



# National Transportation Safety Board

Washington, DC 20594

Office of the Chairman

September 6, 2013

The Honorable Cynthia L. Quarterman  
Administrator  
Pipeline and Hazardous Materials  
Safety Administration  
Washington, DC 20590

Dear Administrator Quarterman:

Thank you for the Pipeline and Hazardous Materials Safety Administration's (PHMSA) June 25, 2013, response to the National Transportation Safety Board (NTSB) regarding Safety Recommendations A-07-107 through -109, stated below. The NTSB issued these recommendations to PHMSA on December 17, 2007, as a result of (1) our investigation of the February 7, 2006, in-flight cargo smoke indication and the subsequent fire after landing of United Parcel Service flight 1307, a McDonnell-Douglas DC-8-71F, at Philadelphia International Airport, Philadelphia, Pennsylvania, and (2) our concerns about the increasing number of incidents documented by the Federal Aviation Administration (FAA) involving overheating and fires initiated by secondary (rechargeable) lithium batteries.

## A-07-107

Require commercial cargo and passenger operators to report all incidents involving primary and secondary lithium batteries, including those contained in or packed with equipment, that occur either on board or during loading or unloading operations and retain the failed items for evaluation purposes.

We have reviewed two PHMSA documents, "Failed Lithium Battery Item Retention Process" and "Lithium Battery Incident Decision Tree Guide," which describe the process and criteria used to determine whether a failed lithium battery item should be retained for further analysis to (1) help determine a failure cause or mode and (2) further inform decisions on risk mitigation of lithium battery transportation. PHMSA has implemented no requirement for the shipper, carrier, or any other person in possession of a failed lithium battery at the time of an incident to retain that battery for evaluation. However, we believe that the Hazardous Materials Regulations (HMR) requirement for operators to report to PHMSA all transportation incidents involving lithium batteries, in addition to the guidance provided in PHMSA's two documents, enables PHMSA to focus its investigative efforts on those items that are most likely to provide new information and avoids duplicate or unnecessary retention of failed battery items. Because these provisions constitute an acceptable alternate solution to the problem, Safety Recommendation A-07-107 is classified "Closed—Acceptable Alternate Action."

A-07-108

Analyze the causes of all thermal failures and fires involving secondary and primary lithium batteries and, based on this analysis, take appropriate action to mitigate any risks determined to be posed by transporting lithium batteries, including those contained in or packed with equipment, on board cargo and passenger aircraft as cargo; checked baggage; or carry-on items.

A-07-109

Eliminate regulatory exemptions for the packaging, marking, and labeling of cargo shipments of small secondary lithium batteries (no more than 8 grams equivalent lithium content) until the analysis of the failures and the implementation of risk-based requirements asked for in Safety Recommendation A-07-108 are completed.

We are encouraged to learn that, effective January 1, 2013, the HMR reference the 2013-2014 ICAO technical instructions (TI), which *allow* shippers and carriers to use the 2013-2014 ICAO TI; however, the regulations do not mandate compliance. Although the revised regulations constitute a noteworthy improvement, we believe that a mandate for compliance with the 2013-2014 ICAO TI provisions for lithium battery transport is needed for PHMSA's actions to constitute an acceptable alternate solution to the problem. Accordingly, pending our receipt and review of the revised HMR, including plans to mandate compliance as described above, Safety Recommendations A-07-108 and -109 remain classified "Open—Acceptable Alternate Response."

We encourage you to submit updates regarding Safety Recommendations A-07-108 and -109 electronically at the following e-mail address: [correspondence@ntsb.gov](mailto:correspondence@ntsb.gov). To avoid confusion, please do not submit both an electronic copy and a hard copy of the same response.

Sincerely,

cc: Ms. Camille Mittelholtz, Acting Director  
Office of Safety, Energy, and Environment  
Office of Transportation Policy