
Abstract:

This rulemaking would amend the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the transport of lithium cells and batteries by aircraft. The IFR contains three amendments: (1) a prohibition on the transport of lithium ion cells and batteries as cargo on passenger aircraft; (2) a requirement that lithium ion cells and batteries be shipped at not more than a 30 percent state of charge aboard cargo-only aircraft; and (3) a limitation on the use of alternative provisions for small lithium cell or battery shipments to one package per consignment or overpack. These amendments are consistent with three emergency amendments to the 2015–2016 International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Technical Instructions).

Agency: Department of Transportation (DOT)

Priority: Other Significant

RIN Status: Previously published in the Unified Agenda

Major: No

Agenda Stage of Rulemaking: Final Rule Stage

Unfunded Mandates: No

EO 13771 Designation: Regulatory

CFR Citation: 49 CFR 172  49 CFR 173

Legal Authority: 49 U.S.C. 44701  49 U.S.C. 5103(b)  49 U.S.C. 5120(b)

Legal Deadline: None

Statement of Need:

This rule is necessary to address an immediate safety hazard and harmonize the US HMR with emergency amendments to the 2015-2016 edition of the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Technical Instructions). FAA research has shown that air transportation of lithium ion batteries poses a safety risk. We are issuing this rule to (1) prohibit the transport of lithium ion cells and batteries as cargo on passenger aircraft; (2) require all lithium ion cells and batteries to be shipped at not more than a 30 percent state of charge on cargo-only aircraft; and (3) limit the use of alternative provisions for small lithium cell or battery shipments under 49 CFR 173.185(c).

Summary of the Legal Basis:

This rule is published under the authority of the Federal Hazardous Materials Transportation Law, 49 U.S.C. 5101 et seq. Section 5103(b) authorizes the Secretary of Transportation to prescribe regulations for the safe transportation, including security, of hazardous material in intrastate, interstate, and foreign commerce. This rule revises regulations for the safe transport of lithium batteries by air and the protection of aircraft operators and the flying public.

Alternatives:

In this rulemaking, PHMSA considered the following three alternatives: (1) PHMSA adopts all of the amendments presented in the rule; (2) a No Action alternative; and (3) a Partial Harmonization alternative.

Anticipated Costs and Benefits:

Based on the analysis described in this RIA, at the mean, PHMSA estimates the present value costs about $39.4 million over 10 years and about $5.6 million annualized (at a seven percent discount rate). Based on the estimated average 10-year cost of $39.4 million discounted at seven percent and the average 10-year VSL value of $6.74 million discounted at seven percent, this rule would need to prevent more than 5.9 fatalities ($39.4 million/$6.74 million) over the next 10 years for the benefits to exceed the quantified costs.

Risks:

PHMSA expects the rule will improve safety for flight crews, air cargo operators, and the public as a result of the state of charge requirement and the consignment and overpack restriction by reducing the possibility of fire on cargo-only aircraft. Additionally, the rule will harmonize the prohibition of lithium ion batteries as cargo on passenger
aircraft and eliminate the possibility of a package of lithium ion batteries causing or contributing to a fire in the cargo hold of a passenger aircraft.

**Timetable:**

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<td>Interim Final Rule</td>
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**Additional Information:** HM-224I;

**Regulatory Flexibility Analysis Required:** No  
**Government Levels Affected:** None

**Small Entities Affected:** Businesses  
**Federalism:** No

**Included in the Regulatory Plan:** Yes

**RIN Information URL:** [www.regulations.gov](http://www.regulations.gov)  
**Public Comment URL:** [www.regulations.gov](http://www.regulations.gov)

**RIN Data Printed in the FR:** No

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