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V-22 OSPREY AIRCRAFT

Assessments Needed to Address Operational and Cost Concerns to Define Future Investments

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Highlights

Highlights of GAO-09-692T, a testimony before the Committee on Oversight and Government Reform, House of Representatives

Why GAO Did This Study

Since the 1980s, the V-22, developed to transport combat troops, supplies, and equipment for the U.S. Marine Corps and to support other services' operations, has experienced several fatal crashes, demonstrated various deficiencies, and faced virtual cancellation—much of which it has overcome. Although recently deployed in Iraq and regarded favorably, it has not performed the full range of missions anticipated, and how well it can do so is in question.

Given concerns about the V-22 program, GAO recently reviewed and on May 11, 2009, reported on MV-22 operations in Iraq; strengths and deficiencies in terms of the capabilities expected of the V-22; and past, current, and future costs. In that report, GAO recommended that the Secretary of Defense require (1) a new alternatives analysis of the V-22 and (2) that the Marine Corps develop a prioritized strategy to improve system suitability, reduce operational costs, and align future budget requests. The Department of Defense (DOD) concurred with the second recommendation, but not the first. GAO believes both recommendations remain valid. This testimony highlights GAO's findings from that report.

In speaking of the V-22, we are actually speaking of two variants of the same aircraft. The MV-22 is used by the Marine Corps; and the CV-22 by the Air Force to support special operations. This statement largely focuses on the MV-22, but also refers to the V-22 and CV-22.

View GAO-09-692T or key components. For more information, contact Michael J. Sullivan at 202-512-4841 or sullivanm@gao.gov.

What GAO Found

As of January 2009, the 12 MV-22s in Iraq successfully completed all missions assigned in a low-threat theater of operations—using their enhanced speed and range to deliver personnel and internal cargo faster and farther than the legacy helicopters being replaced. However, challenges to operational effectiveness were noted that raise questions about whether the MV-22 is best suited to accomplish the full repertoire of missions of the helicopters it is intended to replace. Additionally, suitability challenges, such as unreliable component parts and supply chain weaknesses, led to low aircraft availability rates.

Additional challenges have been identified with the MV-22's ability to operate in high-threat environments, carry the required number of combat troops and transport external cargo, operate from Navy ships, and conduct missions in more extreme environments throughout the world. While efforts are underway to address these challenges, it is uncertain how successful they will be as some of them arise from the inherent design of the V-22.

The V-22's original program cost estimates have changed significantly. From 1986 through 2007, the program's Research, Development, Test, and Evaluation cost increased over 200 percent—from $4.2 to 12.7 billion—while the cost of procurement increased 24 percent from $34.4 to $42.6 billion. This increase coincided with significant reductions in the number of aircraft being procured—from nearly 1,000 to less than 500—resulting in a 148 percent increase in cost for each V-22. Operations and support costs are expected to rise. An indication is the current cost per flying hour, which is over $11,000—more than double the target estimate for the MV-22.

After more than 20 years in development, the MV-22 experience in Iraq demonstrated that the Osprey can complete missions assigned in low-threat environments. Its speed and range were enhancements. However, challenges may limit its ability to accomplish the full repertoire of missions of the legacy helicopters it is replacing. If so, those tasks will need to be fulfilled by some other alternative. Additionally, the suitability challenges that lower aircraft availability and affect operations and support costs need to be addressed. The V-22 program has already received or requested over $29 billion in development and procurement funds. The estimated funding required to complete development and procure additional V-22s is almost $25 billion (then-year dollars). In addition, the program continues to face a future of high operations and support cost funding needs, currently estimated at $75.4 billion for the life cycle of the program. Before committing to the full costs of completing production and supporting the V-22, the uses, cost, and performance of the V-22 need to be clarified and alternatives should be re-considered.