



Highlights of [GAO-10-331](#), a report to the Subcommittee on Air and Land Forces, Committee on Armed Services, House of Representatives

Why GAO Did This Study

The Department of Defense (DOD) requested about \$6.1 billion in fiscal year 2010 for new unmanned aircraft systems (UAS) and for expanded capabilities in existing ones. To support ongoing operations, the Air Force and Army have acquired a greater number of larger systems. GAO was asked to determine the extent to which (1) plans were in place to account for the personnel, facilities, and communications infrastructure needed to support Air Force and Army UAS inventories; (2) DOD addressed challenges that affect the ability of the Air Force and the Army to train personnel for UAS operations; and (3) DOD updated its publications that articulate doctrine and tactics, techniques, and procedures to reflect the knowledge gained from using UAS in ongoing operations. Focusing on UAS programs supporting ongoing operations, GAO reviewed the services' program and funding plans in light of DOD's requirements definition and acquisition policy; interviewed UAS personnel in the United States and in Iraq about training experiences; and reviewed joint, multiservice, and service-specific publications.

What GAO Recommends

GAO recommends, among other things, that DOD conduct comprehensive planning as part of the decision-making process to field new systems or expand existing capabilities and that DOD develop a results-oriented strategy for addressing training challenges. DOD generally agreed with the recommendations.

View [GAO-10-331](#) or [key components](#). For more information, contact Sharon Pickup at (202) 512-9619 or pickups@gao.gov.

UNMANNED AIRCRAFT SYSTEMS

Comprehensive Planning and a Results-Oriented Training Strategy Are Needed to Support Growing Inventories

What GAO Found

DOD continues to increase UAS inventories, but in some cases, the Air Force and the Army lack robust plans that account for the personnel, facilities, and some communications infrastructure to support them. Regarding personnel, the Air Force and the Army have identified limitations in their approaches to provide personnel to meet current and projected UAS force levels, but they have not yet fully developed plans to supply needed personnel. Further, although DOD has recently requested funding and plans to request additional funds, the Air Force and the Army have not completed analyses to specify the number and type of facilities needed to support UAS training and operations. Having identified a vulnerability to the communications infrastructure network used to control UAS missions, the Air Force is taking steps to mitigate the risk posed by a natural or man-made disruption to the network but has not formalized a plan in the near term to provide for the continuity of UAS operations in the event of a disruption. While DOD guidance encourages planning for factors needed to operate and sustain a weapon system program in the long term, several factors have contributed to a lag in planning efforts, such as the rapid fielding of new systems and the expansion of existing ones. In the absence of comprehensive planning, DOD does not have reasonable assurance that Air Force and Army approaches will support current and projected UAS inventories. The lack of comprehensive plans also limits the ability of decision makers to make informed funding choices.

DOD has not developed a results-oriented strategy to resolve challenges that affect the ability of the Air Force and the Army to train personnel for UAS operations. GAO found that the limited amount of DOD-managed airspace adversely affected the amount of training that personnel conducted to prepare for deployments. As UAS are fielded in greater numbers, DOD will require access to more airspace for training; for example, DOD estimated that based on planned UAS inventories in fiscal year 2013, the military services will require more than 1 million flight hours to train UAS personnel within the United States. Further, Air Force UAS personnel and Army ground units have limited opportunities to train together in a joint environment, and they have not maximized the use of available assets during training. Current UAS simulators also have limited capabilities to enhance training. DOD has commenced initiatives to address training challenges, but it has not developed a results-oriented strategy to prioritize and synchronize these efforts. Absent a strategy, DOD will not have a sound basis for prioritizing resources, and it cannot be assured that the initiatives will address limitations in Air Force and Army training approaches.

In many cases, DOD's UAS publications articulating doctrine and tactics, techniques, and procedures did not include updated information needed by manned and unmanned aircraft operators, military planners, and ground units to understand current practices and capabilities. Such information can serve as the foundation for effective joint training programs and can assist military personnel in integrating UAS on the battlefield.