UNMANNED AERIAL SYSTEMS

Actions Needed to Improve DOD Pilot Training

Why GAO Did This Study

The Department of Defense's (DOD) UAS portfolio has grown over the years to rival traditional manned systems, and, as of July 2013, DOD had acquired over 10,000 UAS, according to a 2013 DOD report. Training DOD UAS pilots, most of whom are in the Army or the Air Force, is an integral part of DOD's strategy to accomplish its mission. Senate Report 113-176 included a provision that GAO review DOD's efforts to train UAS pilots.

This report examines, among other things, the extent to which the Army and the Air Force (1) face challenges ensuring that their UAS pilots complete required training and (2) have taken steps to ensure they have sufficient numbers of UAS instructors. GAO analyzed DOD guidance on training UAS pilots, distributed a questionnaire to Army and Air Force headquarters and units, examined nongeneralizable training records of seven Air Force UAS units selected because they have the same mission requirements, and interviewed DOD officials. GAO also conducted 18 focus groups with active duty UAS pilots who were selected based on rank and other factors. The results of the questionnaire and focus groups are not generalizable.

What GAO Found

The Army and the Air Force face challenges ensuring that the pilots who remotely operate their unmanned aerial systems (UAS) complete their required training. Specifically, a March 2015 Army review showed that most pilots in certain Army units did not complete fundamental training tasks in fiscal year 2014—a finding that GAO corroborated through discussions with pilots in focus groups and unit responses to questionnaires. In addition, Army unit status reports do not require UAS pilot training information, and as a result, the Army does not know the full extent to which pilots have been trained and are therefore ready to be deployed. In addition, Air Force training records from a nongeneralizable sample of seven UAS units showed that, on average, 35 percent of the pilots in these units completed the training for all of their required missions. Pilots in all of the seven focus groups GAO conducted with Air Force UAS pilots stated that they could not conduct training in units because their units had shortages of UAS pilots.GAO found similar shortages of UAS pilots in April 2014 and in particular, the Air Force operated below its crew ratio, which is a metric used to determine the number of pilots needed in units. At that time, GAO made four recommendations including that the Air Force update its update crew ratio. The Air Force concurred with these recommendations and has taken actions, or has actions underway. For example, an Air Force Headquarters official stated that, in February 2015, the Air Force completed the first phase of a three-phase personnel requirements study on the crew ratio and expects to update the crew ratio in 2015. However, at this time, the Air Force has not fully implemented any of the recommendations.

The Army and the Air Force are taking actions to increase the number of UAS instructors, but the Army has not fully addressed the risks associated with using less experienced instructors and the Air Force faces instructor shortages. In order to increase the number of its instructors in response to an increase in the number of UAS units, the Army waived course prerequisites for about 40 percent of the UAS pilots attending the course to become instructor pilots from the beginning of fiscal year 2013 through February 2015. The Army originally established these prerequisites—such as a minimum number of flight hours—for UAS pilots volunteering to become instructors to help ensure that instructors were fully trained and ready to instruct UAS pilots. The Army has taken some steps to mitigate the potential risks of using less proficient UAS instructors. For example, beginning in fiscal year 2015, the Army no longer grants waivers for course prerequisites related to proficiency. However, the Army can continue to grant waivers for additional course prerequisites related to experience. As a result, the Army risks that its UAS pilots may not be receiving the highest caliber of training needed to prepare them to successfully perform UAS missions. Furthermore, as of March 2015, the Air Force had staffed its UAS training squadrons at Holloman Air Force Base at 63 percent of its planned staffing levels. This shortage is a key reason that the Air Force has shortages of UAS pilots across the Air Force, according to an Air Force headquarters official. The Air Force is studying the personnel requirements for its school and expects to report the results of this study by spring 2016.