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Federal Aviation Agency
Washington, D.C.

Civil Aeronautics Manual 49

Transportation of Explosives and Other Dangerous Articles

Supplement No. 1, CAM 49 dated April 1961 — August 1, 1961

SUBJECT: Revisions to CAM 49.

This supplement is issued to incorporate into CAM 49 Special Civil Air Regulation No. SR–447 and Exemptions Nos. 170, 172, and 174.

Special regulation SR–447 grants authority to deviate from certain provisions of Part 49 within the State of Alaska. It was issued May 26, 1961 to become effective on June 3, 1961.

Exemption No. 170, issued to Richfield Oil Corporation on June 8, 1961, supersedes Exemption No. 93. Exemption No. 172, issued to the Military Traffic Management Agency on June 29, 1961, supersedes Exemptions Nos. 89 and 92. Exemption No. 174, issued to Precision Exploration Consultants on July 25, 1961, is new.

Exemptions Nos. 108, 127, and 149, also submitted with this supplement, are unchanged except for page numbers.

Changes on the contents page submitted with this supplement are enclosed in black brackets. However, because of its length. the other material is not so marked.

Remove the following pages:	*Insert the following new pages:*
III	III
19 through 40	19 through 41

George C. Prill

GEORGE C. PRILL, *Director,*
Flight Standards Service.

Attachments.

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SPECIAL CIVIL AIR REGULATION NO. SR-477

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.

Appendix C

Federal Aviation Agency Exemptions
Which Affect Part 49

Exemption No. 108

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

In the matter of the petition of

DEPARTMENT OF NATURAL RESOURCES
STATE OF WASHINGTON

for an exemption from the provisions of certain sections of the Civil Air Regulations

Regulatory Docket No. 473

GRANT OF EXEMPTION

By letter dated July 29, 1960, the Department of Natural Resources, State of Washington, petitioned for an exemption to deviate from the Civil Air Regulations in order to deal effectively with fire control and other specialized activities in connection with state and privately owned forest land in the State of Washington. The authorization sought through this exemption is similar to that granted to the U.S. Forest Service in Special Civil Air Regulation SR–397.

The Department of Natural Resources of the State of Washington uses both civil and public aircraft to carry personnel and equipment to fire areas. The aircraft and pilots are certificated, and, where possible, operations are conducted in accordance with the Civil Air Regulations. However, to deal effectively with fire control and the other specialized activities incident to the care and maintenance of the forest land in the State of Washington, it is often necessary (1) to use uncertificated personnel as parachute riggers for rigging cargo parachutes during peak-load periods; (2) to transport cargo droppers in aircraft from which approved seats and safety belts have been removed; (3) to carry gasoline or diesel oil packed in quantities up to 5 U.S. gallons in one metal container aboard passenger-carrying aircraft; (4) to carry gasoline or diesel oil packed in quantities up to 55 U.S. gallons in any one drum aboard cargo aircraft; and (5) to deviate from minimum altitude rules in sparsely populated areas. Due to the exigencies of a particular situation, it is usually impracticable for the Department of Natural Resources to seek authority in each of the above-mentioned instances to deviate from the applicable provisions of the Civil Air Regulations.

In view of the service rendered to the public in the preservation of life and property by this organization and the well-organized supervisory control which it exercises over its operations, I find that an exemption from certain provisions of the Civil Air Regulations as more specifically set forth hereinafter 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, as amended, which has been delegated to me by the Administrator (14 CFR 405.31), the Department of Natural Resources, State of Washington, is hereby granted an exemption from sections 25.80, 43.30(a)

(12), 49.15, 49.24, 54.2(a), and 60.17(c) of the Civil Air Regulations as follows:

Contrary provisions of the above enumerated sections of the Civil Air Regulations notwithstanding, the Department of Natural Resources of the State of Washington is authorized to conduct fire control operations, and other specialized activities in connection with state and privately owned forest land in the State of Washington, which require deviations from the designated provisions of the Civil Air Regulations within the limitations stated in the petition for this exemption to the extent that the Commissioner of Public Lands, Department of Natural Resources, State of Washington, finds necessary for the expeditious conduct of such operations. The Commissioner of Public Lands shall maintain current records of each flight or series of flights for which a deviation is required. These records shall be available for inspection by an authorized representative of the Administrator and shall contain at least the following information, as appropriate:

1. Date, period of time, and location.
2. Deviation required.
3. Names of personnel involved.
4. Certificate number.
5. Aircraft make, model, and registration number.
6. Nature of flight.

This exemption and the authorization granted herein supersedes the telegram of August 5, 1960, to the Department of Natural Resources, State of Washington, and shall remain effective until superseded or rescinded.

/s/ George C. Prill
Acting Director,
Bureau of Flight Standards

Issued in Washington, D.C., on November 22, 1960.

FEDERAL AVIATION AGENCY
UNITED STATES OF AMERICA
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

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.

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

In the matter of the petition of
ALASKA COASTAL AIRLINES
for an exemption from certain provisions of Part 49 of the Civil Air Regulations
} Regulatory Docket No. 261

GRANT OF EXEMPTION

Since August 29, 1958, Alaska Coastal Airlines has been authorized, under specified conditions, to carry up to 20 gallons of gasoline in metal containers of greater capacity than one quart in the cabin of small civil aircraft operated entirely within Alaska. This authorization was originally granted by Civil Aeronautics Board Order No. S-917, and more recently by Federal Aviation Agency Exemption No. 57 which expires on December 31, 1960.

Current provisions of Part 49 of the Civil Air Regulations permit the carriage in passenger-carrying aircraft of not more than 50 pounds net weight 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. Exemption from the foregoing provisions of Part 49 is necessary to alleviate the problem associated with transporting sufficient quantities of gasoline to remote areas in the State of Alaska to meet the needs of the passengers utilizing the services of Alaska Coastal, since access to these areas by any transportation means other than air is impracticable. Many of these passengers desiring to hunt, fish, conduct logging operations, etc., require gasoline for their outboard motors, chain saws, lanterns, and related equipment. However, to transport sufficient quantities of gasoline for such equipment under the provisions of Part 49 would require that a separate cargo-only flight be chartered. Such a requirement places an undue burden on the passengers and does not permit full utilization of the service otherwise made available by the carrier.

The petitioner states that the circumstances which justified the granting of the original waiver by Civil Aeronautics Board Order No. S-917 on August 29, 1958, and of Exemption No. 57 by the FAA on January 25, 1960, still exist. In consideration of the foregoing, I find that an exemption from the provisions of Part 49 of the Civil Air Regulations, as more specifically set forth hereinafter, would permit better utilization of air carrier service in the remote areas of Alaska without compromising safety and would be 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 beeen delegated to me by the Administrator (14 CFR 405.31), Alaska Coastal Airlines is hereby granted

an exemption from sections 49.15 and 49.24 of Part 49 of the Civil Air Regulations as follows:

(a) Contrary provisions of the above enumerated sections of the Civil Air Regulations notwithstanding, Alaska Coastal Airlines is authorized to transport not more than 20 gallons of gasoline in other than one-quart containers in any small civil aircraft operated entirely within the State of Alaska in charter operations, provided that:

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

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

(3) Prior to each flight on which gasoline is to be carried pursuant to this exemption, the pilot in command orally informs all passengers as to the location of the gasoline, the hazards involved, and prohibits smoking, the lighting of matches, or the carrying of any lighted cigar, pipe, or cigarette, or the use of any object that might cause an open flame or spark; and

(4) Prior to each flight on which gasoline is to be carried pursuant to this exemption, Alaska Coastal Airlines furnishes the FAA Air Carrier District Office, Juneau, Alaska, with a list showing the type of 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 form of transportation.

(b) This exemption and the authorization granted herein supersedes Exemption No. 57, issued January 25, 1960, and shall expire February 15, 1963, unless sooner superseded or rescinded.

/s/ Oscar Bakke
Director,
Bureau of Flight Standards

Issued in Washington, D.C., on December 31, 1960.

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

In the matter of the petition of
RICHFIELD OIL CORPORATION
for exemption from certain provisions of Part 49 of the Civil Air Regulations
} Regulatory Docket No. 34

GRANT OF EXEMPTION

By letter dated May 1, 1961, Richfield Oil Corporation, Long Beach, California, hereinafter referred to as Richfield Oil, requested a one-year extension of Exemption No. 93 (Regulatory Docket No. 34). This exemption permitted the transportation of Class A explosives and experts trained in the handling and use of such explosives in civil aircraft within the State of Alaska, notwithstanding certain provisions of Part 49 of the Civil Air Regulations.

Richfield Oil uses these explosives and personnel in connection with geophysical seismic explorations directed toward the development of oil and gas resources in the State 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 means of transportation. Richfield Oil states 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 larger aircraft, such as the Sikorsky S–55, the maximum load would consist of a crew of three experts and their equipment, which would include Class A explosives. The quantity of explosives on normal flights would consist of not more than 50 TNT primers and 50 electric blasting caps. At no time will any personnel other than those in charge of handling explosives be transported with the explosives.

By Exemptions Nos. 18 and 93, the Federal Aviation Agency authorized Richfield Oil to carry Class A explosives in civil aircraft within Alaska without a waiver for each individual flight. Experience under this authority has indicated that such operations by Richfield Oil can be conducted without an adverse effect on safety.

The previous exemptions required that, prior to each flight during which Class A explosives and technical personnel were to be carried, the operator furnish the Regional Manager 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 carried. This requirement has placed a burden upon the operator and the Regional Manager, and has been deleted from similar exemptions granted to other operators. A substitute requirement, as shown in paragraph (2) of this exemption, will serve the intended purpose and relieve the administrative burden, and will

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insure that the Regional Manager has full knowledge of the extent and scope of the operations being conducted and the operating procedures established, and has found them acceptable.

The previous exemptions also required further instructions from the Regional Manager to the exemption holder. Revision to the extent necessary to reduce the need for additional instructions from the Regional Manager will further simplify administrative procedures.

In consideration of the foregoing, I find that the requested extension of the privileges granted by Exemption No. 93 would reduce an administrative burden, would not adversely affect safety, and would be 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), Richfield Oil Corporation is hereby granted an exemption from the provisions of Part 49 of the Civil Air Regulations to the extent necessary to permit the aircraft operators listed in paragraph (6) to carry Class A explosives in civil aircraft within the State of Alaska. Such carriage shall be conducted under the following terms and conditions:

(1) The aircraft shall not be used to carry persons other than crewmembers and personnel trained in the use and handling of Class A explosives who are assigned by Richfield Oil to handle and use the Class A explosives. The names of such personnel shall be furnished to the Regional Manager, Federal Aviation Agency, Post Office Box 440, Anchorage, Alaska, by Richfield Oil.

(2) Prior to conducting operations, Richfield Oil shall notify the Regional Manager, Region Five, in writing, of the operating base or bases, the area or areas of operations, and the operating procedure established for such operations, and the Regional Manager or his designated representative shall have found these to be acceptable. Richfield Oil and its authorized aircraft operators will then be notified in writing by the Regional Manager or his representative of the acceptability of the listing and procedures. No deviations from this listing shall be made without the express approval of the Regional Manager or his designated representative.

(3) Transportation of Class A explosives to and from a civil airport may be made only if prior arrangements have been made by the operator of the aircraft with the local civil airport management. "Civil airports" include FAA intermediate fields and the international airports at Anchorage and Fairbanks. The station manager at an FAA intermediate field is also the airport manager.

(4) Each operator shall apply to the nearest General Safety District Office for approval of departure or approach routes for operations conducted on or in the vicinity of civil airports, or any landing area located in the vicinity of cities, towns, or settlements. The carriage of explosives in *airplanes* may not be authorized to or from Merrill Field, Anchorage, or Phillips Field, Fairbanks. At airports served by control towers, the controller shall be notified that explosives are being carried, prior to takeoff or entry into the traffic pattern. If use of radio is prohibited or not advisable, as when electric firing caps are carried, other acceptable means shall be used to inform the controller in advance. All

flights shall be under Visual Flight Rules. These requirements are in addition to other requirements which may be imposed by local airport management.

(5) The aircraft, when used in this operation, shall meet the aircraft performance and weight limitations applicable to passenger-carrying aircraft.

(6) The authorization granted in this exemption shall be restricted to the following named aircraft operators currently under contract to Richfield Oil to conduct geophysical seismic explorations directed toward the development of oil and gas resources in the State of Alaska, and to such other operators as may be approved by the Regional Manager, Region 5, or his designated representative:

E.R.A. Helicopter, Inc.
P.O. Box 1850
Ventura, California

Hill-I-Copters
Anchorage, Alaska

Alaska Helicopters, Inc.
Anchorage, Alaska

Richfield Oil shall notify the Regional Manager, Federal Aviation Agency, P.O. Box 440, Anchorage, Alaska, of such other operators of aircraft as it may wish to put under contract to engage in the same work. Upon investigation of fitness and ability to comply with the requirements of this exemption, Richfield Oil will be notified of the Regional Manager's approval or disapproval.

This exemption and the authorization granted herein shall become effective on June 23, 1961, and shall remain in effect until June 23, 1962, unless sooner superseded or rescinded by the Federal Aviation Agency.

/s/ George C. Prill
Acting Director,
Bureau of Flight Standards.

Issued in Washington, D.C., on June 8, 1961.

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. 174

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

In the matter of the petition of PRECISION EXPLORATION CONSULTANTS *for an exemption from certain provisions of Part 49 of the Civil Air Regulations*	Regulatory Docket No. 814

GRANT OF EXEMPTION

On June 13, 1961, Precision Exploration Consultants, Anchorage, Alaska, hereinafter referred to as Precision Exploration, requested a two-year exemption from certain provisions of Part 49 of the Civil Air Regulations. This exemption would permit the transportation of Class A explosives, and experts trained in the handling and use of such explosives, in civil aircraft within the State of Alaska, notwithstanding certain provisions of Part 49 of the Civil Air Regulations.

Precision Exploration uses these explosives and personnel in connection with geophysical seismic explorations directed toward the development of oil and gas resources in the State 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 small airplanes and in helicopters because of the lack of other means of transportation. Precision Exploration states 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 larger aircraft, such as the Sikorsky S–55, the maximum load would consist of two crews of three experts each and their equipment, which would include Class A explosives. The quanity of explosives on normal flights would consist of not more than 24 TNT primers and 50 No. 6 electric blasting caps. At no time will any personnel other than those in charge of handling explosives be transported with the explosives.

The exemption sought by the petitioner is identical with exemptions granted to Richfield Oil Company of California, in connection with geophysical seismic explorations directed toward the development of oil and gas resources in the State of Alaska. Two years of experience under these exemptions indicates that exploration operations transporting explosives and experts in accordance with the terms and conditions hereinafter prescribed have been conducted without adversely affecting air or ground safety.

In consideration of the public interest in the development of oil and gas resources within the State of Alaska, and the experience gained in operations conducted in accordance with the terms and conditions hereinafter specified, I find that an adequate level of safety can be maintained

in the operation proposed by the petitioner and that it is in the public interest to grant this exemption. 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), Precision Exploration Consultants is hereby granted an exemption from the provisions of Part 49 of the Civil Air Regulations to the extent necessary to permit the aircraft operators listed in paragraph (6) to carry Class A explosives in civil aircraft within the State of Alaska. Such carriage shall be conducted under the following terms and conditions:

(1) The aircraft shall not be used to carry persons other than crewmembers and personnel trained in the use and handling of Class A explosives who are assigned by Precision Exploration to handle and use the Class A explosives. The names of such personnel shall be furnished to the Regional Manager, Federal Aviation Agency, Post Office Box 440, Anchorage, Alaska, by Precision Exploration.

(2) Prior to conducting operations, Precision Exploration shall notify the Regional Manager, Region Five, in writing, of the operating base or bases, the area or areas of operations, and the operating procedure established for such operations, and the Regional Manager or his designated representative shall have found these to be acceptable. Precision Exploration and its authorized aircraft operators will then be notified in writing by the Regional Manager or his representative of the acceptability of the listing and procedures. No deviations from this listing shall be made without the express approval of the Regional Manager or his designated representative.

(3) Transportation of Class A explosives to and from a civil airport may be made only if prior arrangements have been made by the operator of the aircraft with the local civil airport management. "Civil airports" include FAA intermediate fields and the international airports at Anchorage and Fairbanks. The station manager at an FAA intermediate field is also the airport manager.

(4) Each operator shall apply to the nearest General Safety District Office for approval of departure or approach routes for operations conducted on or in the vicinity of civil airports, or any landing area located in the vicinity of cities, towns, or settlements. The carriage of explosives in *airplanes* may not be authorized to or from Merrill Field, Anchorage, or Phillips Field, Fairbanks. At airports served by control towers, the controller shall be notified that explosives are being carried, prior to takeoff or entry into the traffic pattern. If use of radio is prohibited or not advisable, as when electric firing caps are carried, other acceptable means shall be used to inform the controller in advance. All flights shall be under Visual Flight Rules. These requirements are in addition to other requirements which may be imposed by local airport management.

(5) The aircraft, when used in this operation, shall meet the aircraft performance and weight limitations applicable to passenger-carrying aircraft.

(6) The authorization granted in this exemption shall be restricted to the following named aircraft operators currently under contract to Precision Exploration to conduct geophysical seismic explorations directed

toward the development of oil and gas resources in the State of Alaska, and to such other operators as may be approved by the Regional Manager, Region 5, or his designated representative:

Era Helicopters of Alaska, Inc.
Post Office Box 762
Anchorage, Alaska

Era Helicopters, Inc.
Post Office Box 762
Anchorage, Alaska

GAE Airways
Merrill Field
Anchorage, Alaska

Barton Air Service
Merrill Field
Anchorage, Alaska

Johnson Helicopters, Inc.
Merrill Field
Anchorage, Alaska

Kenai Air Service
Kenai, Alaska

Precision Exploration shall notify the Regional Manager, Federal Aviation Agency, Post Office Box 440, Anchorage, Alaska, of such other operators of aircraft as it may wish to put under contract to engage in the same work. Upon investigation of fitness and ability to comply with the requirements of this exemption, Precision Exploration will be notified of the Regional Manager's approval or disapproval.

This exemption and the authorization granted herein shall remain in effect until July 15, 1963, unless sooner superseded or rescinded by the Federal Aviation Agency.

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

Issued in Washington, D.C., on July 25, 1961.

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