AIR TRAFFIC CONTROL

FAA’s Modernization Efforts—Past, Present, and Future

Why GAO Did This Study

The Federal Aviation Administration’s (FAA) air traffic control modernization (ATC) efforts are designed to enhance the safety, capacity, and efficiency of the national airspace system through the acquisition of a vast network of radar, navigation, communications, and information processing systems, as well as new air traffic control facilities. Since 1981, when these efforts began, FAA’s ATC modernization projects have consistently experienced cost, schedule, and performance problems that GAO and others have attributed to systemic management issues. As a result, FAA’s cost estimates have grown and planned improvements have been delayed. Initially FAA estimated that its ATC modernization efforts would cost $12 billion and could be completed over 10 years. Now, two decades and $35 billion later, FAA expects to need another $16 billion through 2007 to complete key projects, for a total cost of $51 billion.

This testimony (1) provides an overview of the systemic management issues that GAO and others have identified in FAA’s ATC modernization efforts over time, (2) discusses key actions that FAA and others have taken to address these issues, and (3) identifies the challenges that lie ahead for FAA.

What GAO Found

Over the years, systemic management issues, including inadequate management controls and human capital issues, have contributed to the cost overruns, schedule delays, and performance shortfalls that FAA’s major ATC projects have consistently experienced. These problems occurred, in large part, because FAA lacked the information technology and financial management systems that would have helped it reliably determine the projects’ technical requirements and estimate and control their costs and schedules. In addition, organizational culture issues discouraged collaboration among technical experts and users, and frequent changes in FAA’s leadership—seven different Administrators and Acting Administrators in the first 10 years—hampered the modernization efforts.

FAA has taken steps to improve the management of its ATC modernization efforts and has made progress. For example, it implemented a cost-effective, incremental development approach that avoided costly late-stage changes. In addition, it has fully or partially implemented over 30 GAO recommendations designed to improve its management controls and address human capital issues. The Congress also extended the term of the FAA Administrator to 5 years, providing for greater continuity and stability, and enacted legislation designed to bring the benefits of performance management to ATC modernization.

FAA faces a number of challenges in fully implementing recommendations that GAO and others have made to improve its management controls and address human capital issues. FAA also faces the challenge of becoming a more efficient and accountable performance-based air traffic organization. Finally, FAA has an opportunity to review its current 10-year plan for modernizing the National Airspace System and to assess the relative importance and feasibility of the plan’s priorities in light of current federal and private sector economic constraints, new aviation security requirements, and other issues.

Air Traffic Controller at Work


To view the full product, including the scope and methodology, click on the link above. For more information, contact Gerald L. Dillingham at (202) 512-2834 or dillinghamg@gao.gov.