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Highlights

FEDERAL AVIATION ADMINISTRATION

Agency Is Taking Steps to Plan for and Train Its Technician Workforce, but a More Strategic Approach Is Warranted

Why GAO Did This Study

Since 2006, air traffic control (ATC) equipment outages and failures at Federal Aviation Administration (FAA) facilities have caused hundreds of flight delays and raised questions about FAA's maintenance capabilities. About 6,100 technicians maintain FAA's current (legacy) facilities and equipment and will be responsible for the Next Generation (NextGen) technologies planned for the next 15 years. Safe and efficient air travel will therefore partly depend on FAA's having technicians with the right skills now and in the future. As requested, GAO reviewed how (1) FAA incorporates key practices of leading organizations in its workforce planning for technicians, (2) FAA's technician training compares with key practices of leading organizations, and (3) the costs of technician training, including travel costs, have changed in recent years. GAO analyzed FAA workforce and training data, compared FAA planning and training practices with criteria identified in prior GAO work, and conducted focus group interviews with FAA technicians and FAA Training Academy instructors.

What GAO Recommends

Among other things, FAA should develop a written technician workforce planning strategy that identifies needed skills and staffing, and a strategic training plan showing how training efforts contribute to performance goals. The Department of Transportation provided technical corrections.

What GAO Found

FAA has followed some key practices of leading organizations in its strategic workforce planning for technicians but lacks a comprehensive, written strategy to guide its efforts. GAO assessed whether FAA followed those practices fully, mostly, or partially, or did not follow them. For example, FAA partially follows one practice—determining critical skills and competencies—because it assesses those skills and competencies its technicians now have to maintain legacy systems, but has just begun to identify those they will need to maintain NextGen systems. FAA also partially develops strategies to close the gap between the technician workforce it needs and the one that it has: It determines staffing needs annually, but lacks a longer-term strategy to address the hundreds of technician retirements projected through 2020. Without a comprehensive, written technician workforce planning strategy, FAA does not have a transparent road map to acquire and retain the right number of technicians with the right skills at the right time. FAA mostly follows other leading workforce planning practices, although it only partially involves key stakeholders—managers, but not technicians—in workforce planning and may thus be missing opportunities for improvement.

FAA at least partially follows key practices of leading organizations in its strategic training and development for technicians, but it lacks a strategic training plan, and workload issues limit its ability to fully incorporate key leading practices. With the transition to NextGen, technicians will need to be trained both to maintain new systems and to remain proficient in maintaining the legacy systems that FAA plans to continue operating. FAA has partially implemented a strategic approach to planning for training in that it has established annual training goals and incorporated employees' developmental goals in its planning processes. As noted, however, it has just begun to identify the skills and competencies technicians will need to maintain NextGen systems. FAA mostly follows other key practices for design and development, such as developing a mix of in-house and vendor training. FAA is studying the feasibility of having vendors provide certain courses that are currently offered through the FAA Training Academy and are filled to capacity. FAA partially follows leading practices for implementing training and development, but workload demands often limit technicians' opportunities to attend training. FAA also partially follows leading practices for demonstrating how training and development efforts contribute to improved performance and results. For example, FAA identifies annual training goals, but does not link them to specific performance goals. As a result, it is limited in its ability to assess the effectiveness of its investments in training.

Recent compensation costs for instructors at the FAA Training Academy have been roughly stable, while those for student travel to and from the academy and for training courses provided by vendors, exclusive of travel costs, have risen. The higher student travel costs reflect increases in air fares, and vendor training costs have grown as FAA has rolled out more courses for new equipment in preparation for the deployment of NextGen systems.

_____ **United States Government Accountability Office**