

Highlights of GAO-05-726, a report to congressional requesters

## Why GAO Did This Study

The Federal Aviation Administration (FAA) uses the Air Transportation Oversight System (ATOS), which was developed around the principles of system safety, to oversee seven "legacy" airlines" and nine other airlines. In this report, we refer to airlines that are not in ATOS as non-legacy airlines. Two other processes are used to oversee 99 non-legacy passenger airlines, which represent a fast-growing segment of the commercial aviation passenger industry and carried about 200 million passengers in 2004. The National Work Program Guidelines (NPG) establishes a set of inspection activities for non-legacy airlines. The Surveillance and Evaluation Program (SEP) uses principles of system safety to identify additional risk-based inspections for those airlines.

GAO's objective was to assess the processes used by FAA to ensure the safety of non-legacy passenger airlines. GAO reviewed the strengths of FAA's inspection oversight for non-legacy passenger airlines and the issues that hinder its effectiveness.

### **What GAO Recommends**

GAO recommends that FAA develop an evaluative process for SEP and improve communications and training for inspectors in system safety and risk management. FAA agreed with the recommendations on training and communications and will consider developing an evaluative process.

www.gao.gov/cgi-bin/getrpt?GAO-05-726.

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.

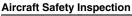
## **AVIATION SAFETY**

# System Safety Approach Needs Further Integration into FAA's Oversight of Airlines

#### What GAO Found

A key strength of FAA's inspection oversight of non-legacy airlines is the introduction of system safety concepts to some inspections, which FAA accomplished by adding SEP to its traditional inspection process, NPG. Although NPG has risk-based elements, it lacks the structured approach to risk identification found in SEP. Under SEP, data are used to help determine trends or problems. The SEP process uses a team of inspectors to identify inspection activities, which we have previously reported is generally more effective than the use of individuals due to their collective ability to identify risks. Under SEP, inspectors also ascertain risks internal to FAA, such as staffing shortages. FAA's oversight of non-legacy airlines further incorporates processes to ensure that inspectors follow up on airline actions taken in response to inspection findings. These efforts address several past GAO concerns, including that NPG did not allow FAA to identify risks and allocate inspection resources accordingly.

The full potential of FAA's inspection program for non-legacy airlines, however, is not being realized due to incomplete implementation of its system safety approach and other challenges. The inspection workload is still heavily oriented to nonrisk-based activities, with 77 percent of inspection activities being identified through the NPG and the remaining relatively small percentage identified through SEP. The emphasis on NPG, including FAA's guidance that inspectors must complete NPG-required inspection activities, acts as a disincentive to identifying further inspection activities through SEP. Inspectors face workload challenges as staff lost through attrition may not be replaced due to a hiring freeze. FAA estimates that over 1,100 inspectors of non-legacy airlines will leave the agency in fiscal years 2005 to 2010. In addition, some FAA inspectors indicated that a lack of technical training on airline systems and equipment posed potential risks to the agency's oversight process. Finally, FAA lacks a process to communicate information to inspectors on how certain internal risks identified through SEP are being resolved. Moreover, FAA has not established a process to evaluate the effectiveness of SEP.





Source: FAA.