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# ADVISORY CIRCULAR



DEPARTMENT OF TRANSPORTATION  
Federal Aviation Administration  
Washington, D.C.

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**Subject:** INFORMATION GUIDE FOR TRAINING PROGRAMS AND MANUAL REQUIREMENTS  
IN THE AIR TRANSPORTATION OF HAZARDOUS MATERIALS

1. PURPOSE. This advisory circular provides certificate holders under Code of Federal Regulations (CFR) Title 14, Parts 121 and 135, Federal Aviation Regulations, with information relevant to CFR Title 49, Part 175, Carriage by Aircraft. Personnel having duties and responsibilities in the acceptance, handling, and carriage of hazardous materials are the cargo receiving clerk/cargo dock supervisor, the cargo load planner/weight and balance clerk, the aircraft loader/forklift operator, the counter agent (if swift small package service is offered), the pilot-in-command, other crewmembers, and other personnel assigned specific duties and responsibilities in the shipment, storage, loading, and unloading of such materials.

2. CANCELLATION. AC 121-21, Information Guide for Training Programs and Manual Requirements in the Air Transportation of Hazardous Materials, dated July 30, 1976, is canceled.

3. MANUAL REQUIREMENTS. Each manual should contain instructions and procedures on the following basic subjects:

a. Acceptance of hazardous materials for air shipment. Procedures and instructions to ensure that:

(1) The material is properly packaged in accordance with the packaging rules, properly labeled and documented, is within the quantity limitations, and is accompanied by the proper shipper certificates and DOT exemption (if applicable) as determined by the inspection requirements for accepting shipments in 49 CFR Part 175.30.

(2) The package is not leaking, damaged, or distorted.

(3) The materials are properly identified as being authorized for carriage in passenger-carrying or cargo-only aircraft and labeled for cargo-only aircraft if not acceptable for passenger-carrying aircraft.

(4) The materials are identified by their proper shipping name and classification in accordance with 49 CFR Part 172.101.

(5) Accepting materials classified as other regulated materials (ORM) are in accordance with 49 CFR Part 172.101.

(6) Shippers are notified in the event the package is damaged in shipment including specific instructions on radioactive materials.

b. Storage. The manual should provide specific guidance to assure that:

(1) The storage of corrosive materials next to or in contact with flammable solids or oxidizing materials will be prevented.

(2) The storage of yellow II and yellow III labeled radioactive materials in a single storage location will not exceed 50 transport indexes (TI).

(3) Yellow II and yellow III labeled radioactive materials storage are isolated from office personnel, personnel traffic, and no loitering is allowed in the area.

(4) The storage of packages bearing a poison label will not be in the same location with foodstuffs, feeds, or any edible materials intended for consumption by humans or animals.

c. Loading. The manual should contain specific guidance on:

(1) Loading of hazardous materials in aircraft in accordance with 49 CFR Subpart B, Part 175.

(2) Loading of hazardous materials in cargo-only aircraft, when other means of transportation are not available, in accordance with 49 CFR Part 175.320.

(3) Loading of radioactive materials in aircraft in accordance with 49 CFR Part 175.700.

(4) Prohibition against loading an aircraft in excess of 50 TI of radioactive materials in accordance with 49 CFR Part 175.75(a)(4) unless the aircraft is being operated under an exemption from the regulations permitting more than 50 TI.

(5) Prohibition against exceeding the quantity limitations specified in 49 CFR Part 175.75 for materials other than radioactive.

(6) Loading of hazardous materials in a Class C or D cargo or baggage compartment or reusable freight container in Class E cargo or baggage compartment in accordance with 49 CFR 175.75.

(7) Loading ORM aboard aircraft.

(8) Prohibition against loading packages bearing a poison label in the same compartment with foodstuffs, feeds, or any edible materials intended for consumption by humans or animals.

d. Written notification of pilot-in-command. The manual should contain company procedures for notification of the pilot-in-command when hazardous materials subject to 49 CFR Part 175 are carried in an aircraft.

e. Reporting certain hazardous materials incidents. The manual should include company procedures for reporting hazardous materials incidents in compliance with 49 CFR Part 175.45.

f. Damage to hazardous materials packages. The manual should include company procedures for handling damaged packages in accordance with 49 CFR Part 175.90 and radioactive contamination in accordance with 49 CFR Part 175.700(b). This should include a listing of telephone numbers and addresses of organizations that can provide technical advice on cleanup techniques and precautions to minimize injury to employees and the general public: e.g., Chemtrec; U.S. Energy Research and Development Administration; State public health department; Office of Hazardous Materials Regulation; and the Director, Center for Disease Control, U.S. Public Health, Atlanta, Georgia.

g. Special requirements for poisons. The manual should include company procedures for handling packages bearing a poison label in compliance with 49 CFR Part 175.630.

#### 4. TRAINING PROGRAM.

\* a. The training requirements prescribed in FAR 121.433a and 135.333 apply to all personnel having assigned duties for receiving, identifying, handling, storing, loading, and unloading in the air transportation of hazardous materials.

b. Under the provisions of FAR 121.433a and 135.333, the certificate holder is responsible for the training of any person or organization who performs packaging, loading, or handling of hazardous materials for his operation under contract.

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c. The amount of formal training to be received should be commensurate with the individual's assigned duties relating to the safe transportation of hazardous materials. The training program curriculum should include both initial and recurrent personnel training. The following is a listing of suggested minimum training subjects and references:

<u>Training Subjects</u>	<u>References</u>
(1) Hazardous materials and classifications	49 CFR Parts 171, 172, 173, and 175
(2) Shipping paper and certificate requirements	49 CFR Part 172
(3) Packaging, marking, and labeling	49 CFR Parts 171, 172, 173, and 175
(4) Exemption authority	49 CFR Part 107
(5) Exceptions from the regulations	49 CFR Part 175.10
(6) Written notification of pilot-in-command	49 CFR Part 175.33
(7) Keeping and replacement of lost or damaged labels	49 CFR Part 175.40
(8) Reporting hazardous materials incidents	49 CFR Part 175.45
(9) Loading, unloading, and handling	49 CFR Subpart B, Part 175
(10) Specific regulations applicable according to classification of materials	49 CFR Subpart C, Part 175

d. An operator operating under the provisions of FAR 135 and using only himself as pilot is responsible for assuring that hazardous materials shipments comply with 49 CFR Part 175. The FAA principal operations inspector charged with the overall surveillance of the operator will evaluate the operator's hazardous materials knowledge in the same manner as used for checking other knowledge requirements of the certificate holder.

\*5. MANUAL AND TRAINING REQUIREMENTS. (Operators not carrying, storing or handling hazardous materials).

a. Manual Requirements. Under the provisions of FAR 135.23, each manual should contain procedures and instructions to ensure that:

(1) No material is accepted that bears a hazardous materials warning label or marking.

(2) No packages are accepted that contain a hazardous material.

(3) Damaged packages found to contain or suspected of containing hazardous materials are reported as hazardous materials incidents in compliance with 49 CFR Part 175.45.

b. Training Program. Under the provisions of FAR 135.333 the training requirements apply to all crewmembers. Personnel having assigned duties for receiving, identifying, handling, storing, loading and unloading packages for the operator should also receive this training.

c. Recommended Training Subjects.

(1) Hazardous materials and classifications (Ref. 49 CFR Parts 171, 172, 173 and 175).

(2) Marking and labeling (Ref. 49 CFR Part 172, Subparts D and E).

(3) Reporting hazardous materials incidents (Ref. 49 CFR Part 175.45).

(4) Specific regulations applicable to operators (Ref. 49 CFR Parts 175.3 and 175.10).

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