

Highlights of GAO-09-520, a report to the Subcommittee on Air and Land Forces, Committee on Armed Services, House of Representatives

## Why GAO Did This Study

From 2008 through 2013, the Department of Defense (DOD) plans to invest over \$16 billion to develop and procure additional unmanned aircraft systems. To more effectively leverage its acquisition resources, DOD recognizes that it must achieve greater commonality among the military services' unmanned aircraft programs. Doing so, however, requires certain trade-offs and complex budget, cost, and schedule interactions.

GAO was asked to assess the progress of selected unmanned aircraft acquisition programs, examine the extent to which the services are collaborating and identifying commonality among those programs, and identify key factors impacting the effectiveness their collaboration. GAO analyzed cost, schedule, and performance data for eight unmanned aircraft systems—accounting for over 80 percent of DOD's total planned investment in unmanned aircraft systems from 2008 through 2013 and two payload programs.

### What GAO Recommends

GAO recommends that DOD (1) direct a comprehensive analysis and develop a strategy to gain commonality among current unmanned aircraft programs and (2) require new programs to demonstrate that opportunities for commonality were adequately assessed. DOD agreed with the recommendations except for the need for a comprehensive analysis. GAO believes this recommendation remains valid.

View GAO-09-520 or key components. For more information, contact Michael J. Sullivan at (202) 512-4841 or sullivanm@gao.gov.

## **DEFENSE ACQUISITIONS**

# Opportunities Exist to Achieve Greater Commonality and Efficiencies among Unmanned Aircraft Systems

### What GAO Found

While proving successful on the battlefield, DOD's unmanned aircraft acquisitions continue to incur cost and schedule growth. The cumulative development costs for the 10 programs GAO reviewed increased by over \$3.3 billion (37 percent in 2009 dollars) from initial estimates—with nearly \$2.7 billion attributed to the Air Force's Global Hawk program. While 3 of the 10 programs had little or no development cost growth and 1 had a cost reduction, 6 programs experienced significant growth ranging from 60 percent to 264 percent. These outcomes are largely the result of changes in program requirements and system designs. Procurement funding requirements have also increased for most programs, primarily because of increases in the number of aircraft being procured, changes in system requirements, and upgrades and retrofits to equip fielded systems with capabilities that had been deferred. Overall, procurement unit costs increased by 12 percent, with unit cost increases of 25 percent or more for 3 aircraft programs. Finally, several programs have experienced significant delays in achieving initial operating capability, ranging from 1 to nearly 4 years.

Several of the tactical and theater-level unmanned aircraft acquisition programs GAO reviewed have identified areas of commonality to leverage resources and gain efficiencies. For example, the Marine Corps chose to procure the Army's Shadow system after it determined Shadow could meet its requirements, and was able to avoid the cost of initial system development and quickly deliver capability to the warfighter. Also, the Navy's Broad Area Maritime Surveillance system will use a modified Global Hawk airframe. However, other programs have missed opportunities to achieve commonality and efficiencies. The Army's Sky Warrior—which is a variant of the Air Force's Predator, is being developed by the same contractor, and will provide similar capabilities—was initiated as a separate development program in 2005. Sky Warrior development is now estimated to cost nearly \$570 million. DOD officials continue to press for more commonality in the two programs, but the aircraft still have little in common.

Although several unmanned aircraft programs have achieved airframe commonality, service-driven acquisition processes and ineffective collaboration are key factors that have inhibited commonality among subsystems, payloads, and ground control stations. For example, the Army chose to develop a new sensor payload for its Sky Warrior, despite the fact that the sensor currently used on the Air Force's Predator is comparable and manufactured by the same contractor. To support their respective requirements, the services also make resource allocation decisions independently. DOD officials have not quantified the potential costs or benefits of pursuing various alternatives, including common systems. To maximize acquisition resources and meet increased demand, Congress and DOD have increasingly pushed for more commonality among unmanned aircraft systems.