W-304

CIVIL AIR REGULATIONS

PART 49

TRANSPORTATION OF EXPLOSIVES AND OTHER DANGEROUS ARTICLES

Effective July 20, 1949

CIVIL AERONAUTICS BOARD

WASHINGTON, D. C.

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49.0 Applicability of part. Explosives or other dangerous articles, including flammable liquids, flammable solids, oxidizing materials, corrosive liquids, compressed gases, and poisonous substances, shall not be loaded in or transported by civil aircraft in the United States, or transported anywhere in air commerce in civil aircraft of United States registry except as hereinafter provided.

49.1 Definitions.

(a) As used in this part the words listed below shall be defined as follows:

(1) *Explosives.* Those liquids, gases, or solids specified as "Forbidden Explosives," Class A, Class B, or Class C explosives by the ICC Regulations.

(2) *Flammable*[1] *liquid.* A flammable liquid is any liquid which gives off flammable vapors (as determined by flash point from Tagliabue's open-cup tester, as used for test of burning oils) at or below a temperature of 80° F.

(3) *Flammable solid.* A flammable solid is a solid substance, other than one classified as an explosive, which is likely under conditions incident to transportation to cause fires through friction, through absorption of moisture, through spontaneous chemical changes, or as a result of retained heat from the manufacturing or processing.

(4) *Oxidizing material.* An oxidizing material is a substance such as a chlorate, permanganate, peroxide, or a nitrate, that yields oxygen readily to stimulate the combusion of organic matter.

(5) *Corrosive liquids.* Corrosive liquids are those acids, alkaline caustic liquids, and other corrosive liquids which, when in contact with living tissue, will cause severe damage to such tissue by chemical action; or which, in case of leakage, will materially damage the aircraft structure or cargo; or which are likely to cause fire when in contact with organic matter or with certain chemicals.

(6) *Compressed gas.* A compressed gas for the purposes of these regulations is defined as any material or mixture having in the container either an absolute pressure exceeding 40 pounds per square inch at 70° F., or an absolute pressure exceeding 104 pounds per square

[1] Chapter 39, "Explosives and Combustibles," of Title 18 of the U. S. Code, Public Law 772, 80th Congress, 2nd Sess.; 18 U. S. C. 831 et seq., enacted June 25, 1948, which supersedes the Transportation of Explosives Act of March 4, 1921, adopts the term "flammable" in place of the currently used term "inflammable." As used in this part "flammable" has the same meaning as "inflammable" and "nonflammable" the same meaning as "noninflammable" as used by current ICC Regulations.

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inch at 130° F., or both; or any liquid flammable material having a Reid [2] vapor pressure exceeding 40 pounds per square inch absolute at 100° F. (See § 49.1 (a) (7) (i) for gases defined and classified as poisonous.)

(i) Any compressed gas, as defined above, shall be classified as a flammable compressed gas if either (1) a mixture of 13 percent or less (by volume) with air forms a flammable mixture or (2) the flammability range with air is greater than 12 percent regardless of the lower limit.

(7) *Poisonous articles.* Poisonous articles for the purpose of these regulations are divided into four classes defined as follows:

(*i*) Extremely dangerous poisons—Class A. Poisonous gases or liquids of such nature that a very small amount of gas, or vapor of the liquid, mixed with air is dangerous to life. This class includes: chlorpicrin, cyanogen, diphosgene, ethyldichlorarsine, hydrocyanic acid, lewisite, methyldichlorarsine, mustard gas, nitrogen peroxide (tetroxide), phenylcarbylamine chloride, phosgene (diphosgene). (Dilute solutions of hydrocyanic acid of not exceeding 5 percent strength are classed as poisonous articles, Class B.)

(*ii*) Less dangerous poisons—Class B. Poisonous liquids and solids, including pastes and semisolids, are substances of such nature that they are chiefly dangerous by external contact with the body or by their being taken internally as in contaminated food or feeds.

(*iii*) Tear gas or irritating substances—Class C. Tear gases are liquid or solid substances which upon contact with fire or when exposed to air give off dangerous or intensely irritating fumes, such as brombenzylcyanide, chloracetophenone, diphenylaminechlorarsine, and diphenylchlorarsine, but not including any poisonous article, Class A.

(*iv*) Radioactive materials—Class D. A radioactive material is any material or combination of materials which spontaneously emits ionizing radiation. For the purpose of these rules radioactive materials are divided into three groups according to the type of radiation emitted at any time during transportation, as follows:

(I) Group I radioactive materials. Group I radioactive materials are those materials which emit any gamma radiation, either alone or with electrically charged particles or corpuscles.

(II) Group II radioactive materials. Group II radioactive materials are those materials which emit neutrons and either or both of the types of radiation characteristic of group I radioactive materials.

(III) Group III radioactive materials. Group III radioactive materials are those materials which emit only electrically charged particles or corpuscles (i. e., alpha and/or beta radiation).

(8) *"Unit" of gamma radiation.* "Unit" of gamma radiation is one milliroentgen per hour at a meter for "hard gamma" radiation, i. e., that amount of gamma radiation which will have the same effect on sensitive photographic film as one milliroentgen per hour at a meter of "hard gamma" radiation of radium filtered through ½ inch of lead.

(9) *Passenger-carrying aircraft.* A passenger-carrying aircraft is an aircraft carrying any individual other than a flight crew or crew member, company employee, or an authorized government representative.

(10) *Cargo aircraft.* A cargo aircraft is an aircraft other than a passenger-carrying aircraft which is carrying goods or property.

(11) *Marking.* Marking is the display on the container of the name of the articles inside as listed in the commodity list of the ICC Regulations.

(12) *Labeling.* Labeling is the display on the container of an appropriate label as specified for a particular class of articles by the ICC Regulations.

(13) *ICC Regulations.* ICC Regulations shall mean the "Interstate Commerce Commission's Regulations for Transportation of Explosives and Other Dangerous Articles," effective January 7, 1941, as amended or revised from time to time.[3]

(14) *Aircraft operator.* An operator of aircraft shall include the owner, lessee, or any other person who causes or authorizes the operation of the aircraft.

49.3 Packing, marking, and labeling requirements.

(a) Unless otherwise specificially provided in this part, explosives or other dangerous articles shipped by air shall be packed, marked, and labeled in accordance with the specifica-

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[2] American Society for Testing Materials Method of Test for Vapor Pressure of Petroleum Products (D-323).

[3] The regulations referred to may be obtained from the Government Printing Office, Washington 25, D. C., or from the Bureau of Explosives, 30 Vesey Street, New York 7, New York.

tions established in Part 72[4] of the ICC Regulations for transportation by rail express: *Provided,* That liquids shall be packed only in containers which are securely closed, sufficient in strength to prevent any leakage or distortion of the containers caused by change in temperature or altitude during transit, and so filled as to provide adequate outage. All explosives or other dangerous articles shipped by air shall show the proper shipping name as shown in the commodity list of Part 72 of the ICC Regulations and any instructions that are necessary for safe handling.

(b) No shipper shall offer and no air carrier or other operator of aircraft shall knowingly accept explosives or dangerous articles for carriage by air unless the shipper or his authorized agent has certified that the shipment complies with the requirements of this part. No shipment shall be accepted for transportation by passenger-carrying aircraft unless the package shows a clear and plainly visible statement that it is within the limitations prescribed for passenger operations. Any operator of aircraft may rely on such a certificate as prima facie evidence that the shipment so certified complies with the requirements of this part.[5]

PASSENGER-CARRYING AIRCRAFT

49.10 Acceptable explosives and other dangerous articles on aircraft carrying passengers. No article listed in Appendixes A or B of this part shall be carried on passenger-carrying aircraft, and no other explosive or dangerous article shall be carried in passenger-carrying aircraft except as provided in §§ 49.11 through 49.18.

49.11 Explosives. Class C explosives may be carried. Class C explosives shall be packed, marked, and labeled as required by Part 72 of the ICC Regulations. The maximum quantity that may be packed in one outside container is 50 pounds.

49.12 Flammable liquids. Flammable liquids may be carried when packed in quantities of not more than 1 quart in inside metal containers or in quantities of not more than 1 pint in inside glass or earthenware containers. Each inside container shall be packed in a strong outside container with cushioning and absorbent material where necessary to prevent breakage and leakage: *Provided,* That viscous flammable liquids, such as cement mastics and sealers, may also be carried in quantities of not more than 8 fluid ounces in collapsible tubes which are packed in quantities of not more than 16 fluid ounces in any one strong outside container.

49.13 Flammable solids and oxidizing materials.

(a) Except for the items listed in subparagraphs (1) through (6) which shall be specially handled as provided therein, flammable solids and oxidizing materials may be carried in quantities of not more than 16 ounces net weight in inside metal or glass containers, suitably cushioned with nonflammable material where necessary to prevent breakage or leakage, and packed in strong outside containers. The maximum quantity that may be packed in any outside container is 25 pounds.

(1) *Liquid or solid organic peroxides.* Liquid or solid organic peroxides shall be packed in inside containers of not over 1 pound or 1 pint capacity. Not more than one such inside container suitably cushioned with nonflammable material shall be packed in a strong outside container. (See corrosive liquids for hydrogen peroxide.)

(2) *Calcium hypochlorite, dry.* Calcium hypochlorite, dry, containing more than 8.80 percent available oxygen (39 percent available chlorine) shall be packed in inside glass or metal containers of not over 5-pound capacity. Each container shall be packed in strong outside containers.

(3) *Matches.* Strike-on-box, book, or card-type matches shall be packed in tightly closed metal inside containers. The maximum quantity of matches that may be packed in any outside container is 25 pounds.

(4) *Picrate of ammonia, picric acid, urea nitrate, trinitrobenzene, and trinitrotoluene.* Picrate of ammonia, picric acid, urea nitrate, trinitrobenzene, or trinitrotoluene, wet with not less than 10 percent water, may be carried only when shipped as a drug, medicine, or chemical, and shall be packed in a glass container enclosed in a strong fiber carton properly cushioned with nonflammable material in an outside shipping case, provided that not more than 16 ounces net content shall be packed in any one outside container.

[4] Part 72 of the ICC Regulations incorporates the packaging specifications of Part 73 thereof. It will be noted that items exempted from the packaging, labeling, or marking provisions of Part 73 of the ICC Regulations are *not* exempted from such requirements for shipment by air unless it is expressely so provided in this part.

[5] The following statement on the shipping label signed by a responsible agent of the shipper will be accepted as meeting this requirement:
This is to certify that the contents of this package are properly described by name and are packed and marked and are in proper condition for transportation according to the regulations prescribed by the Interstate Commerce Commission and the Civil Aeronautics Board.
For shipment on passenger-carrying aircraft add the following:
This shipment is within the limitations prescribed for passenger-carrying aircraft.

(5) *Pyroxylin plastics.* Pyroxylin (nitrocellulose) plastics shall be securely enclosed in tight inside metal containers packed in quantities of not more than 25 pounds in strong outside containers.

(6) *Motion picture film.* Motion picture film (nitrocellulose base) shall be packed, marked, and labeled in accordance with the requirements of Part 72 of the ICC Regulations.

49.14 Acids and other corrosive liquids.

(a) Acids and other corrosive liquids may be carried when packed in bottles of not more than 1 pint capacity, suitably cushioned with nonflammable material to prevent breakage or leakage, and packed in a metal can. Each can shall be packed in a strong outside container.

(b) Electric storage batteries containing electrolyte or corrosive battery fluid, of the nonspillable type, protected against short circuits, and completely and securely boxed, may be carried.

49.15 Nonflammable compressed gases. Nonflammable compressed gases may be carried. Shipment shall be made in ICC approved cylinders, and pressures shall not exceed those permitted by the ICC.

49.16 Poisonous liquids. Class B poisonous liquids may be carried in quantities of not more than 1 pint in glass containers, suitably cushioned to prevent breakage or leakage, or not more than 1 quart in inside metal containers. Each inside container shall be packed in a strong outside wooden or fiberboard box.

49.17 Poisonous solids. Class B poisonous solids may be carried.

(a) Except for cyanides which shall be packed as set forth below, Class B poisonous solids shall be packed in tightly closed inside containers of glass, earthenware, or metal, or in lock-corner sliding-lid wooden boxes lined to prevent sifting, of not more than 5-pound capacity each. Inside containers shall be securely packed in outside fiberboard or wooden containers. Not more than 25 pounds of any such article shall be packed in any one outside container.

(b) Cyanides and cyanide mixtures shall be packed in a tightly closed glass, earthenware, or metal inside container, of not over 1 pound capacity, securely cushioned and packed in quantities of not more than 5 pounds in outside wooden or fiberboard boxes or in wooden barrels.

49.18 Radioactive materials. Radioactive materials—Class D, Groups I, II, and III (liquid, solid, or gaseous) may be carried when packed, marked, and labeled in accordance with the provisions of §§ 73.368 through 73.369 of the ICC Regulations. (See § 49.55 for handling of radioactive materials in aircraft. See also § 49.62 where certain other types of radioactive materials are exempted from certain of the requirements of this part.)

CARGO AIRCRAFT

49.41 Articles which may be carried in cargo aircraft. In addition to the articles acceptable for transportation on aircraft carrying passengers, any article acceptable for, and packed, marked, and labeled in accordance with the ICC Regulations for, transportation by rail express may be carried in cargo aircraft: *Provided*, That no article listed in Appendix A of this part shall be carried except under the provisions of § 49.71. The maximum quantity in any one outside package or container shall not exceed that prescribed in the commodity list of Part 72 of the ICC Regulations.

LOADING AND HANDLING REQUIREMENTS

49.51 Cargo location.

(a) Articles subject to the requirements of this part shall not be carried in the cabins of passenger-carrying aircraft.

(b) Any article acceptable only for cargo aircraft shall be carried in accessible cargo pits or bins or in the cabin.

(c) Articles shall not be placed in the same cargo pit or bin nor placed side by side in cabins so that:

(1) yellow label material is mixed with either white label or with red label material, or

(2) white label material is mixed with poison label material (red printing on white background).

49.52 Pilot notification. When articles subject to the packing, marking, and labeling requirements of this part are carried on aircraft, the operator shall be responsible for notifying the pilot of the proper shipping name of the article as shown in the commodity list of Part 2 of the ICC Regulations, the type of label, quantity, and the location thereof. The pilot notification requirement may be met by entering the required information on the airplane load manifest.

49.53 Damaged or improperly marked articles. If any package coming under the provisions of this part appears to be damaged, leaking, or improperly marked and labeled, it shall be removed from the aircraft and shall not be returned to transportation by air until it has been determined that the package and its contents comply with the requirements of this part.

(a) In any instance where it is indicated that the requirements of this part have been violated, a report shall immediately be made to the nearest representative of the Administrator or Board.

49.54 Quantity limitations. Except as provided below not more than 50 pounds net weight of any article subject to the packing and labeling provisions of this part may be carried in any one cargo pit or bin on passenger-carrying aircraft, or in any inaccessible cargo pit or bin on any aircraft:

(a) Not more than 150 pounds net weight of compressed nonflammable gas may be carried in any single cargo pit or bin on passenger-carrying aircraft or in any inaccessible cargo pit or bin in any aircraft.

(b) No quantity limit is prescribed for calcium hypochlorite, pyroxylin plastics, motion picture film, or radioactive material Group III.

(c) Not more than 40 units of radioactive material Groups I or II shall be carried on any aircraft.

(d) Except as provided above for inaccessible cargo pits or bins, no quantity limitations apply to the carriage of explosives or other dangerous articles under the provisions of this part in cargo aircraft.

49.55 Special requirements for radioactive materials.

(a) Whenever any shipment of radioactive materials is damaged or appears to be damaged, it shall be removed from transportation and segregated as far as possible from human contact. The shipper shall immediately be contacted for disposal instructions, and the Administrator or the Board shall also be notified.

(b) Whenever there is any actual spillage of radioactive materials of such nature that the materials are no longer contained within their inner containers, no attempt shall be made to remove or clean up the materials until instructions are received from the shipper or other qualified persons, and then only when necessary protective measures have been taken, and qualified persons are present to supervise the handling.

(c) A container or group of containers of radioactive materials shall not be placed closer than the distance specified in the distance table to any area that may be continuously occupied by crew members or passengers. If more than one such container is present the distance shall be computed from the table below by adding together the number of units shown on the label of each package.

Table for Personnel Separation [1]

Total Number of units [2]	Minimum distance to crew members and passengers (feet) [3]
0–2	1
3–5	2
6–10	3
11–20	4
21–30	5
31–40	6

[1] This table is designed to afford maximum protection to human beings from the effects of radiation and will not protect X-ray film from such effects under all conditions of exposure. Distance separation required by this table for Groups I and II (red label) radioactive materials is not required for Group III (blue label) radioactive materials.

[2] Total number of units refers to the number found on the red label of a single package entered on the line reading, "Radiation Units from Package: No. * * * ." For two or more packages stored together, the total of the numbers of all such packages is meant.

[3] Distance means the number of feet from the nearest edge of the nearest radioactive container.

(d) If any aircraft is engaged principally or entirely in the transportation of radioactive materials, it shall be the responsibility jointly of the shipper and the carrier to monitor all personnel involved so that the accepted limits of personnel radiation exposure are not exceeded.

EXEMPTED ARTICLES

49.61 Aircraft equipment. Signalling devices, aviation fuel and oil carried in tanks complying with fuel and oil tank installation provisions of the Civil Air Regulations, and other equipment and materials necessary for the safe operation of the aircraft on which they are carried shall be exempt from the provisions of this part.

49.62 Radioactive materials.

(a) Radioactive materials which meet all of the following conditions are exempt from packing, marking, and labeling requirements required by this part:

(*1*) The package shall be such that there can be no leakage of radioactive material under conditions normally incident to transportation.

(*2*) The package shall contain not more than 0.1 millicuries of radium, or polonium, or that amount of strontium 89, strontium 90, or barium 140 which disintegrates at a rate of more than 5 million atoms per second; or not more than that amount of any other radioactive substance which disintegrates at a rate of more than 50 million atoms per second.

(*3*) The package shall be such that no significant alpha, beta, or neutron radiation is emitted from the exterior of the package, and the gamma radiation at any surface of the package shall be less than 10 milliroentgens in 24 hours.

(b) Manufactured articles other than liquids, such as instrument or clock dials of which radioactive materials are a component part, and luminous compounds when securely packed in strong outside containers are exempt from packing, marking, and labeling requirements, provided the gamma radiation at any surface of the package is less than 10 milliroentgens in 24 hours.

(c) (*1*) Radioactive materials such as ores, residues, etc., packed in strong, tight containers are exempt from packing and labeling requirements for shipment in planeload lots, provided the per-planeload radiation intensity at one meter from any outside surface of the load (as loaded in place in the airplane) does not exceed 10 milliroentgens per hour of gamma radiation or equivalent. There shall be no loose radioactive material in the airplane, and the shipment must be braced and lashed so as to prevent leakage or shift of lading under normal conditions of flight.

(*2*) It is the responsibility of the consignor and/or consignee to supervise, respectively, all loading and unloading operations and to monitor all personnel involved so that the accepted limits of personnel radiation exposure are not exceeded.

(d) Shipments of radioactive materials made by the Atomic Energy Commission or under its direction or supervision, which are escorted by personnel who are specially designated by the Atomic Energy Commission, are exempted from the provisions of these regulations where special arrangements are made with and approved by the Administrator.

49.63 Additional exempted articles. The following articles are exempted from the provisions of this part:

(a) **Small-arms ammunition.** Small-arms ammunition in small quantities for personal use.

(b) **Matches.** Small quantities of matches, of the strike-on-box, book, or card type, carried on the person.

(c) **Pyroxylin plastics.** Articles manufactured from a pyroxylin plastic base such as hairbrushes, combs, and toothbrushes which are exempted from the requirements of the ICC Regulations.

(d) **Safety film.** Film having an acetate base.

49.71 Special authority. In emergency situations or where other forms of transportation are impracticable, deviations from any of the provisions of this part for a particular flight may be authorized by the Administrator where he finds that the conditions under which the articles are to be carried are such as to permit the safe carriage of persons and cargo.

49.81 Prohibited articles. No explosive or dangerous article listed in Part 72 of the ICC Regulations as an Explosive A, a Poison A, a forbidden article, or as an article not acceptable for rail express (see § 49.62 for authorization of the carriage of certain radioactive materials), nor any article listed in Appendix A shall be carried on aircraft subject to the provisions of this part.

APPENDIX A—ITEMS PROHIBITED FROM TRANSPORTATION BY AIR

Explosives
- Ammunition for cannon
- Blasting caps, including electric blasting caps
- Blasting caps with safety fuse
- Jet thrust units
- Rocket ammunition

Flammable liquids
- Acrolein
- Carbon disulfide (disulfide)
- Nickel carbonyl
- Zinc ethyl

Flammable solids and oxidizing materials
- Acetyl benzoyl peroxide, solid
- Acetyl peroxide, solid
- Burnt cotton (not repicked)
- Burnt fiber
- Carbopropoxide stabilized or unstabilized
- Charcoal, wood, screenings other than "pinon" wood screenings
- Cotton waste, oily, with more than 5% animal or vegetable oil
- Fish scrap or fish meal containing less than 6% or more than 12% moisture
- Garbage tankage containing less than 8% moisture
- Hair, wet
- Iron mass, spent
- Iron sponge not properly oxidized
- Iron sponge, spent
- Matches, strike-anywhere
- Motion picture film scrap (nitrocellulose)
- Paper stock, wet
- Rags, oily
- Rags, wet
- Spent oxide
- Tankage fertilizers
- Tankages, rough ammoniate
- Textile waste, wet
- Waste paper, wet
- X-ray film scrap (nitrocellulose base)

Compressed flammable gas
- Fluorine

APPENDIX B—ITEMS PROHIBITED FROM TRANSPORTATION BY AIR ON PASSENGER-CARRYING AIRCRAFT

Explosives
- Chemical ammunition containing Class B or Class C poisons
- Explosives Class B, all

Flammable liquids
- Ethyl chloride
- Ethyl trichlorosilane
- Ethylene oxide
- Lithium aluminum hydride etheral
- Spirits of nitroglycerin in excess of one (1) percent by weight
- Trichlorosilane

Flammable solids and oxidizing materials
- Acetyl benzoyl peroxide solution
- Bags, nitrate of soda, empty and unwashed
- Benzoyl peroxide
- Calcium chlorite
- Calcium phosphide
- Calcium resinate

Calcium resinate, fused
Chlorobenzoyl peroxide (para)
Cobalt resinate, precipitated
Lithium hydride
Lithium metal (unless exempt from ICC Regulations)
Lithium silicon
Peracetic acid
Phosphoric anhydride
Phosphorous, amorphous, red
Phosphorous, white or yellow
Phosphorous pentachloride
Phosphorous sesquisulfide
Photographic film scrap (processed, positive or negative nitrocellulose)
Picric acid, wet, exceeding 16 ounces by weight
Potassium, metallic and potassium metallic liquid alloy
Potassium peroxide
Pyroxylin plastic scrap
Sodium chlorite
Sodium metallic and sodium metallic liquid alloy
Sodium peroxide
Sodium picramate
Thorium metal, powdered
Titanium metal, powdered
Zirconium, metallic, dry, wet, or sludge

Acids and other corrosive liquids
Acid sludge
Allyl chloroformate
Amil trichlorosilane
Antimony pentafluoride
Benzoyl bromide
Benzoyl chloroformate
Bromine
Bromine trifluoride
Bromo toluene
Chloracetyl chloride
Chlorine trifluoride
Diethyl dichlorosilane
Difluorophosphoric acid, anhydrous
Dimethyl sulphate
Diphenyl dichlorosilane
Electrolyte or alkaline battery fluid packed with storage batteries, battery chargers, or radio current supply devices
Ethyl chloroformate
Ethyl formate
Ethylphenyl dichlorosilane
Fluosulfonic acid
Hexafluorophosphoric acid
Hexyl trichlorosilane
Hydrazine, anhydrous
Hydrazine solution containing 50% or less of water
Hydrofluoric acid, anhydrous
Hypochlorite solution more than 7% chlorine by weight
Methyl chloroformate
Mixtures of hydrofluoric and sulphuric acids
Monofluorophosphoric acid, anhydrous
Nitrating (mixed) acid
Nitric acid
Nitrohydrochloric acid
Nitrohydrochloric acid, and dilute

Octyl trichlorosilane
Phenylphosphorous oxychloride
Phosphorous tribromide
Phosphorous trichloride
Propyl trichlorosilane
Spent acid, sulfuric or mixed
Sulfur chloride
Thionyl chloride
Thiophosphoryl chloride
Compressed gases
All flammable gases
Nonflammable gases as follows:
Anhydrous ammonia
Boron trifluoride
Chlorine
Hydrogen bromide
Hydrogen chloride
Nitrosyl chloride
Sulfur dioxide
Poisonous articles
Aniline oil
Chemical ammunition
Hydrocyanic acid solutions
Methyl bromide
Motor fuel antiknock compound
Phenyldichlorarsine
Tetraethyl lead

NOTICE

Advise the Civil Aeronautics Board, Washington 25, D. C., that you have purchased this part of the Civil Air Regulations and that agency will supply you with copies of amendments which have been issued since this printing. Be sure to specify the number of this part, otherwise your request cannot be filled.

If you wish to be informed of all future amendments to this and to other parts of the Regulations, subscribe to the monthly Civil Aeronautics Journal. All new regulations, amendments, and special regulations are carried in the Journal. Annual subscriptions are 75 cents, payable in advance by cash or money order, and are obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

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