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THE HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF
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BEFORE THE
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HOUSE ARMED SERVICES COMMITTEE

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Introduction

Chairman Wittman, Ranking Member Norcross, and distinguished Members of the subcommittee, thank you for the opportunity to provide an update on F-35 development and production plans and progress, as well as strategies to maximize readiness and reduce sustainment costs. I'm grateful that topics such as Tech Refresh 3 (TR-3) delivery, engine power and cooling modernization, test infrastructure, and sustainment are priorities for this subcommittee – and I assure you they are also top priorities of mine. Today, our Lighting Sustainment Center is delivering global support to U.S. Services, F-35 Partners, and Foreign Military Sales (FMS) customers, including unprecedented surge support to F-35 users in Israel. We are executing an F-35 War on Readiness, War on Cost, and War on Cyber to get after key program challenges. We are placing strategic focus on depot stand-up, organic warehousing and transportation, and modernization of our logistics information system. Meanwhile, organic pathfinder initiatives are driving cost-effectiveness as we delayer our F-35 supply chain. It's clear there is no shortage of innovation and progress being achieved across this Enterprise.

Our program-wide focus on TR-3 stability and Block 4 delivery aims to ensure this air system is ready and able to win tomorrow's advanced fight, if called upon. We are pursuing game-changing modeling and simulation efforts to minimize requirements for costly real-world flight test and training, we are combating challenges associated with concurrency to deliver necessary capabilities on relevant timelines in future lots, and we are closing in on Milestone C and a Full Rate Production Decision. I look forward to the opportunity to update you on progress and plans associated with these and other efforts today.

Program Progress

Since I last testified in March 2023, the F-35 Program has overcome significant challenges and made tremendous progress. In April 2023, the program awarded a Lot 17 option for 126 aircraft for the U.S. Services, Partners, and FMS customers. Just a few days later, the JPO awarded a Block 4 Contract, which strategically prioritizes development of fielded configurations and enables evaluation of capability maturity through predetermined decision points. In June, in coordination with Naval Air Systems Command, the JPO Training Systems & Simulation team developed and fielded the Effects Based Simulator, an innovative and affordable deployable training solution. In August, the JPO completed its Annual Cost Estimate (ACE). While in then-year dollars (including new inflation indices), the program's lifecycle cost estimate increased by \$55B, in constant-year dollars the 2023 ACE represents a \$45B decrease from the 2022 ACE. Despite economic and supply chain headwinds, this is evidence we are injecting affordability into this program. That same month, during a training event known as *Obsidian Iceberg*, a U.S. Marine Corps F-35B landed on California's Old Pacific Coast Highway during a planned test event demonstrating the platform's capability to operate in locations with limited runway. In September, the F-35 Enterprise completed Joint Simulation Environment (JSE) Runs for Score – a major objective on the path to a Full Rate Production decision. Later that month, multiple F-35 squadrons gathered in Georgia for the *William Tell 2023* Air Meet, demonstrating significant F-35 gun enhancements and F-35 integration capability with other air platforms in near-peer-like competition. In October, the U.S. Navy's 2nd operational F-35 squadron deployed aboard the USS Carl Vinson to conduct operations in the U.S. 3rd Fleet area of operations.

Progress during the past eight months also continues to demonstrate the value each Partner and FMS customer brings to the table. In May, the U.S. Air Force's 493rd Fighter Squadron from

the United Kingdom's RAF Lakenheath forward deployed to Norway's Ørland Air Base to participate in *Arctic Challenge 2023* alongside Norwegian, Dutch, and Italian F-35As supporting a two-week exercise throughout Scandinavia. That same month, Japan declared initial depot capability at its regional propulsion Maintenance Repair Overhaul and Upgrade facility, enhancing global depot maintenance capability. In August, Japanese F-35s arrived in Australia as part of a training exercise. Several weeks later, Australian F-35s travelled to Japan, bringing this multinational operation full circle. In September, Denmark received its first four F-35 aircraft in country. In October, U.S. F-35Bs from Naval Air Station Patuxent River conducted developmental test trials aboard the United Kingdom's HMS Prince of Wales, successfully expanding the F-35's shipboard operating envelope. Since early October, the F-35 Program has delivered surge support to Israel. Israeli users are achieving exceptional mission capability rates and the aircraft is proving resilient. We're learning a tremendous amount and will apply lessons learned to enhance fleet readiness across the globe.

Since March 2023, the F-35 Program has stood up capability at four new bases and on one new ship. To date, F-35 users have logged over 750,000 flight hours and 450,000 sorties across the globe. It's clear F-35 capability and international collaboration are increasing every day. Within ten years, there will be over 600 F-35s operating in the European theater alone, and fewer than 60 of them will be U.S. owned. The F-35 Partnership's shared commitment and mission brings game-changing value not only for coalition combat, but for our taxpayers as well. I'm tremendously proud of our multinational F-35 JPO team members who **Deliver, Innovate, and Grow** every day. Together, we're leaning into this *DIG In* mentality as we enable 5th Generation capability and pursue readiness excellence across the F-35 Fleet.

War on Readiness

In March 2023, I set a target of increasing the U.S. fleetwide F-35 mission capable rate by 10% (to 64%) by the end of March 2024. We've dubbed this effort the "War on Readiness." To achieve this, the F-35 JPO assembled a team dedicated to understanding and addressing complex challenges associated with top degraders, supply and maintenance challenges, and issues affecting long-term-down and out-of-reporting aircraft. My F-35 Executive Director and I chair War on Readiness meetings, and our F-35 Fleet Readiness team is led by an Air Force Major General, ensuring there is no question regarding this topic's importance and visibility within the F-35 Enterprise. The F-35 Executive Leadership Team is rolling up its sleeves to engage directly with suppliers as we ensure necessary focus is placed upon addressing top degraders and meeting supply chain requirements. War on Readiness stakeholders meet bi-weekly with participants spanning industry, F-35 users, and JPO personnel to "get tactical" in addressing specific sustainment challenges. I'm proud of the work this team is accomplishing, but there is much work ahead.

Today, our U.S. F-35 fleet mission capable rate averages 57.5% – up over 4% since I last testified. I am not yet satisfied with this progress, but I am confident this initiative is accelerating maturation of an ecosystem that supports the program's long-term sustainment goals. The War on Readiness is making headway in addressing top readiness degraders, which disproportionately reduce mission capability rates. Elimination of our top three degraders alone would increase U.S. Fleet mission capability to 60.5%. In recent months, we've eliminated multiple degraders completely and significantly reduced many more; however, new top degraders have emerged. The War on Readiness has also enhanced the quality, granularity, and breadth of F-35 sustainment data, which enables greater readiness insight and drives decisions regarding the levers at our disposal. This data offers more context regarding the real-time availability of our F-35 Fleet.

As we continue to tackle our most pressing degraders, new challenges continue to emerge. However, most should be addressed well before they become “top degraders.” We are prioritizing effective forecasting and root cause analysis to alleviate this in the future. To formalize and standardize these processes, the F-35 JPO established a Readiness Control Board to identify and resolve emerging degraders quickly, before they impact readiness. We are investing in processes and infrastructure today that will yield results for years to come. However, the warfighter does not have years to wait. Today, we can – and must – improve forecasting to stay ahead of future degraders before issues occur. We are leading initiatives to keep parts on-wing longer by improving reliability, maintaining an appropriate spares posture, and enhancing repair capability and velocity. The F-35 air system has proven its capability and supply chain resilience in recent months in Israel, and I remain confident in our global sustainment capability.

War on Cost

The F-35 JPO remains focused on enterprise affordability, and I remain personally committed to cost reduction across the acquisition lifecycle. In January 2023, I established an F-35 “War on Cost” to tackle affordability challenges in new and innovative ways. Like the War on Readiness, my F-35 Executive Director and I chair these meetings, and work alongside the team to identify and implement cost-saving solutions. The F-35 Affordability Directorate leads this initiative and is my primary conduit for ensuring cost control by addressing three focus areas: cost as a design and program requirement, cost estimating, and cost reduction.

In the 2023 ACE, the F-35 JPO captured an additional \$13.6B (CY12\$) in sustainment cost reductions over program’s lifecycle, bringing the total captured savings to date to \$33.7B (CY12\$). This results from reliability and maintainability projects, propulsion component improvement

efforts, capability updates (including engine core upgrade), and workforce efficiencies driven by the National Autonomic Logistics Information System (ALIS) Support Center stand-up. The F-35 JPO has driven F-35A Cost Per Tail Per Year (CPTY) down from \$8.7M in 2014 to \$6.4M in 2022 (CY12\$) and the Cost Per Flight Hour from \$87.3k to \$36.1k (CY12\$) over the same period. Meanwhile, we are reviewing support solutions to maximize economies of scale, identifying ways to keep parts on aircraft longer, exploring strategies to reduce hardware costs, and increasing simulator usage.

While sustainment initiatives are yielding progress, our War on Cost is also targeting development and production opportunities. We are getting creative and changing behaviors to mitigate cost growth, no matter the source. In the development space, time is money, and ensuring efficiency is essential to success. Opportunities in this space include lab optimization and development, security, operations, and test improvements. In terms of production, Unit Recurring Flyaway (URF) cost in CY12\$ for all variants remains relatively stable, despite new capabilities introductions and supply chain headwinds. We are actively seeking ways to offset inflation pressures including streamlining contracting strategies, delaying supply chains, and maximizing production line efficiency. When it comes to incorporating affordability initiatives into the ACE, we are betting on ourselves, and will also hold ourselves accountable in the years ahead. I look forward to keeping you and your staff apprised of our progress.

Engine Power and Thermal Management Modernization

The Engine and Power Thermal Management System Modernization (EPM) pre-acquisition program is an air vehicle and engine development and integration program to support future Mission System capabilities while restoring engine life. It consists of the Engine Core

Upgrade (ECU) and the Power Thermal Management Upgrade (PTMU) and is progressing with support from the U.S. Services and Congress. EPM will provide increased cooling and electrical power generation required to support capabilities beyond Block 4 for all variants, while reducing lifecycle costs through engine life restoration. The JPO must rapidly staff the EPM team with expertise necessary to support this effort. We are relying on the U.S. Services to act quickly as we work together to meet these manpower requirements.

Based on the PB24 engine modernization decision, the JPO is continuing to develop and refine an EPM Acquisition Strategy that accounts for the necessary human capital and addresses test infrastructure and air vehicle integration risks while incorporating lessons learned from the program's initial development.

Depot Stand-Up

Organic depot stand-up remains critical to long-term air system affordability and availability. By executing its Global Support Solution, the F-35 Enterprise is establishing air vehicle, propulsion, and component repair facilities in the U.S., Europe, and Asia-Pacific regions. In FY22, the Lot 15-17 contract allocated significant funds towards air vehicle depot capacity establishment, demonstrating the Department's commitment to this strategy. The F-35 Program must sustain activated depots and accelerate new activations to keep up with the demands of a growing fleet. This investment will support the F-35 JPO in delivering organic depot repair capacity while deploying essential TR-3 and Block 4 capability to the fleet. From a propulsion perspective, U.S. organic and global depot capacity and activations are keeping up with fleet demands today, but there is still work to do on the air vehicle side.

In November 2023, the Ogden Air Logistics Complex declared repair capability for the Control Surfaces and Edges workload – the forty-fifth workload established across six organic U.S. depots. Before the end of calendar year 2023, we anticipate activation of three additional workloads including Electro-Mechanical Actuation at Fleet Readiness Center East, Integrated Core Processor at Warner Robins Air Logistics Complex, and Electro-Hydrostatic Actuation at Fleet Readiness Center Southwest. U.S. depots are executing 60% of activated workload component repairs today. The JPO is planning twelve activations in 2024, with remaining activations completing by 2028, for a total of 68 core workloads activated. Expanding our organic and industrial base capability is a key lever in achieving affordability and readiness objectives.

Organic Warehousing and Transportation

The F-35 JPO continues to promote maximum U.S. Service and International Partner involvement in all sustainment activities, not just in depot operations. In January 2021, the JPO entered into a Service Level Agreement with the Defense Logistics Agency (DLA) as the F-35 North American Regional Warehousing product support provider and with United States Transportation Command (USTC) and DLA as F-35 Global Transportation and Distribution product support providers. As a result, DLA and USTC now schedule and deliver Government-owned F-35 global spares material to and from international locations. We are on track to complete transition of more than 30,000 eligible air vehicle part numbers from Lockheed Martin warehouses to DLA warehouses by the end of 2023. In addition, 100% of propulsion items have already transitioned to DLA warehouses. Demilitarization and Disposal Services are included in this DLA agreement and are key Global Sustainment Strategy enablers as the program facilitates materiel management around the globe. Utilizing Government-operated core logistics capabilities is crucial

for ensuring prompt mobilization and response to emergency operations and this transition is essential to maximize sustainment affordability.

Future Air Vehicle Supply Chain Strategy

The JPO remains committed to ensuring contracts fairly and effectively motivate industry behavior to meet fleet readiness requirements. Historically, annualized sustainment contracts with F-35 prime contractors have not yielded sufficient availability and mission capability. In 2020, the F-35 JPO, Lockheed Martin, and the U.S. Services determined a five-year PBL contract would improve Non-Mission Capable – Supply (NMC-S) rates, supply chain response time, and gross issue effectiveness at lower or similar cost compared to existing contract methodologies. The FY22 National Defense Authorization Act prohibited entry into a supply chain PBL sustainment contract until DoD submits a report certifying that PBL will reduce cost or increase readiness.

The JPO and Lockheed Martin have faced challenges in PBL contract alignment within the range of the Government's cost and readiness parameters. Lockheed Martin's PBL proposal, submitted in June 2023 and updated in October 2023, is not within cost or performance ranges that enable the Government to proceed to formal contract negotiation. In close coordination with DoD and U.S. Service senior leadership, the F-35 JPO has paused its path to a system-level Supply Chain PBL with Lockheed Martin. The Government's priority is now focused on maintaining fleet support coverage and updating the air vehicle supply chain strategy to meet warfighter readiness requirements, at a reasonable cost.

ALIS-to-ODIN Transition

The F-35 JPO is evolving its legacy logistics information system, ALIS, into a modern system called the Operational Data Integrated Network (ODIN). ALIS-to-ODIN (A2O) is maturing software, hardware, data, and infrastructure with a focus on delivering incremental value to users along the way. In 2023, the program encountered technical complexities that delayed ALIS software releases. The program is working with industry to execute a strategy to mitigate near-term effects, while assessing longer-term A2O impact. The JPO is developing a final ALIS software release to add capabilities. This effort is also part of a broader initiative known as the *War on Cyber* which mitigates cyber obsolescence, requirements, testing, and operations challenges. In parallel, the JPO is developing ODIN foundational software to enable and simplify future application modernization. Our modernization strategy adopts a microservices architecture where software code is smaller and loosely coupled, and where software components can be deployed and scaled independently. This will enable faster and more frequent ODIN software updates to support user needs.

In 2023, the program successfully fielded unclassified ODIN hardware for new maritime and land-based site activations, and established contracts to replace fielded ALIS hardware with ODIN hardware. The JPO is on track to complete development, test, and certification of classified ODIN hardware elements to enable fielding beginning in 2024. Throughout this effort, the JPO is delaying its supply chain to drive acquisition agility and affordability. By obtaining technical data rights, the JPO enables direct Government procurement of hardware – accelerating procurements and reducing cost. Progress is continuing with data quality, transformation, and infrastructure enhancements. Specifically, the JPO is developing a Data Centralization Archive, which will improve unit hardware performance, provide easier access to data, and enhance fleet

analytics. The JPO designed an improved architecture and began development to “define our infrastructure as code,” which allows us to publish software independent of underlying hardware and transition seamlessly into developmental and production environments in Government-owned clouds. Meanwhile, the National ALIS Support Center, continues to serve as a centralized source of remote support for system administrators. By reducing the required number of ALIS administrators, this facility contributes approximately \$1B (and growing) to F-35 lifecycle savings.

Surge Sustainment Capability

Throughout its history, the F-35 Program has laid the groundwork for surge sustainment to ensure preparation for wartime activities. As we’ve seen in recent months, the F-35’s global sustainment infrastructure, and the platform itself, are being tested through current conflict in Israel. Since the war began on 7 October, Government and industry personnel have worked together to meet emerging Israeli requirements. From operational and technical perspectives, our aircraft and global supply system are proving resilient. As we seek to drive sustainment affordability across the F-35 Enterprise, we are taking steps to ensure our surge sustainment capacity is not compromised. In alignment with the National Defense Strategy, and its objectives to ensure a resilient defense industrial base and foster integrated deterrence, the F-35 JPO participated in two combined OSD and Joint Staff F-35 sustainment table-top exercises to assess our sustainment strategy within a contested logistics environment. The JPO is applying lessons learned to maximize sustainment survivability, responsiveness, and flexibility.

F-35 Development Programs – Weapons, Tech Refresh 3 (TR-3), and Block 4

The F-35 Enterprise is simultaneously executing multiple development programs, which make the platform more lethal and survivable in the high-end fight. While the program has made progress in this domain, significant work remains. This year, The F-35 Program completed development testing and achieved design certification for U.S. Air Force F-35As to carry nuclear weapons fifteen months earlier than planned. In November, the F-35 Program completed integration and flight test for 2,000-pound GBU-31 Joint Direct Attack Munitions in just seventeen days. Lessons learned from this achievement are already accelerating other projects as the F-35 Program works to integrate additional weapons.

TR-3 remains the F-35 Program's top development priority. TR-3, and the associated Next-Generation Distributed Aperture System (DAS), realized significant risk over the past year, delaying forecasted Lot 15 production deliveries into calendar year 2024. While we are observing progress on TR-3, it's not happening quickly enough. Today, TR-3 hardware reliability exceeds the life limit required for aircraft production, and the Next Generation DAS meets the required 8,000 hours design. While hardware reliability represents significant progress, industry suppliers have faced challenges in meeting TR-3 and Next Generation DAS F-35 production demands. The program is working closely with industry partners to encourage necessary capital investments in TR-3 and Next Generation DAS infrastructure to increase production rates and recover schedule.

In recent months, the F-35 Program achieved important development milestones in real-world flight test. Since TR-3's first flight on 6 January 2023, the F-35 Program has flown over 140 sorties in support of TR-3 at Edwards Air Force Base (AFB) and Patuxent River Naval Air Station. In August, U.S. Air Force Pilots at Edwards AFB flew the first F-35 five-ship with TR-3 hardware and software to evaluate advanced sensor fusion. In October, the program released the first TR-3

software version to flight test that includes all TR-2 tactical functionality. On 14 November, Lockheed Martin pilots successfully flew the first production TR-3 configured F-35s in Fort Worth, Texas. The JPO modified seven test aircraft (one still pending Government acceptance) to TR-3 configuration and is pursuing an aggressive schedule to modify two additional aircraft.

TR-3 has experienced setbacks due to realized software development risk, aging development test aircraft, and insufficient lab capacity. Labs have not represented the operational environment well enough. Lockheed Martin and the F-35 JPO are implementing an Enterprise-wide approach to address these challenges. For example, the F-35 Program is using aircraft on the production line as “TR-3 labs” to reduce software development risk. This innovation prevented at least two months of TR-3 development schedule slip and represents significant cost avoidance.

As we look to the future, the F-35 Program’s highest TR-3 priority is software performance improvement, with specific focus on aircraft start-up time and software stability in flight. While we are making progress, these software metrics are not yet adequate to field TR-3 software. Next Generation DAS integration with TR-3 software is also a significant priority as we work to deliver next-generation combat capability. Given schedule estimates to perfect TR-3 and the Next Generation DAS, we are working with the U.S. Services, F-35 partners, and FMS customers on a potential plan to truncate the initial TR-3 software release to deliver capable aircraft without full integration of all systems. This decision increases opportunities for pilot training, drives opportunities for maintainers to obtain hands-on experience, and reduces the duration that Lot 15 aircraft are parked awaiting software. Most importantly, this course of action enables the F-35 Program to pivot resources to the next software release, which incorporates the latest TR-2 combat capabilities into the TR-3 software baseline. Based on comprehensive discussions with the F-35 Joint Executive Steering Board (JESB) members, the U.S. Services and F-35 Partners notionally

support this approach, but we must have a stable, capable, and maintainable software load before making a final decision.

Like TR-3, Block 4 development is critical to advance F-35 air system capabilities for the high-end fight. Block 4 upgrades enhance electronic warfare, communication systems, and other mission systems capabilities for operations in contested spaces around the globe. Block 4 has experienced significant challenges associated with hardware design maturity and software integration timelines. Development and production concurrency is Block 4's most critical challenge, and we are dealing with its consequences today. The TR-3 experience reveals the consequences of accepting high risk in concurrency between development and production. The F-35 JPO, Lockheed Martin, and other industry partners have identified high risk concurrency in the F-35 Block 4 schedule, which would threaten to shut down aircraft production if development slips. We are focused on eliminating this concurrency and establishing realistic delivery schedules that U.S. services, F-35 Partners, and FMS customers can count on.

Several months ago, the F-35 Program awarded a Block 4 contract that puts significant rigor into concurrency analysis. The Block 4 contract establishes Capability Decision Points for an integrated, comprehensive review of the readiness of Block 4 hardware and software to be introduced into specific aircraft production lots. Capability Decision Points enable greater oversight and drive higher confidence in development schedules. Earlier this year, the Undersecretary of Defense for Acquisition and Sustainment directed an F-35 Block 4 development Technical Baseline Review. In recent months, an independent group of Navy and Air Force technical experts have been evaluating the Block 4 development schedule, hardware maturity, program risks, software tools, and industry and Government workforce skillsets. We are looking forward to the Technical Baseline Review's recommendations.

The JESB supports the F-35 JPO's initiatives to reduce concurrency and invest in development infrastructure to support modernization well into the future. The F-35 Program requires a future fleet of nine Flight Sciences Aircraft to complete Block 4 and to enable capacity for future F-35 modernization. Today, the F-35 Program possesses non-recurring engineering necessary to convert three F-35 production aircraft into Flight Sciences Aircraft and full funding in the Future Years Defense Program to complete the conversions. While this is a good start, the F-35 Program must convert six additional aircraft to meet program requirements. This action is dependent upon authority from Congress. The F-35 Program must make investments in Flight Sciences Aircraft and software labs at Lockheed Martin and throughout supplier locations to get the most operational capability out of the F-35 weapons system.

In addition to these efforts, F-35 Mission Systems software development efforts continue to seek more efficient and effective ways to develop and deliver capability to the warfighter. These lines of effort encompass Air System elements such as Operational Flight Programs; Full Mission Simulators and associated Threat Databases; ALIS, ODIN, and off-board mission support; and the JSF Reprogramming Enterprise (JRE) and Mission Data File (MDF) sets it creates. This unified software development approach improves development efficiency and enhances Enterprise-wide integration efforts.

Lot 18-19 Status and Plans

The F-35 production contract for Lot 18 and Lot 19 aircraft will deliver F-35s to U.S. Services, Partners, and FMS customers, increasing F-35 operational capacity around the world. International demand for F-35 aircraft is growing as evidenced by the addition of Poland and Finland, and with other allies soon to follow. There is a reason that nations across the globe

continue to competitively select F-35 to meet their national defense requirements. Through F-35 production contracts, the F-35 Program delivers the air vehicles our users require.

In October 2023, Lockheed Martin submitted a proposal for Lot 18 and Lot 19 production. The F-35 JPO and Lockheed are actively negotiating the Lot 18-19 contract and are targeting potential award on timelines faster than achieved in Lots 15-17. In recent F-35 production lots, suppliers have experienced significant financial pressures under fixed price contracts in the wake of economic uncertainty. Inflation, increases in energy costs, and supplier base disruptions continue to affect cost. These realities have driven increases in Lot 18-19 proposal costs. Resolving this challenge requires partnership between Government and industry stakeholders as the team works towards awarding the Lot 18-19 production contract in Fiscal Year 2024. Beyond the Lot 18 and Lot 19 contract, we must also consider longer-term contract arrangements to stabilize the F-35 industrial base and control cost.

The F-35 Program intends to shift to a block-buy strategy for Lots 20-24 to establish greater stability within the F-35 supply base and reduce cost. Coupled with a known production rate over a longer defined period, Economic Order Quantity (EOQ) funding would enable Lockheed Martin and its subcontractors to make longer-term supply chain investments that reduce overall cost. EOQ has the potential to save up to \$2B over Lots 20-24, encourage F-35 suppliers to make capital investments to further reduce cost, and avoid costly supply chain disruptions that occur under current shorter-term agreements. EOQ funding is critical to maintain stable production cost, and a stable supply base must be a high priority of all F-35 stakeholders.

Milestone C and Full-Rate Production

Completion of JSE Runs for Score in September 2023 cleared the path for the Department to set a date for a Milestone C and Full Rate Production decision in March 2024. Several key statutory and regulatory requirements remain, such as the Director, Operational Test and Evaluation (DOT&E) Report on F-35 Initial Operational Test & Evaluation (IOT&E); the Operational Test Agency's Report on OT&E results; and Defense Acquisition Executive signature of a revised F-35 Acquisition Strategy. The DoD is completing final joint Service and independent cost estimates, which will ensure a realistic program cost baseline as we formally move into Full Rate Production. When achieved, a formal Full Rate Production decision will reduce and eliminate several costly administrative programmatic processes and drive supplier confidence to invest in long-term production and supply chain efficiencies.

Addressing Government Audit Recommendations

As we dive into these and other complex and important topics today, I appreciate the opportunity to testify alongside my colleague from the GAO, Mr. Jon Ludwigson. The F-35 JPO remains an open and committed partner to the GAO's oversight mission, and we are currently supporting five unique audits across two different GAO mission teams – as well as six audits from the Department of Defense Office of Inspector General (DoD IG) and Air Force Audit Agency (AFAA) – which encompass the entirety of the F-35 acquisition lifecycle.

The JPO works actively to implement and close GAO recommendations, as well as recommendations received from other audit agencies. In addition to these active audits, there are sixty-two issued recommendations (eleven pending closure) from GAO, DoDIG, and AFAA that are being implemented across the F-35 Enterprise. While independent program oversight is

beneficial, these reports do drive significant manpower requirements within the F-35 Enterprise. Within the past six months, the GAO has issued new reviews covering development, sustainment strategy, and property accountability. Here in the JPO, implementation activities have already begun. My team is working diligently to implement these recommendations and will continue to maintain transparency and communication with our GAO colleagues.

Human Capital

People are our number one resource. We must invest in appropriately staffing the F-35 Program (both Government and Industry) with talent necessary to continuously develop, produce, and sustain the F-35 Air System. We must incentivize, recruit, retain, and professionally grow our people to meet the challenges in front of us. Earlier this year, the Air Force Life Cycle Management Center (AFLCMC) and Naval Air Systems Command (NAVAIR) analyzed the JPO's workforce demands and sizing. This analysis highlighted several staffing concerns. The F-35 Program is in a challenging phase as we develop, produce, and sustain three aircraft variants concurrently. AFLCMC and NAVAIR are helping us fill existing vacancies, but I am concerned that program priorities and customer demands are not matched with commensurate human resources to support the F-35 Enterprise as the fleet and demand continue to grow. I'm appreciative of the U.S. Services attention to this matter.

Conclusion

Since I last testified before this committee in March 2023, the world has changed, but our focus on affordable and timely fleet-wide readiness and capability remains the same. Our Enterprise is being tested in new ways through real-world conflicts and is proving capable, ready,

reliable, and resilient. However, much work remains ahead of us. By executing an F-35 War on Readiness, War on Cost, and War on Cyber we are elevating the visibility of our most pressing challenges. Actions taken today to accelerate depot stand-up, organic warehousing and transportation, engine power and cooling modernization, streamlined contracting strategies, logistics information system modernization, and enhanced use of technical data rights will increase F-35 availability and drive down sustainment cost. Innovative software development and testing methodologies will continue to accelerate capability delivery. Meanwhile, a formal Full Rate Production decision will drive supplier confidence for decades to come, and allow us to focus on the future rather than the past. I'm proud of all our team is accomplishing and know we will continue to progress in the months and years ahead. Here in the F-35 JPO, our people are our most important asset – and none of this is achievable without their support and commitment. As always – we'll continue to apply our F-35 *DIG In* mentality as our workforce **D**elivers, **I**nnovates, and **G**rows together. Thank you once again for the opportunity to discuss our progress, challenges, and opportunities. This subcommittee's support and oversight are essential to our success.