

STATEMENT OF
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U.S. DEPARTMENT OF DEFENSE
BEFORE THE
SENATE ARMED SERVICES COMMITTEE
ON
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Mr. Chairman, Senator McCain, and distinguished members of the committee, thank you for the opportunity to appear before you to discuss the Joint Strike Fighter (JSF) program. Since I last testified before you in March of last year, there have been many updates to the program. Today I would like to focus on three of the most significant updates.

First, when I testified last year, there was a considerable difference in the cost and schedule estimates between the Joint Program Office and CAPE. Since then, Dr. Carter has assigned a new Program Director, VADM Venlet, who directed an in-depth technical baseline review. This review, conducted by literally hundreds of individuals over a period of six months, has significantly changed the program office estimates and provided in-depth information to the entire Department including my office. In addition, the Department has developed greater insight into the contractor's production performance, as initial low rate production lots near completion. As a result, the program office life cycle cost estimate is now consistent with our estimate.

Last year, I told you that we predicted that the average cost per aircraft would be somewhere between the Program Office estimate of \$80 million per aircraft in FY02 dollars and our estimate of \$95 million per unit. Our current estimate is approximately \$95 million and has been in the low \$90's since 2008. This translates to \$113 million per aircraft in Fiscal Year 2011 dollars.

The estimates that continue to change are for development cost and schedule. As a result of the insights from the Program Office's technical baseline review, CAPE now estimates that development will take an additional 1½ years and cost approximately \$4.5 billion more than we estimated in the spring of 2010. These estimates are in line with the current Program Office estimates and are funded in the PB12 Future Years Defense Program (FYDP).

There are two key drivers behind the increase in development cost and schedule. The first is software and mission systems integration. CAPE has long said that software would be a driving factor in the time necessary to complete development; however, we underestimated how significant a driver it would be. The F-35 is a sophisticated aircraft

with many new mission systems that require integration. The software necessary to seamlessly integrate these systems is taking longer to develop than previously estimated.

Another reason for the increase in development cost and schedule is the Marine Corps' Short Take-off and Landing, or STOVL variant. The STOVL variant accounts for approximately 40 percent of the increase in development costs. This is why Secretary Gates put this variant on "probation" for 2 years.

Secondly, I would like to discuss our estimate of the Joint Strike Fighter operating and support costs. CAPE conducted an extensive independent analysis of the O&S costs of JSF this past year. Experts from the Navy and Air Force participated in our effort. Our estimate, while developed independently, is consistent with that of the Program Office.

Our analysis indicates that the costs to operate and sustain the JSF are less than the F-22, about the same as the F-15C/D, and more than the F-16 and F-18. Given the significant increase in capability, it is not unreasonable that JSF costs more to operate and sustain than some legacy aircraft. However, the fact that it will cost about 33 percent more per flight hour to operate JSF relative to the F-16 and F-18 aircraft it is replacing gives the department a significant bill. CAPE is engaged in supporting Dr. Carter and the Program Office in their efforts to get these operating and support costs down before the aircraft are fielded in numbers.

Finally, I would like to report on the strike-fighter shortfall. Last year I stated that CAPE would conduct an in-depth study of the strike-fighter shortfall. Working with the services, we completed that study this past year. For the Air Force, their engineering analysis showed that the F-16s in particular have significantly greater service life than previously estimated. The net result of the F-35 procurement ramp associated with the 2012 President's Budget and the most recent projections of legacy aircraft lifespan drop the Air Force shortfall down to between 40 and 100 aircraft as we reported in the 30-year aviation plan. This shortfall is relative to a 2,000 plane inventory total. Air Force and CAPE agree that this shortfall is manageable.

The Department of Navy's aircraft shortfall was of greater concern, and the restructuring of the JSF program increased the magnitude, so additional measures were

needed to ensure continued capability for the operational fleet. Department of Navy is addressing the shortfall with several management and investment measures to include a fully funded service life extension program for approximately 150 F/A-18 aircraft. While these management measures help address the shortfall, we judged that they would not be sufficient so Secretary Gates added 41 F/A-18 E/Fs to the PB 2012 FYDP. These aircraft, combined with the additional nine aircraft added by the Congress in 2011 reduce the previous shortfall of 100 aircraft about in half. Navy assesses and CAPE agrees that the latest shortfall projection is manageable.

That concludes the updates I have for you today. Thank you again for the opportunity to appear before you.