



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

**FEB 11 2014**

Mr. Mike Tobin  
Manager Dangerous Goods  
Alaska Airlines  
P.O. Box 68900  
Seattle, WA 98168

Ref. No.: 13-0183

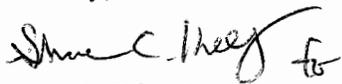
Dear Mr. Tobin:

This is in response to your August 30, 2013 letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) and the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI) applicable to the transportation of lithium batteries. In your letter you note that US Variation 1 in the ICAO TI requires compliance with all applicable requirements of Part 175 including cargo location and a requirement for packages not authorized aboard a passenger aircraft to display a CARGO ONLY AIRCRAFT (CAO) label. You ask if packages containing lithium metal batteries and cells (UN 3090) and lithium metal batteries and cells contained in or packed with equipment (UN 3091) prepared in accordance with section II of packing instructions 968, 969, and 970 in the ICAO TI are forbidden to be loaded in an inaccessible location on aircraft not carrying passengers, such as an inaccessible unit load device in a Class E main deck compartment.

The answer is no. Lithium metal batteries and cells (UN 3090) and lithium metal batteries and cells packed with or contained in equipment (UN3091) transported in accordance with Section II of packing instructions 968, 969, or 970 in the ICAO TI and US State Variation 2 are not subject to the inaccessible loading restrictions in §175.75 (see § 172.102(c)(1) special provision 188) . Further, unless specified in US Variation 2, such packages are not required to be labeled with the CARGO ONLY AIRCRAFT label. You note that §§ 175.30(a) and 175.30(a)(4) prohibits acceptance of hazardous materials unless the operator has ensured the hazardous material is labeled with a "CARGO AIRCRAFT ONLY" label if the material as presented is not permitted aboard passenger-carrying aircraft. While it is reasonable to make the assumption that the CAO label is required on these packages offered in accordance with the ICAO TI, this is not the case. US State Variation 2 is clear that packages of UN 3090 and UN 3091 prepared in accordance with Section II of packing instructions 968, 969, and 970 do not require the CAO label. It is not the intent of this office to require the CAO label on packages of lithium batteries offered under Section II of packing instructions 968, 969, and 970 of the ICAO TI.

I hope this information is helpful. If you have further questions, please do not hesitate to contact this office.

Sincerely,

A handwritten signature in black ink, appearing to read "Duane A. Pfund". The signature is fluid and cursive, with a prominent flourish at the end.

Duane A. Pfund  
International Standards Coordinator  
Standards and Rulemaking Division



August 30, 2013

U.S. Department of Transportation  
PHMSA Office of Hazardous Materials Standards  
Attn: PHH-10  
East Building  
1200 New Jersey Avenue, SE  
Washington, D.C. 20590-0001

Webb  
§ 171.12 (b)(1)  
§ 175.30  
Air / ICAO  
13-0183

### Interpretation Request

Alaska Airlines respectfully requests an interpretation on an apparent conflict between US State Variations in the ICAO Technical Instructions and the Hazardous Materials Regulations (49 CFR Parts 171-180.) Alaska Airlines operates all-passenger, all-cargo and combination aircraft (where both passengers and cargo are carried in a fixed configuration on the main deck.)

#### Question:

Are packages containing lithium metal batteries and cells (UN 3090) and lithium metal batteries and cells contained in or packed with equipment (UN 3091) prepared in accordance with Section II of Packing Instructions 968, 969 and 970 in the ICAO Technical Instructions (TI) forbidden to be loaded in an inaccessible location on aircraft not carrying passengers, such as in an inaccessible unit load device in a Class E\* main deck compartment)?

#### Why we're asking the question:

If a person only uses the ICAO Technical Instructions, they see US-2 not requiring Cargo Aircraft Only (CAO) labels because they are marked "FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT" and therefore conclude they can be loaded in an inaccessible manner per the chart in US-13 which has "inaccessible" in the forbidden column for "packages not authorized aboard a passenger carrying aircraft *and* displaying a cargo aircraft only label."

However, US-1 in the ICAO TI states shipments must be in accordance with 49 CFR "as limited by Part 171, Subpart C." There we find § 171.25(b)(1) requires, in part, compliance with "*all* applicable requirements in Part 175." And in Part 175, § 175.30 "(a) No person may accept a hazardous material for transportation aboard an aircraft unless the aircraft operator ensures the hazardous material is: ...

(4) Labeled with a "CARGO AIRCRAFT ONLY" label ... if the material as presented is not permitted aboard passenger-carrying aircraft."

Following the sequence of the 3 citations mentioned, we conclude a Section II package needs to have a CAO label, and therefore meets the "and" clause in US-2 (full citations below) and thus must be loaded in an accessible manner to the flight crew (or in a Class C cargo compartment.)

#### Recommendation:

If PHMSA's interpretation to our question is Section II batteries are forbidden in an inaccessible location we request PHMSA revise 49 CFR 175.75 table and the US-2 lower left box to read "Cargo-only aircraft - packages not authorized aboard a passenger carrying aircraft." (deleting: "and displaying a cargo aircraft only label.")

If PHMSA's interpretation to our question is Section II batteries may be loaded in an inaccessible location we request PHMSA revise 49 CFR §§ 172.402(c), 173.27(b)(4) and 175.30(a)(4) by adding: "Exception: packages bearing either a "PRIMARY LITHIUM BATTERIES - FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT" or "LITHIUM METAL BATTERIES - FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT" marking do not require a CARGO AIRCRAFT ONLY label."

\* Class E cargo compartment certified by the FAA as defined in 14 CFR 25.857(e). Class C is § 25.857(c).

Thank you in advance for your reply. If you have any questions, please don't hesitate to ask.



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**Current regulations** (which our recommendations seek to improve for clarity and compliance):

1) US-13 and the 49CFR 175.75 table use the language: inaccessible forbidden for "packages not authorized aboard a passenger carrying aircraft and displaying a cargo aircraft only label."

QUANTITY AND LOADING TABLE

Applicability	Forbidden	Quantity Limitation: 25 kg net weight of hazardous material plus 75 kg net weight of Division 2.2 (non-flammable compressed gas) per cargo compartment	No limit
Passenger-carrying aircraft	Cargo Aircraft Only labeled packages	Inaccessible	Accessible.
Cargo-only aircraft— Packages authorized aboard a passenger-carrying aircraft	Not applicable	Inaccessible (Note 1)	Accessible (Note 2).
Cargo-only aircraft— Packages not authorized aboard a passenger-carrying aircraft and displaying a Cargo Aircraft Only label	Inaccessible (Note 1)	Not applicable	Accessible (Note 2).

**Note 1:**The following materials are not subject to this loading restriction—

- a. Class 3, PG III (unless the substance is also labeled CORROSIVE).
- b. Class 6 (unless the substance is also labeled FLAMMABLE LIQUID (PG II and III only)).
- c. Class 7 (unless the hazardous material meets the definition of another hazard class).
- d. Class 9, ORM-D-AIR and Limited Quantity or Excepted Quantity material.

**Note 2:**Aboard cargo-only aircraft, packages required to be loaded in a position that is considered to be accessible include those loaded in a Class C cargo compartment.

2) US-2 requires CAO label for Section 1A and 1B batteries, but Section II batteries "must be marked "PRIMARY LITHIUM BATTERIES - FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT" or "LITHIUM METAL BATTERIES - FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT." That language, of course, comes from 49 CFR 172.102 SP 188.

3) 49 CFR 172.402(c)

Cargo Aircraft Only label. Each person who offers for transportation or transports by aircraft a package containing a hazardous material which is authorized on cargo aircraft only shall label the package with a CARGO AIRCRAFT ONLY label specified in § 172.448 of this subpart.

4) 49 CFR 173.27 General requirements for transportation by aircraft.

(b) Packages authorized onboard aircraft.

(4) A package containing a hazardous material which is authorized aboard cargo aircraft but not aboard passenger aircraft must be labeled with the CARGO AIRCRAFT ONLY label required by § 172.402(c) of this subchapter and may not be offered for transportation or transported aboard passenger-carrying aircraft.

5) 49 CFR 175.30

175.30 Inspecting shipments.

(a) No person may accept a hazardous material for transportation aboard an aircraft unless the aircraft operator ensures the hazardous material is:

(4) Labeled with a "CARGO AIRCRAFT ONLY" label (see § 172.448 of this subchapter) if the material as presented is not permitted aboard passenger-carrying aircraft.