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THE HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF

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UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND SUSTAINMENT

BEFORE THE

TACTICAL AIR AND LAND FORCES SUBCOMMITTEE

AND READINESS SUBCOMMITTEE

OF THE

HOUSE ARMED SERVICES COMMITTEE

ON

F-35 LIGHTNING II PROGRAM SUSTAINMENT

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I Introduction

Chairman Norcross, Ranking Member Hartzler, and distinguished members of the Tactical Air and Land Forces Subcommittee and Chairman Garamendi, Ranking Member Lamborn, and distinguished members of the Readiness Subcommittee, thank you for the opportunity to testify today.

I am pleased to join the Director of Operational Test and Evaluation, Robert Behler, the F-35 Joint Program Office Program Executive Officer, Lieutenant General Eric Fick, and Diana Maurer, the GAO Director of Defense Capabilities and Management to discuss our continued efforts to develop, build, and sustain an affordable and ready F-35 Air System capable of dominating the 21st Century battlespace.

I am here representing the entire Acquisition and Sustainment team of over 100,000 dedicated military, civilian, and contractor professionals who execute our mission every day. I am proud and impressed with the work these dedicated professionals do every day to provide the materiel solutions that give our warfighters the capabilities they need to meet the security challenges we see around the world. In particular, I want to commend the work of the entire F-35 team for their efforts to drive fifth Generation Tactical Aircraft Capabilities to our U.S. Services, International Partners, and Allies.

With more than 458 fielded F-35 aircraft operating from within the U.S. and abroad, our warfighters are beginning to experience the true game changing capabilities the F-35 brings to bear, as well as identifying challenges that need to be addressed. Through these efforts, along with the aggressive implementation of cost-saving initiatives, the F-35 will be more survivable, supportable, lethal, and affordable than ever before.

As Under Secretary, I have maintained a laser focus on driving down costs, improving quality, and increasing fleet readiness. I have worked with these dedicated professionals to help transform the F-35 Program to shift it from a development and initial production focused enterprise to one that delivers the efficiencies and throughput we must have in full rate production. We are also evolving into an agile enterprise that delivers war winning capabilities at a speed that meets the challenge of quickly evolving adversaries. The F-35 Enterprise will make this transformation while delivering the readiness outcomes that our customers demand in a time of strategic competition.

Before taking your questions, I would like to walk through how the F-35 enterprise is working to dramatically improve F-35 sustainment outcomes. I will frame my remarks around those outcomes the Department, F-35 Joint Program Office (JPO), and the U.S. Services are all driving to achieve: Improving Aircraft Availability and Reducing Sustainment Costs.

II Improving Aircraft Availability

As the F-35 fleet continues to grow and the Air System's capabilities are enhanced, it is crucial we stay focused on improving fleet readiness to ensure the F-35's critical capabilities are available to the warfighter. I would like to thank the Congress for their support in helping us maintain this balanced investment approach. With your help, the F-35 Program continues to make steady progress to support fleet readiness enhancement activities including:

Improving overall F-35 sustainment outcomes and aircraft readiness despite dramatic fleet size increases. By the end of 2019, the F-35 Enterprise is on track to produce nearly 150% more aircraft than we built just two years ago and 50% more than in 2018. As the F-35 fleet has grown, aircraft readiness has improved. In particular, DoD combat-coded operational unit Mission Capable (MC) performance increased from 55% in October

2018 to 73% in September 2019; USMC F-35B MC rates increased from 44% to 68%; USAF F-35A rates jumped from 66% to 75%; and USN F-35C rates rose to 75% over the same period.

- Accelerating Reliability and Maintainability (R&M) improvement efforts have contributed to a fleet-wide MC rate increase of 2.7%. To date 161 projects have been identified, with 68 completed.
- Procuring spares and supplies which has helped decrease Non-Mission Capable-Supply (NMCS) rates by 5% during fiscal year 2019.
- Accelerating the activation of organic depot repair capacity, a critical readiness driver, by 6-years, from 2030 to 2024. By the end of this year, 30 of 68 depot repair lines will be activated, one more than the Department's plan had forecasted. We have also reduced total repair time of parts by 13% and are working the continued implementation of performance based agreements and master repair agreements with our industry partners.

Despite our vigilant efforts to improve F-35 sustainment, challenges remain. As I shared previously, the Department issued a program deviation last month due to delays in integrating the F-35 into the Joint Simulation Environment test infrastructure. Additionally, other issues continue to hamper the F-35 Program's ability to achieve the F-35 fleet availability standards required by our warfighters. However, I want to reiterate that I have full faith and confidence in the F-35 program, and in our ability to deliver F-35 combat capability anywhere in the world. Make no mistake, the F-35 is the world's most advanced, lethal, and interoperable aircraft ever developed.

In order to tackle our most pressing sustainment challenges, my Assistant Secretary of Defense for Sustainment, Bob McMahon, approved a new F-35 Life Cycle Sustainment Plan

(LCSP) in January 2019 that identified the success elements that we are employing to drive F-35 availability to meet the sustainment goals required by the U.S. Services, our International Partners, and our Foreign Military Sales (FMS) customers. These success elements address key improvement areas to include:

- Accelerate fleet modifications to upgrade early production aircraft and improve reliability
- Secure Technical Data to spur on competition and provide additional organic repair flexibility
- Identify future maintenance plan changes and accelerate current Top Five capabilities
- Accelerate Navy Intermediate-Level Maintenance for remote shipboard operations
- Accelerate Supply Chain improvements to increase enterprise supply posture and reduce NMC rate for Supply
- Further accelerate depot component repair workload activations to increase supply posture
- Improve Autonomic Logistics Information System (ALIS) field level functionality and responsiveness
- Enhance Reliability and Maintainability Improvement Program (RMIP)
- Accelerate Software Modernization with Government organic core capability

Led by the F-35 JPO's Product Support Manager (PSM), a joint team of representatives from OSD, the F-35 JPO, U.S. Services, and Industry have made great progress in their work to define the plans, metrics, and timelines for each of the success elements. Moreover, Bob McMahon personally provided direct oversight for the development of these plans, and I thank him for his leadership. I'd like to highlight how we think about some of these success elements.

Accelerate Supply Chain Improvements: The Department is focused on delivering Warfighter performance capability within resource constraints. Integral to enabling this is addressing supply chain management inefficiencies and risk. The F-35 Program is driving supply chain improvements through their implementation of a Global Support Solution (GSS) to enable the affordable maintenance and sustainment of combat-ready F-35 capabilities worldwide. For example, the Department is increasing spare parts availability within the GSS by increasing supplier capacity, decreasing lead times for spares, and optimizing shelf spares. Additionally, the Department is continually taking action to assess and develop alternative sourcing of suppliers to ensure that our supply chain is robust and resilient in a dynamic geopolitical environment. Moreover, efforts like these will improve our supply chain performance and result in improved MC rates.

Accelerate Depot Component Repair Workload Activations: Organic depot component repair capability is integral to the readiness of the fleet as it will help support the F-35 global supply chain with ready-for-issue components at a rate that meets fleet demand. Organic depot repair capability will continue to mature over the next eight to ten years until the program achieves full depot capability. By 2024, U.S. depots will have a "demand-rate" repair capability for all sixtyeight workloads to include adequate facilities, trained labor, current technical data, and repair material on hand to affect efficient repairs. Sequencing of workload activations has been prioritized to have the highest positive impact on fleet readiness. The Department is working to ensure that, as new capabilities are introduced into the fleet in Block 4 and beyond, we are conducting appropriate planning to stand up organic depot repair capability where needed to meet fleet demand.

Improving ALIS Field-Level Functionality and Responsiveness: The F-35 ALIS is a key enabler to the platform's operational availability and capability. The Department recognizes that ALIS, as presently constituted, is not delivering the capabilities the Warfighter needs. To correct this, the Department has a plan to stabilize and add critical capabilities to the current version of ALIS and we are starting to see progress from these efforts. Over the past year, the Department has delivered three ALIS software updates and we are on-track to release quarterly releases to rapidly improve current performance – a vast improvement from the 18 months between software updates in the past. Our efforts to stabilize and improve the usability of ALIS has driven trouble reports down 38% from their peak. These efforts mitigate risk while the Department charts a path to the future of ALIS that will help deliver a more ready fleet at a lower cost.

The Department is currently building a timeline with discrete milestones that will chart a management path towards delivering the next-generation ALIS. The new ALIS system will enable the Department to utilize agile software development techniques to deliver flexible applications on a modern, secure architecture. The Department is leveraging the abundance of ALIS lessons learned while embedding together Government and Industry developers along with close partnering with the user to establish a new agile development culture. With that knowledge and culture change, we will deliver a less man-power intensive next-generation ALIS system capable of driving the readiness and affordability we need across the air system. Progress will be driven by our access and understanding of the underlying data and our close partnership with industry. I see a number of our industry partners demonstrating a high degree of competence in developing the kinds of secure, flexible, and open architectures needed to deliver the capabilities the warfighter needs. The problems with ALIS are ones we can and must solve.

Accelerate Software Modernization with Government organic core capability: The Department will likely sustain F-35 software for over 50 years, so implementing a strategy to do this in an affordable and agile way is critical for our warfighters. The program has developed a strategy to merge software development and sustainment of the F-35 Air System supported by an integrated team from Industry, U.S. Government, and International Partners. Agile and DevSecOps are key enablers of this strategy. Two U.S. Air Force and two U.S. Navy organic software depots are being activated to meet the Department's and U.S. Service's readiness (sustainment capacity) and affordability goals.

To accelerate the Agile and DevSecOps enablers for Software Modernization, an effort began in August 2019 to move all F-35 software development to a JPO Government Cloud. That effort is progressing and includes the full support of key industry partners Lockheed Martin and Pratt & Whitney. Our first proof of concept developing F-35 Air System software in the JPO Government Cloud is planned to complete by 1 February 2020.

III Reducing Sustainment Costs

The F-35 Enterprise recognizes that the U.S. Services, the F-35 JPO, and Industry must collaborate to reduce sustainment costs. As we continue to work towards improving and maintaining a high-rate of MC across the fleet, we are making measured progress towards improving F-35 fleet affordability. For example, the estimated cost per flying hour of the F-35B in 2019 decreased by 6 percent corresponding with a drop in the cost of operating the F-35Bs by approximately \$500,000 per tail per year in 2019. In addition, we have reduced F-35 Life Cycle Costs by an estimated \$2.7 billion by accelerating R&M improvements.

Despite these projections, we recognize that there is much more work to be done and this work needs to be accelerated. Consequently, the Department documented new, Service-budget

informed affordability constraints for F-35 sustainment in an Acquisition Decision Memorandum I signed late last year. These affordability constraints, developed by the U.S. Services, for the first time define what the Services will be able to afford to spend on F-35 sustainment, based on projected future budget and portfolio prioritizations. These constraints are a management tool around which all of our efforts to reduce sustainment cost are organized.

More specifically, I am personally overseeing a collaborative effort by the Department, F-35 JPO, Lockheed Martin, and Boston Consulting Group to understand the barriers preventing more rapid improvements to both readiness and affordability performance. The intent is for the F-35 Program to apply commercial best practices to targeted interventions to accelerate performance improvements. These efforts continue to provide granular insights into sustainment cost drivers, which will enable more targeted and efficient cost reduction efforts. Specifically, we have identified that driving down sustainment support costs, both in terms of labor cost and labor demand, is the key lever in reducing overall F-35 sustainment costs, because sustainment support accounts for over a third of overall sustainment costs.

The Department is using these insights to pivot towards an action-oriented and integrated engagement model to support accelerated implementation of key success factors identified in our LCSP. In particular, these insights are assisting our efforts to drive sustainment improvements across the entire F-35 Enterprise in the following areas:

- Improve supplier relations—supports upcoming contractual discussions with targeted analytical support;
- Support LCSP acceleration—outlines discrete tasks, goals, specify timelines to promote measurable improvement;

 Address ALIS—provides technical advisory and establish strong governance across existing programs.

Finally, as we learn more about the readiness barriers and the cost drivers that we need to collectively knock down to meet our affordability goals, we're using this knowledge to help inform our analysis of Lockheed's proposal for a 5-year, fixed price Performance Based Logistics (PBL) contract. The Department has convened a Joint Independent Assessment Team to evaluate the merits and impacts of any potential PBL approach. This Tri-Service team led by Secretary Geurts is in the early stages of working, in conjunction with our industry partners, to analytically understand when, or if, an F-35 PBL contract could be awarded. Our goal is to ensure that any such contract meets the readiness and affordability goals important to the F-35 warfighter and is in the best interest of the American taxpayer.

IV Conclusion

The Department continues to demonstrate our commitment to provide an affordable, lethal, supportable, and survivable F-35 air system to the warfighter. These accomplishments are made possible by the strong partnerships that exist within the F-35 Enterprise, both across U.S. Services and among our International Partners and FMS customers. As the F-35 Program continues to make steady progress to improve sustainment, the Department is aggressively tackling the challenges I described above. We will continue to work to resolve these issues and provide a clear status of our progress to our Congressional stakeholders as well as senior DoD and International leadership.

While the Department is grateful to the Congress for passing a two-year budget agreement that provides the budgetary certainty the Department needs to implement the National Defense Strategy, I want to reiterate how regrettable it is that we are again under a Continuing Resolution

(CR). CRs cause great damage to military readiness and disrupt our ability to modernize our strategic forces, including nuclear, for the future. I strongly urge Congress to pass a defense appropriation and authorization bill now so that we can move forward with the many important programs needed to ensure our readiness and deter our adversaries.

I want to thank both Subcommittees for your longstanding, bipartisan support to our F-35 Program and the men and women in uniform who make it the premier multi-mission, fifthgeneration strike fighter that provides our warfighters unmatched, game-changing capabilities. I look forward to your questions.