AVIATION SAFETY

Enhanced Oversight and Improved Availability of Risk-Based Data Could Further Improve Safety

What GAO Found

Since 2007, FAA has taken several steps to further improve safety at and around airports (see fig.), including implementing procedural and technological changes to improve runway safety, proposing a rule that would require airports to establish risk-management plans that include the ramp areas where aircraft are serviced, collecting more data on safety incidents, and shifting toward risk-based analysis of airborne aviation safety information. Several of these initiatives are intended to better identify systemic issues in air traffic safety.

Rates of reported safety incidents in the terminal area continue to increase. FAA met its interim goals toward reducing the total number of runway incursions—the unauthorized presence of an airplane, vehicle, or person on the runway—in 2009 and 2010, but the overall rate of incursions at towered airports has trended steadily upward. In fiscal year 2004, there were 11 incursions per million operations at these airports; by fiscal year 2010, the rate increased to 18 incursions per million operations. The rate and number of airborne operational errors—errors made by air traffic controllers—have increased considerably in recent years, with the rate nearly doubling from the second quarter of fiscal 2008 to the same period of 2011. FAA has not met its related performance goals.

Comprehensive data are not available for some safety incidents, including runway overruns or incidents in ramp areas. Recent increases in reported runway incursions and airborne operational errors can be somewhat attributed to several changes in reporting policies and procedures at FAA; however, trends may also indicate an increase in the actual occurrence of incidents.

Enhanced oversight and additional information about surface and airborne incidents could help improve safety in the terminal area. FAA oversight in the terminal area is currently limited to certain types of incidents, notably runway incursions and certain airborne incidents, and does not include runway overruns or incidents in ramp areas. In addition, the agency lacks data collection processes, risk-based metrics, and assessment frameworks for analyzing other safety incidents such as runway overruns, incidents in ramp areas, or a wider range of airborne errors. Further, changes to reporting processes and procedures make it difficult to assess safety trends, and existing data may not be readily available to decision makers, including those at the regional and local levels. As a result, FAA may have difficulty assessing recent trends in safety incidents, the risks posed to aircraft or passengers in the terminal area, and the impact of the agency’s efforts to improve safety.

View GAO-12-24 or key components. For more information, contact Gerald L. Dillingham, Ph.D. at (202) 512-2834 or dillinghamg@gao.gov.