

GAO Highlights

Highlights of [GAO-14-516](#), a report to the Subcommittee on Aviation, Committee on Transportation and Infrastructure, House of Representatives

Why GAO Did This Study

The U.S. aviation system is one of the safest in the world, reflecting the work of FAA, industry, and others to continually improve safety. To further enhance safety, in 2005, FAA began adopting a proactive, data-driven, risk-based approach to managing safety, referred to as SMS, and has proposed rules that would require SMS implementation for certain segments of the aviation industry.

GAO was asked to review SMS implementation in the aviation industry. This report addresses (1) the status of SMS implementation at FAA and in the aviation industry; (2) key challenges that FAA and industry face in implementing SMS; and (3) actions aviation stakeholders believe FAA could take to improve SMS implementation. GAO reviewed FAA documents and interviewed FAA officials. GAO also interviewed representatives from 20 selected aviation stakeholders, including commercial air carriers, certificated airports, repair stations, and design and manufacturing firms. Because the stakeholders were non-statistically selected based on their size, SMS implementation, and the industry segment represented, their views cannot be generalized to the industry or any industry segment.

What GAO Recommends

GAO recommends that FAA develop a plan for overseeing industry SMS implementation that includes providing guidance and training for FAA inspectors by the time final rules are published. GAO provided DOT with a draft of this report for comment. DOT provided technical corrections which were incorporated as appropriate.

View [GAO-14-516](#). For more information, contact Gerald L. Dillingham, Ph.D., at (202) 512-2834 or dillinghamg@gao.gov.

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AVIATION SAFETY

Additional Oversight Planning by FAA Could Enhance Safety Risk Management

What GAO Found

The Federal Aviation Administration's (FAA) Air Traffic Organization completed Safety Management System (SMS) implementation in 2010, and five other FAA organizations are implementing it now. SMS is an approach to collect and analyze safety data to identify hazards, manage risks, and take corrective action before an accident occurs. FAA's implementation activities include developing internal SMS guidance and procedures and using them to, among other things, identify hazards in the aviation system and provide oversight of the aviation industry. For example, FAA's Flight Standards Service is developing an SMS-based oversight system for the commercial air carriers it oversees. Although SMS is not yet required for commercial air carriers, airports, or any other industry segment, some are voluntarily implementing SMS as part of several FAA pilot projects. Of the 83 commercial air carriers, 77 are in the process of implementing SMS. FAA anticipates publishing a final rule in September 2014 requiring commercial air carriers to implement SMS. To a lesser extent, other industry segments are voluntarily implementing SMS. For example, according to FAA, 9 of the nation's largest airports are implementing SMS. FAA issued a proposed rule for airport SMS implementation, but development of a final rule has been delayed, and FAA has not yet determined if it will propose rules for other industry segments. Stakeholders and FAA officials speculated that the other industry segments may be waiting to implement SMS until FAA issues additional guidance or a final rule.

According to FAA officials, completing the rulemaking processes for commercial air carriers and airports has been a primary challenge to industry SMS implementation. Officials stated that one reason for delay has been difficulty in developing the benefit-cost analyses required for significant regulatory action. However, FAA is revisiting these analyses through the ongoing rulemaking process. Uncertainty about FAA plans for SMS oversight was among the key challenges for aviation industry SMS implementation. Although some inspector training has been provided, representatives from 9 of the 20 stakeholders GAO interviewed cited concerns that FAA inspectors may not be adequately trained to oversee industry SMS activities, and 6 expressed concerns that inspectors throughout FAA may not consistently interpret SMS regulations. However, FAA has not completed plans for its SMS oversight activities, including inspector training, and officials stated that they would not do so until the final rule is published. Without adequate planning of oversight and training of inspectors, FAA could find itself unprepared to meet its oversight responsibilities when final SMS rules are published.

Twelve of the 20 aviation stakeholders GAO spoke with identified additional FAA actions that could improve their SMS implementation efforts. For example, 4 stakeholders stated that providing SMS training to their employees was a challenge, and 2 suggested that FAA could assist by providing them access to FAA's SMS training. FAA indicated that it is considering industry stakeholder training needs and provided training through the pilot projects. Fourteen stakeholders were pleased with FAA's collaboration and communication, but 6 of them stated that this effort could be broadened. FAA updates its SMS website information, and FAA's most significant industry SMS forum is focusing more on SMS implementation.