



Highlights of [GAO-10-484T](#), a testimony before the Subcommittee on Transportation Security and Infrastructure Protection, Committee on Homeland Security, House of Representatives

## Why GAO Did This Study

The attempted bombing of Northwest flight 253 highlighted the importance of detecting improvised explosive devices on passengers. This testimony focuses on (1) the Transportation Security Administration's (TSA) efforts to procure and deploy advanced imaging technology (AIT), and related challenges; and (2) TSA's efforts to strengthen screening procedures and technology in other areas of aviation security, and related challenges. This testimony is based on related products GAO issued from March 2009 through January 2010, selected updates conducted from December 2009 through March 2010 on the AIT procurement, and ongoing work on air cargo security. For the ongoing work and updates, GAO obtained information from the Department of Homeland Security (DHS) and TSA and interviewed senior TSA officials regarding air cargo security and the procurement, deployment, operational testing, and assessment of costs and benefits of the AIT.

## What GAO Recommends

GAO is not making new recommendations. In past reports, GAO has recommended, among other things, that TSA operationally test screening technologies prior to deployment and assess costs and benefits of screening technology investments. DHS concurred and is working to address the recommendations. DHS provided comments to this statement, which were incorporated.

View [GAO-10-484T](#) or key components. For more information, contact Steve Lord at (202) 512-4379 or [lords@gao.gov](mailto:lords@gao.gov).

## AVIATION SECURITY

### TSA Is Increasing Procurement and Deployment of the Advanced Imaging Technology, but Challenges to This Effort and Other Areas of Aviation Security Remain

#### What GAO Found

In response to the December 25, 2009, attempted attack on Northwest flight 253, TSA revised the AIT procurement and deployment strategy, increasing the planned deployment of AITs from 878 to 1,800 units and using AITs as a primary—instead of a secondary—screening measure where feasible; however, challenges remain. In October 2009, GAO reported on the challenges TSA faced deploying new technologies such as the explosives trace portal (ETP) without fully testing them in an operational environment, and recommended such testing prior to future deployments. TSA officials concurred and stated that, unlike the ETP, operational testing for the AIT was successfully completed late in 2009 before its deployment was fully initiated. While officials said AITs performed as well as physical pat downs in operational tests, it remains unclear whether the AIT would have detected the weapon used in the December 2009 incident based on the preliminary information GAO has received. GAO is verifying that TSA successfully completed operational testing of the AIT. In October 2009, GAO also recommended that TSA complete cost-benefit analyses for new passenger screening technologies. While TSA conducted a life-cycle cost estimate and an alternatives analysis for the AIT, it reported that it has not conducted a cost-benefit analysis of the original deployment strategy or the revised AIT deployment strategy, which proposes a more than twofold increase in the number of machines to be procured. GAO estimates increases in staffing costs alone due to doubling the number of AITs that TSA plans to deploy could add up to \$2.4 billion over its expected service life. While GAO recognizes that TSA is attempting to address a vulnerability exposed by the December 2009 attempted attack, a cost-benefit analysis is important as it would help inform TSA's judgment about the optimal deployment strategy for the AITs, and how best to address this vulnerability considering all elements of the screening system.

TSA has also taken actions towards strengthening other areas of aviation security but continues to face challenges. For example, TSA has taken steps to meet the statutory mandate to screen 100 percent of air cargo transported on passenger aircraft by August 2010, including developing a program to share screening responsibilities across the air cargo supply chain. However, as GAO reported in March 2009, a number of challenges to this effort exist, including attracting participants to the TSA screening program, completing technology assessments, and overseeing additional entities that it expects to participate in the program. GAO is exploring these issues as part of an ongoing review of TSA's air cargo security program which GAO plans to issue later this year. Further, while TSA has taken a variety of actions to strengthen the security of commercial airports, GAO reported in September 2009 that TSA continues to face challenges in several areas, such as assessing risk and evaluating worker screening methods. In September 2009, GAO also recommended that TSA develop a national strategy to guide stakeholder efforts to strengthen airport perimeter and access control security, to which DHS concurred.