

49 CFR Parts 171, 172, 173 and 175

[Docket No. HM-184; Amdt. Nos. 171-66, 172-74, 173-158 and 175-23]

Implementation of the ICAO Technical Instructions

AGENCY: Materials Transportation Bureau (MTB), Research and Special Programs Administration, DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: This notice proposes to amend the Hazardous Materials Regulations in order to permit the offering, acceptance and transportation by aircraft, and by motor vehicle incident to transportation by aircraft, of hazardous materials shipments conforming to the provisions of the International Civil Aviation Organization's (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Technical Instructions). These amendments are necessary to facilitate continued shipment of hazardous materials in international commerce by air when the ICAO Technical Instructions become effective on January 1, 1983, pursuant to decisions taken by the ICAO Council regarding implementation of Annex 18 of the Convention on International Civil Aviation.

DATE: Comments must be received on or before September 15, 1982.

ADDRESS: Address comments to: Dockets Branch, Materials Transportation Bureau, U.S. Department of Transportation, Washington, D.C. 20590. Comments should identify the docket and be submitted, if possible, in five copies. The Dockets Branch is located in Room 8426, Nassif Building, 400 Seventh Street, SW., Washington, D.C. 20590. Public dockets may be reviewed between the hours of 8:30 a.m. and 5:00 p.m., Monday through Friday. Telephone: (202) 426-3148.

FOR FURTHER INFORMATION CONTACT: Edward A. Altemos, International Standards, Coordinator, Materials Transportation Bureau, Department of Transportation, 400 Seventh Street, SW., Washington, D.C. 20590. Telephone: (202) 426-0656.

SUPPLEMENTARY INFORMATION: In consideration of a perceived need to improve the overall safety of the transportation of hazardous materials on a worldwide level, the International Civil Aviation Organization (ICAO) Accident Investigation and Preventional Divisional meeting in 1974 adopted a recommendation 7/1 citing a need to study all aspects relating to the transportation of hazardous materials aboard aircraft. In late 1974, this

recommendation was adopted by the ICAO Air Navigation Commission (ANC) and the ICAO Secretariat was directed to study the matter. Principal regulations currently in force throughout the world were reviewed and ICAO contracting states and interested international organizations were requested to provide information on the regulations they followed and comments on the need for increased international cooperation in this area. All responses received indicated that such a need did exist.

In light of the conclusions drawn from this study, the ANC concluded that ICAO should undertake the development of international standards and guidance material concerning the transportation of hazardous materials by air. By early 1976 a study group established by the ANC had prepared a draft set of Standards and Recommended Practices (SARPS) and supporting technical instructions. The SARPS, when adopted, would become an annex to the Convention on International Civil Aviation (Chicago Convention). Because the SARPS covered only the basic principles relating to the safe transport of hazardous materials by air, they were to be supported by a technical document providing all relevant details. To insure maximum uniformity with existing international standards for the transport of hazardous materials by other modes, the draft SARPS and Technical Instructions were based on the Recommendations prepared by the United Nations Committee of Experts on the Transport of Dangerous Goods and the regulations issued by the International Atomic Energy Agency (IAEA) and also took appropriate account of other existing standards for the transportation of hazardous materials by air.

In March, 1978, the ANC established the Dangerous Goods Panel (DGP), and directed it to continue work on the development of the SARPS and Technical Instructions. In February 1981, the DGP concluded its efforts and forwarded the final draft of the SARPS and supporting Technical Instructions for the Safe Transport of Dangerous Goods by Air (the Technical Instructions) to the ICAO Council for review and approval. On June 26, 1982, the Council adopted the SARPS as Annex 18 to the Chicago Convention. Under the provisions of the Chicago Convention, Annex 28 would become effective (voluntary compliance authorized) on January 1, 1983, and applicable (compliance required) on January 1, 1984, unless more than half of the 150 contracting governments registered disapproval by October 28,

1981. By the latter date, 33 contracting states had registered unqualified support of Annex 18. Two states, the United States and Switzerland, registered a partial approval of the Annex. No states disapproved of the Annex.

The partial disapproval of the Annex by the United States stemmed from certain provisions in the Annex which incorporate the Technical Instructions by reference and thereby lend to the Technical Instructions the character of an annex. This, in effect, requires that all contracting states insure full compliance with all details of the Technical Instructions. While the United States fully supported the basic principles espoused in the Annex, the vast majority of which are consistent with existing provisions in the Hazardous Materials Regulations, it was not in a position to mandate compliance with all details of the Technical Instructions. For this reason, the United States advised that " * * * the United States wishes to register disapproval of paragraph 2.2.1 of Annex 18, Furthermore, the United States wishes to register disapproval of Chapters 3 through 9 of the Annex to the extent that the provisions in these Chapters directly incorporate the provisions of the

Technical Instructions." It is important to note that the reasons behind the partial disapproval of Annex 18 by the United States relate more to the administrative and legal difficulties under United States law that would be associated with mandating compliance with the Technical Instructions than to a general concern for the adequacy of the Technical Instructions from the point of view of safety in air transport. Indeed, notwithstanding the United States' partial disapproval of Annex 18, the Materials Transportation Bureau (MTB) believes they can provide a basis for the safe transport of hazardous materials by air and will do much to facilitate the international transport of hazardous materials by air.

It is clear that by January 1, 1984, compliance with the ICAO Technical Instructions will be mandated by virtually all ICAO member states, which include all the industrialized nations in the world and all of the major trading partners of the United States. Furthermore, as a result of a decision by the International Air Transport Association (IATA) Restricted Articles Board (RAB) to implement the ICAO Technical Instructions effective December 31, 1982, shippers will be unable to have shipments accepted for international transportation after that date unless the shipment complies with the provisions of the ICAO Technical

Instructions. For these reasons, the MTB believes it is in the interest of both shippers and carriers of hazardous materials by air to take action to amend the Hazardous Materials Regulations to recognize the ICAO Technical Instructions. Such action would also be consistent with the United States' obligations as a signatory government to the Chicago Convention.

It should be emphasized that this Notice of Proposed Rulemaking is responsive, in part, to a petition submitted by the Air Transport Association of America requesting that the Hazardous Materials Regulations be amended to recognize the ICAO requirements for the transport of hazardous materials. The petition notes the necessity and urgency of recognition of the ICAO Technical Instructions through the Hazardous Materials Regulations and suggests that there is a general belief (shaped by shippers, air line pilots and air carriers, alike) that the ICAO rules " * * * evidence well organized, technically accurate and workable standards for worldwide transportation of hazardous materials." Because this petition so accurately sets forth the need to take action to amend Hazardous Materials Regulations in order to take account of the ICAO requirements, the MTB believes there is merit in quoting the substance of that petition in this notice:

The Air Transport Association's Cargo Committee, member air carrier's Heads of Cargo divisions and the Restricted Articles Board (member air carrier's representatives from the fields of engineering, chemistry, cargo services, training and safety), take this opportunity to urgently petition the Bureau, pursuant to 49 CFR 106.31, regarding 49 CFR recognition of the ICAO rules and dangerous goods list emanating from Annex 18 and its Technical Instructions for the Safe Transport of Dangerous Goods by Air.

At recent air carrier, Air Line Pilot and other meetings, air carrier representatives, pilots and shippers have noted that the new ICAO rules evidence well organized, technically accurate and workable standards for world-wide transportation of hazardous materials. DOT-MTB personnel at these meetings have stated that the United States Government has an obligation under the Chicago Convention to recognize the newly developed ICAO rules, even though it was reported that our government had partially disapproved certain paragraphs in Annex 18. This registration of disapproval, however, was only to the extent that the "Technical Instructions" were incorporated into the Annex itself.

We realize that our government will also find it necessary to file 'differences' with the ICAO organization such as, quantity limitations on aircraft and hazardous substances and wastes, to mention a few areas which immediately come to mind.

This brings us to the point of urgency, and the fact that time is of the essence, as it will be permissive for the rest of the world to use the

ICAO dangerous goods rules by the end of 1982.

In reality, these rules will take effect for all international traffic moving on the world's scheduled airlines on December 31, 1982, when the IATA Dangerous Goods Regulations—24th (ICAO) Edition becomes effective. Hazardous Materials traffic moving into, out of and through the U.S. will by necessity need to be in a position to abide by these dangerous goods rules.

It is with this in view that we respectfully request DOT-MTB to take all immediate steps possible to provide rulemaking which will implement the ICAO rules into U.S. regulations as an 'alternative' to 49 CFR (with U.S. differences), including the simultaneous publishing of an 'optional' hazardous materials table which will provide for the use of the ICAO Dangerous Goods List (with U.S. differences) for both domestic and international traffic.

Such immediate rulemaking will permit all air carriers the option of utilizing the ICAO rules for acceptance, handling, on line transportation and interline transportation concurrent with their implementation.

Also, such immediate rulemaking will provide the FAA's Office of Civil Aviation Security with the needed time to prepare for the alternative use of ICAO rules by the nations shippers and transporters, as well as other nations shippers and transporters.

We are extremely desirous of as smooth a transition as is possible with respect to the introduction of the ICAO rules. It is our obvious fear that ill-timed introduction to these rules could cause great confusion in our industry. This confusion could provide for unnecessary embargos of hazardous materials/dangerous goods traffic, the disruption of transportation and the opportunity for misrepresentation of such traffic, thus, defeating our ever present concern for safety.

The MTB is proposing to amend the Hazardous Materials Regulations to allow, under certain conditions and with certain limitations, hazardous materials packaged, marked, labeled, classified and described and certified on shipping papers as provided in the ICAO Technical Instructions to be offered, accepted and transported by aircraft within the United States and aboard aircraft of United States' registry anywhere in air commerce. Furthermore, certain amendments are being proposed to Part 175 to align the requirements for the loading and handling of hazardous materials aboard aircraft with those of the Technical Instructions in order to insure that United States' aircraft operating in foreign countries, or that foreign aircraft operating in the United States, will not be in violation of the requirements for loading and handling applied in the country in which the aircraft is operating.

If certain of the requirements imposed on operators by the ICAO Technical Instructions are considered to be overly restrictive, or MTB is unable at this time to justify them on the grounds of safety, no corresponding amendment to Part 175

is being proposed. In such cases it would be the responsibility of the air carrier to insure compliance with any appropriate provisions of the Technical Instructions when operating in a country that mandates compliance with the Technical Instructions. In other cases, where the implementation of a provision in the ICAO Technical Instructions would result in the derogation of an existing DOT requirement that the MTB believes should be maintained in the interest of safety, no amendment to Part 175 is proposed. In such cases ICAO will be officially notified, upon conclusion of this rulemaking action, that the United States is maintaining the more stringent requirement so that an appropriate exception can be noted in the ICAO Technical Instructions.

The following is an analysis of this proposal by section which provides the background behind the proposed changes:

Section 171.2. Paragraph (a) of this section would be amended to include a cross-reference to a new § 171.11 which contains an authorization to use certain provisions of the ICAO Technical Instructions in place of the corresponding provisions in the Hazardous Materials Regulations. The cross reference is similar to those currently contained in paragraph (a) to the sections authorizing compliance with the IMCO Code.

Section 171.11. A new § 171.11 would be added. This section details the extent to which a shipper and air carrier may comply with certain provisions of the ICAO Technical Instructions as an alternative to the corresponding provisions in the DOT Hazardous Materials Regulations. In particular, the section would, subject to certain conditions, allow hazardous materials to be transported by aircraft, and by motor vehicle incident to transportation by aircraft if, under the ICAO Technical Instructions, the hazardous material is properly:

- (1) Packaged,
- (2) Marked,
- (3) Labeled,
- (4) Classified,
- (5) Described and certified on shipping papers,
- (6) Otherwise in the required condition for shipment, and
- (7) Within the quantity limits prescribed for transportation by either passenger or cargo aircraft, as appropriate.

The conditions imposed on the alternative use of the ICAO Technical Instructions would be set forth in paragraph (d) of the section. The special requirements concerning hazardous waste and hazardous substances are necessitated by the statutory mandate to insure appropriate safeguards for these materials during

transportation. The additional conditions proposed in paragraphs (d)(4) and (d)(5), two of which apply only to transportation by motor vehicle incident to air transportation, are considered by the MTB to be necessary for appropriate emergency response in the event of an incident involving the materials.

Section 171.7. This section would be amended to incorporate the 1983 edition of the ICAO Technical Instructions by reference and to provide information relative to the source for obtaining the Technical Instructions.

Section 171.8. This section would be revised to incorporate a definition for the abbreviation "ICAO" and for the term "Unit load device". The definition proposed for "Unit load device" is the definition of that term in the ICAO Technical Instructions.

Section 172.401. This section would be amended to exempt from the prohibited labeling provisions any package labeled in accordance with the ICAO Technical Instructions regardless of the mode of transport of the package.

Section 172.446. Paragraph (a) and the facsimile of the Magnetized Material label would be revised by deleting the text "MAGNETIZED MATERIAL LABEL" in the lower right corner of the border of the label. This is being proposed so that the DOT specifications for this label will be consistent with the ICAO specifications for the same label. A new paragraph (c) would be added to allow the continued use of labels meeting the existing DOT specifications that are in stock as of January 1, 1983, until those stocks are depleted.

Section 172.448. Paragraph (a) and the facsimile of the Cargo Aircraft Only label would be amended by replacing the text "DANGER-PELIGRO" with the word "DANGER" and by removing the text "CARGO AIRCRAFT ONLY LABEL" in the lower right corner of the label. These changes are being proposed so that the DOT specifications for this label will be consistent with the ICAO specifications for the same label. A new paragraph (c) would be added to allow the continued use of labels meeting the existing DOT specifications that are in stock as of January 1, 1983, until those stocks are depleted.

Section 173.250. The reference to § 175.305 would be changed to § 175.10 because the provisions governing the transport by aircraft of wheelchairs with wet electric storage batteries would now appear in § 175.10 rather than in § 175.305.

Section 175.3. The specific references to Parts 172 and 173 would be deleted to enable a carrier to accept a shipment prepared in accordance with the new § 171.11.

Section 175.10. One exception currently appearing in this paragraph would be modified and six new exceptions would be added to insure that all the hazardous materials excepted from regulation under the ICAO Technical Instructions will also be excepted from application of the DOT Hazardous Materials Regulations when carried aboard aircraft. Paragraph (a)(5) would be amended to impose a ten pound gross weight limit on the amount of small arms ammunition that a passenger or crew member may carry in checked baggage. This change is proposed to make this exception consistent with the corresponding exception in the ICAO Technical Instructions. Several new exceptions would be added to deal with alcoholic beverages, perfumes or colognes carried by the operator for sale aboard the aircraft or carried by passengers or crew as carry-on baggage; and with carbon dioxide, solid (dry ice) used in food or beverage service aboard the aircraft or by passengers to refrigerate perishables in carry-on baggage. Consistent with their presentation in the ICAO Technical Instructions, the recently published DOT amendments which provide exceptions for the carriage of electrically powered wheel chairs will now be shown in this section. Several exceptions which currently appear in this section but not in the ICAO Technical Instructions, and which apply primarily to domestic aircraft operations, are not effected by these amendments.

Section 175.30. Paragraph (a) of this section would be amended to allow an operator to accept shipments of hazardous materials if described, certified on shipping papers, labeled, and marked in accordance with § 171.11. However, freight containers would still be required to be placarded or labeled in accordance with Subpart F of Part 172. Paragraph (b) would be amended to make the preloading package and overpack inspection requirements consistent with ICAO requirements by introducing the concept of "Unit load device". In addition, specific references to the DOT requirements for overpacks which appear in § 173.25 and § 175.393(r) would be removed to permit acceptance of overpacks that are prepared in accordance with the provisions of the ICAO Technical Instructions. Finally, a new paragraph (e), concerning the pre-acceptance inspection of overpacks, would be added which would be consistent with the ICAO requirements concerning inspection of overpacks.

Section 175.33. The provisions for notification to pilot-in-command would be revised to make the information

required to be provided more consistent with that required in the ICAO Technical Instructions. It would be required that the notification be provided to the pilot "as early as practicable" prior to departure. Hazardous materials shown on the notification would be permitted to be described by their proper shipping name, hazard class and identification number as provided in the ICAO Technical Instructions provided any additional descriptions required by § 171.11 appear on the shipping papers. A new requirement that the notification include the total number of packages of each material and their total quantity or transport index, as appropriate, is added to be consistent with ICAO requirements. Certain other entries required by ICAO to appear on the notification have not been proposed for inclusion in this section because the MTB does not believe that the increased regulatory burden associated with their inclusion can be justified on the grounds of safety; however, this information may be added to the notification at the discretion of the operator. Finally, a new paragraph (b) would be added to require that a copy of the notification be carried aboard the aircraft during flight.

Section 175.35. This section would be deleted. The MTB believes there is no reason to carry the shipping papers aboard the aircraft if a copy of the notification to pilot-in-command is aboard.

Section 175.75. This paragraph would be amended by deleting the specific reference to Part 172 in paragraph (a)(1) in order to allow the carriage of hazardous materials prepared in accordance with § 171.11 and by including references in paragraph (a)(3) to the existing single package maximum transport indices for passenger and cargo only aircraft.

Section 175.78. This section would be amended to reflect the minimum segregation requirements for hazardous materials of various classes as provided in the ICAO Technical Instructions. The MTB believes these changes are necessary to insure that uniform loading requirements will be applied to United States' registered aircraft operating overseas as well as to foreign registered aircraft operating in the United States. In addition, the MTB believes that these provisions would represent an improvement over the current requirements of this section which specify segregation requirements only for corrosive materials. For example, § 175.78(a) currently would allow flammable liquids and oxidizers to be stowed next to or in contact with each other. This could result in a potentially dangerous situation in the event of leakage of the packages.

Section 175.79. Paragraph (a) would be amended by removing the provision concerning securing of packagings. This provision will be transferred to a new § 175.81 concerning securing of cargo in order to provide greater consistency with the manner of presentation of these requirements in the ICAO Technical Instructions. Paragraph (b) would be amended to clarify that packagings fitted with both top and side closures need not be stored and loaded with the side closures up. This clarification will make paragraph (b) consistent with the corresponding provision in the ICAO Technical Instructions.

Section 175.81. A new § 175.81 concerning securing of packagings would be added to consolidate the general requirement for securing previously contained in § 175.79 and the specific securing provisions for packages containing radioactive materials previously contained in § 175.85(d).

Section 175.85. Paragraph (a) of this section would be amended to clarify the conditions under which hazardous materials may be carried on the main deck of a passenger (combi) aircraft, in order to provide consistency with the ICAO Technical Instructions. Paragraph (b) would be amended to eliminate the use of the word "accessible" through introduction of the ICAO definition of "accessible" directly into the loading requirement. The ICAO definition of "accessible" is, for all practical purposes, identical to that currently used in the section, except the criterion that a crew member be able to separate the package containing cargo-aircraft-only material from other cargo would apply only when size and weight of the package permit. The third sentence in the existing text of paragraph (b) of this section has been removed because the same text already appears in paragraph (c)(3) of this section. Finally, the list of hazardous materials in paragraph (c)(1) which need not be carried in a location that is accessible to a crew member in flight would be revised to be consistent with the corresponding provision of the ICAO Technical Instructions.

Section 175.88. A new § 175.88 concerning inspection of unit load devices would be added consistent with the provisions of the ICAO Technical Instructions. This section would require that a unit load device be inspected prior to loading aboard an aircraft to make certain it is free from evidence of damage to, or leakage from, any hazardous materials it may contain. This is consistent with current requirements that packages and overpacks be inspected for evidence of damage or leakage prior to loading on an aircraft.

Section 175.90. This section would be completely revised to add certain provisions contained in the ICAO

Technical Instructions to the existing provisions concerning damaged shipments. A provision would be added to require that packages and overpacks be inspected for damage or leakage upon removal from an aircraft or unit load device and that the area in which a unit load device was stowed aboard an aircraft be inspected, upon removal of the unit load device, for evidence of leakage of, or contamination from, the dangerous goods carried. If such evidence is found, the aircraft compartment must then be inspected for contamination and any contamination removed. In addition, provisions would be added providing actions to be taken in the event that a package containing etiologic agents is found to be damaged or leaking.

Section 173.305. Paragraph (b) of this section would be deleted since the provisions governing the transport of wheelchairs with wet electric storage batteries would now appear in § 175.10.

Section 175.320. A new paragraph (b)(10) would be added to prohibit the international transportation of hazardous materials under this section unless permission is first obtained from the countries of origin, destination, transit and overflight as required by the ICAO Technical Instructions.

Section 175.630. Several changes are proposed to this section to maintain consistency with corresponding requirements in the ICAO Technical Instructions. The applicability of the section would be expanded to cover etiologic agents as well as poisons. Poisons and etiologic agents, however, would be allowed to be transported aboard an aircraft in the same compartment with foodstuffs, feed or other edible material provided the poisons or etiologic agents and the foodstuffs, feed or other edible materials are loaded in separate unit load devices that are not stowed adjacent to each other aboard the aircraft. Finally, the provision requiring that the area in which a package bearing a poison label was stowed aboard the aircraft be visually inspected after removal of the package would be deleted. This would be replaced by the new provision in § 175.90 requiring that the package be inspected for evidence of damage or leakage upon removal from the aircraft and that the aircraft itself need only be inspected if the package shows evidence of damage or leakage.

Section 175.701. Six of the separation distances prescribed in the table in paragraph (b)(2) of this section would be revised to align the required separation distances with those provided in the ICAO Technical Instructions.

Section 175.705. A new § 175.705

would be added to require a periodic check for radiological contamination of aircraft used routinely for the transport of radioactive materials. If the check revealed the aircraft to have contamination above prescribed levels, it would have to be taken out of service. This section is proposed to provide greater consistency with the provisions of the ICAO Technical Instructions.

List of Subjects

49 CFR Part 171

Hazardous materials transportation.

49 CFR Part 172

Hazardous materials transportation, Labeling, Packaging and containers.

49 CFR Part 173

Hazardous materials transportation, Packaging and containers.

49 CFR Part 175

Hazardous materials transportation, Air carriers.

In consideration of the foregoing, 49 CFR Parts 171, 172, 173, and 175 would be amended as follows:

PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

§ 171.2 [Amended]

1. In § 171.2, paragraph (a) would be amended by adding "171.11," before "171.12 and 176.11".

2. In § 171.7, new paragraphs (c)(29) and (d)(25) would be added to read as follows:

§ 171.7 Matter incorporated by reference.

* * * * *

(c) * * *

(29) ICAO: International Civil Aviation Organization, P.O. Box 400, Place de l'Aviation Internationale, 1000 Sherbrooke Street West, Montreal, Quebec, Canada H3A 2R2. ICAO Technical Instructions available from INTEREG, International Regulations Publishing and Distribution Organization, P.O. Box 60105, Chicago, Illinois 60660.

(d) * * *

(25) International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air, DOC 9284-AN/905 (ICAO Technical Instructions), 1983 edition.

3. In § 171.8 new definitions for "ICAO" and "Unit load device" would be added in appropriate alphabetical order and would read as follows:

§ 171.8 Definitions and abbreviations.

* * * * *

"ICAO" means International Civil Aviation Organization.

"Unit load device" means any type of freight container, aircraft container, aircraft pallet with a net, or aircraft

pallet with a net over an igloo.

4. A new § 171.11 would be added to read as follows:

§ 171.11 Use of ICAO Technical Instructions.

Notwithstanding the requirements of Parts 172 and 173 of this Subchapter, a hazardous material may be transported by aircraft, and by a motor vehicle either before or after being transported by aircraft, in accordance with the ICAO Technical Instructions if the hazardous material:

(a) Is packaged, marked, labeled, classified, described and certified on a shipping paper and otherwise in the required condition for shipment as provided in the ICAO Technical Instructions;

(b) Is within the quantity limits prescribed for transportation by either passenger or cargo aircraft, as appropriate, as provided in the ICAO Technical Instructions;

(c) Is not a forbidden material or package according to § 172.101 or § 173.21 of this subchapter; and,

(d) Fulfills the following additional requirements as applicable:

(1) When a hazardous material which is subject to the requirements of the ICAO Technical Instructions is also a hazardous substance as defined in this subchapter:

(i) The name of the hazardous substance shall be shown in association with the proper shipping name on shipping papers and in package markings unless the proper shipping name required by the ICAO Technical Instructions already includes the name of the hazardous substance; and

(ii) The letters "RQ" shall be entered on the shipping paper either before or after the basic description required by the ICAO Technical Instructions and in association with the proper shipping name required to be marked on the package.

(2) When a hazardous material which is subject to the requirements of the ICAO Technical Instructions is also a hazardous waste as defined in this subchapter:

(i) The word "Waste" must precede the proper shipping name in shipping papers and in package markings; and,

(ii) The requirements of § 172.205 with respect to the hazardous waste manifest apply.

(3) When a hazardous material is not subject to the requirements of the ICAO Technical Instructions it must be transported as required by this subchapter.

(4) When a hazardous material is transported under the provisions of this section by motor vehicle on a public highway, the shipping paper must

include:

(i) The name of the DOT class must closely correspond to the ICAO class in association with the basic description required by the ICAO Technical Instructions unless the proper shipping name contains the key word or words of the hazard class of the material; and,

(ii) The words "Dangerous When Wet" in association with the basic description when the Class 4, Division 4.3 label is required to be applied by the ICAO Technical Instructions.

(5) If a liquid or solid material in a package meets the definition of a poison according to this subchapter, and the fact that it is a poison is not disclosed in the shipping name or through a class name entry, the word "Poison" shall be entered on the shipping paper in association with the basic description.

(6) Abbreviations may not be used in shipping paper entries or package markings unless they are specifically authorized by this subchapter.

PART 172—HAZARDOUS MATERIALS TABLES AND HAZARDOUS MATERIALS COMMUNICATIONS REGULATIONS

5. Section 172.401 would be amended by replacing the word "or" in paragraph (c)(1) with a semicolon, by replacing the period at the end of (c)(2) with "; or," and by adding a new paragraph (c)(3) to read as follows:

§ 172.401 Prohibited labeling.

* * * * *

(c) * * *

(3) The ICAO Technical Instructions.

* * * * *

6. In § 172.446, paragraph (a) would be amended by removing the words "including the label name in the lower border", the figure of the MAGNETIZED MATERIAL label would be amended by removing the words "MAGNETIZED MATERIAL LABEL" in the lower right corner of the border of the label and a new paragraph (c) would be added to read as follows:

§ 172.446 MAGNETIZED MATERIAL label.

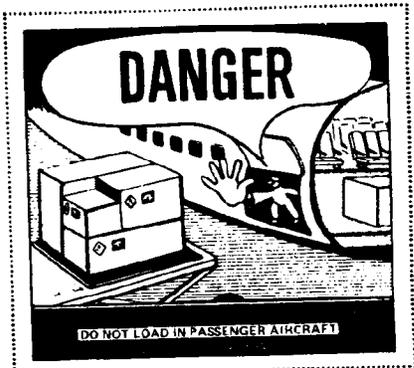
* * * * *

(c) MAGNETIZED MATERIAL labels with the text "MAGNETIZED MATERIAL LABEL" shown in the lower right corner of the label may continue to be used until stocks existing on January 1, 1983, are depleted.

7. In § 172.448, paragraph (a) would be amended and a new paragraph (c) would be added to read as follows:

§ 173.448 CARGO AIRCRAFT ONLY label.

(a) Except for size and color, the CARGO AIRCRAFT ONLY label must be as follows:



(c) CARGO AIRCRAFT ONLY labels with the text "DANGER-PELIGRO" may continue to be used until stocks existing on January 1, 1983, are depleted.

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

8. In § 173.250, paragraph(b) would be revised by changing "§ 175.305" to read "§ 175.10".

PART 175—CARRIAGE BY AIRCRAFT

9. Section 175.3 would be revised to read as follows:

§ 175.3 Unacceptable hazardous materials shipments.

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

10. In § 175.10, paragraph (a)(5) would be revised and new paragraphs (a)(15) through (a)(20) added to read as follows:

§ 175.10 Exceptions.

(a) * * *

(5) Not exceeding 10 pounds gross weight of small-arms ammunition, excluding ammunition with explosive or incendiary projectiles, for personal use carried by a crewmember or passenger in his baggage (excluding carry-on baggage) if securely packed in fiber, wood, or metal boxes.

* * * * *

(15) Alcoholic beverages, perfumes and colognes carried aboard a passenger aircraft by the operator for use or sale on the aircraft.

(16) Alcoholic beverages, perfumes and colognes carried by passengers or crew as carry-on baggage.

(17) Carbon dioxide, solid (dry ice) intended for use in food and beverage service aboard aircraft and dry ice in quantities not exceeding 4 pounds per passenger when used to pack perishables in carry-on baggage.

(18) Carbon dioxide gas cylinders worn by passengers for the operation of mechanical limbs.

(19) Wheel chairs with non-spillable batteries, as checked baggage, provided that the battery is disconnected, the battery terminals are insulated to prevent accidental short circuits, and the battery is securely attached to the wheel chair.

(20) Wheel chairs with spillable batteries, as checked baggage, provided that the wheel chair can be loaded, stowed, secured, and unloaded always in an upright position. The battery must be disconnected, the terminals insulated to prevent accidental short circuits, and the battery securely attached to the wheel chair. The pilot-in-command must be advised either orally or in writing of the location of the wheel chair aboard the aircraft prior to departure. If the wheel chair cannot be loaded, stowed, secured and unloaded always in an upright position, the battery must be removed and the wheel chair may then be carried as checked baggage without restriction. The removed battery must be carried in strong, rigid, outside packagings as follows:

(i) Outside packagings must be leaktight, impervious to battery fluid, loaded aboard the aircraft in accordance with the required orientation markings and be protected against upset by securing to pallets or by securing them in cargo compartments using appropriate means of securement (other than by bracing with freight or baggage) such as by use of restraining straps, brackets or holders;

(ii) Batteries must be protected against short circuits, secured upright in their outside packagings, and surrounded by compatible absorbent material sufficient to absorb their total liquid contents; and

(iii) Outside packagings must be marked to indicate proper orientation, and with the words "Battery, wet, with wheel chair", and be labeled with a Corrosive label.

11. In § 175.30, paragraphs (a) and (b) would be amended and a new paragraph (e) added to read as follows:

§ 175.30 Accepting and inspecting shipments.

(a) * * *

(2) Described and certified on a shipping paper prepared in duplicate in accordance with Subpart C of Part 172 or as authorized by § 171.11 of this subchapter. The originating aircraft operator must retain one copy of each shipping paper for 90 days;

(3) Labeled and marked in accordance with Subparts D and E of Part 172 or as authorized in § 171.11 of this subchapter, and placarded (when required) in accordance with Subpart F of Part 172 of this subchapter; and,

* * * * *

(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.

* * * * *

(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 overpack does not contain a package bearing the "CARGO AIRCRAFT ONLY" label unless the overpack affords clear visibility of and easy access to the package,

(2) The proper shipping names, identification numbers, labels and special handling instructions appearing on the inside packagings are clearly visible or reproduced on the outside of the overpack, and,

(3) Has determined that a statement to the effect that the inside packages comply with the prescribed specifications appears on the outside of the overpack, when specification packagings are prescribed.

-12. Section 175.33 would be revised to read as follows:

§ 175.33 Notification of pilot-in-command.

(a) Except as provided in § 175.10, when a hazardous material subject to the provisions of this subchapter is carried in an aircraft, the operator of the aircraft shall provide the pilot-in-command at least the following information in writing as early as practicable prior to departure:

(1) The proper shipping name, hazard class and identification number of the material as specified in § 172.101 of this subchapter or the ICAO Technical Instructions. 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, any additional description requirements provided in §§ 172.202 and 172.203 of this subchapter must also be shown in the notification.

(ii) The ICAO Technical Instructions, any additional information required to be shown on shipping papers by § 171.11 of this subchapter must also be shown on the notification.

(2) The total number of packages and the quantity of each material, except for radioactive materials, and the location of the hazardous material aboard the

aircraft;

(3) Confirmation that no damaged or leaking packages have been loaded on the aircraft;

(4) For radioactive materials the number of packages, their category, transport index, and specific location aboard the aircraft; and

(5) Whether the package may be carried on cargo aircraft only.

(b) A copy of the written notification to pilot-in-command shall be readily available to the pilot-in-command during flight.

§ 175.35 [Removed]

13. Section 175.35 would be removed.

14. In § 175.75, paragraphs (a)(1), (a)(3)(i) and (a)(3)(ii) would be revised to read:

§ 175.75 Quantity limitations aboard aircraft.

(a) * * *

(1) A hazardous material except as permitted by this subchapter;

* * * * *

(3) * * *

(i) In passenger carrying aircraft,

exceeds 50.0 or, for any single package, exceeds 3.0, or

(ii) In cargo-only aircraft, exceeds 200.00 (for fissile radioactive materials, see § 175.702(b)(3)), or, for any single package, exceeds 10.0

* * * * *

15. Section 175.78 would be revised to read as follows:

§ 175.78 Stowage compatibility of cargo.

(a) Packages containing hazardous materials which might react dangerously with one another must not be stowed in an aircraft next to each other or in a position that would allow a dangerous interaction in the event of leakage. As a minimum, the segregation prescribed in the following Table must be maintained.

TABLE 1¹

	A	B	C	D	E	F	G	H
A Explosive (Class C) or ICAO Division 1.4.	(*)	(*)	(*)	(*)	(*)	(*)	X*	X.
B Compressed gases or ICAO Class 2.	(*)							
C Flammable liquids or ICAO Class 3.	(*)					X	X	
D Flammable liquids and solids (labeled SPONTANEOUSLY COMBUSTIBLE) or ICAO Division 4.2.	(*)					X	X	X.
E Flammable solids (labeled DANGEROUS WHEN WET) or ICAO Division 4.3.	(*)					X	X	X.
F Oxidizers or ICAO Division 5.1.....	(*)		X	X	X			X.
G Organic peroxides or ICAO Division 5.2.	X		X	X	X			X.
H Corrosive materials or ICAO Class 8.	X			X	X	X	X	

¹The letters across the top of the Table have the same meaning as the letters along the left side of the Table.
²An "X" at the intersection of a row and a column in the Table means that package containing the indicated 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.

³For import or export shipment, explosives other than explosives of ICAO Division 1.4, Compatibility Group S, that do not belong to the same compatibility group according to the ICAO Technical Instructions may not be stowed together.
⁴Explosives, other than safety explosives (ICAO Division 1.4, Compatibility Group S) must not be stowed together with this class.

(b) No person may stow a package labeled BLASTING AGENT on an aircraft next to, or in a position that will allow contact with, a package of special fireworks or railway torpedoes:

16. Section 175.79 would be revised to read as follows:

§ 175.79 Orientation of cargo.

(a) A package containing hazardous materials marked "THIS SIDE UP" or "THIS END UP", or with arrows to indicate the proper orientation of the package, must be stored and loaded aboard an aircraft in accordance with such markings.

(b) A package containing liquid hazardous materials not marked as indicated in paragraph (a) of this section, must be stored and loaded with closures up (other than side closures in

addition to top closures).

17. A new § 175.81 would be added to read as follows:

§ 175.81 Securing of packages containing hazardous materials.

(a) Packages containing hazardous materials must be secured in an aircraft in a manner that will prevent any movement in flight which would result in damage to or change in the orientation of the packages.

(b) Packages containing radioactive materials must be secured in a manner that insures that the separation requirements of §§ 175.701 and 175.702 will be maintained at all times.

18. In § 175.85, paragraph (d) is removed and reserved and paragraphs (a), (b) and (c)(1) are revised to read as follows:

§ 175.85 Cargo location.

(a) Except as provided in § 175.10, no person may carry a hazardous material subject to the requirements of this subchapter in the cabin of a passenger-carrying aircraft or on the flight deck of any aircraft. 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 as provided in 14 CFR 25.857(b).

(b) Each package containing a hazardous material acceptable only for cargo aircraft must be loaded in such a manner that a crew member or other authorized person can see, handle and, when size and weight permit, separate such packages from other cargo in flight.

(c) * * *

(1) * * *

(i) Radioactive (ICAO Class 7) materials,

(ii) Poison B (ICAO) Division 6.1 liquids and solids (except those labeled FLAMMABLE).

(iii) Irritating (ICAO Division 6.1) materials,

(iv) Etiologic (ICAO Division 6.2) agents, and

(v) Flammable liquids with a flashpoint above 90°F. (32°C.), and

(vi) Materials classified as Class 9 materials according to the ICAO Technical Instructions and that are

being transported under that classification as provided in § 171.11 of this subchapter.

19. A new § 175.88 would be added to read as follows:

§ 175.88 Inspection of unit load devices.

(a) A unit load device may not be loaded on an aircraft unless the device has been inspected and found to be free from any evidence of leakage from, or damage to, any hazardous materials contained therein.

20. Section 175.90 would be revised to read as follows:

§ 175.90 Damaged shipments.

(a) Packages or overpacks containing hazardous materials must be inspected for damage or leakage after being loaded from an aircraft. When packages or overpacks containing hazardous materials are carried in a unit load device, the area where the unit load device was stowed must be inspected for evidence of leakage or

contamination immediately upon removal of the unit load device from the aircraft, and the packages or overpacks inspected for evidence of damage or leakage when the unit load device is unloaded. In the event of leakage or suspected leakage, the compartment in which the package, overpack, or unit load device was carried must be inspected for contamination and any dangerous level of contamination removed.

(b) Except as provided in § 175.700, the operator of an aircraft shall remove from the aircraft any package subject to this subchapter that appears to be damaged or leaking. In the case of a package which appears to be leaking, the operator must insure that the remainder of the packages in the same shipment are in proper condition for transport by air and that no other packages has been contaminated.

(c) No person shall place or transport a package that is damaged or appears to be damaged or leaking aboard an aircraft subject to this Part.

(d) If a package containing an etiologic agent is found to be damaged or leaking, the person finding the package shall—

(1) Avoid handling of the package or keep handling to a minimum;

(2) Inspect packages adjacent to the leaking package for contamination and withhold from further transportation any contaminated packages until it is ascertained that the packages can be safely transported;

(3) Comply with the reporting requirement of § 171.15 of this subchapter; and

(4) Notify the consignor or consignee.

§ 175.305 [Amended]

21. In § 175.305, paragraph (b) would be removed.

22. In § 175.320 a new paragraph (b)(10) would be added to read as follows:

§ 175.320 Cargo-only aircraft; only means of transportation.

* * * * *

(b) * * *

(10) If the movement involves international transportation, permission for the shipment must also be obtained from the appropriate authorities of the countries of origin, destination, transit and overflight prior to departure.

* * * * *

23. Section 175.630 would be revised to read as follows:

§ 175.630 Special requirements for poisons and etiologic agents.

(a) Hazardous materials bearing the POISON or ETIOLOGIC AGENT label may not be carried in the same compartment of an aircraft with material which is marked as or known to be foodstuffs, feed, or any other edible material intended for consumption by humans or animals unless the poisons or etiologic agents and the foodstuffs, feed, or other edible material are loaded in separate unit load devices which, when stowed on the aircraft, are not adjacent to each other.

§ 175.70 [Amended]

24. In paragraph (b)(2) of § 175.701, the figures in the "Centimeters" and "Inches" columns for the last six entries would be revised to read 290, 320, 350, 375, 400 and 425 in the "Centimeters"

column and 114, 126, 138, 148, 157 and 187 in the "Inches" column, respectively.

25. A new § 175.705 would be added to read:

§ 175.705 Inspection of aircraft for contamination by radioactive materials.

(a) Aircraft used routinely for the carriage of radioactive materials shall be periodically checked to determine the level of contamination. The frequency of checks shall be related to the likelihood of contamination and the extent to which radioactive materials are carried.

(b) An aircraft must be taken out of service if the level of contamination exceeds that provided in § 175.700(b).

(49 U.S.C. 1803, 1804, 1808; 49 CFR 1.53, App. A to Part 1 and paragraph (a)(4) of App. A to Part 106)

Note.—The Materials Transportation Bureau has determined that this document will not result in a "major rule" under the terms of Executive Order 12291 or a significant regulation under DOT's regulatory policy and procedures (44 FR 11034) or require an environmental impact statement under the National Environmental Policy Act (49 U.S.C. 4321, *et seq.*) I certify that this proposal would not, if adopted, have a significant economic impact on a substantial number of small entities because the overall economic impact of this proposal would be minimal. A regulatory evaluation and environmental assessment are available for review in the docket.

Issued in Washington, D.C., on July 26, 1981.

Alan I. Roberts,

Associate Director for Hazardous Materials Regulation, Materials Transportation Bureau.

[FR Doc. 82-20578 Filed 7-30-82; 8:45 am]

BILLING CODE 4910-60-M

U.S. Department of Transportation

Research and Special Programs Administration

400 Seventh St., S.W. Washington, D.C. 20590

Office Business Penalty for Private Use \$300

PRESORTED FIRST-CLASS MAIL POSTAGE & FEES PAID RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION PERMIT NO. G-126