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Federal Aviation Agency
Washington, D.C.

Civil Aeronautics Manual 49

Transportation of Explosives and Other Dangerous Articles

Supplement No. 2, CAM 49, dated April 1961 **March 15, 1962**

SUBJECT: Revisions to CAM 49.

This supplement is issued to incorporate into CAM 49 Civil Air Regulations Amendment 49–2, Exemptions Nos. 127A and 172A, and to correct Special Civil Air Regulation No. SR–447.

Amendment 49–2 amended Part 49 to permit deviations, under certain conditions, for particular operations involving one or more flights. It was issued December 15, 1961, to become effective December 21, 1961.

Exemption No. 127A was issued to Abbott Laboratories on February 14, 1962. Exemption No. 172A was issued to the Department of the Air Force on September 22, 1961.

In the last supplement to CAM 49, Special Civil Air Regulation No. SR–447 was inadvertently printed with the number SR–477. This regulation has been reprinted to show the correct number. No changes have been made in the text.

New or revised material is enclosed in black brackets on the pages submitted with this supplement except Exemptions Nos. 127A and 172A and the pages in the addendum containing the preambles of amendments.

Remove the following pages:	*Insert the following new pages:*
III	III
1 and 2	1 and 2
19 and 20	19 and 20
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GEORGE C. PRILL, *Director,*
Flight Standards Service.

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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 of the Federal Aviation Act of 1958, as amended (72 Stat. 784, as amended; 49 U. S. C. 1472), 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 would be prohibited by any rule, regulation, or requirement prescribed by the Administrator under Title VI of the Federal Aviation Act of 1958, 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) Authority to deviate from any of the provisions of this part for a particular operation, involving one or more flights, may be issued by an authorized representative of 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.

[(Amendment 49–2, published in 26 F.R. 12213, December 21, 1961, effective December 21, 1961.)]

49.2–1 Authority to deviate from the provisions of Part 49 (FAA policies which apply to sec. 49.2(a)). [Authority to deviate from the provisions of Part 49 for a particular operation may be issued to cover the cases described in paragraph (a) or (b) of this section.]

(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 [; amended 26 F.R. 12213, Dec. 21, 1961, effective Dec. 21, 1961.])

49.2–2 *Conditions and limitations (FAA 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 authorization is limited to the particular operation and to the articles for which the authorization is requested, and it will specify the point or points of origin where the articles are to be placed aboard the aircraft and the point or points of destination where such articles are to be 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 [; amended 26 F.R. 12213, Dec. 21, 1961, effective Dec. 21, 1961.])

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

SPECIAL CIVIL AIR REGULATION NO. [SR-447]

Effective: June 3, 1961
Adopted: May 26, 1961
Published: June 3, 1961
(26 F.R. 4930)

Authority to Deviate from Certain Provisions of Part 49 of the Civil Air Regulations Within the State of Alaska

Many of the hunting, fishing, logging, and mineral exploration sites in Alaska are in remote and relatively isolated areas where transportation by air is the only practicable means of access. Flights to these areas usually are made in small aircraft carrying passengers and their supplies and equipment. However, these passengers are not permitted to carry sufficient gasoline to operate their outboard motors, chain saws, cook stoves, lanterns, and related equipment, due to the restrictive provisions of Part 49 of the Civil Air Regulations.

The current provisions of Part 49 limit the quantity of gasoline that may be carried in passenger-carrying aircraft to 50 pounds 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. Therefore, passengers desiring to transport greater quantities of gasoline packed in larger containers, such as refinery sealed cans of 5-gallon capacity, are required to utilize a cargo-only flight for this purpose. Such a requirement places an undue burden on the passengers and does not permit full utilization of the aircraft in the manner intended. The remoteness of many areas in Alaska, with the consequent dependence on air transportation as a means of access to those areas, indicates that there is a need for relief from the gasoline quantity restriction of Part 49 with respect to those small aircraft not engaged in scheduled passenger-carrying operations.

Certain air carriers in Alaska have previously been granted individual authorizations for the carriage, under specified conditions, of not more than 20 gallons of gasoline in the cabin of small passenger-carrying aircraft operated in charter operations. Alaska Coastal Airlines presently holds Exemption No. 149, expiring February 15, 1963, granting such authorization. The experience gained under these individual authorizations has indicated that gasoline can be carried under such specified conditions without an adverse effect on safety. Since there is a need by other operators to transport gasoline in the larger quantities under consideration, it would be consistent with present procedures to grant special authority to the operators of small aircraft, not engaged in scheduled passenger-carrying operations, to deviate from the provisions of Part 49 to the extent provided herein.

The provisions of this Special Civil Air Regulation authorize deviations from Part 49 only with respect to the carriage of up to 20 gallons of gasoline in passenger-carrying aircraft in other than scheduled opera-

tions. The shipper and operator are required to comply with the requirements of Part 49 in all other respects.

Prior to engaging in operations pursuant to this Special Civil Air Regulation, each operator will be required to furnish the Chief, Flight Standards Field Division, Region 5, with (1) a list showing the type of aircraft, registration number, and the area in which the aircraft is to be operated, and (2) a statement that such carriage is necessary to meet the needs of passengers, and that air is the only practicable means of transportation.

This special regulation shall continue in effect until July 15, 1963. Prior to this date, the experience gained under this authorization will be evaluated for the purpose of considering the incorporation of the substance of this rule in the permanent body of the Civil Air Regulations.

Since this special regulation grants relief and imposes no additional burden on any person, notice and public procedure hereon are unnecessary, and good cause exists for making it effective immediately.

In consideration of the foregoing, the following Special Civil Air Regulation is hereby adopted, to become effective June 3, 1961.

1. Contrary provisions of sections 49.15 and 49.24 of Part 49 of the Civil Air Regulations notwithstanding, and subject to the conditions hereinafter set forth, an operator of aircraft of 12,500 pounds or less maximum certificated takeoff weight may deviate from the provisions of such sections to the extent necessary to permit the transportation of not more than 20 gallons of gasoline in other than one-quart containers in such aircraft operated entirely within the State of Alaska in other than scheduled passenger-carrying operations, provided that:

(a) Prior to engaging in operations pursuant to this Special Civil Air Regulation, each operator furnishes the Chief, Flight Standards Field Division, Region 5, with a list showing the type aircraft, registration number, and the area in which the aircraft is to be operated, and indicates that such carriage is necessary to meet the needs of its passengers, and that air is the only practicable means of transportation; and

(b) The gasoline is packed in airtight and leakproof inside containers of at least 28 gauge metal and of not more than 10 gallons capacity each, and each such inside container is packed in an outside wooden box of at lease one-half inch thickness; and

(c) The compartment in which the gasoline container is packed is ventilated so as to prevent the accumulation of gasoline fumes within the aircraft; and

(d) Prior to each flight, the pilot in command orally informs all passengers as to the location of the gasoline, the hazards involved, and prohibits smoking, the carrying of any lighted cigar, pipe, or cigarette, the lighting of matches, or the use of any object that might cause an open flame or spark while loading or unloading the aircraft, or during flight.

This Special Civil Air Regulation shall expire July 15, 1963, unless sooner superseded or rescinded.

UNITED STATES OF AMERICA
FEDERAL AVIATION AGENCY
WASHINGTON, D.C.

In the matter of the petition of
ABBOTT LABORATORIES
for an exemption from certain provisions of Part 49 of the Civil Air Regulations
Regulatory Docket No. 560

GRANT OF EXEMPTION

By letter dated September 12, 1960, Abbott Laboratories of Chicago, Illinois, and Oak Ridge, Tennessee, hereinafter referred to as Abbott, has requested permission to transport quantities of radioactive materials exceeding two (2) curies but not more than fifty (50) curies aboard civil aircraft. Carriage of such material aboard civil aircraft in quantities in excess of two curies generally requires an exemption from the provisions of Part 49 of the Civil Air Regulations.

In support of their request Abbott states:

a. The production of certain basic, short-lived radioactive materials (targets) obtained from various reactor sites must be further processed at their Oak Ridge (Knoxville, Tennessee) plant before they can be shipped to institutions primarily concerned with medical diagnosis and therapy.

b. The short-life period during which the targets retain their effectiveness demands fast transportation.

c. These targets consist of stable, solid, organic materials, usually elements which have been subjected to the neutron fix of a nuclear reactor. Economic considerations require that multicurie quantities (more than 2 curies) of radioactivity be produced in each target.

d. The target material is contained within a hermetically sealed aluminum capsule. For shipment, this capsule will be placed within a container providing sufficient shielding to reduce the external radiation to the limits required by regulation; i.e., 200 mr/hr at the surface and 10 mr/hr at 1 meter maximum.

e. Details of the disaster-proof shipping container which we propose to use can be found in the attached drawing. It has been approved by ICC for the shipment of multicurie quantities of solid radioactive material and has been assigned BE Permit 741.

We find that Abbott is a "licensee" of the Atomic Energy Commission and as such has wide experience and knowledge in the handling and processing of radioactive materials.

The materials to be transported are being manufactured by contractors authorized by the Atomic Energy Commission to produce radioactive materials for use by institutions furthering medical diagnosis and therapy. The shipments, however, are made in the name of the Abbott Laboratories. It appears to be in the public interest that such research

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should be provided with the fullest use of these short-lived materials insofar as public safety permits. Air shipment will reduce greatly the time lost during transportation and would materially aid the research program.

Presently, the safety standards prescribed by the Civil Air Regulations limit the quantity of radioactive materials to 2 curies, or, in some instances, 2.7 curies with respect to the materials which Abbott seeks to transport by air. The present limitations do not distinguish between those materials which are "short-lived" and those which are "long-lived" and may retain hazardous effects for long periods of time. By comparison, the carriage of multicurie quantities of *short-lived* materials do not present the continuing hazard that might be encountered by a 2-curie shipment of *long-lived* materials in the event of crash emergency conditions. The principal safety items that require careful consideration involve adequate shielding within the container to prevent external radiation and the strength of the container to withstand fire and crash forces. In this respect Abbott has developed a shipping container which has been fully tested and is regarded as disaster proof. The container has been approved by the Bureau of Explosives (BE), a technical arm of the Interstate Commerce Commission, and BE Permit 741 authorizes this container to be used for shipment of quantities of radioactive materials not exceeding 50 curies in rail express.

The specifications submitted by Abbott in support of their petition conform to the specification of BE Permit 741. The container is steel-clad, leakproof, and fireproof, and of such strength that it would resist impact and fire under all the forces and fire conditions attendant upon airplane total crash conditions. The radioactive material is enclosed in a hermetically sealed aluminum capsule so shielded within the steel-clad container that the external radiation is within the limits prescribed for the 2 curie shipment, i.e., 10 milliroentgens per hour at a distance of 1 meter of 200 milliroentgens per hour at the surface. This external radiation limit would not be increased by fire or crash forces. The reliability of the container data described above has been confirmed by the Bureau of Explosives.

Additionally, we have discussed with representatives of the Atomic Energy Commission the safety considerations involved in the shipments of radioactive materials by air which exceed the quantity limitations. They have advised us that they have made numerous excess quantity shipments during the past several years under exemption authority given AEC by the regulations and they were completed with an excellent safety record.

In consideration of the foregoing and pursuant to the authority contained in sections 313(a) and 601(c) of the Federal Aviation Act of 1958, which has been delegated to me by the Administrator (14 CFR 405.31), I find that an exemption to Abbott Laboratories from the provisions of sections 49.31(f) and 49.41 of the Civil Air Regulations as more specifically set forth hereinafter would not adversely affect safety and is in the public interest since the transportation of these materials by air would permit the continuation of medical research and therapy work performed by institutions serving a public need. Therefore, Abbott Laboratories is hereby

granted an exemption from sections 49.31(f) and 49.41 of the Civil Air Regulations to the extent necessary to transport quantities of radioactive materials exceeding two (2) curies but not more than fifty (50) curies aboard civil aircraft when packed in the BE Permit 741 container. All such shipments are subject to the conditions hereinafter set forth.

a. Abbott shall furnish to each contractor making such shipments the container specifications and requirements perscribed by BE Permit 741. A record shall be retained by Abbott listing the contractors to whom such specifications have been furnished. A list of the contractors shall be furnished to the Director, Bureau of Flight Standards, Federal Aviation Agency, Washington 25, D.C.

b. All shipments exceeding the quantities as prescribed by section 73.391 (b) and (c) of the Interstate Commerce Commission regulations shall be made only in the approved containers and shall show the assigned BE Permit number (741) on the outer shipping container.

c. The shipper's certificate required by Part 49 shall include the certification that the shipment is being made in accordance with the container specifications and conditions prescribed by BE Permit 741. The certification shall be made by a duly authorized representative of the shipper who has determined that the shipment has been thoroughly checked and has been found to meet the packaging and labeling requirements prescribed by Part 49 of the Civil Air Regulations except with respect to the quantity limitations prescribed by sections 49.31(f) and 49.41.

d. This authorization shall expire January 1, 1962, unless sooner* superseded or rescinded by the Federal Aviation Agency.

/s/ Oscar Bakke
Director,
Bureau of Flight Standards

Issued in Washington, D.C., on November 4, 1960.

*See Exemption No. 127A below.

Exemption No. 127A
Regulatory Docket No. 560

TELEGRAM

February 14, 1962

Mr. Geoffrey I. Gleason
Nuclear Scientist; Oak Ridge Division
Abbott Laboratories,
Radio-Pharmaceuticals
Oak Ridge, Tennessee

This is in response to your letter of February 9, 1962, in which you petitioned for a renewal of Exemption No. 127. Exemption No. 127 granted Abbott Laboratories of Chicago, Illinois, and Oak Ridge, Tennessee, an exemption from sections 49.31(f) and 49.41 of the Civil Air Regulations to the extent necessary to transport quantities of radioactive

materials exceeding two (2) curies but not more than fifty (50) curies aboard civil aircraft when packed in the BE Permit 741 container.

This exemption expired January 1, 1962. The justification advanced for the renewal of Exemption No. 127 is identical to that which supported the issuance of Exemption No. 127 on November 4, 1960. In view of this fact and for the same reasons set forth in Exemption No. 127, I find that the granting of another exemption similar to Exemption No. 127 would not adversely affect safety and is in the public interest.

Therefore, pursuant to the authority contained in sections 313(a) and 601(c) of the Federal Aviation Act of 1958, which has been delegated to me by the Administrator (14 CFR 405.31), Abbott Laboratories is hereby granted an exemption, to be designated Exemption No. 127A, from sections 49.31(f) and 49.41 of the Civil Air Regulations to the extent necessary to transport quantities of radioactive materials exceeding two (2) curies but not more than fifty (50) curies aboard civil aircraft when packed in the BE Permit 741 container. Such shipments shall be made subject to the conditions set forth in Exemption No. 127. This exemption shall become effective immediately and shall expire February 15, 1963, unless sooner superseded or rescinded by the Federal Aviation Agency.

/s/ G. S. Moore
Acting Director,
Flight Standards Service

UNITED STATES OF AMERICA
FEDERAL AVIATION AGENCY
WASHINGTON, D.C.

In the matter of the petition of MILITARY TRAFFIC MANAGEMENT AGENCY *for exemption from the provisions of Part 49 of the Civil Air Regulations*	Regulatory Docket No. 15

GRANT OF EXEMPTION

By letter dated 19 April 1961, the Executive Director, Military Traffic Management Agency, U.S. Army, on behalf of the Department of Defense, requested the Federal Aviation Agency to authorize the transportation of certain kinds of explosives and other dangerous articles via the Department of Defense contract airlift services (QUICKTRANS) and (LOGAIR) between military airports in the United States. Such authorization requires exemption from certain provisions of Part 49 of the Civil Air Regulations in order to transport these materials aboard civil aircraft.

Petitioner advises that: (1) QUICKTRANS and LOGAIR are all-cargo airlift services between selected points of Department of Defense logistic interest within the continental United States contracted annually between the Department of Defense and certain air carriers; (2) the Department of Defense considers the requested exemption authority to permit the transportation of urgently required explosives and other dangerous articles via the QUICKTRANS and LOGAIR contracts to be in the national interest and in support of vital functions of the Department of Defense; (3) shipments of such materials by QUICKTRANS and LOGAIR will be, for the major part, of a classification whose primary hazard is one of flammability rather than of mass detonation, or chemical munitions which will be mostly escorted toxic material (Class A poisons) or tear gas (Class C poison) which may be in larger quantities than presently authorized in FAA or Interstate Commerce Commission Regulations, as well as laboratory samples packed in gas identification sets authorized for movement in limited quantities, without escort, in ICC Regulations; (4) in consideration of the special hazards in air transportation of the materials involved, the cognizant military services (Bureau of Supplies and Accounts, Department of the Navy; Director of Transportation, Air Force Logistic Command; Chemical Corps, Department of the Army) will issue detailed instructions governing the packing of the explosives and other dangerous articles, including toxic material, to be moved, the handling of these materials, and the criteria for determining the emergency nature of the shipment which precludes transportation by other means; (5) carriage of passengers not essential to the flight will be prohibited; (6) arrangements can be made to restrict flights to military airfields; and (7) for transportation of toxic material, escorts will provide sufficient protective clothing for each of the personnel in the airplane and carry sufficient agent (caustic soda) to combat any decontamination problem which may arise.

Section 49.41 of Part 49 of the Civil Air Regulations permits transportation in cargo aircraft of any article packed, marked, and labeled in accordance with ICC Regulations that is acceptable for transportation by rail express. It is noted that the Interstate Commerce Commission, pursuant to section 71.13 of its regulations, has authorized the various United States military departments to transport Class A explosives by rail whenever critical situations dictated such authorization. In these situations, however, the ICC has required that certain stringent packing, stowing, and carriage provisions of its regulations be complied with as a condition of such authorization. In addition, it is noted that a number of contract air carriers have been authorized to transport by air, under specified terms and conditions and during national emergency status, Class A explosives in civil aircraft where it was found necessary in the national defense.

Part 49 of the Civil Air Regulations prohibits the transportation by civil aircraft in the United States of explosives and other dangerous articles listed in Part 72 of the ICC Regulations as articles not accepted for shipment by rail express except that, in emergency situations or where other forms of transportation are impracticable, carriage of such articles may be authorized by the Administrator for a particular flight.

The Department of Defense has stated it has a continuing requirement for the transportation of these explosives by air and, although Part 49 provides for an individual authorization granted for a particular flight, its issuance involves time-consuming procedures that are not readily sufficient to meet this need; thus, a general exemption for a series of flights has been found necessary. The Air Force contract airlift service (LOGAIR), and the Navy contract airlift service (QUICKTRANS), both of the Department of Defense, presently hold such exemptions (Nos. 89 and 92, respectively) which expire July 1, 1961. The civil contract carrier experience gained under such exemptions has been favorable from a safety standpoint. It appears that the issuance of a single exemption to the Department of Defense, in lieu of exemptions to each of the services, would provide uniform standards and procedures for the transport of these materials by civil contract carriers as required by the various services of the Defense Department.

Petitioner has indicated that arrangements can be made to transport explosives and other dangerous articles in civil aircraft only between military airfields. In view of the hazards involved and the proprietary interests of local airport management where a terminal point is a civil airport, it is considered to be in the interest of safety to restrict shipment of such explosives and other dangerous articles to the use of military airfields only.

In addition, the Department of Defense will require the Assistant Chief for Transportation and Facilities, Bureau of Supplies and Accounts, Department of the Navy, or the Director of Transportation, Air Force Logistic Command (AFLC), to certify: (1) that the shipment by air of the explosives and other dangerous articles authorized to be transported under this exemption is required to meet an emergency situation and is in the national interest; (2) that other forms of transportation are impracticable; and (3) that the shipment is made in accordance with the applicable provisions of the ICC Regulations for the shipment of ex-

plosives and other dangerous articles with respect to packaging, marking, stowing, and security of cargo.

In consideration of the foregoing, I find that the exemption requested is in the public interest. Therefore, pursuant to the authority contained in sections 313(a) and 601(c) of the Federal Aviation Act of 1958, which has been delegated to me by the Administrator (14 CFR 405.31), the Department of Defense is hereby granted an exemption from the provisions of Part 49 of the Civil Air Regulations to the extent necessary to permit the transportation by air of explosives and other dangerous articles solely via Department of Defense contract airlift services (QUICKTRANS) and (LOGAIR), subject to the following conditions:

(1) No shipment of explosives and other dangerous articles listed as not acceptable in the commodity list in Part 72 of the Interstate Commerce Commission Regulations shall be transported via QUICKTRANS or LOGAIR flights unless the Assistant Chief for Transportation and Facilities, Bureau of Supplies and Accounts, Department of the Navy, or the Director of Transportation, Air Force Logistic Command, has determined that the shipment is being made in response to an emergency situation and that movement via other modes of transportation is impracticable in terms of time, spoilage, damage, or forfeiture of the normal or intended use of the material at destination;

(2) The Assistant Chief for Transportation and Facilities, Bureau of Supplies and Accounts, Department of the Navy, or the Director of Transportation, Air Force Logistic Command, shall certify that each shipment by air of the explosives and other dangerous articles authorized to be transported under this exemption meets the requirements of paragraph (1), and is in accordance with applicable provisions of the Interstate Commerce Commission Regulations;

(3) Only U.S. military airfields shall be utilized by QUICKTRANS and LOGAIR aircraft for air cargo required to be transported under the terms of this exemption;

(4) Explosives and other dangerous articles shall be packed in accordance with, or in excess of, the requirements of the Interstate Commerce Commission Regulations, and DOD publication NAVAER 15-03-500; TM 38-250; AFM-71-4; and NAVMC-2501, dated 1 June 1959;

(5) Explosives and other dangerous articles not accepted for transportation on passenger or cargo aircraft under Part 49 may be transported by aircraft under the terms of this exemption only if approved for surface transportation by Special ICC permit, and packed in accordance with paragraph (4) and such other special requirements as may be necessary for the particular article to be carried;

(6) The hazard classification of all explosive and other dangerous article items shall be determined in accordance with approved procedures of the Department of Defense, Bureau of Explosives, and the Bureau of Safety and Service, Interstate Commerce Commission, prior to being tendered for movement;

(7) A qualified Department of Defense ordnance or chemical technician, designated by the Assistant Chief for Transportation and Facilities, Bureau of Supplies and Accounts (Navy), or the Director of Transportation, Air Force Logistic Command, as the case may be, shall

supervise the loading and unloading operations of aircraft transporting the explosives and other dangerous articles under the terms of this exemption;

(8) No passenger may be carried without the specific authorization of the Assistant Chief for Transportation and Facilities, Bureau of Supplies and Accounts (Navy), or the Director of Transportation, Air Force Logistic Command: *Provided*, That any such authorization is restricted to the movement of Department of Defense couriers while accompanying security, classified, or sensitive cargo, Department of Defense route supervisors in the performance of their duties, or contractor personnel directly involved in the QUICKTRANS or LOGAIR operations;

(9) In all other respects, the operations conducted under the authority of this exemption shall comply with the requirements of Part 49 of the Civil Air Regulations; and

(10) The pilot in command shall be notified of the type, quantity, and location of the hazardous materials carried on the aircraft.

This exemption and the authorization granted herein supersedes Exemptions Nos. 89 and 92, issued June 1 and June 6, 1960, respectively, shall become effective July 1, 1961, and shall expire July 10, 1963, unless sooner superseded or rescinded by the Federal Aviation Agency.

/s/ Omer Welling
for *Director,*
Bureau of Flight Standards.

Issued in Washington, D.C., on June 29, 1961.

Exemption No. 172A
Regulatory Docket No. 15

TELEGRAM

September 22, 1961

Brigadier General E. W. Hampton
Department of the Air Force
Headquarters United States Air Force
Washington 25, D.C.

As requested by your letter of September 20, 1961, reference AFSTP-MC-C, the following action has been taken on your petition for waiver of Part 49 of the Civil Air Regulations.

The provisions of Exemption No. 172 presently authorize two Department of Defense airlift contractors, LOGAIR and QUICKTRANS, to perform services in the United States similar to those now requested by the USAF for civil aircraft operated under contract to the Military Air Transport Services (MATS) for airlift between a MATS aerial port of embarkation in the United States and overseas military air bases.

The justification advanced for the issuance of the requested exemption is identical to that which supported the issuance of Exemption No. 172 on June 29, 1961. In view of these facts and circumstances, I find the exemption requested is in the public interest. Therefore, pursuant to the authority contained in sections 313(a) and 601(c) of the Federal Aviation Act of 1958, which has been delegated to me by the Administrator (14 CFR 405.31), Exemption No. 172 is hereby amended by this exemption desig-

nated as 172A, to further permit civil aircraft operators under contract to MATS to transport by air certain explosives and other dangerous articles between military airports in the U.S. and military airports located outside the U.S. subject to the terms and conditions of paragraphs 1 through 10 of Exemption 172 except that the certification and authorizations required by paragraphs 1, 2, 7, and 8 may be accomplished by the Chief of Traffic, Headquarters, MATS, or his duly authorized representative.

This exemption and the authorization granted herein shall become effective immediately, and shall expire July 10, 1963, unless sooner superseded or rescinded by the Federal Aviation Agency.

/s/ George C. Prill
Director,
Flight Standards Service

Amendment 49–1

Passenger-Carrying Aircraft

Adopted: Oct. 10, 1958
Effective: Oct. 10, 1958
Published: Oct. 15, 1958
(23 F.R. 7943)

Effective June 25, 1958, the Civil Aeronautics Board revised Part 49 of the Civil Air Regulations. Prior to this revision, Part 49 permitted the carriage on passenger-carrying aircraft of certain radioactive materials when packed, marked, and labeled in accordance with the requirements for shipment by rail express. However, in the revised Part 49 such a provision was inadvertently omitted. It was not intended that the revised part should be more restrictive with respect to radioactive materials than was the previous part. The Board has found through experience, that radioactive materials when packed, marked, and labeled in accordance with requirements of Parts 72 and 73 of the ICC Regulations may be transported without any adverse effect on the safety of passengers aboard the aircraft. This amendment therefore will permit the carriage of radioactive materials as before.

Since this amendment corrects an error and imposes no additional burden on any person, notice and public procedure hereon are unnecessary, and it may be made effective immediately.

Amendment added a new paragraph (f) to section 49.31.

Amendment 49–2

Special Authority for an Operation Including One or More Flights

Adopted: Dec. 15, 1961
Effective: Dec. 21, 1961
Published: Dec. 21, 1961
(26 F.R. 12213)

Regulations governing the air transportation of explosives were originally promulgated in 1942 and expanded to cover "other dangerous articles" in 1944. These rules have been revised several times since then to permit the carriage of additional articles as the experience gained showed that a greater variety and quantity of these materials could be transported with safety.

Section 49.2 presently authorizes deviations for a particular flight in an emergency situation, or when other forms of transportation are impractical. This requires an individual authorization for each flight and this has proved to be a cumbersome procedure for both the aircraft operators and the Administrator when the total amount of material cannot be carried on one flight. Repeated issuance for each flight can be so time-consuming that it can cause serious delays in an air carrier's operation and may create critical commercial and industrial shortages of material and economic loss to the user. Experience gained under these deviations over the years has proved that repeated individual flights have been operated under the same terms and conditions without adverse effect on safety and it now appears reasonable to apply the deviation to an overall operation rather than to a particular flight.

Adequate control over these operations is provided for in the authorization since each operation must be conducted under such terms, conditions, and limitations as are found necessary in the interest of safety in air commerce.

Since this amendment imposes no additional burden upon any person, notice and public procedure hereon are unnecessary, and it may be made effective on less than 30 days' notice.

Amendment revised paragraph (a)(1) of section 49.2, revised the introductory paragraph of section 49.2–1, and revised paragraph (d) of section 49.2–2.
