Why GAO Did This Study

Each day, the Federal Aviation Administration (FAA) controls the take-offs, landings, and flights of over 50,000 aircraft. To accomplish this mission safely and efficiently, FAA must have a sufficient number of adequately trained air traffic controllers working at its air traffic control facilities. Over the next decade, FAA will need to hire and train nearly 17,000 controllers to replace over 15,000 current controllers, most of whom will be retiring. This massive hiring effort will occur as FAA begins to implement the next generation air transportation system (NextGen), which will integrate new technologies and procedures into air traffic operations and fundamentally change the role of air traffic controllers from controlling individual aircraft to managing air traffic flow. Hence, FAA will need to train experienced controllers to use the new technologies at the same time that it hires and trains new controllers to operate both the current and the new technologies.

This testimony addresses FAA’s progress and challenges in hiring, staffing, and training air traffic controllers in the current air traffic control system and in preparing them for NextGen. It is based on prior GAO work, updated with reviews of FAA documents and interviews with FAA officials, controller union representatives, and other stakeholders.

What GAO Found

To prepare for the projected departure of over 15,000 air traffic controllers between 2008 and 2017, FAA began significantly increasing the number of new hires in fiscal years 2006 and 2007, when it hired 1,116 and 1,815 controllers, respectively. By contrast, in fiscal years 2002 through 2005, it had hired an average of 467 controllers per year. Retirements are taking place sooner than FAA expected. As a result, FAA has had to adjust its hiring targets upward—from 1,420 in fiscal year 2008 to 1,877, for example. While FAA has met its hiring targets so far and is on track to meet its target for fiscal year 2008, it has had to expand its applicant pool, in large part because fewer military controllers have sought civilian employment since the Department of Defense began to offer reenlistment bonuses of up to $60,000.

As FAA brings new controllers on board, it faces the challenge of ensuring that its control facilities are adequately staffed to meet their unique traffic demands. In 2007, FAA established staffing ranges for each facility based on facility-specific information, such as air traffic operations, productivity trends, expected retirements, and number of controller trainees. However, FAA’s staffing is not aligned with the new ranges at about half of its facilities. While overstaffing will provide trained replacements as retirements occur, understaffing has potential safety and efficiency implications. As the proportion of new hires increases over time, FAA will face further challenges in balancing the numbers of trainees and fully certified controllers at each facility. Furthermore, with fewer fully certified controllers and greater on-the-job training demands, controllers may work more overtime hours. Overtime can lead to fatigue, and many controllers routinely work overtime, raising safety concerns. Both GAO and the National Transportation Safety Board have found that controllers’ work schedules can contribute to fatigue and have made recommendations to mitigate it. FAA is taking steps to address these recommendations.

In the training area, FAA faces the dual challenge of certifying its new hires to operate today’s air traffic control system as quickly as possible and of preparing to train both experienced controllers and new hires to operate NextGen technologies. Through training improvements, scheduling efficiencies, and greater use of simulators, FAA has, it says, reduced the amount of time controllers remain in trainee status; however, attrition among controllers in developmental training is increasing. It will be important for FAA to monitor the attrition and ensure that performance problems are addressed as early as possible to avoid unnecessary costs. Preparations for NextGen training are still in the early stages—as FAA observes, it is difficult to develop training for systems that have not yet been defined. However, GAO’s work has shown that further research is needed to determine what training will be required to support the transition to NextGen—a transition that will involve changes in the roles and responsibilities of air traffic controllers as well as changes in technologies.