



U.S. Department
of Transportation
**Federal Aviation
Administration**

SAFO

Safety Alert for Operators

SAFO 05008
DATE: 12/30/05
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.

Subject: Potential for in-flight fires resulting from laptop battery failures.

Background: This office was alerted of certain batteries contained within particular make and models of portable laptop computers that could possibly electrically short, overheat, and cause possible smoke and flames. While, according to the identified manufacturer, there is a remote possibility that the affected batteries could result in smoke and flames, the manufacturer is taking extensive action to recall and replace the affected batteries. Users of the subject laptop computers have been advised by the laptop manufacturer not to use their computers on battery power.

Discussion: On January 8, 2004, the FAA issued Advisory Circular (AC) 120-80, In-Flight Fires, which discusses the dangers of in-flight fires, with particular emphasis on hidden fires that may not be visible or easily accessed by the crew. The AC provides guidance on how to deal with in-flight fires, emphasizing the importance of crewmembers taking immediate and aggressive action in response to signs of an in-flight fire while stressing the effectiveness of Halon extinguishing agents. In addition, the AC discusses the importance of appropriate crewmember training in dealing with hidden fires.

Crewmembers, in particular, should be aware that the potential for smoke emission and fire propagation from high-energy batteries, of any kind, could result from internal short-circuit failures. If detected, arresting or suppression techniques should be followed, as prescribed in the AC.

Recommended Action: Directors of safety, directors of operations, chief pilots, training managers, and crewmembers of passenger-carrying airplanes under Title 14 of the Code of Federal Regulations (14 CFR) parts 91, 121; 125, 129, and 135 should be aware of the potential hazard described in this SAFO and should apply the practices of AC 120-80. Operators are reminded to follow their established procedures in contacting their local FAA Flight Standards District Office or their Certificate Management Office to report any incidents of in-flight fires occurring during its operations. Title 14 CFR part 121, section 121.703(a)(2), and part 135, section 135.415(a)(2), as applicable, address reporting requirements for fires [occurring] during flight not protected by related fire-warning system.

AC 120-80, In-Flight Fires, may be found at:

[http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/ed51f1681e9d8c5e86256e4a00744607/\\$FILE/AC120-80.pdf](http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/ed51f1681e9d8c5e86256e4a00744607/$FILE/AC120-80.pdf)