

Cancelled by 121-7A

AC NO: 121-21

DATE: 7/30/76



ADVISORY CIRCULAR

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

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 Parts 121 (O.M.B. 04 R0032) and 135 (O.M.B. 04 R0105) of the Federal Aviation Regulations (FAR) with information relevant to recent amendment Docket HM-112 that incorporated FAR 103 into Title 49 Code of Federal Regulations (CFR) as Part 175. This amendment also contains substantive changes in the requirements for air transportation of hazardous materials (dangerous articles) that may require certificate holders to revise the manuals and training programs regarding the carriage and handling of hazardous materials. 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 by the air carrier), 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.** Advisory Circular AC No. 103-3 is canceled, effective July 1, 1976.
 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 insure 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 certificate as determined by the inspection requirements for accepting shipments in 49 CFR Part 175.30.
 - (2) The package is not leaking, damaged, or distorted.
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- (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 Parts 172.101 and 173.510.
 - (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 poisons 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 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 reuseable freight container in Class E cargo or baggage compartment in accordance with 49 CFR Part 175.75.
 - (7) Loading ORM aboard aircraft.
 - (8) Prohibition against loading poisons 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 organizations such as Chemtrec, U.S. Energy Research and Development Administration, State Public Health Department, Office of Hazardous Materials Operations, and Director, Center for Disease Control, U.S. Public Health, Atlanta, Georgia, with telephone numbers as sources that can provide technical advice on cleanup techniques and precautions to minimize injury to employees and the general public.
 - g. Special requirements for poisons. The manual should include company procedures for handling poisons in compliance with 49 CFR Part 175.630.

4. TRAINING PROGRAM.

- a. The training requirements apply to all personnel having assigned duties for receiving, identifying, handling, storing, loading, and unloading in the air transportation of hazardous materials.
- b. Any aircraft operator operating under the provisions of FAR 121 or 135 who contracts the services of any person or organization for the purpose of packaging, loading, or handling hazardous materials for his operation shall be responsible for training these persons having such responsibilities according to his training program required by FAR 121.433a or 135.140.

- c. Training subjects. 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:

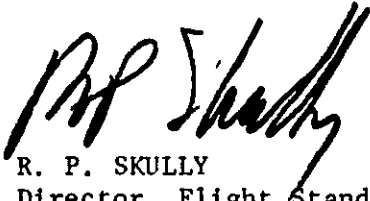
<u>Training Subjects</u>	<u>References</u>
(1) Hazardous materials and classifications	49 CFR Parts 171, 172, 173, and 175
(2) Shipping paper and certificate requirements	49 CFR Part 172
(3) Packaging, marking, and labeling	49 CFR Parts 171, 172, 173, and 175
(4) Exemption authority	49 CFR Part 107
(5) 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 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.

7/30/76

AC 121-21

5. HOW TO OBTAIN THIS PUBLICATION. Copies of this advisory circular, AC 121-21, "Information Guide for Training Programs and Manual Requirements in the Air Transportation of Hazardous Materials," may be obtained by writing to the Department of Transportation, Distribution Unit, TAD-443.1, Washington, D. C. 20590.



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