

GAO
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Highlights

Highlights of [GAO-09-614](#), a report to congressional requesters

Why GAO Did This Study

The air cargo industry contributed over \$37 billion to the U.S. economy in 2008 and provides government, businesses, and individuals with quick delivery of goods. Although part of an aviation system with an extraordinary safety record, there have been over 400 air cargo accidents and over 900 incidents since 1997, raising concerns about cargo safety.

GAO's congressionally requested study addresses (1) recent trends in air cargo safety, (2) factors that have contributed to air cargo accidents, (3) federal government and industry efforts to improve air cargo safety and experts' views on the effectiveness of these efforts, and (4) experts' views on further improving air cargo safety. To perform the study, GAO analyzed agency data, surveyed a panel of experts, reviewed industry and government documents, and interviewed industry and government officials. GAO also conducted site visits to Alaska, Ohio, and Texas.

What GAO Recommends

GAO is recommending efforts to enhance small air cargo carrier safety, including data collection of carrier operations, targeted safety programs, and flight risk assessment. FAA and NTSB provided technical comments, which were included as appropriate.

View [GAO-09-614](#) or key components. For more information, contact Gerald Dillingham, Ph.D., at (202) 512-2834 or dillinghamg@gao.gov.

AVIATION SAFETY

Better Data and Targeted FAA Efforts Needed to Identify and Address Safety Issues of Small Air Cargo Carriers

What GAO Found

From 1997 through 2008, 443 accidents involving cargo-only carriers occurred, including 93 fatal accidents. Total accidents declined 63 percent from a high of 62 in 1997 to 23 in 2008. Small cargo carriers were involved in the vast majority of the accidents—79 percent of all accidents and 96 percent of fatal accidents. Although accident rates for large cargo carriers fluctuated during this period, they were comparable to accident rates for large passenger carriers in 2007. GAO could not calculate accident rates based on operations or miles traveled for small carriers because the Federal Aviation Administration (FAA) does not collect the necessary data.

Although several factors contributed to these air cargo accidents, our review of National Transportation Safety Board (NTSB) data found that pilot performance was identified as a probable cause for about 80 percent of fatal and about 53 percent of non-fatal cargo accidents. Furthermore, GAO's analysis of NTSB reports for the 93 fatal accidents, using an FAA flight-risk checklist, identified three or more risk factors in 63 of the accidents. Risk factors included low pilot experience, winter weather, and nighttime operations. Alaska's challenging operating conditions and remotely located populations who rely on air cargo are also a contributing factor.

Many federal efforts to improve air cargo safety focus on large carriers. Air cargo experts that GAO surveyed ranked FAA's voluntary disclosure programs—in which participating carriers voluntarily disclose safety events to FAA—as the most effective effort to improve air cargo, but two of the three main voluntary disclosure programs are used typically by large carriers. Several industry initiatives, however, focus on carriers with smaller aircraft, such as the Medallion Foundation, which has improved small aircraft safety in Alaska through training and safety audits.

The two actions experts cited most often to further improve air cargo safety were installing better technology on cargo aircraft to provide additional tools to pilots and collecting data to track small cargo carrier operations. Using flight risk checklists can also help pilots assess the accumulated risk factors associated with some cargo flights.

Cargo being loaded at Anchorage International Airport, Alaska



Source: GAO.