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

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

SUBJECT: Air Force, Force Structure and Modernization Programs

STATEMENT OF:

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Deputy Chief of Staff
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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 Datal 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.