



Highlights of [GAO-06-610T](#), a testimony before the Subcommittee on Tactical Air and Land Forces, Committee on Armed Services, House of Representatives

Why GAO Did This Study

The current generation of unmanned aircraft systems (UAS) has been in development for defense applications since the 1980's. As of February 2006, the Department of Defense (DOD) had more than 3,000 unmanned aircraft, about 2,000 of which are supporting ongoing operations in Iraq. DOD's 2006 Quadrennial Defense Review validates the importance of unmanned systems and establishes plans to significantly expand investment in unmanned systems and their use in military operations over the next several years. The Congress has been particularly interested in DOD's approach to determining UAS needs and managing the growing number of UAS programs.

This testimony addresses GAO's prior work and preliminary observations on (1) the operational successes and challenges U.S. forces are experiencing with UAS in combat operations, and the extent to which DOD has taken steps to address challenges; (2) DOD's progress in establishing a strategic plan and oversight framework to guide joint and service-specific UAS development efforts and related investment decisions; and (3) our assessment of the Global Hawk and Predator programs' business cases and acquisition strategies and the lessons learned that can be applied to the Joint Unmanned Combat Air Systems program.

www.gao.gov/cgi-bin/getrpt?GAO-06-610T.

To view the full product, click on the link above. For more information, contact Sharon Pickup at (202) 512-9619 or pickups@gao.gov, or Michael J. Sullivan at (937) 258-7915 or sullivanm@gao.gov.

UNMANNED AIRCRAFT SYSTEMS

Improved Planning and Acquisition Strategies Can Help Address Operational Challenges

What GAO Found

DOD has experienced a high level of mission successes with UAS, but continues to face challenges in fully maximizing the use of these assets. In operations in Iraq and Afghanistan, U.S. forces have used UAS for intelligence, surveillance, reconnaissance, and offensive strike missions in support of joint and service-specific operations. As the numbers of UAS operating in the same airspace as manned aircraft grows, DOD continues to face operational challenges related to interoperability, availability of communications bandwidth, and airspace integration. While DOD and the services have taken some positive initial steps to address these challenges, such as issuing guidance and developing initiatives to improve interoperability, limited progress has been made and the effectiveness of these efforts cannot be adequately assessed until they are fully implemented.

While DOD continues to request funds to support service plans for acquiring UAS, it still lacks a viable strategic plan to guide UAS development and investment decisions. Since GAO last reported, DOD established new oversight bodies and updated its UAS Roadmap, but it is too early to tell how the new entities will interrelate and whether they will be able to influence service plans. Also, the updated roadmap identifies broad goals, desired capabilities, and service acquisition plans, but lacks critical elements, such as a clear link among goals, capabilities, and plans, opportunities for joint endeavors, and funding priorities and needs. Until DOD develops a strategic plan, it will not be well positioned to validate requirements, evaluate and integrate services plans, and establish program and funding priorities, nor will Congress have all the information it needs to evaluate funding requests. Such a plan would also help DOD anticipate and minimize the types of challenges that are being experienced today.

While there have been successes on the battlefield, UAS development programs have shared many of the same problems as other major weapon systems that begin an acquisition program too early, with many uncertainties about requirements, funding, and immature technology, design, and production. Unmanned systems have also experienced similar outcomes—changing requirements, cost growth, delays in delivery, performance shortfalls, and reliability and support problems. Future acquisition programs can learn from past efforts to craft better and less risky acquisition plans. Key steps conducive to success include preparing a comprehensive business case, adopting a knowledge-based and incremental acquisition strategy, and sustaining disciplined leadership and direction. Frequent changes to the Joint Unmanned Combat Air Systems technology demonstration program and recent budget actions raise some questions about the Department's priorities and future directions for UAS. Concerns have also been raised about possible duplication of systems as the services look to expand individual fleets. Ongoing Army and Air Force efforts to coordinate the Warrior and Predator programs are encouraging and could be a model for limiting duplication and fostering jointness and interoperability.