

GAO Highlights

Highlights of [GAO-14-237](#), a report to congressional requesters

Why GAO Did This Study

Maintaining a safe and robust aviation system requires qualified aviation professionals—including aerospace engineers, aircraft mechanics, and avionics technicians—to design, manufacture, and repair more than 225,000 aircraft. Aviation stakeholders have expressed concerns that an insufficient supply of personnel could develop because of imminent retirements and a perception that fewer people enter these professions.

GAO was asked to review the supply and demand of aviation professionals. This report discusses (1) what available data and forecasts reveal about the need for and potential availability of aerospace engineers, aircraft mechanics, and avionics technicians, and (2) what actions industry and the federal government are taking to help attract and retain these professionals. GAO (1) collected and analyzed data from 2000 through 2012, employment projections from 2012 through 2022, and literature relevant to the aviation professionals' labor markets; (2) reviewed agency documents; and (3) interviewed agency officials about programs that support training. GAO also interviewed 10 aviation industry associations (5 representing employees and 5 representing employers) and selected a non-generalizable sample of 23 private sector employers, based on size and location, to understand any actions used to attract their workforce.

GAO is not making recommendations. GAO received technical comments on this report from Education, DOL, and DOT, which were incorporated as appropriate. DOD did not have any comments on this report.

View [GAO-14-237](#). For more information, contact Gerald L. Dillingham at (202) 512-2834 or dillingham@gao.gov

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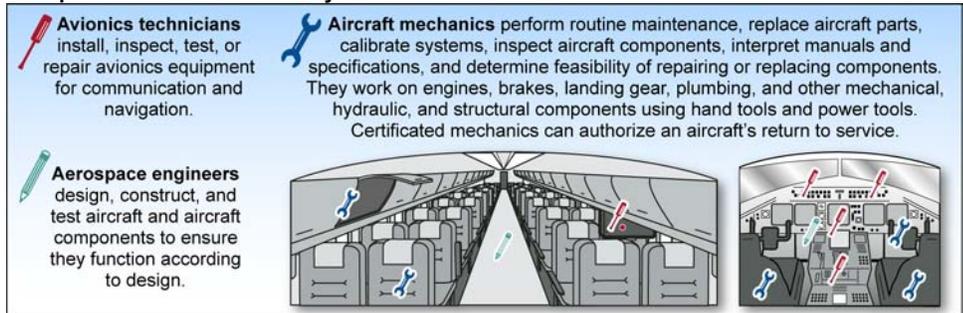
AVIATION WORKFORCE

Current and Future Availability of Aviation Engineering and Maintenance Professionals

What GAO Found

GAO analysis found mixed evidence about a current or possible future shortage of aviation professionals. Aerospace engineers have experienced a low unemployment rate—the most direct measure of a labor shortage—and increases in employment suggesting a shortage may exist; however, earnings for the occupation have stayed about the same. Data provide less support for a shortage of aircraft mechanics; while the occupation has had a low unemployment rate, both employment and earnings have stayed about the same, suggesting that demand for this occupation has not outstripped supply. GAO was unable to analyze information on avionics technicians because of insufficient data. In addition, the Bureau of Labor Statistics' employment projections indicate slower than average or no growth for these three occupations over the next 10 years. Data also suggest the number of people who have received training related to these aviation professions is increasing; however, several other industries compete for these individuals and not all will pursue aviation careers.

Examples of Tasks Performed by Selected Aviation Professionals



Source: GAO.

Industry and government are taking some actions to attract and retain qualified individuals in these occupations, but employers GAO interviewed remain concerned about future needs. GAO found that most of these employers had some challenges hiring personnel with the skills employers were seeking at the wage they offered. According to economic literature, employers may take several actions in response to a perceived labor shortage—including increasing recruiting efforts and raising wages. Employers reported taking a variety of actions, but few were raising wages. Several agencies—the Federal Aviation Administration (FAA) and the Departments of Defense (DOD), Education, Labor (DOL), and Veterans Affairs—maintain programs that assist individuals interested in aviation careers. For example, in academic year 2011–2012, Education disbursed approximately \$1.6 billion in federal grants to students majoring in related fields. Still, most employers and stakeholders stated that maintaining a qualified workforce will be difficult, in part because of a perception that fewer people are interested in aviation careers. GAO was unable to verify these concerns with available data. It could be expected that employers would continue to take actions at their disposal—such as adjusting wages or changing recruiting and training practices—if a labor shortage were to develop. While such actions would be considered typical market responses to a potential shortage, it does not mean such actions are costless or might not affect the industry.