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# Highlights

Highlights of [GAO-05-395T](#), 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 aerial vehicles (UAV) has been under development for defense applications since the 1980s, and as the Department of Defense (DOD) transforms its military operations, UAVs are becoming increasingly vital. Today's testimony identifies (1) GAO's preliminary observations on operational successes and emerging challenges from ongoing GAO work reviewing UAV current operations, (2) the extent to which DOD has developed a strategic plan and oversight body to manage its investment in UAVs, and (3) lessons from GAO's prior work that can be used to promote the efficient development, fielding, and operational use of UAVs.

[www.gao.gov/cgi-bin/getrpt?GAO-05-395T](http://www.gao.gov/cgi-bin/getrpt?GAO-05-395T).

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

## UNMANNED AERIAL VEHICLES

### Improved Strategic and Acquisition Planning Can Help Address Emerging Challenges

#### What GAO Found

Current UAV operations have achieved mission successes, but some challenges are emerging. Among the successes, the Predator UAV has performed traditional intelligence, surveillance, and reconnaissance missions and less traditional close air support and armed strike missions. In addition, certain small UAVs have enabled troops to accomplish their missions at greater distances from enemy positions. Nonetheless, UAV operations have been hampered by certain emerging challenges. For example, some UAVs are not fully interoperable with others, with manned aircraft systems, or even with conventional forces. Certain UAVs are unable to operate in sandstorms or other poor weather conditions, thus forfeiting some of the advantages otherwise available from the sensor payloads. And UAVs increasingly compete for limited bandwidth.

DOD still lacks a viable strategic plan and oversight body to guide UAV development efforts and related investment decisions. DOD has set up a Joint UAV Planning Task Force to guide UAV development and fielding, but the task force has only limited authority and cannot enforce program direction. DOD's UAV *Roadmap* contains some elements of a strategic plan, but it does not describe the interrelationship of service roadmaps to the DOD *Roadmap* or clearly identify funding priorities. Thus, DOD may not be well positioned to make sound program decisions or establish funding priorities, nor will Congress have all the information it needs to evaluate funding requests. Such a plan would also help DOD minimize the types of challenges that are emerging.

DOD has not consistently implemented best practices in developing and fielding UAVs. GAO has found that programs have succeeded when DOD has used innovative development processes, relied on evolutionary technology development, ensured high-level management attention, and constrained resources and relied on achievable technologies. Development has been hampered when DOD has insisted on requirements that outstripped technology, rushed into production before completing testing, used overly ambitious schedules, or engaged in concurrent testing and production.

#### Global Hawk UAV



Source: U.S. Air Force.