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TACTICAL AIRCRAFT

Opportunity to Reduce Risks in the Joint Strike Fighter Program with Different Acquisition Strategy

GAO Accountability·Integrity·Reliability

Highlights

Highlights of GAO-05-271, a report to Congressional Committees

Why GAO Did This Study

The Department of Defense's (DOD) Joint Strike Fighter (JSF) program aims to develop and field more than 2,400 stealthy fighter planes with greater capabilities than DOD's aging tactical aircraft. JSF is DOD's most costly aircraft program, with estimated life-cycle costs approaching $600 billion.

Since the program began, in 1996, JSF has experienced significant cost and schedule overruns. While the program has worked to prepare more accurate cost and delivery estimates, upcoming investment decisions will indicate the level of risk DOD is willing to accept as the program moves forward and annual outlays significantly increase.

GAO is required by law to review the JSF program annually for the next 5 years. This first report analyzes JSF's business case for delivering new capabilities to the warfighter and determines whether JSF's current acquisition strategy follows best practices.

What GAO Recommends

GAO recommends that DOD establish an executable program consistent with best practices and DOD policy regarding knowledge-based, evolutionary acquisitions. If DOD moves the program forward without capturing adequate knowledge, it should not make investments to increase production capability until it has. DOD partially concurred but believes its current practices achieve the recommendations' objectives.

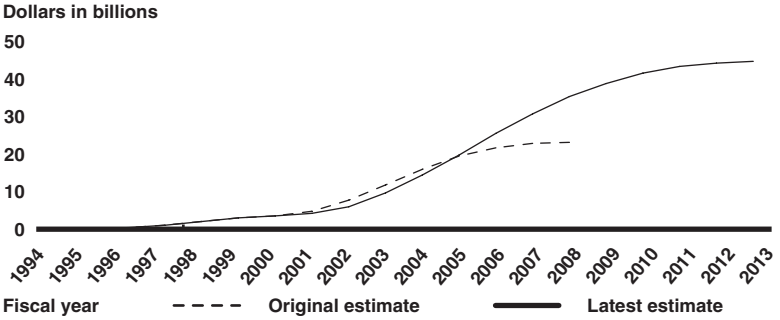
www.gao.gov/cgi-bin/getrpt?GAO-05-271.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Michael J. Sullivan at (202) 512-4841 or sullivanm@gao.gov.

What GAO Found

Several program changes have made the original JSF business case unexecutable. Since initial estimates in 1996, development costs have grown over 80 percent, or $20 billion. Program acquisition unit costs have increased by 23 percent, or $19 million, since 2001. In addition, delivery of the first JSFs to the warfighter has been delayed 2 years so far. Continued program uncertainties make it difficult to estimate the resources needed for the program. For example, the full impact of recent aircraft design changes on the program may not be fully understood for some time, and the Navy, Air Force, and Marines—the program's primary customers—have not determined the number of aircraft they expect to buy. Given the uncertainties, the program could use more time to gain knowledge before moving forward. DOD will also be challenged to deliver on future business case agreements if program accountability continues to be compromised by frequent changes in program management.

Original and Latest Development Cost Estimates



Source: GAO analysis of DOD data.

The program's current acquisition strategy does not follow a knowledge-based, evolutionary approach as dictated by best practices and DOD policy. Such a strategy is key to successfully executing a new JSF business case. However, JSF preliminary plans call for the developer to manufacture about 20 percent of the JSF fleet in the low-rate initial production phase—at a cost of about $50 billion—while still developing JSF technologies and integrating and demonstrating the product design, making cost and schedule increases likely. To achieve low-rate production capacity, DOD will need to invest in personnel, facilities, and tooling—increasing its production investment from $100 million a month in 2007 to $1 billion a month in 2013---before flight testing is completed. Problems discovered late in flight tests could result in further cost increases and delivery delays, as well as reduced quality and reliability. To execute its strategy, the JSF program will need to compete with other large programs for scarce funding, which could be a significant challenge because JSF's funding profile assumes an unprecedented $225 billion over the next 2 decades—an average of $10 billion a year. Finally, the strategy assumes the use of a cost reimbursement contract for initial production, placing a high burden of risk on the government, given the large number of aircraft.