LOCKHEED MARTIN CORPORATION
LOCKHEED MARTIN AERONAUTICS COMPANY

PRESENTATION TO THE ARMED SERVICES COMMITTEE

UNITED STATES SENATE

SUBJECT: F-35 JOINT STRIKE FIGHTER PROGRAM

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Mr. Chairman, Members of the Committee

On behalf of Lockheed Martin and the F-35 industrial team that I represent today, thank you for the opportunity to participate on this panel with VADM Venlet and Mr. Sullivan. For the record, I would like to touch on two important points in my brief opening statement. The first is the value proposition of the F-35 program and the second is the current performance of the program.

The value proposition of the F-35 starts with the driving requirement to recapitalize the three tactical air services of the United States plus those of our closest allies-those nations that stand with us in coalition operations. The program will reduce the cost of the military enterprise which for the past two decades has been engaged in sustained, joint-service, coalition based peacekeeping and combat operations like the Balkans, Iraq and Afghanistan. The F-35 will be a powerful enabler of coalition building that incorporates advanced technologies to ensure it will be effective against future threat scenarios that are likely to be far more stressing in other regions of the world. In the case of individual services and individual nations, there is real opportunity to reduce expensive infrastructure while introducing revolutionary new capabilities. The Marine Corps's intention to replace the F-18, AV-8 and EA-6 with the F-35 is estimated by the Marines to save a billion dollars per year when the transition is complete. Across the current partnership, F-35 will replace A-10, F-16, F-18, AV-8B, EA-6B, Tornado, and Italian AMX aircraft.

The F-35 also leverages the economies of commonality and scale in procurement and sustainment that come with much broader participation than traditional single-service fleet recapitalization. From the industrial perspective, we are also recapitalizing the aerospace industry with new manufacturing technologies as we introduce production efficiencies across the industrial partnership. The F-35 program today involves more than 1,300 suppliers in 47 states and supports nearly 127,000 direct and indirect U.S. jobs. In addition, we are implementing global industrial partnerships as part of the Government to Government agreements. Those industrial ties will enhance the economic relationships between the U.S. and participating allied nations and will underscore the military ties that enable coalition burden sharing in the future. This international participation also makes F-35 potentially the largest program in the Department of Defense that can favorably affect the U.S. balance of trade. It is clear that capturing the full potential of F-35 depends on maintaining a strategic perspective and making decisions that will enable the future success of this program. In this new reality, the value proposition is more relevant today than ever before.

Next, I would like to provide an update on the current performance of the program. I am pleased to report that we are making significant progress on the current plan and in just the past week we have delivered our second F-35C Navy carrier variant and the first two production F-35s to the Air Force. From a technical perspective, we believe the risks that are part of the introduction of this revolutionary F-35 weapon system are now understood. There are several critical elements still ahead of us, mainly in the full implementation of advanced software fusion, integration of weapons and demonstration of full shipboard compatibility. That said, early testing has allowed us to understand our main technical challenges and develop resolution paths for them. Examples of these are the integration of the Helmet Mounted Display into the next generation cockpit and mission system and flying qualities in the transonic flight regime. Where we anticipate challenges, we try to test early and identify shortcomings and we've done that on F-35. Our main issues have been well publicized and we are on path to resolve them. It is worth noting that the performance of the STOVL variant in flight test has been very good since November. Our F-35B test airplanes at the Naval Air Test Center are all performing vertical landings and we are on track for shipboard testing this fall. We expect to deliver our third Navy F-35C in the next few weeks and will begin

shipboard compatibility testing at Lakehurst this fall. In addition, all of our USAF CTOL test jets are in active testing at the Air Force Test Center in California. Our mission system testing is underway and software stability and sensor performance have been exceptional.

Since the new schedule was put in place in late 2010, our factory performance has been on plan. We have essentially eliminated out-of-station work in the factory and are now delivering complete jets to the flight line. We have recently delivered our first two production jets to the US Air Force.

In the Procurement Phase: The initial F-35 acquisition strategy was originally structured around six Low Rate Initial Production, or LRIP, lots of about 250 airplanes that would employ cost-plus type contracts. In 2010, the industry team agreed to move to a Fixed Price-type contract with the fourth LRIP Lot, two years earlier than originally planned. This agreement occurred after 31 production airplanes were under contract with none delivered.

During LRIP Lots 1 through 3, our initial performance across our supply chain was heavily influenced by the incorporation of changes identified in the 2004 weight reduction redesign, changes required for our suppliers to complete full qualification testing of their components and changes found in early ground and flight testing. This change incorporation resulted in inefficiencies in the manufacturing process due to late delivery of parts, incorporation of late parts out of the normal manufacturing sequence and transfer of some assembly work to the flight line where completion is much less efficient. These impacts that are due to the concurrent development, test and production activity are captured in a term called concurrency cost and includes future modifications that may be incorporated later in the life cycle of the jets in that contract. The team is focused now on any opportunity to reduce the concurrency estimate and improve the final cost to complete on these early production lots. All cost overruns are shared between the contractor and U.S. Government in this phase.

In LRIP lots 4 and 5, these are the initial fixed price type contracts which Lockheed Martin has agreed to take two years earlier than the original acquisition plan. Our factory performance metrics are now showing significant improvement in all key areas, we are experiencing excellent learning curve reductions in assembly hours and we have essentially eliminated all traveled work. By the end of 2011, we will have sufficient actual cost data to know the projected cost for the 32 airplanes in LRIP 4. We have recently submitted our proposal for LRIP 5 which includes 35 airplanes and are in the initial negotiations for that contract. It is important to note that our LRIP 4 settlement was significantly below the government's estimate and our initial proposal for LRIP 5 is also below the December 2010 government estimate.

Future Production: Future production contracts are expected to be Firm Fixed Price and will combine both U.S. and Allied partner procurements into a single contract buy. It is important for future affordability to provide stability in annual orders and to move to higher, more efficient production rates as quickly as practical. It is important to remember that the F-35 program has invested heavily in highly automated, precision and motion-based manufacturing infrastructure in our factories and throughout our global supply chain to ensure industrial capability to deliver the F-35 at the efficient production rates envisioned. However, over the last two years, program adjustments have moved approximately 240 U.S. airplanes out of the near-term production profile into future years. There has also been an additional movement of some planned partner nation procurements in response to those changes. This movement is the single largest contributor to the increase in unit cost for the F-35. We are fully cognizant of the risk of retrofit to airplanes procured before adequate structural testing is complete, but we believe that risk has been reduced significantly with the production order reductions already

applied and will be further reduced when two lifetimes of durability testing for all three variants is completed in 2013. At some point the potential cost risk of retrofit for a limited number of airplanes is clearly much less than the cost benefit to all future airplanes that comes with accelerated achievement of production cost improvement with higher production volume. Our most significant cause for concern is the retention of efficient production profiles in the future to capture the economies of scale that allow affordable recapitalization of the U.S. and Allied multi-role fighter force.

For Sustainment: We are fully engaged with the F-35 Program Office and the operating services of the U.S. and partner nations to ensure that operating and support costs are fully characterized and optimized. We remain absolutely convinced that the focus on F-35 supportability from the beginning has resulted in real design features that will enhance reliability, reduce maintenance hours per task and facilitate unit-level, service-level and coalition-based operations. We are also certain that moving to a single family of airplanes will allow significant reductions in infrastructure relative to the many independent logistics pipelines that support today's variety of operational fleets.

In summary, we understand the Committee's overarching concern to see schedule and cost control and predictability going forward. We share that concern and are fully committed to drive down costs in the face of challenging fiscal realities. Lockheed Martin is attacking every element of cost within our operation, both direct and indirect. We have invested over $1 billion in factory efficiencies in our facility in Fort Worth and another $450 million in information system improvements which will streamline our operations across the F-35 enterprise. As a program, we are investing in affordability initiatives in our supply chain and we are working closely with our Government counterparts to develop a should-cost approach to future production lots.

Mr. Chairman, the Joint Strike Fighter program is a first of its kind – three variants, nine international partners, more than 1,300 global suppliers. It was conceived 20 years ago for the exact situation we find ourselves in today – global economic pressures in an increasingly uncertain security environment that regularly requires our allies to join forces. Now more than ever this new reality requires a value proposition that only the F-35 program can deliver. While we have experienced and overcome significant challenges to date, there is no doubt that the F-35 will be the most relied upon aircraft for the U.S. and our allies for decades to come.

On behalf of Lockheed Martin and the F-35 industry team thank you again for this opportunity. I look forward to your questions.