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Effective: October 1, 2006

Code of Federal Regulations Currentness Title 49. Transportation

Subtitle B. Other Regulations Relating to Transportation

Chapter I. Pipeline and Hazardous Materials Safety Administration, Department of Transportation (Refs & Annos)

Subchapter C. Hazardous Materials Regulations

Part 175. Carriage by Aircraft (Refs & Annos)

Subpart A. General Information and Regulations

→ § 175.1 Purpose, scope and applicability.

- (a) This part prescribes requirements that apply to the transportation of hazardous materials in commerce aboard (including attached to or suspended from) aircraft. The requirements in this part are in addition to other requirements contained in parts 171, 172, 173, 178, and 180 of this subchapter.
- (b) This part applies to the offering, acceptance, and transportation of hazardous materials in commerce by aircraft to, from, or within the United States, and to any aircraft of United States registry anywhere in air commerce. This subchapter applies to any person who performs, attempts to perform, or is required to perform any function subject to this subchapter, including--
  - (1) Air carriers, indirect air carriers, and freight forwarders and their flight and non-flight employees, agents, subsidiary and contract personnel (including cargo, passenger and baggage acceptance, handling, loading and unloading personnel); and

- (2) Air passengers that carry any hazardous material on their person or in their carry-on or checked baggage.
- (c) This part does not apply to aircraft of United States registry under lease to and operated by foreign nationals outside the United States if:
  - (1) Hazardous materials forbidden aboard aircraft by § 172.101 of this subchapter are not carried on the aircraft; and
  - (2) Other hazardous materials are carried in accordance with the regulations of the State (nation) of the aircraft operator.

SOURCE: 70 FR 8302, Feb. 18, 2005; 71 FR 14604, March 22, 2006; 72 FR 44947, Aug. 9, 2007; 78 FR 65485, Oct. 31, 2013, unless otherwise noted.

AUTHORITY: 49 U.S.C. 5101 - 5128; 44701; 49 CFR 1.81 and 1.97.

49 C. F. R. § 175.1, 49 CFR § 175.1

Current through April 30, 2015; 80 FR 24774.

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Effective: October 1, 2006

Code of Federal Regulations Currentness

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Subtitle B. Other Regulations Relating to Transportation

Chapter I. Pipeline and Hazardous Materials Safety Administration, Department of Transportation (Refs & Annos)

Subchapter C. Hazardous Materials Regulations

See Part 175. Carriage by Aircraft (Refs & Annos)

Subpart A. General Information and Regulations

→ § 175.3 Unacceptable hazardous materials shipments.

A hazardous material that is not prepared for shipment in accordance with this subchapter may not be offered or accepted for transportation or transported aboard an aircraft.

SOURCE: 70 FR 8302, Feb. 18, 2005; 71 FR 14604, March 22, 2006; 72 FR 44947, Aug. 9, 2007; 78 FR 65485, Oct. 31, 2013, unless otherwise noted.

AUTHORITY: 49 U.S.C. 5101 - 5128; 44701; 49 CFR 1.81 and 1.97.

49 C. F. R. § 175.3, 49 CFR § 175.3

Current through April 30, 2015; 80 FR 24774.

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## Effective: August 6, 2014

Code of Federal Regulations Currentness

Title 49. Transportation

Subtitle B. Other Regulations Relating to Transportation

Chapter I. Pipeline and Hazardous Materials Safety Administration, Department of Transportation (Refs & Annos)

Subchapter C. Hazardous Materials Regulations

Part 175. Carriage by Aircraft (Refs & Annos)

Nation Subpart A. General Information and Regulations

→ § 175.8 Exceptions for operator equipment and items of replacement.

<For compliance date(s) of amendment(s) to section, see 80 FR 9217.>

- (a) Operator equipment. This subchapter does not apply to-
  - (1) Aviation fuel and oil in tanks that are in compliance with the installation provisions of 14 CFR, chapter 1.
  - (2) Hazardous materials required aboard an aircraft in accordance with the applicable airworthiness requirements and operating regulations. Items of replacement for such materials must be transported in accordance with paragraph (a)(3) of this section.
  - (3) Items of replacement (company material (COMAT)) for hazardous materials described

in paragraph (a)(2) of this section must be transported in accordance with this subchapter. When an operator transports its own replacement items described in paragraph (a)(2), the following exceptions apply:

- (i) In place of required packagings, packagings specifically designed for the items of replacement may be used, provided such packagings provide at least an equivalent level of protection to those that would be required by this subchapter.
- (ii) Aircraft batteries are not subject to quantity limitations such as those provided in § 172.101 or § 175.75(c) of this subchapter.
- (4) Unless otherwise addressed by FAA regulation or policy (e.g. Advisory Circular), hazardous materials used by the operator aboard the aircraft, when approved by the Administrator of the Federal Aviation Administration.
- (b) Other operator exceptions. This subchapter does not apply to—
  - (1) Oxygen, or any hazardous material used for the generation of oxygen, for medical use by a passenger, which is furnished by the aircraft operator in accordance with 14 CFR 121.574 or 135.91. For the purposes of this paragraph, an aircraft operator that does not hold a certificate under 14 CFR parts 121 or 135 may apply this exception in conformance with 14 CFR 121.574 or 135.91 in the same manner as required for a certificate holder. See § 175.501 for additional requirements applicable to the stowage of oxygen.
  - (2) Dry ice (carbon dioxide, solid) intended for

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use by the operator in food and beverage service aboard the aircraft.

- (3) Aerosols of Division 2.2 only (for dispensing of food products), alcoholic beverages, colognes, liquefied gas lighters, perfumes, and portable electronic devices containing lithium cells or batteries that meet the requirements of § 175.10(a)(18) carried aboard a passenger-carrying aircraft by the operator for use or sale on that specific aircraft. A liquefied gas lighter design must be examined and successfully tested by a person or agency authorized by the Associate Administrator.
- (4) A tire assembly with a serviceable tire, provided the tire is not inflated to a gauge pressure exceeding the maximum rated pressure for that tire, and the tire (including valve assemblies) is protected from damage during transport. A tire or tire assembly which is unserviceable or damaged is forbidden from air transport; however, a damaged tire is not subject to the requirements of this subchapter if it contains no material meeting the definition of a hazardous material (e.g., Division 2.2).

[72 FR 55693, Oct. 1, 2007; 76 FR 3381, Jan. 19, 2011; 78 FR 1092, Jan. 7, 2013; 79 FR 46039, Aug. 6, 2014; 80 FR 9217, Feb. 20, 2015]

SOURCE: 70 FR 8302, Feb. 18, 2005; 71 FR 14604 , March 22, 2006; 72 FR 44947, Aug. 9, 2007; 78 FR 65485, Oct. 31, 2013, unless otherwise noted.

AUTHORITY: 49 U.S.C. 5101 - 5128; 44701; 49 CFR 1.81 and 1.97.

49 C. F. R. § 175.8, 49 CFR § 175.8

Current through April 30, 2015; 80 FR 24774.

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#### Effective: January 8, 2015

Code of Federal Regulations Currentness Title 49. Transportation

Subtitle B. Other Regulations Relating to Transportation

Chapter I. Pipeline and Hazardous Materials Safety Administration, Department of Transportation (Refs & Annos)

Subchapter C. Hazardous Materials Regu-

Part 175. Carriage by Aircraft (Refs & Annos)

Subpart A. General Information and Regulations

→ § 175.9 Special aircraft operations.

<Text of section amended by 80 FR 1163, retroactively effective Jan. 1, 2015.>

<For compliance date(s) of amendment(s) to sub-</pre> sections (b)(6) and (b)(6)(v), see 80 FR 1076.>

- (a) This subchapter applies to rotorcraft external load operations transporting hazardous material on board, attached to, or suspended from an aircraft. Operators must have all applicable requirements prescribed in 14 CFR Part 133 approved by the FAA Administrator prior to accepting or transporting hazardous material. In addition, rotorcraft external load operations must be approved by the Associate Administrator prior to the initiation of such operations.
- (b) Exceptions. This subchapter does not apply to the following materials used for special aircraft operations when applicable FAA operator require-

ments have been met, including training operator personnel on the proper handling and stowage of the hazardous materials carried:

- (1) Hazardous materials loaded and carried in hoppers or tanks of aircraft certificated for use in aerial seeding, dusting spraying, fertilizing, crop improvement, or pest control, to be dispensed during such an operation.
- (2) Parachute activation devices, lighting equipment, oxygen cylinders, flotation devices, smoke grenades, flares, or similar devices carried during a parachute operation.
- (3) Smoke grenades, flares, and pyrotechnic devices affixed to aircraft during any flight conducted as part of a scheduled air show or exhibition of aeronautical skill. The aircraft may not carry any persons other than required flight crewmembers. The affixed installation accommodating the smoke grenades, flares, or pyrotechnic devices on the aircraft must be approved for its intended use by the FAA Flight Standards District Office having responsibility for that aircraft.
- (4) Hazardous materials are carried and used during dedicated air ambulance, fire fighting, or search and rescue operations.
- (5) A transport incubator unit necessary to protect life or an organ preservation unit necessary to protect human organs, carried in the aircraft cabin, provided:
- (i) The compressed gas used to operate the unit is in an authorized DOT specification cylinder and is marked, labeled, filled, and maintained as prescribed by this subchapter;

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(ii) Each battery used is of the nonspillable type;

- (iii) The unit is constructed so that valves, fittings, and gauges are protected from damage;
- (iv) The pilot-in-command is advised when the unit is on board, and when it is intended for use;
- (v) The unit is accompanied by a person qualified to operate it;
- (vi) The unit is secured in the aircraft in a manner that does not restrict access to or use of any required emergency or regular exit or of the aisle in the passenger compartment; and,
- (vii) Smoking within 3 m (10 feet) of the unit is prohibited.
- (6) Hazardous materials that are loaded and carried on or in cargo only aircraft, and that are to be dispensed or expended during flight for weather control, environmental restoration or protection, forest preservation and protection, firefighting and prevention, flood control, avalanche control, landslide clearance, or ice jam control purposes, when the following requirements are met:
- (i) Operations may not be conducted over densely populated areas, in a congested airway, or near any airport where carrier passenger operations are conducted.
- (ii) Each operator must prepare and keep current a manual containing operational guidelines and handling procedures, for the use and guidance of flight, maintenance, and ground personnel concerned in the dispensing or expend-

ing of hazardous materials. The manual must be approved by the FAA Principal Operations Inspector assigned to the operator.

- (iii) No person other than a required flight crewmember, FAA inspector, or person necessary for handling or dispensing the hazardous material may be carried on the aircraft.
- (iv) The operator of the aircraft must have advance permission from the owner of any airport to be used for the dispensing or expending operation.
- (v) When Division 1.1, 1.2, and 1.3 materials (except detonators and detonator assemblies) and detonators or detonator assemblies are carried for avalanche control, landslide clearance, or ice jam control flights, the explosives must be handled by, and at all times be under the control of, a qualified blaster. When required by a State or local authority, the blaster must be licensed and the State or local authority must be identified in writing to the FAA Principal Operations Inspector assigned to the operator.

[76 FR 3381, Jan. 19, 2011; 80 FR 1163, Jan. 8, 2015]

SOURCE: 70 FR 8302, Feb. 18, 2005; 71 FR 14604 March 22, 2006; 72 FR 44947, Aug. 9, 2007; 78 FR 65485, Oct. 31, 2013, unless otherwise noted.

AUTHORITY: 49 U.S.C. 5101 - 5128; 44701; 49 CFR 1.81 and 1.97.

49 C. F. R. § 175.9, 49 CFR § 175.9

Current through April 30, 2015; 80 FR 24774.

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### Effective: January 8, 2015

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Chapter I. Pipeline and Hazardous Materials Safety Administration, Department of Transportation (Refs & Annos)

Subchapter C. Hazardous Materials Regulations

Name Part 175. Carriage by Aircraft (Refs & Annos)

Subpart A. General Information and Regulations

→ § 175.10 Exceptions for passengers, crewmembers, and air operators.

<Text of section amended by 80 FR 1164, retroactively effective Jan. 1, 2015.>

<For compliance date(s) of amendment(s) to section, see 79 FR 46012; 80 FR 1076; 80 FR 9217.>

- (a) This subchapter does not apply to the following hazardous materials when carried by aircraft passengers or crewmembers provided the requirements of §§ 171.15 and 171.16 (see paragraph (c) of this section) and the requirements of this section are met:
  - (1)(i) Non-radioactive medicinal and toilet articles for personal use (including aerosols) carried in carry-on and checked baggage. Release devices on aerosols must be protected by a cap or other suitable means to prevent inadvertent release;

- (ii) Other aerosols in Div. 2.2 (nonflammable gas) with no subsidiary risk carried in checked baggage only. Release devices on aerosols must be protected by a cap or other suitable means to prevent inadvertent release; and
- (iii) The aggregate quantity of these hazardous materials carried by each person may not exceed 2 kg (70 ounces) by mass or 2 L (68 fluid ounces) by volume and the capacity of each container may not exceed 0.5 kg (18 ounces) by mass or 500 ml (17 fluid ounces) by volume.
- (2) One packet of safety matches or a lighter intended for use by an individual when carried on one's person or in carry-on baggage only. Lighter fuel, lighter refills, and lighters containing unabsorbed liquid fuel (other than liquefied gas) are not permitted on one's person or in carry-on or checked baggage.
- (3) Implanted medical devices in humans or animals that contain hazardous materials, such as a heart pacemaker containing Class 7 (radioactive) material or lithium batteries; and radiopharmaceuticals that have been injected or ingested.
- (4) Alcoholic beverages containing:
- (i) Not more than 24% alcohol by volume; or
- (ii) More than 24% and not more than 70% alcohol by volume when in unopened retail packagings not exceeding 5 liters (1.3 gallons) carried in carry-on or checked baggage, with a total net quantity per person of 5 liters (1.3) gallons for such beverages.

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- (5) Perfumes and colognes purchased through duty-free sales and carried on one's person or in carry-on baggage.
- (6) Hair curlers (curling irons) containing a hydrocarbon gas such as butane, no more than one per person, in carry-on or checked baggage. The safety cover must be securely fitted over the heating element. Gas refills for such curlers are not permitted in carry-on or checked baggage.
- (7) A small medical or clinical mercury thermometer for personal use, when carried in a protective case in carry-on or checked baggage.
- (8) Small arms ammunition for personal use carried by a crewmember or passenger in checked baggage only, if securely packed in boxes or other packagings specifically designed to carry small amounts of ammunition. Ammunition clips and magazines must also be securely boxed. This paragraph does not apply to persons traveling under the provisions of 49 CFR 1544.219.
- (9) One self-defense spray (see § 171.8 of this subchapter), not exceeding 118 mL (4 fluid ounces) by volume, that incorporates a positive means to prevent accidental discharge may be carried in checked baggage only.
- (10) Dry ice (carbon dioxide, solid), with the approval of the operator:
- (i) Quantities may not exceed 2.5 kg (5.5 pounds) per person when used to pack perishables not subject to the HMR. The package must permit the release of carbon dioxide gas; and

- (ii) When carried in checked baggage, each package is marked "DRY ICE" or "CARBON DIOXIDE, SOLID," and marked with the net weight of dry ice or an indication the net weight is 2.5 kg (5.5 pounds) or less.
- (11) A single self-inflating personal safety device such as a life jacket or vest fitted with no more than two small gas cartridges (containing no hazardous material other than a Div. 2.2 gas) for inflation purposes plus no more than two spare cartridges. The personal safety device and spare cartridges may be carried in carry-on or checked baggage, with the approval of the aircraft operator, and must be packed in such a manner that it cannot be accidently activated.
- (12) Small compressed gas cylinders of Division 2.2 (containing no hazardous material other than a Division 2.2 gas) worn by the passenger for the operation of mechanical limbs and, in carry-on and checked baggage, spare cylinders of a similar size for the same purpose in sufficient quantities to ensure an adequate supply for the duration of the journey.
- (13) A mercury barometer or thermometer carried as carry-on baggage, by a representative of a government weather bureau or similar official agency, provided that individual advises the operator of the presence of the barometer or thermometer in his baggage. The barometer or thermometer must be packaged in a strong packaging having a sealed inner liner or bag of strong, leak proof and puncture-resistant material impervious to mercury, which will prevent the escape of mercury from the package in any position.
- (14) Electrically powered heat-producing articles (e.g., battery-operated equipment such as diving lamps and soldering equipment) as

checked or carry-on baggage only and with the approval of the operator of the aircraft. The heat-producing component, the energy source, or other component (e.g., fuse) must be removed to prevent unintentional functioning during transport. Any battery that is removed must be protected against short circuit by placement in original retail packaging or by otherwise insulating terminals (e.g., by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch).

- (15) A wheelchair or other battery-powered mobility aid equipped with a nonspillable battery or a dry sealed battery when carried as checked baggage, provided—
- (i) The battery conforms to the requirements of § 173.159a(d) of this subchapter for non-spillable batteries;
- (ii) The battery conforms to the requirements of § 172.102(c)(1), Special provision 130 of this subchapter for dry sealed batteries, as applicable;
- (iii) Visual inspection including removal of the battery, where necessary, reveals no obvious defects (removal of the battery from the housing should be performed by qualified airline personnel only);
- (iv) The battery is disconnected and the battery terminals are protected to prevent short circuits, unless the wheelchair or mobility aid design provides an effective means of preventing unintentional activation, and
- (v) The battery is-
  - (A) Securely attached to the wheelchair or

mobility aid;

- (B) Is removed and placed in a strong, rigid packaging marked "NONSPILLABLE BATTERY" (unless fully enclosed in a rigid housing that is properly marked);
- (C) Is removed and placed in a strong, rigid packaging marked with the words "not restricted" in accordance with paragraph (c)(2) of § 172.102, Special provision 130, of this subchapter; or
- (D) Is handled in accordance with paragraph (a)(16)(iv) of this section.
- (16) A wheelchair or other battery-powered mobility aid equipped with a spillable battery, when carried as checked baggage, provided—
- (i) Visual inspection including removal of the battery, where necessary, reveals no obvious defects (however, removal of the battery from the housing should be performed by qualified airline personnel only);
- (ii) The battery is disconnected and terminals are insulated to prevent short circuits;
- (iii) The pilot-in-command is advised, either orally or in writing, prior to departure, as to the location of the battery aboard the aircraft; and
- (iv) The wheelchair or mobility aid is loaded, stowed, secured and unloaded in an upright position, or the battery is removed, and carried in a strong, rigid packaging under the following conditions:
  - (A) The packaging must be leak-tight and

impervious to battery fluid. An inner liner may be used to satisfy this requirement if there is absorbent material placed inside of the liner and the liner has a leakproof clos-

- (B) The battery must be protected against short circuits, secured upright in the packaging, and be packaged with enough compatible absorbent material to completely absorb liquid contents in the event of rupture of the battery; and
- (C) The packaging must be labeled with a CORROSIVE label, marked to indicate proper orientation, and marked with the words "Battery, wet, with wheelchair."
- (17) A wheelchair or other mobility aid equipped with a lithium ion battery, when carried as checked baggage, provided-
- (i) The lithium ion battery must be of a type that successfully passed each test in the UN Manual of Tests and Criteria (IBR; see § 171.7 of this subchapter), as specified in § 173.185 of this subchapter, unless approved by the Associate Administrator;
- (ii) The operator must verify that:
  - (A) Visual inspection of the wheelchair or other mobility aid reveals no obvious defects;
  - (B) Battery terminals are protected from short circuits (e.g., enclosed within a battery housing);
  - (C) The battery must be securely attached to the mobility aid; and

- (D) Electrical circuits are isolated;
- (iii) The wheelchair or other mobility aid must be loaded and stowed in such a manner to prevent its unintentional activation and its battery must be protected from short circuiting;
- (iv) The wheelchair or other mobility aid must be protected from damage by the movement of baggage, mail, service items, or other cargo;
- (v) Where a lithium ion battery-powered wheelchair or other mobility aid is specifically designed to allow its battery to be removed by the user (e.g., collapsible):
  - (A) The battery must be removed from the wheelchair or other mobility aid according to instructions provided by the wheelchair or other mobility aid owner or its manufacturer:
  - (B) The battery must be carried in carry-on baggage only;
  - (C) Battery terminals must be protected from short circuits (by placement in original retail packaging or otherwise insulating the terminal e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch);
  - (D) The battery must not exceed 25 grams aggregate equivalent lithium content; and
  - (E) A maximum of one spare battery not exceeding 25 grams aggregate equivalent lithium content or two spares not exceeding 13.5 grams aggregate equivalent lithium content each may be carried;

- (vi) The pilot-in-command is advised either orally or in writing, prior to departure, as to the location of the lithium ion battery or batteries aboard the aircraft.
- (18) Except as provided in § 173.21 of this subchapter, portable electronic devices (e.g., watches, calculating machines, cameras, cellular phones, laptop and notebook computers, camcorders, medical devices etc.) containing dry cells or dry batteries (including lithium cells or batteries) and spare dry cells or batteries for these devices, when carried by passengers or crew members for personal use. Portable electronic devices powered by lithium batteries may be carried in either checked or carry-on baggage. Spare lithium batteries must be carried in carry-on baggage only. Each installed or spare lithium battery must be of a type proven to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, Sub-section 38.3 and each spare lithium battery must be individually protected so as to prevent short circuits (e.g., by placement in original retail packaging, by otherwise insulating terminals by taping over exposed terminals, or placing each battery in a separate plastic bag or protective pouch). In addition, each installed or spare lithium battery must not exceed the following:
- (i) For a lithium metal battery, a lithium content of not more than 2 grams per battery; or
- (ii) For a lithium ion battery, the Watt-hour rating must not exceed 100 Wh. With the approval of the operator, portable electronic devices may contain lithium ion batteries exceeding 100 Wh, but not exceeding 160 Wh and no more than two individually protected lithium ion batteries each exceeding 100 Wh, but not exceeding 160 Wh, may be carried per person as spare batteries in carry-on baggage.

- (iii) For a non-spillable battery, the battery and equipment must conform to § 173.159a(d). Each battery must not exceed a voltage greater than 12 volts and a watt-hour rating of not more than 100 Wh. No more than two individually protected spare batteries may be carried. Such equipment and spare batteries must be carried in checked or carry-on baggage.
- (iv) Articles containing lithium metal or lithium ion cells or batteries the primary purpose of which is to provide power to another device must be carried as spare batteries in accordance with the provisions of this paragraph.
- (19) Fuel cells used to power portable electronic devices (e.g., cameras, cellular phones, laptop computers and camcorders) and spare fuel cell cartridges when transported personal use under the following conditions:
- (i) Fuel cells and fuel cell cartridges may contain only Division 2.1 liquefied flammable gas, or hydrogen in a metal hydride, Class 3 flammable liquid (including methanol), Division 4.3 water-reactive material, or Class 8 corrosive material;
- (ii) The quantity of fuel in any fuel cell or fuel cell cartridge may not exceed:
  - (A) 200 mL (6.76 ounces) for liquids;
  - (B) 120 mL (4 fluid ounces) for liquefied gases in non-metallic fuel cell cartridges, or 200 mL (6.76 ounces) for liquefied gases in metal fuel cell cartridges;
  - (C) 200 g (7 ounces) for solids; or
  - (D) For hydrogen in metal hydride, the fuel

cell cartridges must have a water capacity of 120 mL (4 fluid ounces) or less;

- (iii) No more than two spare fuel cell cartridges may be carried by a passenger or crew member as follows:
  - (A) Fuel cell cartridges containing Class 3 flammable liquid (including methanol) and Class 8 corrosive material in carry-on or checked baggage; and
  - (B) Division 2.1 liquefied flammable gas or hydrogen in a metal hydride and Division 4.3 water-reactive material in carry-on baggage only;
- (iv) Fuel cells containing fuel are permitted in carry-on baggage only;
- (v) Fuel cell cartridges containing hydrogen in a metal hydride must meet the requirements in § 173.230(d) of this subchapter;
- (vi) Refueling of a fuel cell aboard an aircraft is not permitted except that the installation of a spare cartridge is allowed;
- (vii) Each fuel cell and fuel cell cartridge must conform to IEC 62282-6-100 and IEC 62282-6-100 Amend. 1 (IBR; see § 171.7 of this subchapter) and must be marked with a manufacturer's certification that it conforms to the specification. In addition, each fuel cell cartridge must be marked with the maximum quantity and type of fuel in the cartridge;
- (viii) Interaction between fuel cells and integrated batteries in a device must conform to IEC 62282-6-100 and IEC 62282-6-100 Amend. 1 (IBR, see § 171.7 of this subchapter). Fuel cells

whose sole function is to charge a battery in the device are not permitted; and

- (ix) Fuel cells must be of a type that will not charge batteries when the consumer electronic device is not in use and must be durably marked by the manufacturer with the wording: "APPROVED FOR CARRIAGE IN AIRCRAFT CABIN ONLY" to indicate that the fuel cell meets this requirement.
- (20) Permeation devices for calibrating air quality monitoring equipment when carried in checked baggage provided the devices are constructed and packaged in accordance with § 173.175.
- (21) An internal combustion or fuel cell engine or a machine or apparatus containing an internal combustion or fuel cell engine when carried as checked baggage, provided—
- (i) The engine contains no liquid or gaseous fuel. An engine may be considered as not containing fuel when the engine components and any fuel lines have been completed drained, sufficiently cleaned of residue, and purged of vapors to remove any potential hazard and the engine when held in any orientation will not release any liquid fuel;
- (ii) The fuel tank contains no liquid or gaseous fuel. A fuel tank may be considered as not containing fuel when the fuel tank and the fuel lines have been completed drained, sufficiently cleaned of residue, and purged of vapors to remove any potential hazard;
- (iii) It is not equipped with a wet battery (including a non-spillable battery), a sodium battery or a lithium battery; and

(iv) It contains no other hazardous materials subject to the requirements of this subchapter.

- (22) Non-infectious specimens transported in accordance with § 173.4b(b).
- (23) Insulated packagings containing refrigerated liquid nitrogen when carried in checked or carry-on baggage in accordance with the ICAO Technical Instructions (IBR, see § 171.7 of this subchapter), Packing Instruction 202, the packaging specifications in part 6, chapter 5, and special provision A152.
- (24) Small cartridges fitted into devices with no more than four small cartridges of carbon dioxide or other suitable gas in Division 2.2, without subsidiary risk with the approval of the operator. The water capacity of each cartridge must not exceed 50 mL (equivalent to a 28 g cartridge).
- (b) The exceptions provided in paragraph (a) of this section also apply to aircraft operators when transporting passenger or crewmember baggage that has been separated from the passenger or crewmember, including transfer to another carrier for transport to its final destination.
- (c) The requirements to submit incident reports as required under §§ 171.15 and 171.16 of this subchapter apply to the air carrier.

[71 FR 78634, Dec. 29, 2006; 72 FR 44947, 44950, Aug. 9 2007; 73 FR 4719, Jan. 28, 2008; 73 FR 23367, April 30, 2008; 74 FR 2266, Jan. 14, 2009; 75 FR 73, Jan. 4, 2010; 76 FR 3381, Jan. 19, 2011; 76 FR 43531, July 20, 2011; 76 FR 82178, Dec. 30, 2011; 78 FR 1093, Jan. 7, 2013; 78 FR 1117, Jan. 7, 2013; 78 FR 65485, Oct. 31, 2013; 79 FR 46040, Aug. 6, 2014; 80 FR 1164, Jan. 8, 2015; 80 FR 9217, Feb. 20, 2015]

SOURCE: 70 FR 8302, Feb. 18, 2005; 71 FR 14604, March 22, 2006; 72 FR 44947, Aug. 9, 2007; 78 FR 65485, Oct. 31, 2013, unless otherwise noted.

AUTHORITY: 49 U.S.C. 5101 - 5128; 44701; 49 CFR 1.81 and 1.97.

49 C. F. R. § 175.10, 49 CFR § 175.10

Current through April 30, 2015; 80 FR 24774.

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Effective: October 1, 2006

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Part 175. Carriage by Aircraft (Refs & Annos)

Subpart A. General Information and Regulations

→ § 175.20 Compliance and training.

An air carrier may not transport a hazardous material by aircraft unless each of its hazmat employees involved in that transportation is trained as required by subpart H of part 172 of this subchapter. In addition, air carriers must comply with all applicable hazardous materials training requirements in 14 CFR Part 121 and 135.

SOURCE: 70 FR 8302, Feb. 18, 2005; 71 FR 14604 , March 22, 2006; 72 FR 44947, Aug. 9, 2007; 78 FR 65485, Oct. 31, 2013, unless otherwise noted.

AUTHORITY: 49 U.S.C. 5101 - 5128; 44701; 49 CFR 1.81 and 1.97.

49 C. F. R. § 175.20, 49 CFR § 175.20

Current through April 30, 2015; 80 FR 24774.

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#### Effective: January 8, 2015

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Name Part 175. Carriage by Aircraft (Refs & Annos)

Subpart A. General Information and Regulations

→ § 175.25 Notification at air passenger facilities of hazardous materials restrictions.

<Text of section amended by 80 FR 1164, retroactively effective Jan. 1, 2015.>

<For compliance date(s) of amendment(s) to subsections (b) and (c), see 80 FR 1076.>

(a) Notices of requirements. Each person who engages in for-hire air transportation of passengers must display notices of the requirements applicable to the carriage of hazardous materials aboard aircraft, and the penalties for failure to comply with those requirements in accordance with this section. Each notice must be legible, and be prominently displayed so it can be seen by passengers in locations where the aircraft operator issues tickets, checks baggage, and maintains aircraft boarding areas. At a minimum, each notice must communicate the following information:

- (1) Federal law forbids the carriage of hazardous materials aboard aircraft in your luggage or on your person. A violation can result in five years' imprisonment and penalties of \$250,000 or more (49 U.S.C. 5124). Hazardous materials include explosives, compressed gases, flammable liquids and solids, oxidizers, poisons, corrosives and radioactive materials. Examples: Paints, lighter fluid, fireworks, tear gases, oxygen bottles, and radio-pharmaceuticals.
- (2) There are special exceptions for small quantities (up to 70 ounces total) of medicinal and toilet articles carried in your luggage and certain smoking materials carried on your person. For further information contact your airline representative.
- (b) Ticket purchase. An aircraft operator must ensure that information on the types of hazardous materials which a passenger is forbidden to transport aboard an aircraft is presented at the point of ticket purchase or, if this is not practical, made available in another manner to passengers prior to the checkin process. Information provided via the Internet may be in text or pictorial form but must be such that ticket purchase cannot be completed until the passenger, or a person acting on their behalf, has been presented with this information and indicated that they have understood the restrictions on hazardous materials in baggage.
- (c) Check-in. When the flight check-in process is conducted remotely (e.g., via the Internet) or when completed at the airport, without assistance from another person (e.g., automated check-in kiosk), the aircraft operator must ensure that information on the types of hazardous materials a passenger is forbidden to transport aboard an aircraft is presented to passengers. Information may be in text or in pictorial form but must be such that the check-in process cannot be completed until the passenger, or

a person acting on their behalf, has been presented with this information and indicated that they have understood the restrictions on hazardous materials in baggage.

(d) Signage. When the check in process is not conducted remotely (e.g., at the airport with the assistance of an airline representative), passenger notification of permitted and forbidden hazardous materials may be completed through signage (electronic or otherwise), provided it is legible and prominently displayed.

[76 FR 3382, Jan. 19, 2011; 78 FR 1117, Jan. 7, 2013; 78 FR 65486, Oct. 31, 2013; 80 FR 1164, Jan. 8, 2015]

SOURCE: 70 FR 8302, Feb. 18, 2005; 71 FR 14604, March 22, 2006; 72 FR 44947, Aug. 9, 2007; 78 FR 65485, Oct. 31, 2013, unless otherwise noted.

AUTHORITY: 49 U.S.C. 5101 - 5128; 44701; 49 CFR 1.81 and 1.97.

49 C. F. R. § 175.25, 49 CFR § 175.25

Current through April 30, 2015; 80 FR 24774.

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### Effective: October 1, 2006

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Subchapter C. Hazardous Materials Regulations

Part 175. Carriage by Aircraft (Refs & Annos)

Subpart A. General Information and Regulations

→ § 175.26 Notification at cargo facilities of hazardous materials requirements.

- (a) Each person who engages in the acceptance or transport of cargo for transportation by aircraft shall display notices to persons offering such cargo of the requirements applicable to the carriage of hazardous materials aboard aircraft, and the penalties for failure to comply with those requirements, at each facility where cargo is accepted. Each notice must be legible, and be prominently displayed so it can be seen. At a minimum, each notice must communicate the following information:
  - (1) Cargo containing hazardous materials (dangerous goods) for transportation by aircraft must be offered in accordance with the Federal Hazardous Materials Regulations (49 CFR parts 171 through 180).
  - (2) A violation can result in five years' imprisonment and penalties of \$250,000 or more (49 U.S.C. 5124).

- (3) Hazardous materials (dangerous goods) include explosives, compressed gases, flammable liquids and solids, oxidizers, poisons, corrosives and radioactive materials.
- (b) The information contained in paragraph (a) of this section must be printed:
  - (1) Legibly in English, and, where cargo is accepted outside of the United States, in the language of the host country; and
  - (2) On a background of contrasting color.
- (c) Size and color of the notice are optional. Additional information, examples, or illustrations, if not inconsistent with required information, may be included.
- (d) Exceptions. Display of a notice required by paragraph (a) of this section is not required at:
  - (1) An unattended location (e.g., a drop box) provided a general notice advising customers of a prohibition on shipments of hazardous materials through that location is prominently displayed; or
  - (2) A customer's facility where hazardous materials packages are accepted by a carrier.

SOURCE: 70 FR 8302, Feb. 18, 2005; 71 FR 14604, March 22, 2006; 72 FR 44947, Aug. 9, 2007; 78 FR 65485, Oct. 31, 2013, unless otherwise noted.

AUTHORITY: 49 U.S.C. 5101 - 5128; 44701; 49 CFR 1.81 and 1.97.

49 C. F. R. § 175.26, 49 CFR § 175.26

Current through April 30, 2015; 80 FR 24774.

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r Part 175. Carriage by Aircraft (Refs & Annos)

Subpart A. General Information and Regulations

→ § 175.30 Inspecting shipments.

<Text of section amended by 80 FR 1164, retroactively effective Jan. 1, 2015.>

<For compliance date(s) of amendment(s) to sub-</p> sections (e)(1) and (e)(2), see 80 FR 1076.>

- (a) No person may accept a hazardous material for transportation aboard an aircraft unless the aircraft operator ensures the hazardous material is:
  - (1) Authorized, and is within the quantity limitations specified for carriage aboard aircraft according to § 172.101 of this subchapter or as specifically provided by otherwise subchapter.
  - (2) Described and certified on a shipping paper prepared in duplicate in accordance with part 172 of this subchapter or as authorized by subpart C of part 171 of this subchapter. See §

175.33 for shipping paper retention requirements;

- (3) Marked and labeled in accordance with subparts D and E of part 172 or as authorized by subpart C of part 171 of this subchapter, and placarded (when required) in accordance with subpart F of part 172 of this subchapter; and
- (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.
- (b) Except as provided in paragraph (d) of this section, no person may carry a hazardous material in a package, outside container, or overpack aboard an aircraft unless the package, outside container, or overpack is inspected by the operator of the aircraft immediately before placing it:
  - (1) Aboard the aircraft; or
  - (2) In a unit load device or on a pallet prior to loading aboard the aircraft.
- (c) A hazardous material may be carried aboard an aircraft only if, based on the inspection by the operator, the package, outside container, or overpack containing the hazardous material:
  - (1) Has no holes, leakage or other indication that its integrity has been compromised; and
  - (2) For Class 7 (radioactive) materials, does not have a broken seal, except packages contained in overpacks need not be inspected for seal integrity.

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(d) The requirements of paragraphs (b) and (c) of this section do not apply to Dry ice (carbon dioxide,

- (e) An overpack containing packages of hazardous materials may be accepted only if the operator has taken all reasonable steps to establish that:
  - (1) The proper shipping names, identification numbers, labels and special handling instructions appearing on the inside packages are clearly visible or reproduced on the outside of the overpack, and
  - (2) The word "OVERPACK" appears on the outside of the overpack when specification packagings are required.

[72 FR 25177, May 3, 2007; 73 FR 57006, Oct. 1, 2008; 76 FR 3383, Jan. 19, 2011; 79 FR 46040, Aug. 6, 2014; 80 FR 1164, Jan. 8, 2015]

SOURCE: 70 FR 8302, Feb. 18, 2005; 71 FR 14604 , March 22, 2006; 72 FR 44947, Aug. 9, 2007; 78 FR 65485, Oct. 31, 2013, unless otherwise noted.

AUTHORITY: 49 U.S.C. 5101 - 5128; 44701; 49 CFR 1.81 and 1.97.

49 C. F. R. § 175.30, 49 CFR § 175.30

Current through April 30, 2015; 80 FR 24774.

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#### Effective: October 1, 2006

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Subchapter C. Hazardous Materials Regulations

Part 175. Carriage by Aircraft (Refs & Annos)

Subpart A. General Information and Regulations

→ § 175.31 Reports of discrepancies.

- (a) Each person who discovers a discrepancy, as defined in paragraph (b) of this section, relative to the shipment of a hazardous material following its acceptance for transportation aboard an aircraft shall, as soon as practicable, notify the nearest FAA Regional or Field Security Office by telephone or electronically, and shall provide the following information:
  - (1) Name and telephone number of the person reporting the discrepancy.
  - (2) Name of the aircraft operator.
  - (3) Specific location of the shipment con-cerned.
  - (4) Name of the shipper.
  - (5) Nature of discrepancy.

- (6) Address of the shipper or person responsible for the discrepancy, if known, by the air carrier.
- (b) Discrepancies which must be reported under paragraph (a) of this section are those involving hazardous materials which are improperly described, certified, labeled, marked, or packaged, in a manner not ascertainable when accepted under the provisions of § 175.30(a) of this subchapter including packages or baggage which are found to contain hazardous materials subsequent to their being offered and accepted as other than hazardous materials.

SOURCE: 70 FR 8302, Feb. 18, 2005; 71 FR 14604, March 22, 2006; 72 FR 44947, Aug. 9, 2007; 78 FR 65485, Oct. 31, 2013, unless otherwise noted.

AUTHORITY: 49 U.S.C. 5101 - 5128; 44701; 49 CFR 1.81 and 1.97.

49 C. F. R. § 175.31, 49 CFR § 175.31

Current through April 30, 2015; 80 FR 24774.

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### Effective: January 8, 2015

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Subchapter C. Hazardous Materials Regu-

r Part 175. Carriage by Aircraft (Refs & Annos)

Subpart A. General Information and Regulations

→ § 175.33 Shipping paper and notification of pilot-in-command.

<Text of section amended by 80 FR 1164, retroact-</p> ively effective Jan. 1, 2015.>

<For compliance date(s) of amendment(s) to sub-</p> section (a)(1)(i), see 80 FR 1076.>

- (a) When a hazardous material subject to the provisions of this subchapter is carried in an aircraft, a copy of the shipping paper required by § 175.30(a)(2) must accompany the shipment it covers during transportation aboard the aircraft, and the operator of the aircraft must provide the pilotin-command with accurate and legible written information as early as practicable before departure of the aircraft, which specifies at least the following:
  - (1) The proper shipping name, hazard class and identification number of the material, including any remaining aboard from prior stops, as spe-

cified in § 172.101 of this subchapter or the ICAO Technical Instructions. In the case of Class 1 materials, the compatibility group letter also must be shown. If a hazardous material is described by the proper shipping name, hazard class, and identification number appearing in:

- (i) Section 172.101 of this subchapter. Except for the requirement to indicate the type of package or technical name, any additional description requirements provided in §§ 172.202, and 172.203 of this subchapter must also be shown on the notification.
- (ii) The ICAO Technical Instructions (IBR, see § 171.7 of this subchapter), any additional information required to be shown on shipping papers by subpart C of part 171 of this subchapter must also be shown in the notification.
- (2) The total number of packages;
- (3) The net quantity or gross weight, as applicable, for each package except those containing Class 7 (radioactive) materials. For a shipment consisting of multiple packages containing hazardous materials bearing the same proper shipping name and identification number, only the total quantity and an indication of the quantity of the largest and smallest package at each loading location need to be provided;
- (4) The location of the packages aboard the aircraft;
- (5) Confirmation that no damaged or leaking packages have been loaded on the aircraft;
- (6) For Class 7 (radioactive) materials, the

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number of packages, overpacks or freight containers, their category, transport index (if applicable), and their location aboard the aircraft;

### (7) The date of the flight;

- (8) The telephone number of a person not aboard the aircraft from whom the information contained in the notification of pilotin-command can be obtained. The aircraft operator must ensure the telephone number is monitored at all times the aircraft is in flight. The telephone number is not required to be placed on the notification of pilot-in-command if the phone number is in a location in the cockpit available and known to the flight crew.
- (9) Confirmation that the package must be carried only on cargo aircraft if its transportation aboard passenger-carrying aircraft is forbidden; and
- (10) An indication, when applicable, that a hazardous material is being carried under terms of a special permit.
- (11) For UN1845, Carbon dioxide, solid (dry ice), only the UN number, proper shipping name, hazard class, total quantity in each hold aboard the aircraft, and the airport at which the package(s) is to be unloaded must be provided.
- (b) A copy of the written notification to pilotin-command shall be readily available to the pilotin-command during flight. Emergency response information required by subpart G of part 172 of this subchapter must be maintained in the same manner as the written notification to pilot-in-command during transport of the hazardous material aboard the aircraft.

# (c) The aircraft operator must—

- (1) Retain a copy of the shipping paper required by § 175.30(a)(2) or an electronic image thereof, that is accessible at or through its principal place of business and must make the shipping paper available, upon request, to an authorized official of a federal, state, or local government agency at reasonable times and locations. For a hazardous waste, each shipping paper copy must be retained for three years after the material is accepted by the initial carrier. For all other hazardous materials, each shipping paper copy must be retained by the operator for one year after the material is accepted by the initial carrier. Each shipping paper copy must include the date of acceptance by the carrier. The date on the shipping paper may be the date a shipper notifies the air carrier that a shipment is ready for transportation, as indicated on the air bill or bill of lading, as an alternative to the date the shipment is picked up or accepted by the carrier. Only an initial carrier must receive and retain a copy of the shipper's certification, as required by § 172.204 of this subchapter.
- (2) Retain a copy of each notification of pilotin-command, an electronic image thereof, or the information contained therein for 90 days at the airport of departure or the operator's principal place of business.
- (3) Have the information required to be retained under this paragraph readily accessible at the airport of departure and the intended airport of arrival for the duration of the flight leg.
- (4) Make available, upon request, to an authorized official of a Federal, State, or local government agency (including an emergency responder(s)) at reasonable times and locations, the documents or information required to be re-

tained by this paragraph. In the event of a reportable incident, as defined in § 171.15 of this subchapter, make immediately available to an authorized official of a Federal, State, or local government agency (including an emergency responders), the documents or information required to be retained by this paragraph.

(d) The documents required by paragraphs (a) and (b) this section may be combined into one document if it is given to the pilot-in-command before departure of the aircraft.

[72 FR 25177, May 3, 2007; 73 FR 57006, Oct. 1, 2008; 74 FR 2267, Jan. 14, 2009; 79 FR 46040, Aug. 6, 2014; 80 FR 1164, Jan. 8, 2015]

SOURCE: 70 FR 8302, Feb. 18, 2005; 71 FR 14604, March 22, 2006; 72 FR 44947, Aug. 9, 2007; 78 FR 65485, Oct. 31, 2013, unless otherwise noted.

AUTHORITY: 49 U.S.C. 5101 - 5128; 44701; 49 CFR 1.81 and 1.97.

49 C. F. R. § 175.33, 49 CFR § 175.33

Current through April 30, 2015; 80 FR 24774.

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### Effective: April 17, 2014

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Subchapter C. Hazardous Materials Regulations

Name Part 175. Carriage by Aircraft (Refs & Annos)

Subpart A. General Information and Regulations

→ § 175.34 Exceptions for Cylinders of Compressed Oxygen or Other Oxidizing Gases Transported Within the State of Alaska.

- (a) Exceptions. When transported in the State of Alaska, cylinders of compressed oxygen or other oxidizing gases aboard aircraft are excepted from all the requirements of §§ 173.302(f)(3) through (5) and 173.304(f)(3) through (5) of this subchapter subject to the following conditions:
  - (1) Transportation of the cylinders by a ground-based or water-based mode of transportation is unavailable and transportation by aircraft is the only practical means for transporting the cylinders to their destination;
  - (2) Each cylinder is fully covered with a fire or flame resistant blanket that is secured in place; and
  - (3) The operator of the aircraft complies with the applicable notification procedures under § 175.33.

- (b) Aircraft restrictions. This exception only applies to the following types of aircraft:
  - (1) Cargo-only aircraft transporting the cylinders to a delivery destination that receives cargo-only service at least once a week.
  - (2) Passenger and cargo-only aircraft transporting the cylinders to a delivery destination that does not receive cargo only service once a week.

[79 FR 15046, March 18, 2014]

SOURCE: 70 FR 8302, Feb. 18, 2005; 71 FR 14604, March 22, 2006; 72 FR 44947, Aug. 9, 2007; 78 FR 65485, Oct. 31, 2013, unless otherwise noted.

AUTHORITY: 49 U.S.C. 5101 - 5128; 44701; 49 CFR 1.81 and 1.97.

49 C. F. R. § 175.34, 49 CFR § 175.34

Current through April 30, 2015; 80 FR 24774.

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#### Effective: October 31, 2013

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Subchapter C. Hazardous Materials Regula-tions Part 175. Carriage by Aircraft (Refs & Annos)

Subpart B. Loading, Unloading and Handling

→ § 175.75 Quantity limitations and cargo location.

- (a) No person may carry on an aircraft a hazardous material except as permitted by this subchapter.
- (b) Except as otherwise provided in this subchapter, no person may carry a hazardous material in the cabin of a passenger-carrying aircraft or on the flight deck of any aircraft, and the hazardous material must be located in a place that is inaccessible to persons other than crew members. Hazardous materials may be carried in a main deck cargo compartment of a passenger aircraft provided that the compartment is inaccessible to passengers and that it meets all certification requirements for a Class B aircraft cargo compartment in 14 CFR 25.857(b) or for a Class C aircraft cargo compartment in 14 CFR 25.857(c). A package bearing a "KEEP AWAY FROM HEAT" handling marking must be protected from direct sunshine and stored in a cool and ventilated place, away from sources of heat.
- (c) For each package containing a hazardous material acceptable for carriage aboard passenger-carrying aircraft, no more than 25 kg (55 pounds) net weight of hazardous material may be loaded in an inaccessible

manner. In addition to the 25 kg limitation, an additional 75 kg (165 pounds) net weight of Division 2.2 (non-flammable compressed gas) may be loaded in an inaccessible manner. The requirements of this paragraph do not apply to Class 9, articles of Identification Numbers UN0012, UN0014, or UN0055 also meeting the requirements of § 173.63(b), and Limited or Excepted Ouantity material.

- (d) For the purposes of this section--
  - (1) Accessible means, on passenger-carrying or cargo-only aircraft that each package is loaded where a crew member or other authorized person can access, handle, and, when size and weight permit, separate such packages from other cargo during flight, including a freight container in an accessible cargo compartment when packages are loaded in an accessible manner. Additionally, a package is considered accessible when transported on a cargo-only aircraft if it is:
  - (i) In a cargo compartment certified by FAA as a Class C aircraft cargo compartment as defined in 14 CFR 25.857(c); or
  - (ii) In an FAA-certified freight container that has an approved fire or smoke detection system and fire suppression system equivalent to that required by the certification requirements for a Class C aircraft cargo compartment.
  - (2) Inaccessible means all other configurations to include packages loaded where a crew member or other authorized person cannot access, handle, and, when size and weight permit, separate such packages from other cargo during flight, including a freight container in an accessible cargo compartment when packages are loaded in an inaccessible manner.
- (e) For transport aboard cargo-only aircraft, the requirements of paragraphs (c) and (d) of this section do not apply to the following hazardous materials:

- (1) Class 3, PG III (unless the substance is also labeled CORROSIVE), Class 6.1 (unless the substance is also labeled for any hazard class or division except FLAMMABLE LIQUID), Division 6.2, Class 7 (unless the hazardous material meets the definition of another hazard class), Class 9, articles of Identification Numbers UN0012, UN0014, or UN0055 also meeting the requirements of § 173.63(b), and those marked as a Limited Quantity or Excepted Quantity material.
- (2) Packages of hazardous materials transported aboard a cargo aircraft, when other means of transportation are impracticable or not available, in accordance with procedures approved in writing by the FAA Regional or Field Security Office in the region where the operator is located.
- (3) Packages of hazardous materials carried on small, single pilot, cargo aircraft if:
- (i) No person is carried on the aircraft other than the pilot, an FAA inspector, the shipper or consign-

- ee of the material, a representative of the shipper or consignee so designated in writing, or a person necessary for handling the material;
- (ii) The pilot is provided with written instructions on the characteristics and proper handling of the materials; and
- (iii) Whenever a change of pilots occurs while the material is on board, the new pilot is briefed under a hand-to-hand signature service provided by the operator of the aircraft.
- (f) At a minimum, quantity limits and loading instructions in the following quantity and loading table must be followed to maintain acceptable quantity and loading between packages containing hazardous materials. The quantity and loading table is as follows:

Quantity and Loading Table							
Applicability	Forbidden	Quantity Limitation: 25 kg net weight of hazardous ma- terial 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	Inaccessible (Note 1)	Not applicable	Accessible (Note 2).	4.5			
Packages not authorized aboard a passenger-carrying aircraft and displaying a Cargo Aircraft Only label				:- ;			

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. Division 6.1 (unless the substance is also labeled for any hazard class or division except FLAMMABLE LIQUID)

- c. Class 7 (unless the hazardous material meets the definition of another hazard class).
- d. Class 9, Limited Quantity or Excepted Quantity material.
- e. Articles of Identification Numbers UN0012, UN0014, or UN0055 also meeting the requirements of § 173.63(b).

  Note 2: Aboard cargo-only aircraft, packages required to be loaded in a position that is considered to be accessible in

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.

[71 FR 54395, Sept. 14, 2006; 72 FR 55693, Oct. 1, 2007; 74 FR 2267, Jan. 14, 2009; 76 FR 3383, Jan. 19, 2011; 76 FR 82178, Dec. 30, 2011; 78 FR 65486, Oct. 31, 2013]

SOURCE: 70 FR 8302, Feb. 18, 2005; 71 FR 14604, March 22, 2006; 72 FR 44947, Aug. 9, 2007; 78 FR 65485, Oct. 31, 2013, unless otherwise noted.

AUTHORITY: 49 U.S.C. 5101 - 5128; 44701; 49 CFR 1.81 and 1.97.

49 C. F. R. § 175.75, 49 CFR § 175.75

Current through April 30, 2015; 80 FR 24774.

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### Effective: January 19, 2011

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Subchapter C. Hazardous Materials Regula- tions

\* Part 175. Carriage by Aircraft (Refs & Annos)

Subpart B. Loading, Unloading and Handling

→ § 175.78 Stowage compatibility of cargo.

- (a) For stowage on an aircraft, in a cargo facility, or in any other area at an airport designated for the stowage of hazardous materials, packages containing hazardous materials which might react dangerously with one another may not be placed next to each other or in a position that would allow a dangerous interaction in the event of leakage.
- (b) At a minimum, the segregation instructions prescribed in the following Segregation Table must be followed to maintain acceptable segregation between packages containing hazardous materials with different hazards. The Segregation Table instructions apply whether or not the class or division is the primary or subsidiary risk. The Segregation Table follows:

Segregation Table											
		Class or division									
	Hazard label	1	2	3	4.2	4.3	5.1	5.2	8		
1	and the state of t	Note 1	Note 2								
2		Note 2									
3		Note 2					X				
4.2		Note 2					X				
4.3		Note 2							X		
5.1		Note 2		X	X						
5.2		Note 2					- W				
8		Note 2				X					

- (c) Instructions for using the Segregation Table are as follows:
  - (1) Hazard labels, classes or divisions not shown in the table are not subject to segregation require- ments.
  - (2) Dots at the intersection of a row and column in-

- dicate that no restrictions apply.
- (3) The letter "X" at the intersection of a row and column indicates that packages containing these classes of hazardous materials may not be stowed next to or in contact with each other, or in a position which would allow interaction in the event of leakage of the contents.