

VOLUME 2. Air Operator Certification

CHAPTER 3. SELECTED PRACTICES

SECTION 5. HAZARDOUS MATERIALS OR DANGEROUS GOODS

217. GENERAL. This section contains information, direction, and guidance to be used by operations inspectors concerning inspections of hazardous materials or dangerous goods, the acceptance of hazardous materials or dangerous goods manuals, and the approval of hazardous materials or dangerous goods training. As used in this section, the terms “hazardous materials” and “dangerous goods” are synonymous. All Title 14 of the Code of Federal Regulations (14 CFR) part 121 and part 135 operators are required to provide training on the identification of hazardous materials to their personnel. Those operators who transport hazardous materials must include procedures for handling these materials in their general operations manuals (GOM). These operators must also train their personnel in the use of these procedures.

NOTE: Operators that choose not to carry hazardous materials must have a hazardous materials recognition program.

219. RESPONSIBILITY FOR ACCEPTANCE/ APPROVAL, SURVEILLANCE, AND ENFORCEMENT OF HAZARDOUS MATERIALS PROGRAMS. The Office of Security and Hazardous Materials (ASH) through the Regional Hazardous Materials Branch Managers (HMBM) has oversight responsibility for an air carrier’s hazardous materials program. The HMBM is the technical expert and must evaluate all hazardous materials programs. (See Table 2.3.5.2 for a list of HMBMs.) An operator’s hazardous materials program is contained in its hazardous materials manual and includes hazardous materials training. Operators should use the latest version of Advisory Circular (AC) 121-21, Information Guide for Training Programs and Manual Requirements in the Air Transportation of Hazardous Materials, when they develop their hazardous materials programs.

A. Procedures for Approval of Hazardous Materials Training. When a POI receives proposed or updated hazardous materials training from an operator, the POI should forward it to the HMBM. The HMBM evaluates the contents of the training and consults with the POI when necessary. The operator should coordinate with the HMBM as necessary to formulate satisfactory hazardous materials training. Once the HMBM is satisfied with the training, the

HMBM will recommend it to the POI in writing for final approval. The POI then approves the implementation of the training in accordance with 14 CFR part 121, section 121.433a and part 135, section 135.333. Hazardous materials training is usually included in the air carrier’s hazardous materials manual. The initial approval of the training is usually done at the same time as the review and acceptance of the hazardous materials manual.

B. Procedures for Approval of Hazardous Materials Manuals. Like other manuals, the hazardous materials manual is required by 14 CFR part 121, section 121.135 and part 135, section 135.23 and must be accepted by the POI. However, POIs must not accept this manual until the HMBM has evaluated it and recommended it for acceptance. When a POI receives a hazardous materials manual for review from an air carrier, the POI should forward it to the HMBM. The HMBM will review the contents of the manual and consult with the POI when necessary. The operator should coordinate with the HMBM as necessary to formulate satisfactory hazardous materials manual. Once the HMBM is satisfied with the manual, the HMBM will recommend it to the POI in writing for acceptance. Only then may the POI accept the manual.

221. HAZARDOUS MATERIAL INFORMATION REQUIREMENTS FOR OPERATORS NOT ACCEPTING HAZARDOUS MATERIALS. Operators who do not accept, handle, or store hazardous materials must provide procedures and instructions in the operator’s manual as follows:

- Procedures and instructions so that all personnel responsible for accepting and handling any cargo or packaged materials receive adequate training on the recognition of items classified as hazardous materials (Adequate is defined in an operational sense to mean the demonstrated ability of required personnel to identify such items.)
- Procedures and instructions so that no packages are accepted by the operator that contain a hazardous material
- Procedures and instructions for reporting that damaged packages found to contain, or that are suspected of containing, hazardous materials or dan-

gerous goods are reported in compliance with Title 49 of the Code of Federal Regulations (49 CFR) part 171 §§ 171.15, 171.16, and 175.31

- Procedures and instructions to see that all company material (COMAT) containing hazardous materials will be offered to a different mode of transportation (e.g., ground) and/or an air carrier that is authorized to transport hazardous materials
- Procedures and instructions to see that any employee, agent, or contract employee of the air carrier who prepares and/or offers COMAT containing hazardous materials for shipment via any mode is fully trained as a hazardous materials shipper

223. HAZARDOUS MATERIALS INFORMATION REQUIREMENTS FOR OPERATORS ACCEPTING HAZARDOUS MATERIALS.

Operators who transport hazardous materials must provide instruction and procedures on the following basic subjects. The following information is provided as background material for the aviation safety inspector (ASI) and is not intended to supplant nor provide guidance for an operator's hazardous materials program. POIs may share this information when requested, but must see that the operator understands that the HMBM is the FAA authority that the operator must work with when developing, implementing, or changing a hazardous materials program.

NOTE: See table 2.3.5.1. for a list of applicable regulatory references.

A. Procedures and Instructions on Acceptance of Hazardous Materials for Air Shipment. The operator's instructions should contain the following information:

(1) *Packaging.* The material must be properly packaged in accordance with the packaging rules and it must be properly marked, labeled, and documented. The total quantity must be within the quantity limitations and the shipment must be accompanied by the proper shipping papers, Department of Transportation (DOT) exemptions, or competent authority certificates, as determined by the inspection requirements for accepting shipments in 49 CFR part 175.

(2) *Damage-Free.* The package may not leak or be damaged, and must be an authorized package in accordance with the applicable regulations.

(3) *Authorization of Carriage.* The package must either be authorized for carriage in passenger-carrying aircraft or labeled for cargo-only aircraft if it is not acceptable for passenger-carrying aircraft.

(4) *Identification.* The material must be identified by the proper shipping name, hazard class or division, identification number, and packing group, when required, in

accordance with 49 CFR part 172, or the International Civil Aviation Organization (ICAO) Technical Instructions.

(5) *Marking and Labeling.* The package must be properly marked and labeled in accordance with 49 CFR or the ICAO Technical Instructions.

(6) *Shipping Papers.* Shipping papers must be reviewed to ensure that all necessary information is entered, including any additional information that may be required because of the commodity shipped, or because the method of transportation is related to air transportation.

B. Storage of Hazardous Materials. Operators should provide specific guidance on the storage of hazardous materials. This guidance should include instructions for Class 8 (corrosive), Class 7 (radioactive), and Class 6, Division 6.1 (poisonous) materials as discussed below:

(1) *Corrosive Materials (Class 8).* The storage of Class 8 (corrosive) materials next to, or in contact with, Class 4, Division 4.2 or 4.3 (flammable) solids or Class 5, Division 5.1 (oxidizing) materials must be prevented. The segregation prescribed in 49 CFR § 175.78 must be maintained for all packages containing hazardous materials that might react dangerously when stored in a position that causes or contributes to leakage.

(2) *Radioactive Materials (Class 7).* The storage of Class 7 (radioactive) materials labeled yellow II and/or yellow III will not exceed a transport index (TI) of 50 in a single storage location. These materials are stored in an area that is isolated from people and does not permit pedestrian traffic or loitering. The minimum separation distances prescribed in 49 CFR § 175.703 should be maintained between radioactive materials labeled yellow II and yellow III and packages of undeveloped film.

(3) *Poisonous Materials (Class 6, Division 6.1).* Packages bearing a Class 6, Division 6.1 poison label will not be stored in the same location as foodstuffs, feeds, or any edible materials intended for consumption by either humans or animals.

C. Loading of Hazardous Materials. The operator should provide specific guidance for loading hazardous materials. This guidance should include:

- Loading of hazardous materials in aircraft in accordance with 49 CFR part 175, Subpart B
- Loading and carriage of hazardous materials in cargo-only aircraft, when other means of transportation are not available or impracticable, in accordance with 49 CFR § 175.320
- Loading of radioactive materials in aircraft in accordance with 49 CFR § 175.700 to ensure that TI limitations are in accordance with the provision of 49 CFR § 175.75 and that radioactive packages are transported in accordance with 49 CFR §§ 175.701, 175.702, and 175.703

- Loading of hazardous materials in cargo compartments or freight containers within cargo compartments, in accordance with 49 CFR § 175.75
- A prohibition against loading packages bearing a poison label in the same compartment that holds foodstuffs, feeds, or any edible materials intended for consumption by humans or animals unless both commodities are in separate, closed-unit load devices known as freight containers

D. Written Notification of Pilot-In-Command (PIC).

Operators must establish procedures for notifying the PIC when hazardous materials are carried on board the aircraft in accordance with 49 CFR part 175, § 175.33.

E. Reporting Hazardous Materials Incidents. The hazardous materials information must include company procedures for reporting hazardous materials incidents, in compliance with 49 CFR § 171.15 and 171.16, and should include the procedures for reporting discrepancies, in compliance with 49 CFR § 175.31.

F. Damage to Hazardous Materials Packages. The operator must develop procedures for handling damaged packages in accordance with 49 CFR § 175.90, radioactive contamination in accordance with 49 CFR § 175.700, and substances in Class 6, Division 6.2 (infectious substances), as found in 49 CFR § 175.630. The information should include a list of telephone numbers and addresses of organizations that can provide technical advice on clean-up techniques and precautions to minimize the possibility of injury to employees and the general public. Some names of appropriate organizations for such advice include the following: Chemtrec, U.S. Energy Research and Development Administration, a state public health department, a federal or state office of hazardous materials regulation, and the Center for Disease Control and Prevention of the U.S. Public Health Service.

225. COORDINATION. The POI may be required to act as a coordinator between the operator and the Security and Hazardous Materials Division. Figure 2.3.5.2. lists FAA HMBMs by regional and geographic areas. These branch managers may be contacted regarding all aspects of the air transportation of hazardous materials.

227. EXEMPTIONS. When an operator applies for either an initial DOT exemption or the renewal of an exemption for the carriage of certain hazardous material in air commerce, the POI and the principal maintenance inspector (PMI) may need to assist the Security and Hazardous Materials Division in reviewing the compliance history of the certificated operator. There are two

types of exemptions: an exemption which is valid for 2 years and is obtained through the standard exemption process and an emergency exemption that is issued to the shipper who hires and provides the name of the operator in the exemption. The emergency exemption is normally issued exclusively for one-time-only shipments.

229. VIOLATIONS AND INVESTIGATIONS. When an inspector becomes aware of a suspected hazardous materials violation, the inspector shall notify the appropriate HMBM and the appropriate POI. The hazardous materials special agents conduct inspections, surveillance, and investigations of the transportation of hazardous materials in air commerce operations.

231. SOURCES OF INFORMATION. The following regulations and publications pertaining to the safe transportation of hazardous materials are available electronically:

A. National Sources. National sources of information pertaining to the safe transportation of hazardous materials are as follows:

(1) *14 CFR Parts 91, 121, 125, and 135.* This reference contains the regulations that are applicable to air carrier and air taxi operations and helicopter operations, and defines the duties and responsibilities for conducting training programs and procedural manuals dealing with the air transportation of hazardous materials.

(2) *49 CFR Parts 100-185.* This title contains the regulations dealing with the proper identification, classification, packaging, labeling, marking, and certification of hazardous materials transported in commerce.

(3) AC 121-21B, Information Guide for Training Programs and Manual Requirements in the Air Transportation of Hazardous Materials.

(4) Department of Transportation Hazardous Materials web site: <http://hazmat.dot.gov>.

(5) FAA Hazardous Materials web site: <http://ash.faa.gov>

B. ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air. These technical instructions amplify the basic provisions of Annex 18 to the Convention on International Civil Aviation, and contain detailed instructions necessary for the safe international transport of dangerous goods by air. These regulations are issued in a 2-year edition on alternate Septembers, becoming effective the following January 1.

233. - 236. RESERVED.

**TABLE 2.3.5.1.
APPLICABLE REGULATORY REFERENCES**

SUBJECTS	REGULATORY REFERENCES
AC 121-21B	
*‡ Hazardous Materials and Classifications	49 CFR Parts 171 and 172
‡ Shipping Paper and Certification Requirements	49 CFR Part 172
*‡ Packaging, Marking, and Labeling	49 CFR Parts 171, 172, 173, 175, and 178
*Exceptions to the Regulations	49 CFR 175.10
Written Notification of PIC	49 CFR 175.33
* Reporting Hazardous Materials Incidents/ Discrepancies	49 CFR 171.15 49 CFR 171.16 49 CFR 175.31
Loading, Unloading, and Handling	49 CFR Part 175, Subpart B
Specific Regulations Applicable According to Classification of Material	49 CFR Part 175, Subpart C

* Operators that will not accept or transport hazardous materials or dangerous goods only have to train in these subjects.

‡ In accordance with 49 CFR § 171.11, the ICAO Technical Instructions can be used.

TABLE 2.3.5.2.
REGIONAL HAZARDOUS MATERIALS BRANCH MANAGERS

AAL

Refer to the Hazardous Materials Branch Manager in the Northwest Mountain Region, ANM-740

ACE

Hazardous Materials Branch Manager, ACE-740

Central Region

10801 Pear Tree Ln, Ste. 126

St. Ann, MO 63074

Phone: (816) 890-4842

24 hr. operation center: (816) 329-3000

AEA

Hazardous Materials Branch Manager, AEA-740

Eastern Region

1 Aviation Plaza

Jamaica, NY 11434

Phone: (718) 553-2596

24 hr operation center: (718) 553-3100

AGL

Hazardous Materials Branch Manager, AGL-740

Great Lakes Region

2300 East Devon Avenue Rm 203

Des Plaines, IL60018

Phone: (847) 294-7414

24 hr operation center: (847) 294-8400

ANE

Hazardous Materials Branch Manager, ANE-740

New England Region

12 New England Executive Park

Burlington, MA 01803

Phone: (781) 238-7705

24 hr operation center: (781) 238-7001

ANM

Hazardous Materials Branch Manager, ANM-740

Northwest Mountain Region

1601 Lind Avenue, S.W.

Renton, WA 98055-4056

Phone: (425) 227-2706

24 hr operation center: (425) 227-2000

TABLE 2.3.5.2. (Cont'd.)
LOCATIONS OF REGIONAL HAZARDOUS MATERIALS OR
DANGEROUS GOODS COORDINATORS

ASO

Hazardous Materials Branch Manager, ASO-740

Southern Region

1701 Columbia Ave Rm 420

Collee Park, GA 30337-2745

Phone: (404) 305-6831

24 hr operation center: (404) 305-5180

ASW

Hazardous Materials Branch Manager, ASW-740

Southwest Region

2601 Meacham Blvd.

Fort Worth, TX 76193-0740

(Fed Ex zip: 76137)

Phone: (817) 222-5720

24 hr operation center: (817) 222-5006

AWP

Hazardous Materials Branch Manager, AWP-740

Western-Pacific Region

15000 Aviation Blvd 6th Floor, Rm 6025

Lawndale, CA 90261

Phone: (310) 725-3701

24 hr operation center: (310) 725-3300

WASHINGTON HEADQUARTERS

National Program Manager, AFS-300

800 Indenpendance Avenue, S.W.

Washington, DC 20591

Phone: (202) 267-9864

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