



U.S. Department
of Transportation

**Federal Aviation
Administration**

SAFO

Safety Alert for Operators

SAFO 15003
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Flight Standards Service
Washington, DC

http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo

A SAFO contains important safety information and may include recommended action. SAFO content should be especially valuable to air carriers in meeting their statutory duty to provide service with the highest possible degree of safety in the public interest. Besides the specific action recommended in a SAFO, an alternative action may be as effective in addressing the safety issue named in the SAFO.

Subject: Fire Risk of Electronic Cigarettes (e-cigarettes) in Checked Baggage

Purpose: This SAFO alerts operators to recent incidents involving e-cigarettes in checked baggage and recommends carriage of such devices in the passenger cabin only.

Background: On August 9, 2014, at Boston's Logan Airport, an e-cigarette contained in a passenger's checked bag in the cargo hold of a passenger aircraft caused a fire that forced an evacuation of the aircraft. On January 4, 2015, at Los Angeles International Airport, a checked bag that had missed its flight was found to be on fire in a baggage area. Emergency responders attributed the fire to an overheated e-cigarette inside the bag. These incidents and several others occurring outside of air transportation have shown that e-cigarettes can overheat and cause fires when the heating element is accidentally activated or left on. This danger may be exacerbated by the growing trend of users modifying and rebuilding their reusable e-cigarette devices (personal vaporizers) and interchanging original and aftermarket batteries, heating elements, and vaporizing components.

On December 10, 2014, the International Civil Aviation Organization (ICAO) issued an Electronic Bulletin (EB) titled, *DANGEROUS GOODS CARRIED BY PASSENGER AND CREW — INCIDENTS RELATED TO ELECTRONIC CIGARETTES* (EB 2014/074). The ICAO bulletin recommends that a passenger's e-cigarettes be carried in the cabin of the aircraft and not in checked baggage. This ICAO bulletin can be viewed at the following link: https://www.faa.gov/about/office_org/headquarters_offices/ash/ash_programs/hazmat/passenger_info/media/ICAO_ecigarettes_bulletin.pdf

Discussion: These incidents highlight an emerging safety risk relating to the carriage of e-cigarettes on aircraft in checked baggage. Although ICAO standards and applicable U.S. Department of Transportation (DOT) regulations do not explicitly prohibit e-cigarettes in checked and carry-on baggage, the transportation of battery-powered devices that are likely to create sparks or generate a dangerous evolution of heat is prohibited unless they are packaged in such a manner to preclude such an occurrence (see 49 CFR 173.21(c)). Carriage of e-cigarettes in the passenger cabin addresses this safety risk by ensuring that if an incident does occur, it can be immediately identified and mitigated. Operators can also refer to SAFO 09013 *Fighting Fires Caused by Lithium Type Batteries in Portable Electronic Devices*.

Recommended Action: It is recommended that Operators require their passengers to carry e-cigarettes and related devices exclusively in the cabin of the aircraft. Operators are encouraged to communicate their

e-cigarette policy to passengers as widely as possible to include their website, press releases, ticket purchase, the check-in process (on-line, kiosks, check-in agents, etc.), and through any other means already established to inform passengers of hazardous materials regulations and related company policies.

Contact: Questions or comments regarding this SAFO should be directed to the FAA Office of Hazardous Materials Safety (ADG-1), at (202) 267-9432.