Civil Aeronautics Manual 49

Transportation of Explosives and Other Dangerous Articles

Revised

NOTE: This publication is a consolidation of all CAM 49 material and includes pertinent changes in Supplements 3 and 7 to Volume I. It contains no new material. Subsequent changes begin with Supplement 8 to Volume I.

December 1958

Introductory Note

Civil Aeronautics Manual 49 contains in consolidated form (1) Civil Air Regulations Part 49, Transportation of Explosives and Other Dangerous Articles, effective June 25, 1958, and Amendment 49–1, effective October 10, 1958, adopted by the Civil Aeronautics Board; and (2) any rules, policies, and interpretations issued by the Administrator of Civil Aeronautics in application to the various sections of the regulations.

CAA *rules* are supplementary regulations issued pursuant to authority expressly conferred on the Administrator in the Civil Air Regulations. Such rules are mandatory and must be complied with.

CAA *policies* provide detailed technical information on recommended methods of complying with the Civil Air Regulations. Such policies are for the guidance of the public and are not mandatory in nature.

CAA *interpretations* define or explain words and phrases of the Civil Air Regulations. Such interpretations are for the guidance of the public and will be followed by the Administration in determining compliance with the regulations.

This manual is arranged to give the number, title, and text of each section of the regulations followed by any rules, policies, or interpretations applicable to that section of the regulations. These rules, policies, or interpretations of the Administrator are identified by consecutive dash numbers appended to the regulation section number.

This manual, effective October 16, 1958, supersedes Civil Aeronautics Manual 49, dated December 15, 1956, and revisions dated June 1, 1957, contained in Supplement No. 3 to Volume I. It will be revised from time to time in accordance with changes in Civil Air Regulations Part 49, or as the need for additional explanations are brought to the attention of the Administrator.

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Transportation of Explosives and Other Dangerous Articles

Applicability and Definitions

49.1 *Applicability of this part.*

(a) Explosives and other dangerous articles, as defined and regulated in Parts 72 through 78 of the ICC Regulations (49 CFR Parts 72 through 78) including but not limited to flammable liquids, flammable solids, oxidizing materials, corrosive liquids, compressed gases, and poisonous articles 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.

(b) Explosives and other dangerous articles listed in Part 72 of the ICC Regulations (49 CFR Part 72) as articles not accepted for rail express 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.

(c) The provisions of this part shall not be applicable to radioactive materials meeting the requirements of Parts 72 and 73 of the ICC Regulations (49 CFR Parts 72, 73) which exempt them from the prescribed packing, marking, and labeling requirements thereof for shipment by rail express.

(d) The provisions of this part shall not be applicable to aircraft equipment such as signaling devices, aviation fuel and oil carried in tanks complying with the fuel and oil tanks 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.

(e) The provisions of this part shall not be applicable to materials while carried in the hoppers or tanks of aircraft certificated for use in aerial seeding, dusting, spraying, fertilizing, crop improvement, or pest control and which are to be dispensed during such operations.

Note: In addition to other authorized sanctions, section 902 of Title IX on the Civil Aeronautics Act of 1938, as amended (52 Stat. 1015, as amended; 49 U. S. C. 622), provides that any person who knowingly delivers or causes to be delivered to an air carrier or to the operator of any civil aircraft for transportation in air commerce, or who causes the transportation in air commerce of, any shipment, baggage, or property, the transportation of which is prohibited by any rule, regulation, or requirement prescribed by the Civil Aeronautics Board, pursuant to authority under Title VI of the Civil Aeronautics Act of 1938, as amended, relating to the transportation, packing, marking, or description of explosives or other dangerous articles shall, upon conviction thereof for each such offense, be subject to the applicable penalties set forth therein.

49.2 *Special authority.*

(a) In emergency situations or where other forms of transportation are impracticable:

(1) Deviation from any of the provisions of this part for a particular flight may be authorized by the Administrator subject to such terms, conditions, and limitations as he finds necessary in the interest of safety in air commerce.

(2) Shipments made by the Atomic Energy Commission shall be exempt from the quantity limitation prescribed for radioactive materials in the ICC Regulations for shipment by rail express provided such shipments are otherwise in accordance with the requirements approved by the Interstate Commerce Commission for shipment by rail express and prior notification of each shipment is given by the Atomic Energy Commission in the form and manner prescribed by the Administrator.

(b) Shipments of radioactive materials made by the Atomic Energy Commission or under its direction or supervision, which are escorted by personnel who are especially designated by the

Atomic Energy Commission, shall be exempt from the provisions of this part where special arrangements are made with and approved by the Administrator.

49.2-1 *Authority to deviate from the provisions of Part 49 (CAA policies which apply to sec. 49.2 (a)).* The Administrator may grant authority for a particular flight to deviate from the provisions of Part 49 in those cases described in either paragraphs (a) or (b).

(a) An emergency situation in which the issuance of the authority to deviate from the provisions of Part 49 would serve the public interest in connection with any actual or imminent disaster such as flood, fire, storm, earthquake, or other calamitous visitation, or any humanitarian effort such as to save lives or to alleviate distress or suffering. Any situation which is solely a matter of convenience or economic advantage to the shipper, consignee, or persons who desire to transport any shipment is not deemed to be an emergency situation for a deviation to be authorized under section 49.2 (a).

(b) When other forms of transportation are found to be impracticable such as when: (1) the transit time by other forms of transportation would result in spoilage, damage, or forfeit the normal or intended use of the shipment at destination; (2) the destination is not safely accessible by other means of transportation.

(Published in 23 F. R. 7990, Oct. 16, 1958, effective Oct. 16, 1958.)

49.2-2 *Conditions and limitations (CAA policies which apply to sec. 49.2).* An authorization to deviate from the provisions of Part 49 will be issued only under the following conditions and limitations:

(a) The persons carried aboard the aircraft are limited to the minimum flight crew necessary to the safety of the particular flight and such other persons that are essential to the handling en route of the particular shipment for which deviation authority is requested.

(b) The shipper certifies that the shipment can be handled in air transportation with a reasonable degree of safety to persons and cargo aboard the aircraft and provides full instructions with regard to any special handling procedures and precautions to be observed which are necessary to assure safe transit.

(c) The aircraft can be located on airports for loading and unloading and operated during takeoff, en route, and landing so as to remain a safe distance from all heavily populated areas and, insofar as possible, avoid being in hazardous proximity to any place of human abode or assembly when the shipment of any explosive or other dangerous articles can create destructive forces or have lethal or injurious effect over an appreciable area as a result of accident to the aircraft or shipment.

(d) The deviation for which authorization is issued is limited to the particular flight and articles for which authorization is requested. For the purpose of this paragraph, authorization for a particular flight is issued for the entire flight from the point of origin where the articles, for which deviation authority applies, are placed aboard the aircraft to the point of destination where such articles are removed from the aircraft.

(e) The shipment is loaded, unloaded, packed, marked, stowed, and secured aboard the aircraft in accordance with any rules or special instructions of the Interstate Commerce Commission for the item or items for which deviation authority is requested.

(f) The crew of the aircraft is thoroughly briefed on the characteristics and proper handling of the cargo and, when any crew change is involved during the flight, the new crew shall be briefed under a hand-to-hand signature service furnished by the carrier.

(g) The holder of the authorization will notify and obtain permission from the operators or managers of the airports used in the operation.

(h) The authorization is limited to the carriage of the particular articles on civil aircraft within the continental limits of the United States including its territories and possessions. Aircraft of United States registry engaged in air commerce outside of the United States must obtain the authorization necessary for such flights within foreign countries from the appropriate authority of each such country involved. Extra copies of the authorization should accompany the request for clearance.

(Published in 23 F. R. 7990, Oct. 16, 1958, effective Oct. 16, 1958.)

49.2-3 *Application for authorization to deviate from the provisions of Part 49 (CAA policies which apply to sec. 49.2 (a)).*

(a) Application for authorization to deviate from the provisions of Part 49 will be made on Form ACA–400, Application for Certificate of Waiver, which may be obtained from any Flight Operations and Airworthiness District Office of the Civil Aeronautics Administration (see appendix A for sample form). The application will be completed in triplicate and submitted to the nearest Flight Operations and Airworthiness District Office. The application should be completed as follows:

(1) Type or print in ink.

(2) Give complete information on items 1 through 7 (if additional space is required, use a separate sheet in triplicate which shall be attached to each copy of the application and made a part thereof).

(3) Under item 3, insert the appropriate section of Part 49 for which deviation authorization is desired.

(4) Item 4, describe specifically the explosive and/or dangerous articles to be carried.

(5) Item 5, state the airports to be used and describe the routes to be flown.

(6) Item 6, state the date(s) on which the flight will begin and end and approximate duration of elapsed flight time stated in hours.

(7) Item 7, fill in as indicated and in addition give the name, address, and purpose of any other person(s) who will be aboard the aircraft during the flight for which deviation is requested.

(8) Sign all copies of the application on the reverse side in the space provided for the applicant's signature.

(b) At the time the application is submitted, the applicant will arrange with the Flight Operations and Airworthiness inspector to inspect the aircraft, the loading arrangement, and to ascertain the safety precautions being employed or otherwise necessary for the safe conduct of the flight.

(c) In cases of emergency requiring immediate transportation of the articles for which a deviation is necessary, application may be made by telephone or telegraph to the Flight Operations and Airworthiness District Office.

(Published in 23 F. R. 7990, Oct. 16, 1958, effective Oct. 16, 1958.)

49.5 *Definitions.* As used in this part, terms are defined as follows:

Cargo aircraft. **A cargo aircraft is an aircraft which is not a passenger-carrying aircraft and which is used for the carriage of goods.**

Explosives and other dangerous articles. **(As defined in Part 73 of the ICC Regulations (49 CFR Part 73)):**

Acids and other corrosive liquids.
Compressed gases.
Explosives.
Flammable liquids.
Flammable solids.
Oxidizing materials.
Poisonous articles.

ICC Regulations. **ICC Regulations are the currently effective "Interstate Commerce Commission's Regulations for Transportation of Explosives and Other Dangerous Articles," as amended or revised from time to time (49 CFR Parts 71–78).**

Note: These ICC Regulations 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.

Labeling. **Labeling is the display on a container of the appropriate label specified in the ICC Regulations for the particular class of article.**

Marking. **Marking is the display on the outside of a container of the name of the article inside as required by this part.**

Operator of aircraft. **Operator of aircraft is any person who causes or authorizes the operation of any civil aircraft, whether with or without the right of legal control (in the capacity of owner, lessee, or otherwise) of such aircraft.**

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, or individuals accompanying shipments.**

Person. **Person is any individual, firm, copartnership, corporation, company, association, joint-stock association, or body politic; and includes any trustee, receiver, assignee, or other similar representative thereof.**

Pilot in command. **The pilot in command is the pilot responsible for the operation and safety of the aircraft during the time defined as flight time.**

Quantity. Quantity is that net amount specified in United States liquid measure or in avoirdupois weight, unless otherwise provided in this part.

Unit of radiation. As defined in Part 73 of the ICC Regulations (49 CFR Part 73).

Shipping Requirements

49.11 *Packing and marking requirements.* Unless otherwise specifically provided in this part, explosives and other dangerous articles shall be packed and marked in accordance with the requirements prescribed in Parts 72, 73, and 78 of the ICC Regulations (49 CFR Parts 72, 73, 78) as are applicable to rail express.

Note: The marking required by this provision may be followed by additional identification in parentheses.

49.12 *Labeling requirements.* Unless otherwise specifically provided in this part, explosives and other dangerous articles acceptable under the provisions of this part for transportation in air commerce shall be labeled by the shipper with the appropriate label specified in the ICC Regulations even though they may be exempt from ICC labeling requirements by virtue of ICC quantity and packing limitations.

49.13 *Certification requirements.*

(a) No shipper shall offer and no air carrier or other operator of aircraft shall knowingly accept explosives and other dangerous articles for carriage by air unless the package is accompanied by or shows a clear and plainly visible statement signed by the shipper or his duly authorized agent that the shipment complies with the requirements of this part. No such shipment shall be accepted for transportation by passenger-carrying aircraft unless the shipper's certification includes an additional statement that the shipment is within the limits prescribed by this part for passenger-carrying aircraft. Any air carrier or other operator of aircraft may rely on such a certification as prima facie evidence that the shipment so certified complies with the requirements of this part.

Note: The following statement signed by the shipper or his duly authorized agent 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, marked, and labeled 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 the following must be added to the above: This shipment is within the limitations prescribed for passenger-carrying aircraft.

(b) The shipper's certification of compliance with this part shall be made upon the ICC label affixed to each package containing explosives or other dangerous articles when there is a provision on the face of the label for such certification. When the label used does not so provide, such certification shall be made in duplicate and signed by the shipper or his duly authorized agent for each consignment. One signed copy shall accompany the shipment and the other signed copy shall be retained by the originating carrier. The air carrier or other operator of aircraft may also require the shipper to have the shipper's statement certified by an authority approved by the carrier.

49.14 *Quantity equivalents.* Quantities measured by the metric system or the imperial system may be substituted on the basis of one liter or one imperial quart per quart specified, and 500 grams per pound specified, up to one gallon for liquids or 10 pounds for solids.

49.15 *Containers for liquids.*

(a) Liquids shall be packed only in inside containers which are securely closed, sufficient in strength to prevent any leakage or distortion of the containers caused by change in temperature or pressure during transit, and so filled as to provide adequate outage.

(b) When liquids are restricted to quantities of one quart in inside containers, each such inside container shall be packed in a strong outside container with suitable cushioning and absorbent material to prevent breakage or leakage.

(c) When liquids are restricted to quantities of less than one quart in inside containers, each such inside container shall be packed in a strong outside container with suitable cushioning and absorbent material to prevent breakage or leakage: *Provided,* That such inside containers of a total capacity not to exceed one quart may be packed in a strong outside container with suitable cushioning and absorbent material to prevent breakage or leakage.

Loading and Handling Requirements

49.21 *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 a location accessible to a crew member in flight.

(c) Articles shall not be placed in the same cargo pit or bin nor placed side by side in cabins so that yellow label material is mixed with white label material.

49.22 *Notification of pilot in command.* When articles subject to the provisions of this part are carried on aircraft, the operator of the aircraft shall be responsible for informing the pilot in command of the name of the explosive or other dangerous article, the type of label, the quantity, and the location thereof. The cargo load manifest shall be conspicuously marked to indicate articles subject to the provisions of this part.

49.23 *Damaged articles.* If any package subject to the provisions of this part, except as otherwise provided in section 49.25, appears to the pilot in command or the operator of the aircraft to be damaged or leaking, the operator of the aircraft shall remove it from the aircraft and it 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. In such instances, the operator of the aircraft shall promptly report the circumstances to a representative of the Administrator or the Board.

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

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

49.25 *Special requirements for radioactive materials.*

(a) Whenever any shipment of radioactive materials is damaged or appears to the pilot in command or the operator of the aircraft to be damaged, the operator shall remove it from the aircraft and segregate it from human contact. The operator of the aircraft shall immediately contact the shipper for disposal instructions and notify the Administrator or the Board of the incident.

(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 below 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 such table 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 frequently in the transportation of radioactive materials, it shall be the responsibility jointly of the shipper and the operator of the aircraft to monitor all personnel involved so that the accepted limits of personnel radiation exposure are not exceeded.

Passenger-Carrying Aircraft

49.31 *Articles which may be carried on passenger-carrying aircraft.* No explosive or other dangerous article shall be carried on passenger-carrying aircraft, other than the following:

(a) Explosives and other dangerous articles which are exempt under the ICC Regulations from the specification packing, marking, and labeling requirements of Parts 72, 73, and 78 thereof (49 CFR Parts 72, 73, 78) applicable to rail express.

(b) Class C explosives when packed, marked, and labeled in accordance with the requirements of Parts 72 and 73 of the ICC Regulations (49 CFR Parts 72, 73) for shipment by rail express except that the maximum that may be packed in one outside container is 50 pounds.

(c) Subject to the limitations contained in section 49.24 (a), nonflammable compressed gases when in ICC approved cylinders and at pressures not to exceed those permitted by the ICC Regulations for shipments by rail express except that the following may not be carried: Anhydrous ammonia, boron trifluoride, chlorine, hydrogen bromide, hydrogen chloride, nitrosyl chloride, and sulfur dioxide.

(d) Motion picture film and X-ray film (nitrocellulose base) exposed and unexposed when packed, marked, and labeled in accordance with the requirements of Parts 72 and 73 of the ICC Regulations (49 CFR Parts 72, 73) for shipment by rail express.

(e) Pyroxylin plastics containing nitrocellulose in sheets, rolls, rods, or tubes when packed, marked, and labeled in acordance with the requirements of Parts 72 and 73 of the ICC Regulations (49 CFR Parts 72, 73) for shipment by rail express.

(f) Subject to the limitations contained in section 49.24 (b), radioactive materials, Groups I, II, and III, may be carried when packed, marked, and labeled in accordance with the requirements of Parts 72 and 73 of the ICC Regulations (49 CFR Parts 72, 73) for shipment by rail express.

Cargo Aircraft

49.41 *Articles which may be carried on cargo aircraft.* In addition to the articles acceptable for transportation on passenger-carrying aircraft, the following articles may be carried on cargo aircraft:

(a) Any article acceptable under the ICC Regulations for transportation by rail express. The maximum quantity in any one outside package or container shall not exceed that prescribed for rail express in the commodity list of Part 72 of the ICC Regulations (49 CFR Part 72).

(b) (1) Radioactive materials such as ores, residues, etc., of low activity packed in strong, tight containers are exempt from the packing and labeling requirements of this part 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 as appropriate to supervise all loading and unloading operations and to monitor all personnel involved so that the accepted limits of personnel radiation exposure are not exceeded.

Appendix A
Sample Forms

Form ACA-400
(1-48)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

APPLICATION FOR CERTIFICATE OF WAIVER

FORM APPROVED
BUDGET BUREAU NO. 41-R076.4.

APPLICANTS—DO NOT USE THESE SPACES

REGION NO.	DATE

ACTION

☐ APPROVED ☐ DISAPPROVED *(Explain under "Remarks")*

SIGNATURE OF AGENT

To: CIVIL AERONAUTICS ADMINISTRATION.

INSTRUCTIONS

Submit this application in triplicate (3) to your local CAA District Office.

Applicants requesting a Certificate of Waiver for an air meet will complete all items and certification on this form and will attach a properly marked map or diagram of the operations area. This map or diagram must be to scale, and distances must be shown. It must include race courses, obstructions, grandstands; congested areas, parking areas, dead lines, police stations; ambulance, fire-truck, crash-wagon, and control stations.

Applicants requesting a Certificate of Waiver, for activities other than an air meet, will complete items 1 through 7 only and the certification on the reverse.

1. NAME (FIRST, MIDDLE, AND LAST)

2. PERMANENT MAILING ADDRESS	HOUSE NUMBER AND STREET, OR ROUTE NUMBER	POST OFFICE	STATE	TELEPHONE

3. TO AUTHORIZE NONOBSERVANCE OF CIVIL AIR REGULATIONS, SECTION (INDICATE SECTIONS WHICH PROHIBIT PROPOSED OPERATION)

4. IN PERFORMANCE OF (DESCRIBE PROPOSED OPERATION AND PURPOSE THEREOF IN DETAIL)

(IF NECESSARY, ATTACH SUPPLEMENT TO CONTINUE)

5. AREA OF OPERATION

6. FOR THE PERIOD OF—				BEGINNING *(Date)*	ENDING *(Date)*	BETWEEN THE HOURS OF—
HOURS	DAYS	WEEKS	MONTHS			

7. AIRCRAFT MAKE AND MODEL	IDENTIFICATION MARK	OWNER	ADDRESS (STREET, CITY, STATE)

WHILE BEING FLOWN BY THE FOLLOWING PILOTS:

NAME	ADDRESS (STREET, CITY, STATE)	CERTIFICATE NUMBER AND RATING

Application for Certificate of Waiver.

Form ACA-400 (1-48)

8. THE AIR MEET WILL BE SPONSORED BY—

9. PERMANENT MAILING ADDRESS	HOUSE NUMBER AND STREET OR ROUTE NUMBER	POST OFFICE	CITY	STATE

10. POLICING (WHAT PROVISION WILL BE MADE FOR POLICING THE MEET?)

11. EMERGENCY FACILITIES

☐ PHYSICIAN ☐ AMBULANCE ☐ FIRE TRUCK ☐ CRASH WAGON

☐ OTHER (*Specify*) _____

12. AIR TRAFFIC CONTROL (DESCRIBE METHOD OF CONTROLLING TRAFFIC, INCLUDING PROVISION FOR ARRIVAL AND DEPARTU OF SCHEDULED AIRCRAFT)

13. SCHEDULE OF EVENTS (INCLUDE ARRIVAL AND DEPARTURE OF SCHEDULED AIRCRAFT AND OTHER OPEN PORT PERIODS; UNFORESEEN CHANGES AND REVISIONS TO BE SUBJECT TO APPROVAL OF LOCAL AGENT)

HOUR	DATE	EVENT	PILOT RATING

(If sufficient space is not available, the entire schedule of events may be submitted on separate sheets, in the order and manner indicated above.)

The undersigned applicant accepts full responsibility for the strict observance of the terms of the Certificate of Waiver, and understands that the authorization contained in such certificate will be strictly limited to the above-described operations.

I CERTIFY that the foregoing statements are true.

_____ (DATE) _____ (SIGNATURE OF APPLICANT)

REMARKS:

Application for Certificate of Waiver (reverse).

Appendix B

Special Civil Air Regulations Which Affect Part 49

SPECIAL CIVIL AIR REGULATION NO. SR-397

Effective: June 30, 1953
Adopted: June 30, 1953

Authorization for the United States Forest Service to Deviate From the Air Regulations Civil

Contrary provisions of the Civil Air Regulations notwithstanding, the Chief, Forest Service, United States Department of Agriculture, is authorized to permit aircraft and airmen, while engaged in operations conducted for the United States Forest Service, to deviate from the provisions of the Civil Air Regulations to the extent that he finds necessary for the expeditious conduct of such operations. The Chief, Forest Service, shall notify the Administrator of any deviation which he has authorized and the reasons therefor in accordance with a procedure established by the Administrator.

Appendix C

Civil Aeronautics Board Orders Which Affect Part 49

Order No. S—900

UNITED STATES OF AMERICA

CIVIL AERONAUTICS BOARD

WASHINGTON, D. C.

Adopted by the Civil Aeronautics Board at its office in Washington, D. C., on the 15th day of July, 1958

In the matter of the request of

STANDARD OIL COMPANY OF CALIFORNIA, WESTERN OPERATIONS, INC.

for authority to deviate from certain provisions of Part 49 of the Civil Air Regulations

ORDER GRANTING REQUEST FOR AUTHORITY TO DEVIATE FROM CERTAIN PROVISIONS OF PART 49 OF THE CIVIL AIR REGULATIONS

By letters dated April 2 and May 16, 1958, The California Company, on behalf of the Standard Oil Company of California, Western Operations, Inc., Anchorage, Alaska, hereinafter referred to as Standard Oil, requested the Board to permit certain aircraft operators under contract to Standard Oil to transport Class A explosives accompanied by experts trained in the handling and use of such explosives in civil aircraft within the Territory of Alaska notwithstanding certain provisions of Part 49 of the Civil Air Regulations.

Standard Oil uses these explosives and personnel in connection with its geophysical seismic explorations directed toward the development of oil and gas resources in the Territory of Alaska. The areas in which such explorations are conducted are in many cases inaccessible by any transportation means other than air. In the petitioner's case it is necessary in the furtherance of its explorations to transport Class A explosives and personnel trained in the handling and use of such explosives, to and between seismic shot point locations in light aircraft and in helicopters because of the lack of other forms of transportation. Standard Oil advises that in small aircraft, such as Bell helicopters, there would be two experts and a maximum of 150 pounds of material which would include Class A explosives. In large aircraft such as the Sikorsky S–55 the maximum load would consist of two crews of three experts each and their equipment, including Class A explosives. The quantity of explosives on normal flights would consist of not more than 24 TNT primers and approximately 50 No. 6 electric blasting caps. Standard

Oil states that at no time will any personnel other than those in charge of handling explosives be transported with the explosives.

Under the provisions of Part 49 of the Civil Air Regulations no explosives or dangerous articles listed in Part 72 of the Interstate Commerce Commission Regulations as Class A explosives may be carried on aircraft. The Administrator may, however, permit deviation from any provision of this part for a particular flight in emergency situations or where other forms of transportation are impracticable, subject to such terms, conditions, and limitations as he finds necessary in the interest of safety in air commerce. Pursuant to this authority, the Administrator has granted individual waivers for Standard Oil's explorations in Alaska. Since the Administrator is not authorized to grant waivers for a series of flights, Standard Oil has petitioned the Board for this authority.

The Board has in recent years authorized certain air carriers and aircraft operators to carry Class A explosives in civil aircraft in the Territory of Alaska and elsewhere under similar operating conditions. Furthermore, the action by the Administrator in granting waivers on an individual basis for Standard Oil's explorations indicates that the Administrator has found that the conditions under which the Class A explosives are to be carried are such as to permit their safe carriage in air commerce.

In consideration of the foregoing, the Board finds that an authorization, as more specifically set forth hereinafter, permitting the operators identified below to deviate from certain provisions of Part 49 of the Civil Air Regulations would not adversely affect safety and is in the public interest. Therefore,

IT IS ORDERED:

1. That contrary provisions of Part 49 of the Civil Air Regulations notwithstanding, and subject to the conditions hereinafter set forth, the request of Standard Oil be and it is hereby granted to the extent necessary to permit the aircraft operators, hereinafter described in paragraph 2, to transport Class A explosives in civil aircraft within the Territory of Alaska, provided that:

(a) The civil aircraft shall not be used to carry persons other than crew members and technically trained personnel who are assigned by Standard Oil to handle and use the Class A explosives. The names of these personnel will be furnished to the Administrator by Standard Oil;

(b) Prior to each flight during which Class A explosives and technical personnel assigned by Standard Oil to handle such explosives are to be carried, each operator shall furnish the Administrator with a list showing the type aircraft, registration number, area in which the aircraft is to be operated, and the names of the technical personnel to be transported. No deviations from this listing shall be made without the express approval of the Administrator;

(c) Shipments may be made to and from a civil airport only if prior arrangements have been made between the operator of the aircraft and the local civil airport management;

(d) The operations on and in the vicinity of civil airports shall be conducted in accordance with such special traffic rules as may be prescribed by the Administrator including weather minimums, airport approach and departure routes to avoid flight over congested areas, and notification to the airport control tower of the nature of the cargo aboard;

(e) The aircraft to be used in the operation shall meet the aircraft performance and weight limitations applicable to passenger-carrying aircraft unless otherwise authorized by the Administrator.

2. That the authorization granted in this order shall be restricted to the following named aircraft operators currently under contract to Standard Oil to conduct geophysical seismic explorations directed toward the development of oil and gas resources in the Territory of Alaska and, subject to the approval of the Administrator of Civil Aeronautics, to such other operators of aircraft as may be put under contract by Standard Oil to engage in the same work:

Polar Helicopters, Inc.
Box 4502
Spenard, Alaska

Circle Air Trails
Homer, Alaska

Rotor-Aids, Inc.
Box 1850
Ventura, California

Sea Airmotive Inc.
Lake Hood
Anchorage, Alaska

Economy Helicopters
2108 W. Washington Ave.
Yakima, Washington

This order and the authorization granted herein shall expire two years from the date of this order unless sooner superseded or rescinded by the Board.

(Sec. 205 (a), 52 Stat. 984; 49 U. S. C. 425 (a))

[SEAL]

By the Civil Aeronautics Board:
s/ Marvin Bergsman
MARVIN BERGSMAN
Acting Secretary

Order No. S—917

UNITED STATES OF AMERICA
CIVIL AERONAUTICS BOARD
WASHINGTON, D. C.

Adopted by the Civil Aeronautics Board at its office in Washington, D. C., on the 29th day of August, 1958

In the matter of the request of
ALASKA COASTAL AIRLINES
for a waiver of certain provisions of Part 49 of the Civil Air Regulations

ORDER GRANTING A WAIVER OF CERTAIN PROVISIONS OF PART 49 OF THE CIVIL AIR REGULATIONS

By telegram and letter dated June 13 and June 23, 1958, respectively, Alaska Coastal Airlines of Juneau, Alaska, hereinafter referred to as Coastal,

requested the Board to permit it to carry gasoline aboard small [1] passenger-carrying aircraft operating within the Territory of Alaska in amounts not to exceed 20 gallons notwithstanding certain provisions of Part 49 of the Civil Air Regulations.

Current provisions of Part 49 permit the carriage in passenger-carrying aircraft of up to 50 pounds of gasoline in any cargo pit or bin when packed in one quart inside containers which are packed in a strong outside container with suitable cushioning and absorbent material to prevent breakage or leakage. Coastal indicates that a waiver of the foregoing provisions of Part 49 is necessary to alleviate the problem associated with transporting sufficient quantities of gasoline to remote areas in the Territory of Alaska to meet the needs of their passengers, where air is the only practicable form of transportation. Coastal indicates that many of their passengers desiring to hunt, fish, conduct logging operations, etc., require gasoline for their outboard motors, chain saws, lanterns, and related equipment. However, in order to transport sufficient quantities of gasoline for such equipment under present Part 49, such passengers must charter a separate cargo-only flight. Coastal states that this involves considerable additional expense to their passengers and suggests that the problem could be solved by permitting the carriage in passenger-carrying aircraft of up to 20 gallons of gasoline in refinery sealed tins packed in a strong wooden outside box.

While the Administrator may permit deviations from any provision of Part 49 for a particular flight in emergency situations or where other forms of transportation are impracticable subject to such terms, conditions, and limitations as he finds necessary in the interest of safety in air commerce, he is not authorized to grant a waiver for a series of flights. Accordingly, Coastal has petitioned the Board for such a waiver.

The packing requirements and quantity limitations in present Part 49 dealing with the carriage of gasoline in passenger-carrying aircraft may present a hardship on certain of Coastal's passengers. Nevertheless, the Board is of the opinion that such hardship would not justify a relaxation of the requirements of Part 49 as requested with respect to scheduled passenger-carrying operations. Conversely, the Board believes that the relief requested by Coastal may be granted, with respect to passenger charter flights subject to certain conditions, without adversely affecting safety. Persons chartering aircraft on which gasoline is to be carried for their own use would be aware of the type of container used to carry such gasoline and the quantity involved. It can thus be assumed that such persons would be aware of the safety risk involved and would exercise due caution. As a precautionary measure, this waiver requires that the pilot of each such charter flight brief all his passengers on the hazards involved and prohibit the use of matches or any object which would cause an open flame or spark. In addition, the carrier is required to pack such gasoline in airtight, leakproof inside metal containers of at least 28 gauge of not more than 10 gallons capacity each and each such metal container must be packed in an outside wooden box of at least one-half inch thickness. The carrier is further required to place these containers in a ventilated location so as to prevent the accumulation of vapors.

In consideration of the foregoing, the Board finds that a waiver of the provisions of Part 49 to permit the carriage of gasoline in amounts up to 20

[1] Small aircraft are aircraft of 12,500 pounds or less maximum certificated take-off weight.

gallons in other than quart containers aboard small passenger-carrying aircraft in charter operations would not adversely affect safety, is in the public interest, and should be granted. Therefore,

IT IS ORDERED:

That contrary provisions of Part 49 of the Civil Air Regulations notwithstanding, the request of Alaska Coastal Airlines be and is hereby granted only to the extent that it may transport up to 20 gallons of gasoline in other than one quart containers on any individual flight in small civil aircraft operating entirely within the Territory of Alaska in charter operations, provided that:

(1) Such gasoline shall be packed in airtight and leakproof inside metal cans of at least 28 gauge of not more than 10 gallons capacity each, and that each such inside metal can shall be packed in an outside wooden box of at least one-half inch thickness; and

(2) Each such container of gasoline shall be placed in a location in the aircraft which shall be ventilated so as to prevent the accumulation of gasoline vapors within the aircraft; and

(3) Prior to each flight on which gasoline is to be carried pursuant to this waiver, the pilot in command shall orally inform all passengers as to the location of the gasoline, the hazards involved, and shall prohibit smoking and the use of matches or any object that might cause an open flame or spark; and

(4) Alaska Coastal Airlines shall furnish the Administrator with a list showing the type aircraft, registration number, and the area in which the aircraft is to be operated prior to each flight on which gasoline pursuant to this waiver is carried.

This waiver shall be effective only for the period during which the circumstances and conditions upon which its issuance is predicated shall continue, but shall terminate in any event on December 31, 1959, unless sooner superseded or rescinded by the Board.

(Sec. 205 (a), 52 Stat. 984; 49 U. S. C. 425 (a))

[SEAL]

By the Civil Aeronautics Board:
s/ Mabel McCart
MABEL MCCART
Acting Secretary

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