Honorable Curt Weldon
Chairman
Subcommittee on Military Research and
Development
Committee on National Security
U.S. House of Representatives
Washington, D.C. 20515

## Dear Mr. Chairman:

At your request, the Congressional Budget Office has estimated the cost of three tactical aircraft programs to reflect changes resulting from the 1997 Quadrennial Defense Review (QDR). CBO estimates that the Administration's programs to modernize Air Force, Navy, and Marine Corps tactical air forces would cost about \$290 billion over the 1999-2026 period, excluding about \$31 billion in costs that have been incurred through 1998. (All of the estimated costs in this letter are expressed in constant 1998 dollars.) Based on the Administration's plan, annual funding for the three programs would increase from \$6.5 billion in 1999 to a high of about \$15 billion in 2010. Annual funding would average about \$10.4 billion over the 27-year period. The enclosed table displays a breakdown of CBO's estimates by aircraft and type of cost.

**F/A-18E/F.** The Navy would use E and F models of the F/A-18 aircraft in fighter and attack roles. It plans to buy 548 of the new aircraft to replace older models of the F-18 and F-14 aircraft. Funding has already been provided to buy 32 aircraft, although the E and F models are still undergoing development.

CBO estimates that completing development and buying 516 E/F aircraft would cost about \$34 billion. This estimate assumes that production would extend through 2010 and that annual production rates would reach 48 aircraft. It also assumes that the Navy would buy the aircraft under multiyear contracts beginning in 2000 and that correcting a performance deficiency known as wing-drop would require minimal design changes.

**F-22.** The Air Force would acquire 339 F-22 fighters to replace F-15s in air superiority and fighter roles. The F-22 is currently in development, and the Air Force has requested funds to buy two aircraft in 1999 for testing. It wants to begin production in 2000.

CBO estimates that the remaining costs of the F-22 program would total about \$45 billion. We assume that production would begin in 1999 and extend through 2011 with annual production rates reaching 36 aircraft. For costs after 2003, the estimate reflects Air Force plans to buy the aircraft using multiyear contracts. The estimate also reflects our assessment of the contractors' initiatives to further reduce the aircraft's production costs by redesigning parts and by reorganizing purchases of materials and manufacturing processes.

Joint Strike Fighter (JSF). The JSF program calls for developing an aircraft that would have three versions with more than the usual number of common parts to replace certain aircraft in the Air Force, Navy, and Marine Corps. The Air Force would buy 1,763 of one version to replace the F-16; the Navy would buy 480 JSF aircraft to replace its A-6 fleet and some F/A-18 aircraft; and the Marine Corps plans to purchase 609 JSF aircraft to replace its fleet of F/A-18s and AV-8Bs. The JSF is currently in the concept demonstration phase of development, with engineering and manufacturing development scheduled to follow in 2001. Under the current plan, production would start on the Air Force version in 2005. Production of the Marine Corps version is currently scheduled to begin in 2006, with Navy variants beginning production in 2008.

CBO estimates that between 1999 and 2026 the Joint Strike Fighter would cost about \$212 billion to develop and purchase. The estimate is based on historical relationships between an aircraft's cost and technical characteristics such as weight and performance. It also draws upon estimated costs for electronics, engines, and other subsystems that would be used in the F-22.

You also asked CBO to estimate the budgetary impact of starting to buy the Navy's version of the JSF in 2005 instead of 2008 as planned by the Administration. (We assume production schedules for the Air Force and Marine Corps variants would remain as planned.) CBO estimates that the cumulative effect would be negligible in constant dollars, but that yearly

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expenditures for the three programs would reach a peak of \$16 billion in 2008 instead of about \$15 billion in 2010. The enclosed figure illustrates the budgetary impact.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Jo Ann Vines.

Sincerely,

June E. O'Neill Director

## **Enclosures**

cc: Honorable Owen B. Pickett Ranking Minority Member

> Honorable Floyd Spence Chairman Committee on National Security

> Honorable Ike Skelton Ranking Minority Member Committee on National Security

Enclosure 1 Honorable Curt Weldon

## CBO ESTIMATES OF COSTS TO COMPLETE THE F/A-18E/F, F-22, AND JOINT STRIKE FIGHTER PROGRAMS OVER THE 1999-2026 PERIOD (Costs in billions of 1998 dollars)

	F-18	F-22	JSF	Total
Quantity				
Number of Aircraft	516 <sup>a</sup>	339	2,852	3,707
		Costs <sup>b</sup>		
Development	c	5	21	26
Procurement	33	40	191	264
Military Construction	_0	<u> </u>	<u> </u>	<u> </u>
Total	34	45	212	290

NOTE: Details may not add to totals due to rounding.

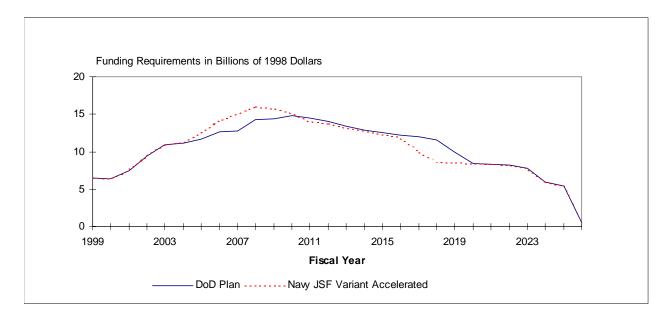
a. The current F/A-18E/F program calls for purchasing 548 E/F aircraft; 32 aircraft have already been funded.

b. Excludes \$31.4 billion in sunk costs. That amount covers some funding for research and development, procurement, and military construction-\$10.0 billion for the F/A-18E/F, \$19.4 billion for the F-22, and \$2.1 billion for the JSF.

Less than \$500 million.

Enclosure 2 Honorable Curt Weldon

## CBO ESTIMATES OF F/A-18E/F, F-22, AND JSF ANNUAL ACQUISITION FUNDING REQUIREMENTS



SOURCE: Congressional Budget Office.

NOTE: Funding includes all costs except annual operating and support costs.