camera system will support a higher degree of high-fidelity automation in that process.

And it was noteworthy to me in the cockpit, you know, there are times when, you know, the pilots are—you know, it is not that hard to fly the airplane, and then there is moments where it is really hard, and they are task-saturated. And those moments are areas where I think we could definitely leverage autonomy to reduce that burden on them, particularly when it comes to the dicier aspects of refueling operation.

Mr. WITTMAN. Very good.

Thank you, Mr. Chairman.

Mr. KELLY. The gentleman yields back.

I now recognize Mr. Norcross.

Mr. NORCROSS. Thank you, Chairman.

This wasn't going to be a refueling hearing, but I am going to continue it and—because Rob has certainly touched on a number of those issues. And I understand the environment we are speaking of, but can you, Mr. Hunter, give us a better view on the current thinking for stealth technology. I know Rob asked a question of additional capabilities, but stealth for NGAS, where do you see that going?

Secretary HUNTER. Well, I think it is a huge element of the analysis of alternatives to look at, what are the different technologies that can help us do refueling in a contested environment? And what are the different ways to solve that very challenging operational problem? So it is a huge focus. We are leveraging, obviously, the expertise of our force. We are leveraging modeling and simulation to help us think through what might work to help us enable that and then what doesn't work.

One thing that is a clear lesson that I do want to hit on again is a core foundation for all of it is situational awareness and the connectivity that is required to give the crew situational awareness in order to engage in higher risk operations and higher risk environments. And so that is something that we already understand, and our AOA will help us get after more questions such as the one you reference about what other technologies can be bring to bear to help us operate better in that environment.

Mr. NORCROSS. We certainly have a number of platforms that currently we have and have to be fueled. But looking to the future, there can be many types. And I am not sure one size fits all, and that is one of the challenges.

Can you tell me currently, for the KC-46, if this was two years ago I would say, what can it refuel? I think we are on the other end. What can't it refuel currently?

Secretary HUNTER. There is a very small number of limitations. The most notable one is the A-10, and that—it just relates—you know, it is an engineering issue between the boom and that aircraft, and its power of the engines. It is not impossible to do it. It is just not—it is not a particularly good idea to do it on a routine basis, and, therefore, we don't. And that is a decision made by General Minihan and his team at AMC, and that is working. We have enough KC-135s to ensure that we can safely operate A-10s wherever we need to.

Mr. NORCROSS. And certainly the number of those is diminishing each year that we go through.

The remote visual system, I am not looking back, but we were—where we are currently, the system that they are building right now has been approved—its design concept—by the Air Force, correct?

Secretary HUNTER. Yeah. We are well along, so, you know, the final—the nature of the KC-46 FAA airworthiness certification. So we are still working with the FAA [Federal Aviation Administration] to completely nail down airworthiness certification, which will completely close approval of the design, but we are—we have made a ton of progress towards that, and we are close.

Mr. NORCROSS. We certainly have. The good news is we will have the greatest system the world has ever seen. The bad news is it took us a long time to get here. But looking forward the question is, are we where we expected to be as of the final design that we are looking at? Are we still looking at a late 2025 implementation?

Secretary HUNTER. There is some schedule pressure there. And depending on completion of the FAA airworthiness certification process, I cannot guarantee you that we would be in a position to field in 2025. It may be 2026, and that is actually likely. I think it probably will field in 2026, but I can get back to you with a more detailed timeline for where we see the state of play of fielding.

Mr. NORCROSS. Certainly, we appreciate that. And considering what we have gone through on this tanker program, I think all of us can say is we are glad we are on this side of the hill and it is going much better now.

And with that, I will yield back to the chairman.

Mr. KELLY. I now recognize Dr. Jackson.

Dr. JACKSON. Thank you, Mr. Chairman.

I just want to ask a real quick question. I know we hit on this already. Just kind of the importance of the CV-22 program and what is going on there. And we kind of, you know, it was highlighted based on the recent groundings that we had on how important that aircraft is overall to all branches of the service.

But I just wanted to ask a question. The CV-22 is the Air Force's only high-speed vertical lift platform in the inventory. It allows for long distance vertical lift operations with increased survivability. When we talk about operations in the Indo-Pacific, and really across the globe, speed and range are perhaps the two most important factors. And the CV-22 aircraft provides the capability that is nearly impossible at this particular to replace in that regard.

I know the Department of the Air Force has invested in the CV-22 and Nacelle improvement program, and it has greatly improved the readiness of the aircraft and increased aircraft availability by over 5 percent from what I have been told.

Lieutenant General Moore, how has the Nacelle improvement benefitted aircraft readiness? And have you seen an increase in mission-capable rates? Further, is it your assessment that you have seen a decrease in the maintenance man-hours and costs per flight hour within the CV-22 fleet thanks to the Nacelle improvement program?

General MOORE. So we have absolutely seen a decrease in maintenance man-hours. Largely, that comes from increased engine

time on the wing. Engine changes in the CV-22 are complex, as you certainly know, and so we have seen an improvement.

This is paired with a companion mod that replaces a wiring harness in the same area as the nacelle screen which is actually the part that we are talking about. That has helped as well. Nevertheless, the MC [Mission Capable] rates remain below what we would like, the maintenance man-hours per flight hour remain higher than we would like, and we now have a fairly healthy task ahead of us to get our pilots back up to full mission status, and that will happen along a very deliberate pathway.

But the CV-22 is still a part of our force. We intend to use it that way. We wish that the mods that we had put in place could have maybe potentially had more impact. I think we could have hoped for more, but we are seeing the improvements that you are talking about, maybe not quite to the extent that we would have hoped.

Dr. JACKSON. Great. Yeah. I have been out there in a helicopter, and I have seen the before and after, and it is pretty impressive, the change, and I can only imagine the impact it is having. I hope that we continue to do that on all of our B-22s across the services.

My second question, real quickly, is during my time in Congress I have spent a lot of time focusing on our vertical lift capabilities across services and what that will look for—what that will look like moving forward.

Many of you have heard me say this before. You know, when you were talking about Indo-Pacific, I think—and one of the reasons why, you know, the V-280 program, Bell has got that right now, is basically based on speed and range. And those are going to be really important in a future conflict, especially in a conflict in the Indo-Pacific where those are going to be exaggerated.

During my recent meetings and briefings, I have heard that while we have great capabilities now, we need to make a next generation leap with regards to speed, range, and survivability. Development of the high-speed VTOL [Vertical Takeoff and Landing], the vertical lift takeoff and landing aircraft, is well underway right now to meet the critical needs of tomorrow. That is the plan at least.

But, in my opinion, we need to quickly move into the next phase of this program. I understand that DARPA [Defense Advanced Research Projects Agency] intends to move from four potential proposals to two or three in the near future, and I would urge that decision to happen sooner than later, so that we can accelerate this program. I think that, you know, time is of the essence here.

This new high-speed VTOL aircraft will need to have advanced features like runway independence, improved survivability, variable payload configurations, to allow for increased mission flexibility and superior performance over the legacy platforms to say the least.

Lieutenant General Moore, can you speak to the importance of speed and range for our projection forces capability and how this new high-speed VTOL aircraft will be part of that?

And, Assistant Secretary Hunter, I know this program lives currently in DARPA at the moment, but I have heard from many leaders and operators about how great this aircraft will be. So is there

anything in terms of resources or authorities that this committee can do to—or provide to accelerate the fielding of this aircraft?

General MOORE. So we certainly value speed and range above most of the other attributes of a fighting force in the Pacific. You are certainly well aware of this when you fly from D.C. to Hawaii. You get very happy not because you are in Hawaii, but because you are no longer in D.C. Yet you are only halfway to Guam. This is an enormous area to fight in.

Certainly, speed and range are attributes that we value. We also, however, have to ensure that if we are going to bring on a new weapons system that we have the headspace in the budget to account for that. And I think we are challenged to see something like future vertical lift come in until after the nuclear bow wave peaks sometime—we thought it would 2027. I think now it is probably 2028 or 2029. Before that, I don't see that we have a way to bring a new weapons system into the portfolio.

Dr. JACKSON. Thank you, sir.

Secretary HUNTER. I would say, from an acquisition perspective, we do talk to DARPA and are in discussions with DARPA on how their high-speed VTOL program—you know, they are looking for a service to take that program on when it reaches the completion of the work that they are doing. You know, they work it up to a certain point, and then they expect someone else to carry the program forward.

So no resolution as of yet in those conversations, but this is an area where we are working very intentionally with the force design that is directly tied to our vision for Great Power competition. And so this capability would be in the mix to understand, how does our force design meet the needs of the fight and the things that substantially improve our capabilities. To reference what the General said earlier, right, that balance, reinforcing our—an advantage or strengthening an area of weakness. Then they are going to be prioritized in our force design.

So we are really looking to our colleagues today in the A-57 on the half-staff, but in the future an Integrated Capabilities Command to help us work through these prioritization questions.

Dr. JACKSON. Thank you, both. My time is up, and I just want to say that with the Army's vertical lift program I understand these new proposed capabilities are a leap, a big leap, so—

Mr. KELLY. The gentleman's time has expired.

I now recognize Mr. Garamendi. I am sorry. I am sorry. Ms. McClellan. I am so sorry.

Ms. MCCLELLAN. Thank you, Mr. Chairman. And thank you to you and the ranking member for having this hearing today. I do appreciate hearing from our witnesses on the ways that we can continue to ensure that the Air Force has what it needs to remain a truly global force.

With that, I want to start with a follow up from Mr. LaLota's questions, and that is how the Air Force projection forces are ensuring that it maintains its nimbler counter-insurgency and counter-terrorism capabilities if they are needed.

General MOORE. So, ma'am, I will certainly say that we have not given up on counter-insurgency or counter-terrorism. However, China is the pacing threat, and we are focusing on what it takes

to execute an end-to-end operation that can create effects against a peer adversary.

Low in-fighting is something that we have become very good at over the last 30 years, but it is a very different kind of requirement than confronting a peer adversary. Confronting a peer adversary is much, much more complex. It is much more intensive in terms of data and the ability to move it, as well as airmen, to make command and control decisions. And if we are going to be successful in that arena, we have to focus on that.

There are still parts of the Air Force Special Operations Command in particular will still focus on counter-insurgency and counter-terrorism. In fact, Special Operations Command is the global integrator for that fight. Air Force Special Operations Command is their component, will continue to focus on that, but the majority of what we have, we will need to pivot away from that and it will have to pivot towards high-end competition or conflict if called upon, or we won't be able to pull this off.

Secretary HUNTER. The one area that I would highlight that we are doing some work on that is directly relevant is on the counter-UAS [Unmanned Aerial System], which is a huge priority across the Department. No single service has all of the tools required to really effectively perform that mission and all of the different scenarios that you see that we require that capability in the Middle East.

So that is a joint, multi-service effort that the Air Force is participating with, and with our service counterparts. And we bring certain technologies to the fight, the capabilities of the Air Force Research Lab and that we have got some things that we can bring to that fight as well.

Ms. McCLELLAN. Thank you. And we are over five months operating under a continuing resolution, and I wonder if you could share how that has affected the Air Force's acquisitions, your ability to maintain your programs, and if there have been any delays as a result.

Secretary HUNTER. I am going to let the General answer this one. But I can't resist the opportunity to just start on our collaborative combat aircraft program, with the advantage that that program was already underway, and so we have been able to execute a good portion of it. But we have not been able to execute the Experimental Operations Unit, which will be helping us figure out the concept of operations for CCA [Collaborative Combat Aircraft].

So we have lost time on a critical element of the program, which is really getting after the CONOPS, and there is a range of other impacts.

Rick, if you would like to—

General MOORE. Yeah. We have absolutely lost time, and we have lost buying power, and we are not going to get either one of those back. It is imperative—I know that it is not the direct work of this committee, but it is imperative that we have a budget and that we have it on time. By far, the salient feature of our ability to progress is the ability to have predictable funding that arrives on time.

The Experimental Operations Unit is a great example of one of the things that hasn't been able to start. It sits in a basket of capa-

bilities represented by the Secretary's operational imperatives. The Secretary has been working on operational imperatives since he arrived, and yet nothing has yet been appropriated for it. We are still waiting for the first of those dollars to arrive, and we are—we are giving time to our adversaries. Quite frankly, they don't have this problem.

Ms. MCCLELLAN. And my last question, I don't know if you will have time to answer fully, so, if not, you can submit it for the record later. But, Lieutenant General Moore, with Russia's continued aggression in Ukraine, increased cooperation and support of our European allies remains a top priority. And what has the Air Force done in 2024 to develop new operational concepts, deploy capabilities, and plan to bolster deterrence, and maintain its competitive advantage against Russia, and what can we expect in 2025?

General MOORE. So we certainly—we would stop short of saying that we have participated in the conflict, but we certainly have followed the guidance of the Administration and the Congress and provided assistance where we can.

I would characterize our impact as having helped Ukraine devise new ways of fighting. Quite frankly, they are moving very quickly. That battlefield changes about every 90 days, and they are moving very quickly. We have provided all of the assistance that we are authorized to provide without getting directly involved.

And so largely this is a policy issue, and we are complying with both the policy and the public law that comes from the Congress.

Secretary HUNTER. And I would just add in terms of defense of NATO [North Atlantic Treaty Organization], the air policing mission, U.S. Air Force is—with F-35s and other platforms, but working in close cooperation with the European nations, also operating F-35As, that cooperation has really been excellent. We see the value of the connectivity of that platform in those operations.

Ms. MCCLELLAN. Thank you, and I yield back.

Mr. KELLY. I now recognize my friend, General Bergman.

Mr. BERGMAN. Thank you, Mr. Chairman.

Thanks to everybody for being here. I would like to focus a little bit on the Air National Guard for a minute here. Since the Gulf War, the Air National Guard has lost 24 fighter squadrons. And of the 81 squadrons in the Air Combat Command fielded as of January 1, 2023, only 25 were allocated to the Air National Guard.

In Michigan, we are seeing this firsthand as Selfridge Air National Guard Base will be losing its A-10 mission. That is just a fact of life. We know these are tough decisions that have to be made.

The fiscal year 2024 NDAA included a provision encouraging the Air Force to commit additional procurement of the F-15EX above the program of record for the purpose full recapitalization of the Air National Guard. The Air National Guard A-10 squadrons currently planned on losing, you know, their A-10 mission.

So does the Air Force disagree with the Armed Services Committee's assessment and our committee's commitment to ensuring a robust National Guard? How do you—I hate to say, how do you feel? But, you know, what is the—what are you thinking about the future of the Air Guard?

General MOORE. So we are committed—the Air Force is committed, along with the committee, to a robust Air National Guard. If you look at the percentage of squadrons at the beginning of Desert Storm that were allocated to the Air National Guard, particularly in the fighter world, and you look at the percentage at the end of this fight-up, they are roughly the same.

So there has been a concurrent drawdown of the combat forces in the Air Force over those several years. At the beginning of Desert Storm, as you well know, the Air Force had about 150 fighter squadrons, and we were nearly 600,000 people. That is nothing like the Air Force that we have today.

So it is not a lack of commitment to the Guard. It is that the Air Force over the last 30 years has simply gotten smaller.

I would also say that in terms of the F-15EX, you mentioned Selfridge specifically, if F-15EXs were to go to Selfridge, they needed to have been bought at least three years ago, and maybe four. And our ability to add aircraft beyond what we have procured right now, the program of record, as you know, is 144, and we are simply not able to reach that. In fact, you will see in our 2025 budget a reduction of six aircraft in the budget year.

So we have no complaint about the Fiscal Responsibility Act, but the fact of the matter is it reduced our top line, and so it would not be likely that we would see the ability to add additional procurement, and F-15EX is about \$3 billion per squadron to procure and bed down. And I think it unlikely that we will see additional F-15EXs in the Air Force's budget in the—

Mr. BERGMAN. So let me ask you a question. Does that mean there is the potential for further reduction in the number of fighter missions for the Air Guard?

General MOORE. We don't see that. We have looked—we have looked very carefully. In the A-10 enterprise in particular, we replaced fighter missions with fighter missions where we could. When we ran out of fighter tails, we replaced fighter missions with flying missions, which is what happened at Selfridge. And if we weren't able to do that, then we replaced fighter missions with a relevant high-end future force mission that would result in a transition we would not have to talk about again in our lifetimes.

Mr. BERGMAN. Okay. On a different subject, the President's budget calls for the Air Force to divest 250 aircraft, which will, my understanding is, put the Air Force total below 5,000 total airframes. Is that a correct statement?

General MOORE. The first number I am familiar with. I am not sure about 5,000, but it sounds about right. I am not familiar with that number, though.

Mr. BERGMAN. Anyway, the budget also falls below the Air Force's stated goal of at least 72 new fighter jets annually by about a dozen jets, so about from 72 to 60. Why the disconnect? And what is the plan to—are we going to ramp up procurement so we can get up to the number that was originally requested? Or why the difference?

General MOORE. We would like to do that. Our top line was simply lower than it was in 2024. And consider that when we open the books, whether the top line changes or not, because of workforce

supply chain inflation, there is about a \$10 or \$12 billion bill across the fight-up that we have to handle.

And we are still committed to those airplanes. We believed in them last year. We believe in them this year. But they don't fit in the top line—they don't fit in the top line anymore. Unfortunately, it is that simple. I wish that it were different, but it is not.

Mr. BERGMAN. Okay. Thank you.

Mr. Chairman, I yield back.

Mr. KELLY. If they don't want those KC-46s in Michigan, we will definitely take them in Mississippi.

With that, I yield my—I yield questions to Mr. Garamendi.

Mr. GARAMENDI. Thank you, Mr. Chairman. Wow. This is an extraordinary hearing. We need this. We need that. We need vertical lift. We need aerial tankers, F-15EXs. We need \$3 billion a copy. Hypersonic—I just left the hypersonic missile hearing in the other hearing room. F-35s, I think Special Operations came up here.

Joe reminded me that his two subs are now one sub, and so Two Sub Joe is now One Sub Joe.

My question really is for you, General. You recently made a statement, when asked about the Sentinel, you said, "The Sentinel will be funded. We will make the trades that it takes to make that happen." General Moore said at the Center for Strategic and International Studies.

Can you explain the trade that you will—that you, the Pentagon, we will make, so that the \$130 billion Sentinel program over the next 10, 15 years, will be built? What is that trade? What are you trading off?

General MOORE. Sir, I don't know that we know the answer to that yet. But what we do know is that Sentinel is a national imperative. There have been multiple nuclear posture reviews over the last 20 years across a range of Administrations and across a range—

Mr. GARAMENDI. Stop. Stop. We have heard that. So you are not going to tell us what you are trading for the Sentinel?

General MOORE. Sir, we don't know the magnitude of that trade yet, so I couldn't tell you what the trade would be.

Mr. GARAMENDI. Well, basically, it is \$130 billion over the next 15 years. That is basically what we are going to spend on the Sentinel.

Secretary HUNTER. So, Congressman, this is—

Mr. GARAMENDI. How do you know what the trade is? Your colleague doesn't know what the trade is, although he is willing to spend \$130 billion on the Sentinel.

Secretary HUNTER. This is part of the Nunn-McCurdy review process—

Mr. GARAMENDI. That is correct.

Secretary HUNTER. —to do exactly what you are describing. So that process is underway. And, obviously, the first determination is, does Sentinel continue or not? That is a question that Dr. LaPlante will decide.

Mr. GARAMENDI. No. That is not the first question. That is the end question. First question is, what is it going to cost?

Secretary HUNTER. There are five aspects of the review, and they—

Mr. GARAMENDI. That is correct.

Secretary HUNTER. —ultimately come together to the question of whether the program terminates or is continued. And so that—we in the Air Force are—obviously, we are contributing to the discussion with our understanding of the program.

Mr. GARAMENDI. You are central to the discussion. It is your program.

Secretary HUNTER. But OSD [Office of the Secretary of Defense] runs the Nunn-McCurdy review process, and so they are leading that, and we will take their decision and then execute that when it is made.

Mr. GARAMENDI. No. You will be—no. Listen, I have reviewed this rather extensively. I know the process. The process starts with the Air Force and the justification of the cost issues. All right? That is where it starts. And then from there it moves on to, what is the—what is the alternatives to spending the money on this? Is it hypersonic or is it something else? I know the process. It begins in your wheelhouse, and specifically with you.

And, General Moore, you have been bold enough to say you are going to do the Sentinel regardless, and you will make tradeoffs. I want to know what your tradeoffs are. Which one of the programs that have been discussed here by the members of this committee are you not going to do, so that you can do the Sentinel?

General MOORE. Sir, we don't know that yet because we don't know the magnitude of the trade, and we don't know the shape of the bill.

Mr. GARAMENDI. Well, you have—you know it is \$130 billion. That is the current number.

General MOORE. Yes, sir.

Mr. GARAMENDI. Mr. Hunter?

General MOORE. We don't know how much of that is within the FYDP, or how much of it comes in the out-years. It is a 30-year number actually that you are talking about.

Mr. GARAMENDI. In fact, you do know most of that.

Mr. Hunter, how are you going to go about giving us an honest, complete answer to the Nunn-McCurdy, or are you going to take what the General just said, regardless, we are going to do it because it has been said for 20 years that it is—actually, it is 40 years, excuse me, 50—53 years that we have had to have a trial. Period. And it is in fact a religious issue, having very little to do with the world in which we are now living.

So there are going to be tradeoffs, Mr. Hunter.

Secretary HUNTER. There are. And—

Mr. GARAMENDI. And there would be, first, an understanding of the cost, and then an understanding of the tradeoffs, and then ultimately, yes, it will be in the Secretary's—but I will tell this—share with my colleagues here that this is ultimately a question for the Congress. How are we going to spend the precious resources that we allocate to the military? Are we going to spend it on the Sentinel, or are we going to spend it on vertical lift, or any of the other things that this committee has raised today?

With that, I yield back.

Mr. KELLY. The gentleman yields back.

I now recognize Mr. Alford.

Mr. ALFORD. Well, thank you, Chairman Kelly and Ranking Member Courtney. I am honored to represent the only B-2 bomber base in the nation with Whiteman Air Force Base in our district, the future home of the B-21.

Last year, the chairman and I visited Palmdale, California, to see the B-21 firsthand, an incredible visit to learn more about our next strategic bomber and how it will project American air power across the globe.

B-21 is a critical piece of our effort to deter China and will be the backbone of our bomber force. This program has stayed on target, and I remain committed to working with my colleagues on this very committee, the appropriators, and both of you to ensure that it does stay on track.

I have also been in constant contact with General Bussiere. We are excited about the rater coming to Whiteman Air Force Base.

Considering China's rapid military buildup, we cannot afford delays to programs like the B-21. We need the B-21, as you know, to counter China and bolster our bomber force.

Secretary of Defense has prioritized China as DoD's number 1 pacing challenge and called for development of new capabilities and plans to bolster deterrence. How will the B-21's role do this by deterring Communist China? Let's start with you, Mr. Hunter, and then go to the General.

Secretary HUNTER. Well, Congressman, you said it well. The B-21 is the backbone of our bomber force, and, in particular, it brings both the strategic deterrence and the conventional long-range strike capability that we need in our future force design.

And, in particular, it is the combination of range, access, payload, and the weapons capability that is—that constitutes that payload. That allows us to go anywhere, perform the missions the nation needs against anti-access threats today and the ones that we project in the near future and in the midterm future and in the far future. That the B-21 has the capability to give us the access that we need in all of those environments, so it is absolutely core to maintaining our—both our strategic and our conventional strike—long-range strike capabilities going forward.

Mr. ALFORD. General, let me ask you a separate question. Head of Strategic Command, General Cotton, recently said during testimony he would love more than 100 B-21s. Can you talk about what that means? What does—how many do we actually need to deter China?

General MOORE. Yes, sir. So how many we need to deter China is an interesting question. But the fact of the matter is, the 100 aircraft threshold, the decision point, with lead time accounted for, to go past 100 is not until the mid-to-late 2030s. So the commitment right now is to 100 aircraft. That takes us for procurement into the late 2030s. The decision whether or not to go past that may very well not be based on China because it will be made at a time when we don't foresee the security environment, and we don't need to.

This is not a decision that needs to be made now, but it is one that we need to continue to think about. General Cotton has probably the best insight of anybody on this, and certainly on active duty he has the most experience both in depth and breadth. So his

counsel is well taken. We just haven't come quite to the point that we need to make this decision yet.

Mr. ALFORD. I want to switch gears, since General Bergman brought up the A-10s. You know, we have the 442nd at Whiteman Air Force Base, proud fighting men and women who love this mission, love a fighter mission. It does not look good that they are going to have another fighter mission there. Everyone I ask won't give me a straight answer. You have kind of answered a little bit about that today. What is the odds of 442nd ended up flying the B-21?

General MOORE. I think the odds that the 442nd winds up in a global strike mission are very high. I think the odds that that includes the B-21, I think if we were given odds, we would say that that probably is something reasonable to have a thought on.

I don't want to get in front of the Secretary. Basing decisions are made by the Secretary. But I believe that we will be able to have a flying mission to replace the A-10s at Whiteman as long as long as we are able to keep our current procurement on track, I think the odds of that—I think the odds of that are pretty good.

We have a view of the 2026 top line, and it does not look any better than 2025. So we will have to be cognizant of what the procurement profiles look like going forward.

Mr. ALFORD. In relation to that, staying on track, how concerned about you about the inflationary pressures, the disruptions that would impact the ability to make the necessary investments and meet the production ramp that we are currently on?

Secretary HUNTER. I am very confident we can meet the production ramp that we are on for B-21. There are inflationary impacts, and you have seen evidence of that. The government has cost control in the near years, and so that is an element of why I am so confident in our ability to do the production ramp that we have planned.

But those inflationary costs do have an impact. Where they don't come to us, that means they affect the industrial base, and that has longer term implications for the health of the industrial base, and those problems often turn up on other programs.

Mr. ALFORD. Thank you, both. I am out of time.

I yield back.

Mr. KELLY. I know recognize myself. Even though you showed up late there, Mr. Alford, I still let you get in.

Mr. Hunter, in your written testimony, you write, "Near-peer competitors have made significant advancements that threaten today's tanker fleet and potentially forces them to operate further away from the area of responsibility. The stacked demand of global operations requires a set number of air refueling tankers with specific connectivity, Nunn-McCurdy review process survivability, and agility capabilities.

How would the KC-135 recapitalization program and next generation air refueling system, or NGAS, get to these requirements, and what is the timeline for each program?

Secretary HUNTER. So our KC-135 recapitalization effort is really focused on ensuring we have continuous tanker production. That is the objective. And so, in effect, speed to ramp is core to that pro-

gram, because the necessity to begin production to ensure the right delivery timeframe for those systems is relatively near term.

Having said that, we are interested in having connectivity as part of the KC-135 recapitalization effort, and that is part of the requirement that we have been in dialogue with industry to understand what can be done. And, in fact, we can do much better than we have in today's fleet as part of that effort.

NGAS—connectivity is core to the NGAS concept among other things, but it is absolutely one of the core elements. So, and we are able, as I talked about a little bit earlier, to leverage the work that we have done on advanced mission systems architecture to help us ensure that that connectivity can be baked into the design.

And, again, our approach will be to work with a large number of vendors, many of whom will specialize in mission systems, including connectivity and communications.

Mr. KELLY. Thank you, Mr. Secretary.

And, Lieutenant General Moore, this committee has heard from numerous stakeholders that there are not enough air refueling tankers. How would you respond to them? And I also want you to include, we have the Washington Air National Guard, which has the mission but no planes. I would think with the shortage of fuelers that we could get some KC-135s to our friends in the Washington Air National Guard, so they are not using someone else's tankers.

So if you would respond, how do we respond that we don't have enough refueling tankers?

General MOORE. Yes, sir. So I think refueling capacity is something that in any fight will be enormously valued. It is part of how we have built our overall fleet structure.

I don't believe that this shortage is more important than some of the others that are addressed. What you see in our 2025 budget are investments in the long-range kill chain. We can see from analysis we can move beyond platforms and weapons to a look at what it takes to create effects from end to end.

And of the most pressing shortfalls that are in that end-to-end creation of effects, tankers are not—are not amongst the highest priorities. They are absolutely a priority.

I would also—not to mince words, but they are important. The Washington Air National Guard does have tankers. They are part of a wing that has tankers. It is not that they are using someone else's. It is that they have a group of tankers that are apportioned to both parts of a total force wing. So I don't think it is any more realistic to say the Washington Air National Guard doesn't have tankers than to say that the 92nd Air Refueling Wing doesn't have tankers. They both do.

We would oppose any increase in this fleet based on the prioritization that we see in other mission areas, but we would strongly oppose growing the tanker fleet in order to support a single unit, so that they can have their own airplanes. That would not be a priority for us.

Mr. KELLY. I would just argue—I have heard this fleet management crap a whole lot in my life, and I am just going to tell you it doesn't work. Number 1, we don't manage aircraft well that we don't own. And I would just—I truly mean that. A unit should own

its aircraft—maintenance, flying, and all of those things. We do well what we own. We don't pay attention to things that are fleet managed or otherwise.

And with that—and I appreciate your response, General Moore. I really do.

Mr. Hunter, I want to recognize you for any—I keep going back between Mr. and Secretary. I don't think either offends you, but if you have additional comments, now is the time to make them.

Secretary HUNTER. Sir, neither do offend me. I did want to reiterate thanks for the support for the committee for the quick start initiative. I think it really gets after how we—when we identify new priorities, and they do emerge on a regular basis, right, the threat is a fast, rapidly-moving element of the security environment, and so we need the capability to respond quickly.

The committee's work with us to create that authority is absolutely essential to us having the ability to do that. We intend to come to you shortly with some of the initial initiatives there. And I think you will see that it is what we described to you as our need, and I hope you will be able to support us on this.

Mr. KELLY. Thank you. And, General Moore, I wasn't trying to be rude, but I have seen AMC and other people try to do the fleet management. And I can just tell you when that happens what happens is the National Guard and Reserve get the short end of the stick, and they get the broke or old stuff, and the active duty gets the new and shiny stuff, whether that is through utilization that is measured by different metrics. And so it is something that I hope you all will consider.

And with that, this hearing is adjourned.

[Whereupon, at 4:37 p.m., the subcommittee was adjourned.]

A P P E N D I X

MARCH 12, 2024

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

MARCH 12, 2024

**Opening Remarks of Chairman Trent Kelly, Seapower and Projection Forces,
Hearing on Air Force Projection Forces Aviation Programs and Capabilities
Related to the President's 2025 Budget Request, March 12, 2024**

Good Afternoon,

- This subcommittee covers Seapower and Projection Forces.....today we will hear about the projection part of the portfolio. Before we do I'd like to welcome Mr Nick Lalota from New Yorks first district.
- Our witnesses this afternoon are no strangers to this subcommittee, and I want to take a moment to thank you and your staffs for your hard work and your service to this nation. Although we don't agree about everything you have gone out of your way to make yourselves available to this subcommittee and I appreciate it.
- More than ever projection forces play an important part in the growing threats around the world. I know saying that has become somewhat of a cliché, but I have never seen a threat as great as it is today. In the last year I have literally been around the world and I'm more concerned than ever.
- This subcommittee has two legs of the nuclear triad and the air portion with our bombers and tankers has been and will continue to be in an unprecedented era of modernization. I'd like to hear from the witnesses how we are going to balance the retirements of the B-1 and B-2 with the extensive modernization of the B-52 and procurement of the B-21.
- Also, as you know the recent Mobility Guardian Exercise identified the lack of secure communication links with the Air Forces Airlift and Air Refueling fleet. I know we always ask commanders to tell us what they need and in this case, AMC took a lot of equipment to Mobility Guardian and identified what worked and what didn't and what would get at the problem set the fastest. I'd like to hear your thoughts on the lessons learned from that exercise.

- Finally, I'd like to hear your thoughts on increasing air refueling capacity. Admiral Paparo in his nomination hearing last month said quote "I do have concerns about the ability of the Joint Force to refuel what will be a dynamic force operating within the AOR from bases on land."
- Before we introduce the witnesses, I'd like to turn to Mr Courtney for his opening remarks.

Opening Remarks of Ranking Member Joe Courtney, Seapower and Projection Forces, Hearing on Air Force Projection Forces Aviation Programs and Capabilities Related to the President's 2025 Budget Request, March 12, 2024

Thank you Chairman Kelly.

Before I begin, I'd also like to thank our witnesses for being here and for their testimony. Mr. Hunter, Lieutenant General Moore, great to have back before the subcommittee again.

Today's hearing is rather timely, as the President's Fiscal Year 2025 budget request was released yesterday. I look forward to discussing the Department's priorities today. This also comes at a time of great uncertainty, as we are discussing the FY25 request while we still do not have a full FY24 budget signed in to law yet. I don't need to tell anybody in this room how detrimental operating on a continuing resolution for five months is to the Department.

As our subcommittee continues to move forward on the next NDAA, we, like we have done in past budgets, will make the necessary adjustments on a bipartisan basis and ensure we are investing in the right efforts to sustain our technological supremacy and unmatched logistical advantage.

Just last week, the DOD decided to lift the grounding order for V-22 Osprey flights and return to operations after three months of grounding across the inventory

following the fatal Air Force CV-22 crash off the coast of Japan in November. I remain incredibly concerned and believe that in order to return to flight there must be significant modifications to prevent future mishaps from occurring. I understand that more rigorous inspections of aircraft will occur, but I have significant concerns of future materiel failures that will unnecessarily put servicemembers in harm's way while performing routine missions. While the investigation is still underway, and we have not yet been briefed on its findings, I hope that we can discuss elements of the investigation here today.

In that light, this subcommittee is focused on ensuring the Department has a proven bomber roadmap as the B-21 moves into low-rate production and upgrades the B-52 with new engines and capabilities. Failure is not an option as you take a two-pronged approach that incorporates divesting legacy B-1s and B-2s from the fleet.

Pivoting to the air refueling mission of the Air Force, the Department continues to invest in the KC-46 Pegasus while making prudent adjustments to enhance the aircraft's Remote Vision System, and I am glad to see that those issues have been worked out, and there is an acquisition and integration strategy to begin outfitting aircraft with RVS 2.0 next year. This subcommittee needs to see a clear commitment and strategy for how we will execute a bridge tanker concept, as well as proceeding forward with the next generation air refueling system.

Lastly, I remained concerned that the VC-25B program continues to be plagued with rising costs, labor challenges, and lengthy delays for this critical platform.

Under the current schedule, the first VC-25B aircraft will be over 10 years old when it delivers to the Air Force. I think it goes without saying that the Air Force needs to stabilize production and work with industry to prevent future schedule delay.

Thank you all for being here today, and I look forward to your opening testimony.

With that I yield back.

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UNITED STATES HOUSE OF REPRESENTATIVES

PRESENTATION TO THE
HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES
UNITED STATES HOUSE OF REPRESENTATIVES

HEARING DATE/TIME: March 12, 2024, 3:30 P.M.

SUBJECT: Air Force, Force Structure and Modernization Programs

STATEMENT OF:

Hon. Andrew P. Hunter
Assistant Secretary of the Air Force
(Acquisition, Technology & Logistics)

Lt. Gen. Richard G. Moore Jr., USAF
Deputy Chief of Staff
(Plans and Programs)

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SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES
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INTRODUCTION

Chairman Kelly, Ranking Member Courtney, and distinguished members of the subcommittee, thank you for having us here today to provide testimony on The Department of the Air Force's Fiscal Year 2025 (FY25) President's Budget (PB) request for projection forces aviation programs and capabilities.

The United States Air Force is critical to our national defense. Our capabilities underwrite the capabilities of the entire of the joint force, and we are uniquely suited to provide this cornerstone of the Nation's defense. This is particularly true of the long-range strike and power projection capabilities that are the purview of this subcommittee and that we will discuss today.

The Department of the Air Force's FY25PB request reflects our commitment to developing a threat-informed, concept-driven future Air Force but resources have been limited by the 2023 Fiscal Responsibility Act (FRA). The FRA spending caps increase risk and force difficult tradeoffs. We have made significant progress in identifying the capabilities the Air Force will need to develop and field to prevail against our adversaries. However, the Air Force is facing a significant, dangerous shift in the strategic security environment. The Air Force has historically adapted to key inflection points to best compete in emerging security landscapes. We must reoptimize to pivot from supporting post-9/11 conflicts and demands to deterring, and if necessary, winning, conflicts in an era of Great Power Competition (GPC).

The Secretary of the Air Force has made clear we are out of time and must reoptimize now. To achieve a more competitive posture, the DAF is implementing major changes centered on how we develop people, generate readiness, project power, and develop integrated capabilities. The Operational Imperatives work highlighted the challenges of integration and the importance of tight partnerships between the operational and acquisition communities. The capability development-related GPC organizational changes we are making at the Secretariat and Air Force Materiel Command levels institutionalizes these lessons learned. The Air Force is establishing a single authoritative entity focused on identifying and prioritizing future operational capabilities, driving cross-platform mission systems integration and capability development, establishing focused acquisition Systems Centers for effective portfolio and lifecycle management, and standing up relevant Secretariat offices to inform senior leaders on

enterprise decisions. This will result in a more agile and integrated acquisition system that delivers capabilities—quickly and at scale.

Since time is of the essence in capability development we are thankful for Congress providing the Section 229 “Quick Start” provision in the FY24 NDAA and we look forward to providing information on the specific initiatives using this authority in the near future. While grateful for the support, we continue to be hampered by funding through Continuing Resolutions and restrictions on the retirement of outdated fighter, tanker, cargo, and command and control aircraft. Compromises that divert focus from our operational imperatives put our military’s ability to deliver decisive combat power at great risk. We are conscious of the difficulties associated with these changes and are eager for continued collaboration with Congress, industry, and the communities that support our Air Bases to ensure our Nation’s security.

CURRENT CAPACITY AND CAPABILITY

Following National Defense Strategy (NDS) guidance, the Air Force seeks to invest in technologies and field systems that are both lethal and survivable against tomorrow’s threats. This ultimately means transitioning away from many legacy platforms to free up manpower and resources to modernize and field more credible systems. If we are to modernize to address the emerging threat, we must use resources tied to our legacy platforms and weapons systems that are decreasing in relevance today and will be irrelevant in a future peer conflict. Retaining systems that have either limited contributions, or are simply not relevant in the future fight, delays modernization and exacerbates future capability gaps. If deterrence fails, our Airmen must have the training, tools, platforms, and operating systems required to win. We must strike a balance between risk in the near-term and risk in the future.

Bomber Force Structure

Our budget request supports the NDS’s call for continued modernization of the nuclear triad, to ensure a safe, secure, and effective nuclear deterrent to backstop our integrated deterrence approach. Air Force bombers anchor the air leg of the Nation’s Nuclear Triad. As a unique national security capability, the B-21 represents the future of this bomber force. As modernization continues, the Air Force will gradually transition the current three-bomber fleet to

a two-bomber fleet of next-generation B-21s and modernized B-52s to provide nuclear and conventional global strike options for decades to come.

B-21

The B-21 is a Special Access Program (SAP). Budget year requests at the appropriation level are unclassified, but most supporting details are classified and provided to Congress in appropriate classified forums. The FY25 PB includes \$2.8 billion in Research Development Test & Evaluation (RDT&E) for the continuation of EMD, and also includes modernization activities. Modernization includes, but is not limited to, Long Range Standoff Weapon (LRSO) integration, new conventional weapon integration, air vehicle provisioning for future capabilities, sensors, and continued nuclear certification activities. The FY25 PB includes \$2.7 billion in Procurement funding for the execution towards Lot 3 of Low Rate Initial Production (LRIP). In addition to aircraft costs, which includes Advance Procurement for Lot 4, this also provides funding for producibility improvements, approved LRIP Active Management strategies, initial spares, support equipment, Diminishing Manufacturing Sources and Material Shortages (DMSMS) or obsolescence issues, and depot standup. The FY25 PB includes \$220.3 million in Main Operating Bases (MOB) MILCON funding for three projects at Ellsworth AFB, SD, the ADAL Squadron Ops facility, Environmental Protection Shelters (EPS) and Alert Apron, as well as continued Planning & Design. FY25 PB also supports funding for two MILCON projects at Dyess AFB, TX, Refueler Parking and Fuels Admin Lab, as well as continued Planning & Design.

B-52 Squadrons

The Air Force is transitioning to a two-bomber force: B-21 and modernized B-52 aircraft. The FY25 PB request for all B-52 modifications is \$1,045.6 million RDT&E and \$217.9 million procurement. This funding enables the Air Force to advance the most comprehensive modernization in the platform's history, executing numerous on-going modernization programs in various acquisition phases from early development phase through production and fielding phase. The major B-52 modernization efforts include the Commercial Engine Replacement Program (CERP) and the Radar Modernization Program (RMP).

The B-52J Commercial Engine Replacement Program (CERP) has a FY25 PB request of \$785.0 million RDT&E and \$2.1 million for advance procurement of Common Graphics Processing Unit (GPU) cards for the display and sensor system processor (DASSP). B-52J CERP initiated as a Middle Tier Acquisition (MTA) program, selected Boeing as integrator (Mar 2018), selected Rolls-Royce as engine provider (Sep 2021), completed Preliminary Design Review (PDR) (Oct 2022), and delivered a virtual System Prototype (vSP) that provided residual operational capability to Air Force Global Strike Command (Oct 2023). B-52J CERP has completed MTA requirements by delivering a digital prototype and has transitioned to a Major Capability Acquisition (Nov 2023). The program continues to mature cost and schedule to set a program baseline at Milestone B targeted for Aug 2024. In FY25 the program will be in the Engineering and Manufacturing Development (EMD) phase, and will be integrating the electronics controls, displays, electrical systems, engine support components and advanced engine testing required for conversion to B-52J.

B-52H Radar Modernization Program (RMP) has a FY25 PB request of \$179.8 million RDT&E and \$129.5 million in procurement. B-52H RMP replaced the first B-52 EMD aircraft's 1980's radar system with Raytheon's advanced, modern off-the-shelf APG-79 radar system in Sep 2023. The program entered EMD 10 Jun 2021 and awarded a development contract to Boeing Defense on 14 Jun 2021. B-52H RMP completed system-level Critical Design Review in Feb 2022. Boeing started modifying the first B-52H RMP test aircraft in May 2023 and USAF will begin developmental flight tests in Nov 2024 at Edwards AFB CA. Milestone C Decision Point #1 is scheduled for 2nd quarter of Fiscal Year 2025, and Milestone C Decision Point #2 is scheduled for 4th quarter of Fiscal Year 2025.

B-2

The FY25 PB requests \$41.2 million in RDT&E for B-2 to continue development and flight testing to modernize avionics, communications systems, cockpit displays, armament systems, low observable components, aircraft supportability improvements, and support equipment development. The FY25 PB also requests \$101.5 million in procurement to allow the Air Force to purchase and install equipment for modernized avionics, communications systems,

cockpit displays, low observable components, and training systems, as well as to provide maintenance and repair capabilities for B-2 systems.

B-1

The FY25 PB requests \$17.9 million in RDT&E to complete development and flight testing to modernize the B-1's secure communications systems. All of this is in preparation for transition to production in FY25, which enables fleet installations to be completed by FY27. Also, the FY25 PB requests \$13.4 million for B-1 procurement to allow the Air Force to begin installation of secure communication kits and procure external Load Adaptable Modular pylons. The external pylon integration maximizes carriage of standoff munitions on the B-1 and allows the Air Force to increase volume of fires from standoff ranges.

Aerial Refueling

Near-peer competitors have made significant advancements that threaten today's tanker fleet and potentially forces them to operate farther away from their area of responsibility. The stacked demand of global operations requires a set number of air refueling tankers with specific connectivity, survivability, and agility capabilities, generating at mission capable rates to meet timelines and win the fight. The FY25PB requests \$3.2 billion in RDT&E and procurement to continue uninterrupted tanker recapitalization.

KC-46A

The KC-46A continues to provide increased operational readiness, flexibility, connectivity, and survivability to the Global Reach mission. To date, one hundred thirty-nine production aircraft are on contract and 81 KC-46As have been delivered to the warfighter.

The Air Force continues to work with Boeing to correct deficiencies with the Remote Vision System (RVS) and stiff air refueling boom. We are committed to ensuring these deficiencies are properly addressed without undue burden on the taxpayers or warfighters. The RVS 2.0 solution and start of fleet retrofit is now scheduled in FY26. In addition, the stiff boom deficiency design solution is expected to start fielding in FY26.

While the KC-46A program is addressing these challenges, Air Mobility Command (AMC) has accepted a certain level of risk and cleared the KC-46A for worldwide operations, using existing approved restrictions, operational guidance, and risk assessments for all Mobility aircraft. KC-46As must fill rotational deployments to ensure KC-135 units remain within deploy-to-dwell redlines and are afforded readiness training opportunities. The Air Force will utilize the capability the KC-46A can provide today, in order to support global operations and continue the KC-46A transition while we divest KC-10s and KC-135s. The A-10 is not cleared for operational refueling; the E-2D, F-16, ~~F-117~~, C-32B, and B-21 are awaiting receiver certification. All other joint aircraft have been cleared for operational air refueling.

The FY25 PB requests \$93.6 million in RDT&E funds to support the ongoing KC-46A Engineering and Manufacturing Development and post-production modification efforts, to include the boom telescope actuator redesign that resolves the stiff boom deficiency, continued test and receiver aircraft certifications, development for training system required updates, and increased effort on the KC-46A Pegasus Advanced Communications Suite (PACS) Block 1 program. In addition to PACS Block 1, AMC will accelerate the means to connect the Mobility Air Forces (MAF) via the FY25 new start MAF Connectivity to optimize operations and close logistics and kill chains. These connectivity initiatives will provide the KC-46A with increased communications reliability using high-bandwidth, multi-waveform, multi-orbit, constellation systems of systems, including accelerating commercial satellite-based internet services. Additionally, the budget requests \$3.1 billion to fund procurement of 15 aircraft in Production Lot 11 and the associated support costs, along with increased depot standup and transition to organic sustainment efforts. The DAF is increasing the number of KC-46A programmed aircraft from 179 to 183 aircraft, which procures 4 additional aircraft in Production Lot 13 in FY27.

Tanker Recapitalization

Accelerating future tanker capability and recapitalizing the aging tanker fleet is a top priority for the DAF. Tanker Recapitalization is the second phase in replacing legacy tanker aircraft, following the KC-46A program that ensures continuous, uninterrupted tanker recapitalization. The DAF's goal is to use the Tanker Recapitalization program to replace up to 15 KC-135s per year as they retire between the completion of the KC-46A contract and an accelerated Next Generation Air-refueling System (NGAS). The program received Joint

Requirements Oversight Council (JROC) validated requirements and released a draft System Requirements Document (SRD) to industry in 2023. Once market research and the Business Case Analysis (BCA) update is completed, the DAF will determine the program's acquisition strategy, estimated to occur in 3QFY24.

The FY25 PB request of \$13.7 million in RDT&E funding will support FY25 acquisition activities including the Future Tanker program office stand up, release of the program's Request for Proposal (RFP) to industry, Engineering Support and Cost Analysis.

Next Generation Air-Refueling System (NGAS)

NGAS will deliver adaptive and agile platform(s) and mission systems as part of a tanker Family of Systems by the mid -2030s. The NGAS AoA will consider a wide range of designs including clean sheet design(s) and purpose-built aircraft to address projected threats and needed capabilities and leverage benefits of full and open competition. NGAS held its Materiel Development Decision milestone in January 2024 and was approved entrance into the Materiel Solution Analysis (MSA) Phase. In addition, the Office of the Secretary of Defense, Cost Assessment and Program Evaluation approved the Analysis of Alternatives (AoA) study plan, and the 9-month AoA is underway and will complete in October 2024. The AoA will shape requirements and determine the technology development timeline. Finally, the DAF is standing up a Future Tanker program office to execute both the NGAS and Tanker Recapitalization programs.

The FY25 PB request of \$7.0 million in RDT&E funds post-AoA studies, updates tanker models and run high-fidelity modeling and simulation to further exercise joint warfighting concepts and plans. The DAF is constantly evaluating technology acceleration opportunities for the program and is awaiting the Analysis of Alternatives results and post-AoA modeling and simulation data.

KC-10 and KC-135

The FY25 PB requests \$32.0M in RDT&E to continue KC-135 fleet communications suite modernization to enable digital and secure communications across the fleet. These

modernization efforts include Aero-I SATCOM, Comm 2 Crypto and Data, High-Frequency Modernization, and Mobile User Objective System. The funding will also be used for drag reduction initiatives to support climate initiatives in an effort to reduce fleet emissions. This funding will address critical Diminishing Manufacturing Sources and Material Shortages (DMSMS) issues through the Center Console Refresh program. This effort replaces the integrated fuel management panel, fuel management panel, tanker interface unit, multi-function display, and the control display unit which are all out of production and no longer able to be serviced.

The FY25 PB also requests \$161.6M in procurement to continue installation of Real-Time Information in the Cockpit (RTIC), Comm 2 Crypto and Data, High-Frequency Modernization, and the safety of flight Rudder Position Indicator (RPI) modifications. These modifications will allow the KC-135 to meet NSA-crypto mandates. The RPI modification will allow crews enhanced situational awareness into the actual rudder position, versus what it is commanded, and provide advanced visuals so crews can avoid safety of flight situations. The KC-135 will also begin the installation of Mobility Air Force (MAF) Connectivity enhancement; allowing the tanker to close logistics and kill chains. The KC-135 fleet completed all Block 45 installs in FY24. The KC-10 fleet will fully divest by the end of FY24.

Executive Airlift

The Executive Airlift fleet supports the President of the United States through VC-25 and the Vice President of the United States, First Spouse of the United States, Secretary of State, Secretary of Defense, and Chairman of the Joint Chiefs of Staff through five different aircraft types. Modernization and recapitalization efforts of these aircraft will continue to provide reliable operational support while keeping passengers globally connected while airborne.

VC-25A

The FY25 PB request of \$11.4 million in procurement is for Block Upgrade efforts (low latency worldwide data connections, aggregated throughput bandwidth, and Multi-Role Tactical Common Data Link) on one aircraft, low-cost modifications, and service bulletins.

VC-25B

The FY25 PB requests \$433.9 million in RDT&E to continue Engineering and Manufacturing Development, aircraft modifications, developmental test and evaluation, and other product support activities.

C-32 / C-40

The FY25 PB requests \$338.7 million in procurement funding to purchase aircraft that will augment the current C-32A executive airlift fleet. The acquisition will modify a new-production, industry standard, business aircraft by integrating the military-specific modifications and Senior Leader Communications System-Airborne suite already present on the executive airlift fleet. The C-32A fleet supports the Top Five (Vice President of the United States, First Spouse of the United States, Secretary of State, Secretary of Defense, and Chairman of the Joint Chiefs of Staff). This fleet augmentation will alleviate pressure on the C-40B and C-40C fleets that currently support combatant commanders, the Cabinet, and Congress.

Strategic and Tactical Airlift

The stacked demand of global operations requires a set number of strategic and tactical airlift aircraft with specific connectivity, survivability, and agility capabilities now, generating at mission capable rates to meet timelines and win the fight.

C-5M

The FY25 PB requests \$55.0 million in procurement, predominately for Crown Skins, as well as Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM), C-5 Core Mission Computer/Weather Radar (CMC/WxR) system equipment, and Mission Systems Equipment Lavatories. Crown Skins replacement and lavatory modifications address corrosion issues decreasing availability of aircraft and causing grounding. CNS/ATM complies with civil airspace mandates for US National Airspace System and international civil airspace. CMC/WxR upgrades computer processor modules and addresses obsolescence issues.

Additionally, the FY25 PB requests \$33.0 million in RDT&E to support Replacement of the Multi-functional Controls and Display (RMCD), which mitigates the obsolescence of the current control and display units and increases capacity for future technology integration into the cockpit.

C-17A

The FY25 PB requests \$113.7 million in procurement funding to continue critical modifications to the C-17 fleet to address obsolescence and flight safety issues. These include Beyond Line of Sight (BLOS), Replacement Heads-Up Display (RHUD), and Filter Fire Mitigation (FFM) for Onboard Inert Gas Generating System (OBIGGS), and Aircraft Connectivity. The BLOS communication system effort modernizes multi-channel voice and data communication subsystems to address obsolescence issues and enables compliance with FAA and NSA mandates. The RHUD modification addresses obsolescence issues with the current HUD that will become unsupportable in FY26 and could cause grounding of aircraft if the current scheduled is delayed. FFM includes a redesigned shut off valve that eliminates potential filter fires, improves fuel efficiency, and incorporates a Master Caution annunciation to warn aircrews of potential filter fire risk. MAF Connectivity is a new start program that will provide capability for increased aircrew situational awareness, real-time secure command and control of forces, and close logistics and kill chains. Additionally, the FY25 PB requests \$17.4 million in RDT&E funding to address obsolescence issues. Flight Deck Replacement prevents obsolescence in 16 existing C-17 flight deck parts. Four parts will significantly impact aircraft availability in FY29 and deplete assets worldwide by FY31.

C-130H

The FY25 President's budget requests \$102.5 million in procurement funding to support the C-130H fleet. The Air Force continues to modernize the C-130H fleet to ensure aircraft safety, airspace compliance, and aircraft systems modernization. Our C-130H Center Wing Box replacement program breathes new life into some of our hardest flown aircraft, enabling them to continue to safely operate well into the future. The Avionics Modernization Program (AMP) Increment 2 program improves the C-130H fleet maintainability and reliability by providing a new digital avionics suite, mitigating obsolescence and diminishing manufacturing source

challenges, and provides Crypto Modification I capabilities to include MUOS/SATURN upgrades.

C-130J

The FY25 PB requests \$34.4 million in RDT&E and \$209.3 million for procurement and modification efforts. The FY25 PB also requests \$24.9 million in RDT&E for HC/MC-130J and \$231.9 million for procurement and modification efforts for HC/MC-130J.

The Air Force has partially recapitalized the C-130H fleet with C-130Js, which also supports our Special Operations missions by providing Special Forces with extra weight carrying capacity, longer range, and better fuel efficiency. These special mission variants of the C-130J conduct weather reconnaissance (WC-130J), search and rescue (HC-130J), and special operations (MC-130J and AC-130J). The Air Force has multiple modification efforts for the C-130J, including Center Wing Box replacement, Large Aircraft Infrared Countermeasures, communications upgrades, and Block 8.1. The C-130J Block 8.1 modernization program, currently in production, delivers new communication and data link capabilities, a modern flight management system, and other key capabilities to the field. In addition, the Air Force plans to upgrade both our C-130H and C-130J fleets with a Mobile User Objective System and a Second-Generation Anti-Jam Tactical Ultra High Frequency Radio satellite communication system to ensure we maintain key communication links anywhere in the world.

CV-22

The CV-22 is the Air Force variant of the joint V-22 tilt-rotor aircraft. It allows for long-distance, terrain following, vertical lift operations with increased survivability and is the only high-speed vertical lift platform in the Air Force inventory. The Air Force lost eight Airmen in a CV-22 Osprey mishap on November 29, 2023, off the shore of Yakushima, Japan. In response, Lieutenant General Tony Bauernfeind, Air Force Special Operations Commander, convened safety and aircraft investigation boards to determine the cause of the mishap and the tragic loss of life. On 6 December 2023, Lieutenant General Bauernfeind directed an operational stand-down of the Air Force CV-22 aircraft to mitigate risk during the mishap investigation. It

has been determined that a materiel failure of a component led to the mishap. Furthermore, information from the Air Force Safety Investigation Board and an evaluation of historical data from over 750,000 V-22 flight hours identified the need for additional maintenance and procedural controls to mitigate risk. Institution of these controls and a safety focused, multi-phased approach for maintainers, aircrew, and aircraft enabled a return to flight authorization on 8 March 2024. Full operational capability of the CV-22 is expected in summer 2024. The FY25 PB requests \$84.8 million to continue development and modifications to increase CV-22 fleet reliability, capability, and survivability. Investments in these areas will ensure the CV-22 fleet remains ready, reliable, and relevant in the future. Notable investments include the Block 20 Mission Computer Obsolescence Initiative to replace older mission computers and upgrades several avionics systems. Additionally, investments in Nacelle Improvement include redesigned wiring and structural improvements of the nacelles designed to increase aircraft availability by over 5 percent.

Conclusion

Thank you again for the opportunity to testify. We look forward to working with this subcommittee to ensure the Department of the Air Force maintains the necessary military advantage to secure our vital national interests and support our allies and partners in Fiscal Year 2025 and beyond.

3/30/23, 9:40 AM

ANDREW P. HUNTER



BIOGRAPHY



UNITED STATES AIR FORCE

ANDREW P. HUNTER

Mr. Andrew P. Hunter, a member of the Senior Executive Service, is the Assistant Secretary of the Air Force for Acquisition, Technology and Logistics, Arlington, Virginia. As the U.S. Air Force's Service Acquisition Executive, Mr. Hunter is responsible for and oversees Air Force research, development and acquisition activities totaling an annual budget in excess of \$60 billion for more than 550 acquisition programs. In this position, Mr. Hunter serves as the principal adviser to the Secretary of the Air Force and the Air Force Chief of Staff for research and development, test, production and modernization efforts within the Air Force.

Prior to his current position, Mr. Hunter was a senior fellow in the International Security Program and Director of the Defense-Industrial Initiatives Group at the Center for Strategic and International Studies. He focused on issues affecting the industrial base, including emerging technologies, the defense acquisition system, defense trade and industrial policy.

Mr. Hunter previously served as a senior executive in the Department of Defense as Director of the Joint Rapid Acquisition Cell. His duties included fielding solutions to urgent operational needs and leading the work of the Warfighter-Senior Integration Group to ensure timely action on critical issues of warfighter support. Mr. Hunter served as the Chief of Staff to the Honorable Ashton B. Carter and the Honorable Frank Kendall, while each was serving as Under Secretary of Defense for Acquisition, Technology and Logistics. Additional duties while at the Defense Department included support to the Deputy's Management Action Group and examining ways to reshape acquisition statutes.

Mr. Hunter served as a Professional Staff Member of the House Armed Services Committee, leading the committee's policy staff and managing a portfolio focused on acquisition policy, the defense industrial base, technology transfers and export controls. He also served in a variety of staff positions in the House of Representatives, including Appropriations Associate for Congressman Norman D. Dicks; Military Legislative Assistant and Legislative Director for Congressman John M. Spratt, Jr.; and staff member for the Select Committee on U.S. National Security and Military and Commercial Concerns with the People's Republic of China.

EDUCATION

1994, Bachelor of Arts, Social Studies, Harvard University, Cambridge, Mass.

2001, Master of Arts, Applied Economics, The John Hopkins University, Baltimore, Md.

CAREER CHRONOLOGY

1. 1994–1999, Military Legislative Assistant and Legislative Director, Representative John M. Spratt, Washington, D.C.
2. 1999–2005, National Security Appropriations Associate, Representative Norm D. Dicks, Washington, D.C.
3. 2005–2011, Professional Staff Member, House Armed Services Committee, Washington, D.C.
4. 2011–2014, Director, Joint Rapid Acquisition Cell, Office of the Under Secretary of Defense Acquisition, Technology, and Logistics, Department of Defense, Washington, D.C.
5. 2014–2021, Director, Defense-Industrial Initiatives Group and Senior Fellow, International Security Program, Center for Strategic and International Studies
6. 2021–present Assistant Secretary of the Air Force for Acquisition, Technology and Logistics, the Pentagon, Arlington, Va.

(Current as of September 2022)



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RICHARD G. MOORE JR.



LIEUTENANT GENERAL RICHARD G. MOORE JR.

Lt. Gen. Richard G. Moore, Jr. is the Deputy Chief of Staff for Plans and Programs, Headquarters U.S. Air Force, the Pentagon, Arlington, Va. As the Air Force's senior Planner/Programmer, he directs and coordinates activities ensuring the Air Force plans for, builds, and employs effective air and cyber forces to achieve national defense objectives. To accomplish these tasks, he leads the development, integration, evaluation, and analysis of the Air Force's program objective memorandum and resource allocation plan.

Lt. Gen. Moore graduated from the U.S. Air Force Academy in 1992 with a Bachelor of Science in Chemistry, and subsequently earned a Master of Engineering Management from Washington State University in 1997. During his Air Force career, Lt. Gen. Moore has commanded at the squadron, group, and wing levels. He is a command pilot with more than 4,000 hours in the KC-135R/T Stratotanker, C-12F Huron, C-5A/B/M Galaxy, C-17A Globemaster III and C-130J Super Hercules.

Prior to his current position, Lt. Gen. Moore was the Director of Programs, Office of the Deputy Chief of Staff for Plans and Programs, HAF, the Pentagon, Arlington, Virginia.

EDUCATION

1992 Bachelor of Science, Chemistry, U.S. Air Force Academy, Colorado Springs, Colo.
 1997 Master of Engineering Management, Washington State University, Pullman
 1997 Squadron Officer School, Maxwell Air Force Base, Ala.
 2004 Master of Military Operational Art and Science, Air Command and Staff College, Maxwell AFB, Ala.
 2010 Master of Science, International Security Studies, Air War College, Maxwell AFB, Ala.
 2016 Advanced Senior Leader Development Program, Warrenton, Va.

ASSIGNMENTS

1. August 1992–December 1993, Student, Euro-NATO Joint Jet Pilot Training, Sheppard Air Force Base, Texas
2. December 1993–May 1997, KC-135 Aircraft Commander, Fairchild AFB, Wash.
3. June 1997–July 1998, Air Mobility Command Regional Operations Director, Tanker Airlift Control Center, Scott AFB, Ill.
4. July 1998–December 1999, Tanker Requirements Program Manager, Headquarters Air Mobility Command Directorate of Plans and Programs, Scott AFB, Ill.
5. January 2000–July 2003, C-5 Air Refueling Flight Examiner Aircraft Commander; Assistant Wing Executive Officer, Chief, Wing Exercise and Contingency Scheduling, 9th Airlift Squadron, Dover AFB, Del.
6. July 2003–June 2004, Student, Air Command and Staff College, Maxwell AFB, Ala.
7. June 2004–September 2005, Chief, Air Refueling Capabilities Branch, Global Mobility Concept of Operations Division, Headquarters U.S. Air Force, the Pentagon, Arlington, Va.
8. September 2005–August 2007, Aide-de-Camp to the Vice Chairman of the Joint Chiefs of Staff, the Joint Staff, the Pentagon, Arlington, Va.
9. August 2007–July 2009, Operations Officer and Commander, 437th Operations Support Squadron, Charleston AFB, S.C. (January 2009–May 2009, Commander, 437th Expeditionary Operations Support Squadron, Sather Air Base, Iraq)
10. July 2009–June 2010, Student, Air War College, Maxwell AFB, Ala.
11. July 2010–August 2012, Vice Commander, 62nd Airlift Wing, Joint Base Lewis-McChord, Wash. (December 2011–March 2012, Commander, 385th Air Expeditionary Group, Incirlik AB, Turkey)
12. August 2012–October 2014, Commander, 436th Airlift Wing, Dover AFB, Del.
13. October 2014–April 2015, Chief, Force Planning and Global Mobilization Division, HAF, the Pentagon, Arlington, Va.
14. April 2015–July 2016, Program Integration Division Chief, Office of the Assistant Secretary of the Air Force for Financial Management and Comptroller, HAF, the Pentagon, Arlington, Va.



EFFECTIVE DATES OF PROMOTION

Second Lieutenant May 27, 1992	
First Lieutenant May 27, 1994	
Captain May 27, 1996	
Major November 01, 2002	
Lieutenant Colonel December 01, 2006	
Colonel October 01, 2010	
Brigadier General August 05, 2016	
Major General November 01, 2019	
Lieutenant General June 30, 2022	

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RICHARD G. MOORE JR.

15. August 2016–August 2018, Commander, 86th Airlift Wing, Ramstein AB, Germany
 16. August 2018–June 2019, Chief of Staff, U.S. Air Forces in Europe and Air Forces Africa, Ramstein AB, Germany
 17. August 2019–June 2022, Director of Programs, Office of the Deputy Chief of Staff for Plans and Programs, HAF, the Pentagon, Arlington, Va.
 18. July 2022–present, Deputy Chief of Staff for Plans and Programs, HAF, the Pentagon, Arlington, Va.

SUMMARY OF JOINT ASSIGNMENTS

1. September 2005–April 2007, Aide-de-Camp to the Vice Chairman of the Joint Chiefs of Staff, the Joint Staff, the Pentagon, Arlington, Va., as a major and lieutenant colonel

FLIGHT INFORMATION

Rating: command Pilot

Flight hours: more than 4,000

Aircraft flown: KC-135R/T, C-12F, C-5A/B/M, C-17A and C-130J

MAJOR AWARDS AND DECORATIONS

Legion of Merit with three oak leaf clusters

Defense Meritorious Service Medal

Meritorious Service Medal with four oak leaf clusters

Air Medal with oak leaf cluster

Aerial Achievement Medal with silver oak leaf cluster

Air Force Commendation Medal

Army Commendation Medal

EFFECTIVE DATES OF PROMOTION

Second Lieutenant May 27, 1992

First Lieutenant May 27, 1994

Captain May 27, 1996

Major Nov. 1, 2002

Lieutenant Colonel Dec. 1, 2006

Colonel Oct. 1, 2010

Brigadier General Aug. 5, 2016

Major General Nov. 1, 2019

Lieutenant General June 30, 2022

(Current as of July 2022)



QUESTIONS SUBMITTED BY MEMBERS POST HEARING

MARCH 12, 2024

QUESTIONS SUBMITTED BY MR. GARAMENDI

Mr. GARAMENDI. The FY23 NDAA issued language directing the Secretaries of the Air Force and Navy to develop and implement processes and procedures to leverage used, overhauled, reconditioned, and remanufactured commercial dual-use parts for commercial derivative aircraft and engines.

Secretary HUNTER. [No answer was available at the time of publication.]

QUESTIONS SUBMITTED BY MR. GALLAGHER

Mr. GALLAGHER. How is the Air Force not just thinking, but planning for next generation airlift and contested logistics, specifically palletizing munitions and rocket cargo? How realistic is their employment and what considerations are you making for unmanned mass-resupply?

General MOORE. As the DAF modernizes for the future fight in a contested environment, we incorporated multiple analysis paths to better understand the characteristics of this changed environment and the technology that will enable success. The 25 PB incorporates exploratory work for the Next Generation Airlifter (NGAL) specifically focused on what are the key attributes we will need to enable joint maneuver and address contested logistics needs. Our proposed investment provides preliminary analysis on less mature concepts while accelerating palletized solutions that could employ mass effects. NGAL and Rocket Cargo concepts are in the very preliminary planning phase. For both of these, DAF is investing some basic funding which will allow proper analysis of the future problem sets. DAF has witnessed notable success in employing palletized effects prototype systems from airlift platforms. This concept shows great promise for complicating our adversaries strategy.

