

Highlights of [GAO-11-807T](#), a testimony before the Subcommittee on National Security, Homeland Defense, and Foreign Operations, Committee on Oversight and Government Reform, House of Representatives

Why GAO Did This Study

The attempted bombing of Northwest flight 253 in December 2009 underscores the need for effective aviation security programs. Aviation security remains a daunting challenge with hundreds of airports, thousands of aircraft, and thousands of flights daily carrying millions of passengers and pieces of checked baggage. The Department of Homeland Security's (DHS) Transportation Security Administration (TSA) has spent billions of dollars and implemented a wide range of aviation security initiatives. Three key layers of aviation security are (1) TSA's Screening of Passengers by Observation Techniques (SPOT) program designed to identify persons who may pose a security risk; (2) airport perimeter and access controls security; and (3) checked baggage screening systems. This testimony provides information on the extent to which TSA has taken actions to validate the scientific basis of SPOT, strengthen airport perimeter security and access controls, and deploy more effective checked baggage screening systems. This statement is based on prior reports GAO issued from September 2009 through July 2011 and selected updates in June and July 2011. GAO analyzed documents on TSA's progress in strengthening aviation security, among other things.

What GAO Recommends

GAO has made recommendations in prior work to strengthen TSA's SPOT program, airport security efforts, checked baggage screening efforts. DHS and TSA generally concurred with the recommendations and have actions under way to address them.

View [GAO-11-807T](#) or key components. For more information, contact Stephen M. Lord at (202) 512-8777 or lords@gao.gov.

July 13, 2011

AVIATION SECURITY

TSA Has Taken Actions to Improve Security, but Additional Efforts Remain

What GAO Found

DHS has completed an initial study to validate the scientific basis of the SPOT program; however, additional work remains to fully validate the program. GAO reported in May 2010 that TSA deployed this program, which uses behavior observation and analysis techniques to identify potentially high-risk passengers, before determining whether there was a scientifically valid basis for using behavior and appearance indicators as a means for reliably identifying passengers who may pose a risk to the U.S. aviation system. TSA officials said that SPOT was deployed in response to potential threats, such as suicide bombers, and was based on scientific research available at the time. GAO recommended in May 2010 that DHS, as part of its study, assess the methodology to help ensure the validity of the SPOT program. DHS concurred and its April 2011 validation study found that SPOT was more effective than random screening to varying degrees. For example, the study found that SPOT was more effective than random screening at identifying individuals who possessed fraudulent documents and individuals who were subsequently arrested. However, DHS's study was not designed to fully validate whether behavior detection can be used to reliably identify individuals in an airport environment who pose a security risk. The study noted that additional work is needed to comprehensively validate the program. TSA officials are assessing the actions needed to address the study's recommendations.

In September 2009, GAO reported that since 2004 TSA has taken actions to strengthen airport perimeter and access controls security by, among other things, deploying a random worker screening program; however, TSA has not conducted a comprehensive risk assessment or developed a national strategy. Specifically, TSA had not conducted vulnerability assessments for 87 percent of the approximately 450 U.S. airports regulated by TSA at that time. GAO recommended that TSA develop (1) a comprehensive risk assessment and evaluate the need to assess airport vulnerabilities nationwide and (2) a national strategy to guide efforts to strengthen airport security. DHS concurred and said TSA is developing the assessment and strategy, but has not yet evaluated the need to assess airport vulnerabilities nationwide.

GAO reported in July 2011 that TSA revised explosives detection requirements for its explosives detection systems (EDS) used to screen checked baggage in January 2010, but faces challenges in deploying EDS that meet these requirements. Deploying systems that meet the 2010 EDS requirements could be difficult given that TSA did not begin deployment of systems meeting the previous 2005 requirements until 2009. As of January 2011 some of the EDS in TSA's fleet detect explosives at the level established in 2005 while the remaining EDS detect explosives at levels established in 1998. Further, TSA does not have a plan to deploy and operate systems to meet the current requirements and has faced challenges in procuring the first 260 systems to meet these requirements. GAO recommended that TSA, among other things, develop a plan to ensure that EDS are operated at the levels in established requirements. DHS agreed and has outlined actions to do so.