




Memorandum

Date: June 18, 2018

Subject: INFORMATION: Audit Announcement | FAA's Oversight of Aircraft Evacuation Procedures | Project No. 18A3006A000
Federal Aviation Administration

From: Matthew E. Hampton 
Assistant Inspector General for Aviation Audits

To: Director, Audit and Evaluation, FAA

The effective evacuation of civil aircraft is a critical component of saving lives in the event of an incident. The Federal Aviation Administration's (FAA) standards¹ for evacuating passenger aircraft require that the aircraft can be fully evacuated in 90 seconds or less. To obtain FAA certification for a specific aircraft type, manufacturers must conduct an actual demonstration of an emergency evacuation or a combination of tests and analyses, including computer simulations, that yield equivalent results.

Stakeholders have raised concerns about the validity of the assumptions that drive FAA evacuation standards—and industry tests and simulations for certifying new aircraft—given that the standards have not been significantly updated since 1990. Significant changes in the industry and consumer behavior have occurred since 1990. For example, the number of aircraft seats and passengers have increased but the size of seats and distance between them—known as seat pitch—has decreased. Additionally, passengers' reliance on carry-on luggage has increased.

In October 2016, American Airlines had to evacuate an aircraft due to an engine fire. Citing this incident, coupled with the potential for additional reductions in seat pitch and increasing the number of seats in commercial airliners, the Ranking Member of the House of Representatives Committee on Transportation and Infrastructure and the Ranking Member of the Subcommittee on Aviation have requested that we examine FAA's evacuation standards and whether passengers

¹ Title 14 Code of Federal Regulations (CFR) § 25.803 and 14 CFR Part 25 Appendix J

can safely evacuate aircraft in emergencies within the required 90 seconds given these changes in the airline industry and consumer behavior.

Accordingly, our audit objectives will be to assess FAA's (1) development and updating of aircraft emergency evacuation standards, including how changes in passenger behavior, passenger demographics, and seating capacity, affect the standards, and (2) process for determining whether aircraft as currently configured meet evacuation standards.

We plan to begin the audit in June 2018 and will contact your audit liaison to schedule an entrance conference. We will conduct our work at FAA Headquarters and other locations, as required. If you have any questions, please contact me at 202-366-0500, or Nelda Smith, Program Director, at 202-366-2140.

cc: DOT Audit Liaison, M-1
FAA Audit Liaison, AAE-100