

Highlights of GAO-05-485T, a testimony before the Subcommittee on Aviation, Committee on Transportation and Infrastructure, House of Representatives

## Why GAO Did This Study

Congress's formation of the Air Traffic Organization (ATO) and the Joint Planning and Development Office (JPDO), both within the Federal Aviation Administration (FAA), represent the latest efforts to address the monumental challenges of modernizing the national airspace system (NAS) during the first quarter of the twenty-first century. For more than two decades, FAA has been working to modernize the air traffic control (ATC) system, but projects have repeatedly missed cost, schedule, and performance targets. Consequently, ATC modernization has been on GAO's list of high-risk federal programs since 1995.

The ATO's focus is on a rolling 10-year outlook to operate and modernize the NAS. By contrast, the JPDO's vision is longer term, focused on coordinating the research efforts of diverse federal agencies to achieve a common goal of meeting potential air traffic demands in 2025.

This statement discusses (1) GAO's assessment of the ATO's efforts to date in addressing some of the key challenges for the ATC modernization program and (2) challenges that lie ahead for the ATO and options that it could consider in addressing the needs of the NAS over the next decade, as well as longer-term needs defined by the JPDO.

#### www.gao.gov/cgi-bin/getrpt?GAO-05-485T.

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

# NATIONAL AIRSPACE SYSTEM

# Progress and Ongoing Challenges for the Air Traffic Organization

### **What GAO Found**

The ATO is taking a number of positive steps to address the legacy cost, schedule, and performance problems that have affected the ATC modernization program for the past two decades. For example, the ATO is beginning to involve stakeholders early and throughout a system's development; has demonstrated a willingness to cut major acquisitions that are not meeting their goals, even after investing significant resources; and has improved its management of information technology. However, the ATO does not use a knowledge-based approach to acquisitions, characteristic of best commercial and federal practices, which would help avoid cost, schedule, and performance problems. Additionally, the ATO has used a process improvement model in several software-intensive acquisitions. However, because the ATO has not mandated use of the model in all such acquisitions, it risks taking a major step backwards in its capabilities for ATC systems and software. Finally, the ATO is taking steps to change the culture of its component organizations by, for example, replacing a personalitydriven culture with one that is more sustainable and stable. Continued management attention in this area will be important to the organization's success.

The ATO faces the challenges of (1) modernizing and expanding NAS capacity to accommodate an expected 25-percent increase in the volume of air traffic over the next 10 years, (2) hiring thousands of air traffic controllers to replace those expected to retire over the next decade, (3) working with the new JPDO to coordinate the research efforts of diverse federal agencies to transform the NAS to meet potential air travel needs of 2025, and (4) addressing aging infrastructure. To fund its major system acquisitions through fiscal year 2009 while remaining within projected budget targets, the ATO has substantially reduced funding for other areas. However, the ATO does not provide administration and congressional decisionmakers with information about the impact of the reduced funding on NAS modernization. To deal with these challenges, some aviation experts suggested options that the ATO could consider, including contracting out more services and incurring debt to obtain multiyear funding for capital investments (an option requiring legislative change). Our work and some experts also suggest clarifying budget submissions to show decisionmakers how constrained budgets affect NAS modernization and how the ATO is working to live within its means.



Source: National Aeronautics and Space Administration.