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THE HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES

STATEMENT OF

REAR ADMIRAL D. H. MILLER III
DIRECTOR, AIR WARFARE
CHIEF OF NAVAL OPERATIONS

BEFORE THE

TACTICAL AIR AND LAND FORCES SUBCOMMITTEE

OF THE

HOUSE ARMED SERVICES COMMITTEE

ON

THE NAVY'S F-35C PROGRAM

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Introduction

Chairman Turner, Ranking Member Tsongas and distinguished Members of the Subcommittee, thank you for the opportunity to appear before you today to discuss how the Navy's F-35C, with fifth generation capabilities and fully integrated into our carrier Air Wings, will meet warfighting needs. The F-35C will form the backbone of Navy air combat superiority for decades to come complementing the tactical fighter fleet with a dominant, multirole, fifth-generation aircraft capable of projecting U.S. power and deterring potential adversaries.

The Carrier Air Wing of the future must rely on the capacity and capabilities of both fourth and fifth-generation aircraft. The F-35C provides unique capabilities that cannot be matched by modernizing fourth-generation aircraft. Stealth technology and advanced integrated systems enable the F-35C to counter rapidly evolving air-to-air and surface-to-air threats. Fifth-generation advancements shift focus from kinematics to information collection and dissemination in the real-time battle space, enabling us to break enemy kill chains while facilitating our own. Coupled with the proven capabilities and capacity of a continually improving and relevant Carrier Air Wing, the F-35C greatly enhances a Carrier Strike Group's battle space awareness, lethality and survivability to prevail in a high-end conflict.

The Fiscal Year (FY) 2017 President's Budget (PB-17) supports the F-35C procurement to complete System Development and Demonstration (SDD), Initial Operations Test and Evaluation (IOT&E), Initial Operational Capability (IOC) and to transition squadrons on a timeline that supports the first operational deployment on USS CARL VINSON (CVN 70) in FY 2021. The Navy also has a robust sustainment plan that supports operating this new aircraft and properly training maintenance crews and Carrier Air Wing aviators.

Continuous maintenance and modernization of both fourth and fifth-generation aircraft is critical to pace the rapidly evolving threat. Readiness recovery remains a key concern as the fiscally constrained environment has challenged our ability to sustain current strike fighter inventory. Investing in new aircraft and capabilities while ensuring adequate levels of readiness are both necessary to support current and enduring Naval Aviation requirements. To this end, Follow-on Modernization (FoM) and weapons integration for the F-35C are critical aspects of the entire F-35 program.

Ultimately, with F-35C integrated and interoperable in the Carrier Air Wing, the Carrier Strike Group of the future will be more lethal, survivable and able to accomplish the entire spectrum of mission sets to include immediate response to high-end threats. The Navy remains dedicated to a capabilities-focused approach as we evolve the Carrier Air Wing and the Carrier Strike Group of the future.

Operator's Perspective

Operations, exercises and milestones achieved over a four-year period at Eglin Air Force Base in Florida, Naval Air Station Lemoore in California and the U.S. Navy's Operational Test Squadron at Edwards Air Force Base in California demonstrate the program is on a positive trajectory. Early assessment of fourth and fifth-generation integration continues to indicate there will be improved survivability and lethality across all Carrier Air Wing assets against modern threats, especially after the full warfighting capability in Block 3F is delivered.

Progress has been made in the tactical integration of fourth and fifth-generation fighters. Further development is ongoing and continuous to include integrating F-35C into each class at the U.S. Navy Fighter Weapons School (TOPGUN). Fleet pilots using Delta Flight Path, the aircraft's precision landing mode, are experiencing enormous gains in safety, efficiency and

effectiveness. Last month, the first aircraft arrived at Naval Air Station Lemoore for the stand-up of the second F-35C site with introduction of the aircraft to the operational fleet coming in the near future.

System Development and Demonstration (SDD)

SDD delivers the full Block 3F capability to the warfighter and is a prerequisite to commencing IOT&E. F-35C IOC is defined by completion of IOT&E and one Block 3F F-35C squadron capable of deploying onboard an aircraft carrier for extended operations. The IOC definition also includes the requirement to properly man, train and equip required squadron personnel. IOC is therefore event driven and is directly impacted by IOT&E schedule. The Navy is pursuing selective testing when assets and capabilities are available in order to efficiently accomplish portions of the Test and Evaluation Master Plan.

The Navy is actively engaged to resolve SDD schedule risk. This includes correcting a weapons station overloading condition identified in early weapons carriage testing in order to carry and employ the AIM-9X within the full envelope of the aircraft. It also includes continued progress on catapult ride quality for aviators (also referred to as Nz oscillations) while launching from the aircraft carrier. Additionally, the Helmet Mounted Display system has posed a problem for night shipboard operations which adversely affects all ship-based aircraft. The Navy is working closely with the other Services and partners, the Joint Program Office (JPO) and Lockheed Martin to develop and test a solution that allows the aircraft to operate safely in all illumination and weather conditions at sea.

The Navy is working with all stakeholders to complete SDD in accordance with the program of record timeline while monitoring test point completion. Prior challenges with software stability have pressurized the schedule. Ultimately, the Navy requires the advertised 3F

capability to include full weapons and aircraft envelope so our warfighters can meet the current threat.

As one of three key component systems of the F-35C, timely delivery of the Autonomic Logistics Information System (ALIS) is extremely important. The Navy is working directly with the U.S. Marine Corps and the JPO to ensure ALIS will meet the Navy's IOC requirements by the end of SDD and adequately support Department of the Navy activities; specifically, overcoming bandwidth limitations unique to operations at sea. Additionally, squadrons at sea for extended periods of time must be able to receive ALIS software upgrades. This effort should ensure that newer versions of software are "backward compatible" with older versions of software to reduce mission impact. Navy sustainment experts continue to examine ALIS compatibility with legacy information systems and the ALIS future software technical roadmap. Although these are being closely tracked and will require continued efforts, they currently present minimal risk to the Navy's F-35C IOC. ALIS 3.0 is expected to field in early calendar year 2018, which is ahead of the expected F-35C IOC date.

Procurement

PB-17 increases F-35C procurement over the Future Years Defense Program (FYDP) by ten aircraft, and requests $592 million in Research, Development, Test, and Evaluation, Navy (RDT&E) and $1.3 billion in Aircraft Procurement, Navy (APN). The PB-17 procurement ramp optimizes the squadron transition timeline based on current force structure and future deployment schedules. The Navy is committed to procuring F-35Cs to achieve essential fifth-generation capability for "what it takes to win" across all deployed Carrier Air Wings.

As additional aircraft arrive to the Fleet, a commensurate expansion of training throughput for both maintainers and pilots is necessary, as well as the appropriate military construction to support operations and training.

Follow-on Modernization (FoM)

For the Carrier Air Wing of the future to pace a rapidly evolving threat, the F-35C FoM plan must remain on schedule. It is not enough to just evolve the significant capabilities of the F-35C, but equally important to ensure those capabilities are integrated and interoperable with existing ships and Carrier Air Wing aircraft within the Carrier Strike Group. Critical enablers for Naval Integrated Fire Control (NIFC) only exist in Block 4 and the Navy's ability to conduct NIFC in the future is the cornerstone of how the future Carrier Strike Group will fight. Weapons integration, radar improvements, electronic warfare capabilities, interoperability, and real-time information dissemination must also continue to progress in order to guarantee mission success in the future high-end threat environment. The Navy is working closely with the United States Air Force and United States Marine Corps to ensure the FoM Capability Development Document adequately addresses warfighter requirements.

Closing

The dynamic security environment requires the speed, endurance, flexibility and autonomous nature of the Navy's Carrier Strike Group. The nation needs the tremendous capabilities of the F-35C on its carrier flight decks. The aircraft's stealth characteristics, long-range combat identification and ability to penetrate threat envelopes while fusing multiple information sources into a coherent picture will transform the joint and coalition view of the battlefield. The F-35C's capability will provide decision superiority to the nation's warfighters

to ensure that if deterrence fails, the United States can conduct decisive combat operations to defeat any enemy.