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TACTICAL AIR AND LAND FORCES SUBCOMMITTEE
HOUSE ARMED SERVICES COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

PRESENTATION TO THE
HOUSE ARMED SERVICES COMMITTEE
TACTICAL AIR AND LAND FORCES SUBCOMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

SUBJECT: How the F-35 is Meeting Current and Future Fifth Generation Fighter Capability

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March 7, 2018

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INTRODUCTION

Chairman Turner, Ranking Member Tsongas, and distinguished Members of the Subcommittee, it is my distinct pleasure to be here with you this morning. Thank you for the opportunity to discuss how the F-35A Joint Strike Fighter is meeting current and future fifth generation fighter capability needs.

The Air Force is accepting Lot 10 aircraft in the System Development and Demonstration (SDD) final Block 3F configuration. With this configuration, the F-35A is fully capable of striking and destroying a broad range of targets, day or night, in adverse weather conditions. The F-35A missions include Air Interdiction, Offensive and Defensive Counter Air, Close Air Support, Strategic Attack, and Suppression and Destruction of Enemy Air Defenses. The F-35A complements other low-observable assets including the F-22, B-2, and B-21 as well as our legacy fourth generation fleet. It is a lethal, survivable, and adaptive weapon system emerging as the mainstay of our future Combat Air Force.

The F-35 is the fighter of the future. Not just for the Air Force but also for our sister Services and eight partner nations. Designing and developing an aircraft capable of the missions I've mentioned for three different services and eight partner air forces is probably the most complex and challenging undertaking in Department of Defense history. The systems on board the aircraft are among the most advanced systems in the world. Fusing all of these systems into a coherent, integrated solution that presents enormous amounts of information to the pilot is no easy task. Although issues existed regarding cost, schedule and performance of the System Development and Demonstration (SDD) effort, most of these issues are now behind us. I'll discuss some of these issues as I address how the F-35A is meeting the Air Force's current and future fifth generation fighter capability needs.

KEY CHALLENGES AFFECTING AF OPERATIONS AND SUSTAINMENT COSTS

Overall F-35 system affordability is our number 1 concern. If we can't reduce the projected overall costs for this very capable platform, we simply won't be able to afford the current planned buy. This issue is a key focus of both OSD and the AF and we're working closely with the JPO on the way ahead to affordability

AF PLANS TO ADDRESS INCREASING F-35 OPERATIONS AND SUSTAINMENT COSTS

As the program matures, we will continue to evaluate the operations and sustainment cost of the F-35. Although, the program is still in development, opportunities exist in reducing the overall operations and sustainment cost, lowering production cost, and building better sustainment strategies. We will continue to work closely with the Joint Program Office and Industry to evaluate and analyze actual data. Adjusting program quantities and flying hours may be required if the projected higher than expected operations and sustainment cost come to reality.

OPERATOR'S PERSPECTIVE ON PROGRESS IN MEETING REQUIREMENTS

The Air Force declared Initial Operational Capability in August, 2016 with twelve Block 3i configured aircraft assigned to the 388th Fighter Wing, Hill AFB, Utah. Today, we have thirty-four F-35s as we build the 388th Fighter Wing fleet to 72 F-35s by December 2019.

Last year, we deployed the F-35s from Hill AFB to Red Flag 17-1 to train with our sister services and coalition partners. Other participants included the Royal Air Force, Royal

Australian Air Force, United States Navy and United States Marine Corps. Missions included integration with F-16s, F-15s, F-18s, F-22s and a variety of command and control assets.

Aircraft and crews integrated seamlessly with all other participants, delivered a dramatic increase in Air Force capability, and significantly enhanced the capabilities of the entire force of 80 aircraft taking part in the exercise.

Today, F-35s assigned to Hill AFB are deployed to Pacific Command to support a Theater Security Package. Following a flawless deployment of 12 aircraft to Kadena AB, Japan, we established flying operations in less than three days after landing; much like we would expect with our legacy fighter aircraft. We learned valuable lessons on F-35A spare parts supply chain availability in theater as we maintain our deployed fleet far from home over a six month duration. The aircraft were involved in several exercises in theater and have integrated with United States Air Force, United States Marine Corps, Republic of Korea and Japanese Air Defense assets. These 12 aircraft recently completed an aircraft configuration upgrade from Block 3i to our more advanced Block 3F configuration.

Block 3i provided an interim aircraft configuration sufficient for Initial Operational Capability, yet lacked some desired capabilities for full spectrum combat operations. The upgrade to Block 3F expands the number and type of weapons that can be carried, provides improved targeting and identification functionality, and enhances datalinks for improved communication and interoperability. Block 3F F-35As provide a lethal and survivable 5th Generation capability to our Combatant Commands that can detect, track and engage targets in contested environments, and meet the full spectrum of Joint warfighter requirements in future years. Block 3F F-35A performance has exceeded our expectations and the sentiment from both

our pilots and maintainers is the Block 3F F-35A represents a massive leap forward in combat capability and maintainability.

Since the first F-35A (AF-1) rolled off the assembly line at the Lockheed Martin plant in Ft Worth, Texas on 25 Nov 2008, the United States Air Force fleet of F-35s has grown to 137 total aircraft stationed at five different Air Force Bases in the continental United States. We've trained approximately 360 pilots from several nations, with a mix of Active Duty (258), AF Reserve (31), Air National Guard (4), USMC (3), international (50) and contractors (4). During these past 6 years, Air Force pilots have flown over 60,000 flight hours in this fighter jet and have full confidence in the F-35A's ability to take the fight to our enemies at the time and location of our choosing.

PERSPECTIVE ON COMPLETING SYSTEM DEVELOPOMENT AND DEMONSTRATION

Concerning the completion of the System Development and Demonstration phase, we have just started fielding F-35A aircraft in the final SDD Block 3F configuration and are very pleased with the performance of the new software so far; however, approximately 108 aircraft are in either a Block 2B or 3i configuration that eventually requires retrofit with software and/or hardware upgrades to the Block 3F configuration. The Air Force is working with the Joint Program Office on a detailed retrofit plan to efficiently and smartly upgrade the existing fleet to the Block 3F configuration.

As mentioned, we're very pleased with the performance of the new 3F software but, like any system of this complexity, there are corrections that need to be addressed in the future. We're focused on prioritizing known deficiencies so the Joint Program Office can focus their efforts and

understand which problem areas must be fixed, as well as those that may be resolved with a short-term fix until a more permanent solution can be found.

F-35A PROCUREMENT IN THE FUTURE

The F-35A acquisition schedule makes the F-35 a critical component of the Air Force long-term fighter force. Currently, the Air Force plans to procure forty-eight F-35As annually and increase our procurement to fifty-four over the Future Years Defense Program or FYDP for fiscal years 2019-2023. Accelerating the procurement rate prior to the development of Block 4 adds overall cost to the program. If we were to procure at higher than planned rates inside the FYDP, the Air Force would have to retrofit aircraft already delivered to the fleet with Block 4 hardware and software modifications. Once Block 4 delivers near the end of the FYDP, we will examine the option of accelerating the F-35A program above the current procurement rate to meet the 5th Generation requirements necessary to balance the Air Force ability to fulfill national security objectives.

MEETING REQUIREMENTS UNDER C2D2

The F-35 Joint Program Office is in the process of coordinating and transitioning to a new acquisition strategy for follow-on modernization. This new approach provides a continuous, incremental, plan called Continuous Capability Development and Delivery (C2D2). F-35 C2D2 will build upon the warfighting capability provided in Block 3F during the SDD phase. The C2D2 approach is more responsive to the changing threat priorities and maintains the viability of the F-

35 fleet over its 50+ year lifecycle. The C2D2 strategy is geared toward acquisition of the requirements to counter the estimated threat in 2025 and beyond. Capability improvements include integration of additional weapons and upgrades to the electronic warfare system, datalink systems, and radar. The Air Force is placing great importance on the hardware upgrade planned as Technical Refresh 3. Technical Refresh 3 adds an improved integrated core processor, an improved panoramic cockpit display, and a more capable aircraft memory system.

The Air Force is concerned over funding for Block 4 modernization. Congress reduced the F-35 follow-on modernization in fiscal year 2017 by approximately sixty percent. For fiscal year 2018, Congress is recommending a twenty-five percent reduction in follow-on modernization funding. Both of these budgets were marked as “Early to Need” based on the lack of a Capability Development Document. The Capability Development Document was approved by the Joint Requirements Oversight Council in April 2017. I can’t emphasize enough how important it is that we fully fund Block 4. We are at a crucial stage where we must commit to the developmental work to ensure we have these capabilities available to meet a 2025 need.

READINESS OF AUTONOMIC LOGISTICS INFORMATION SYSTEM

In February of last year, I expressed frustration and hope regarding the Autonomic Logistics Information System, or ALIS. Schedule and capability delays continue and ALIS capability has marginally improved.

The Air Force demonstrated an initial capability to deploy with ALIS with our recent Theater Security Package deployment in the Pacific; however, ALIS is currently labor-intensive for our maintainers and support personnel. In some of our Aircraft Maintenance Units,

maintenance Airman are assigned to work ALIS issues as a primary job. This has a significant impact to our already stretched maintenance workforce, negatively affecting flight line operations and workforce development. I remain concerned about the future of ALIS and the impact it has on our growing fleet.

In August of 2017, the Air Force Digital Services conducted a two-day study of ALIS and the processes used to develop ALIS. In that investigation, their opinion was that methodology and resources used to develop ALIS does not deliver the required warfighting capability that the Air Force needs.

We are working with the F-35 Joint Program Office in order to request Air Force Digital Services to conduct a more in-depth study so we can fully understand the issues. This more in-depth study is imperative to better inform requirements for future ALIS development. Now is the right time to address the shortcomings of ALIS and future development. The JSF enterprise needs a new methodology and plan with measurable, attainable milestones going forward.

CONCLUSION

In conclusion, the United States Air Force remains confident the F-35A provides the survivability, lethality, and maintainability the Combat Air Force needs to meet current and emerging world-wide threats. We look forward to seeing the fleet employ full warfighting capability now that it's been delivered in 2018. The Air Force will continue to work closely with our sister services and the Joint Program Office to ensure the right capabilities are delivered and any challenges are prioritized. Our initial experiences with our Block 3i aircraft give us confidence we are on the right path. As our Chief of Staff of the Air Force, General Goldfein, recently stated

“Air and Space superiority are not American birthrights. They must be fought for and won.”
Finishing the F-35A System Development and Demonstration program of record and transitioning to Block 4 follow-on modernization are critical to ensuring the Air Force is ready to fly, fight, and win when called upon. I thank the committee for their support of the Armed Forces and our nation.
Thank you for the invitation and for allowing me to speak with you today.