60-15

CIVIL AIR REGULATIONS

PART 47

AIR TAXI CERTIFICATION AND OPERATION RULES AND RULES GOVERNING OTHER SMALL AIRCRAFT COMMERCIAL OPERATIONS

Effective ~~July 1, 1959~~ /

CIVIL AERONAUTICS BOARD

WASHINGTON, D.C.

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AUTHORITY: §§ 47.1 to 47.96 issued under sec. 205, 52 Stat. 984; 49 U. S. C. 425. Interpret or apply secs. 601, 604, 605, 52 Stat. 1007, 1010, as amended; 49 U. S. C. 551, 554, 555.

APPLICABILITY AND DEFINITIONS

§ 47.1 Applicability of this part.

The provisions of this part shall be applicable to air taxi operators as defined herein. In addition, the provisions of this part, except the certification rules and operations specifications requirements, shall be applicable to any other citizen of the United States engaged in the carriage in air commerce of goods or passengers for compensation or hire using small aircraft unless otherwise provided for in the regulations of this subchapter. For the purposes of this part, student instruction, banner towing, crop dusting, seeding, and similar operations shall not be considered as the carriage of goods or persons for compensation or hire.

§ 47.2 Applicability of Parts 43 and 60 of this subchapter.

The provisions of Parts 43 and 60 of this subchapter shall be applicable to all operations conducted under the provisions of this part unless otherwise specified in this part.

§ 47.5 Definitions.

As used in this part, terms are defined as follows:

Administrator. The Administrator is the Administrator of Civil Aeronautics.

Air taxi operator. An air taxi operator is an air carrier subject to Part 298 of the Economic Regulations of this subchapter who engages directly in air transportation of passengers and/or property and who:

(1) Does not utilize in such transportation any aircraft having a maximum certificated take-off weight of more than 12,500 pounds, and

(2) Does not hold a certificate of public convenience and necessity issued by the Board pursuant to Section 401 of the Civil Aeronautics Act of 1938, as amended, or other economic authority issued by the Board.

Aircraft. An aircraft is any contrivance now known or hereafter invented, used, or designed for navigation of or flight in the air.

Approved. Approved, when used alone or as modifying terms such as means, method, action, equipment, etc., means approved by the Administrator.

Area. Area is any geographical area designated by the Administrator, such as the continental limits of the United States, Canada, Mexico, or any part thereof.

Authorized representative of the Administrator. An authorized representative of the Administrator is any employee of the Civil Aeronautics Administrator or any private person, authorized by the Administrator to perform particular duties of the Administrator under the provisions of this part.

Category (of aircraft). A category is a broad classification of aircraft with distinct configuration and operating characteristics such as airplane, helicopter, or glider.

Class (of aircraft). A class is a classification of aircraft within a category differentiating between single-engine and multiengine and land and water configurations.

Extended overwater operation. An extended overwater operation is an operation over water conducted at a distance in excess of 50 miles from the nearest shore line.

Flight time. Flight time is the total time from the moment the aircraft first moves under its own power for the purpose of flight until the moment it comes to rest at the end of the flight.

IFR. IFR is the symbol used to designate instrument flight rules.

IFR weather conditions. IFR weather conditions are weather conditions less than the minimums prescribed for flight under VFR of Part 60 of this subchapter.

Landing area. A landing area is an area of land or water which is used or intended for use for the landing and take-off of aircraft.

Night. Night is the time between the ending of evening civil twilight and the beginning of morning civil twilight as published in the American Air Almanac converted to local time for the locality concerned.

NOTE: The American Air Almanac containing the ending of evening twilight and the beginning of morning twilight tables may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Information is also available concerning such tables in the Offices of the Civil Aeronautics Administration or the United States Weather Bureau.

Operation rules. Operation rules shall be deemed to include requirements pertaining to aircraft, instruments and equipment, pilots, and flight operations.

Operations specifications. Operations specifications are rules of particular applicability issued by the Administrator under delegated authority from the Board and are not part of the air carrier operating certificate.

Operator. Operator is an air taxi operator or other person required to conduct operations under this part.

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

Small aircraft. Small aircraft means aircraft having a maximum certificated take-off weight of 12,500 pounds or less.

Type (of aircraft). Type is a specific classification of aircraft having the same basic design including all modifications thereto except those modifications which result in a change in handling or flight characteristics.

VFR. VFR is the symbol used to designate visual flight rules.

CERTIFICATION RULES FOR AIR TAXI OPERATORS

§ 47.10 Certificate required.

No person shall operate an aircraft as an air taxi operator without, or in violation of the terms of, an air carrier operating certificate issued by the Administrator.

§ 47.11 Renewal of existing authority.

If a person holding a valid air carrier operating certificate issued for air taxi operations prior to the effective date of this part files an application at least 30 days prior to the effective date of this part for the issuance of an operating certificate in accordance therewith, such person may continue operations as an air taxi operator in accordance with the authority held until such time as the Administrator shall finally dispose of the application for a new operating certificate.

§ 47.12 Application for certificate.

An application for an air carrier operating certificate shall be made in the form and manner and shall contain information prescribed by the Administrator.

§ 47.13 Issuance of certificate.

An air carrier operating certificate authorizing a person to conduct operations as an air taxi operator shall be issued by the Administrator to an applicant if the Administrator finds that such person is able to conduct such operations safely in accordance with the requirements of this part and the conditions and limitations specified in the operations specifications.

§ 47.15 Display of certificate.

The air carrier operating certificate shall be displayed at the operator's principal operations office and available for inspection by an authorized representative of the Board or the Administrator.

§ 47.16 Duration and renewal of certificate.

(a) An air carrier operating certificate issued under this part for air taxi operations shall remain in effect for 2 years

from the date of issuance or renewal thereof, unless such certificate has been sooner surrendered, suspended, revoked, or otherwise terminated.

(b) The Administrator shall renew an air carrier operating certificate for air taxi operations if, upon investigation and examination, he finds that the air carrier meets the requirements of § 47.13.

(c) Application for renewal of an air carrier operating certificate for air taxi operations shall be made at anytime prior to the expiration thereof, and shall be made in the form and manner prescribed by the Administrator.

§ 47.17 *Transferability of certificate.*

An air carrier operating certificate is not transferable, except with the written consent of the Administrator.

OPERATIONS SPECIFICATIONS REQUIREMENTS

§ 47.18 Operations specifications required.

(a) On and after the effective date of this part all operations specifications currently in force shall cease to be a part of any operating certificate and shall be deemed to be operations specifications issued under this part. Thereafter new or amended specifications shall be issued by the Administrator for operations subject to this part in a form and manner prescribed by him in accordance with the provisions of this part.

(b) No person shall operate an aircraft as an air taxi operator without, or in violation of, operations specifications issued by the Administrator.

§ 47.19 Contents of specifications.

The operations specifications shall contain the following:

(a) Types of operations authorized;

(b) Category, class, and type of aircraft authorized for use;

(c) Area of operations;

(d) A requirement for the carriage of a copy of operations specifications in each aircraft when used in air taxi operations; and

(e) Such additional items as the Administrator determines, under the enabling provisions of this part, are necessary to cover a particular situation.

§ 47.20 Deviation authority.

Whenever, upon investigation, the Administrator finds that the general standards of safety require or permit a deviation from any specific requirement for a particular operation or class of operations, he may issue specifications prescribing requirements which deviate from the requirements of this part.

§ 47.21 Amendment of operations specifications.

Any operations specification may be amended by the Administrator if he finds that safety in air transportation so requires or permits. Except in the case of an emergency requiring immediate action in respect to safety in air transportation or upon consent of the air carrier concerned, no amendment shall become effective prior to 30 days after the date the air carrier has been notified of such amendment. Within 30 days after either the receipt of such notice or the refusal of the Administrator to approve an air carrier's application for amendment, the air carrier may petition the Board to review the action of the Administrator. Except with regard to emergency amendments by the Administrator, the effectiveness of any amendment concerning which the carrier has petitioned for review shall be stayed pending the Board's decision.

§ 47.22 Inspection authority.

An authorized representative of the Board or the Administrator shall be permitted at any time and place to make inspections or examinations to determine the operator's compliance with the provisions of the operations specifications.

OPERATION RULES

§ 47.30 Aircraft requirements.

Aircraft shall be identified in accordance with Part 1 of this subchapter and certificated in accordance with the applicable airworthiness certification parts of this subchapter. In addition, aircraft shall be maintained and inspected in accordance with the provisions of Part 43 of this subchapter.

§ 47.31 Aircraft limitations for IFR and land aircraft overwater operations.

When passengers are carried, no operator shall operate any aircraft under IFR weather conditions or any land aircraft in overwater operations except as follows:

(a) *IFR operations.* Aircraft shall be multiengine with fully functioning dual controls when a second pilot is required, and shall comply with the following en route limitations:

(1) No take-off shall be made at a weight in excess of that which will permit the aircraft to climb at a rate of at least 50 feet per minute with the critical engine inoperative at an altitude of at least 1,000 feet above the elevation of the highest obstacle within 5 miles on either side of the intended track or at an altitude of 5,000 feet, whichever is the higher.

(2) In applying the requirements of subparagraph (1) of this paragraph, it shall be assumed that:

(i) The critical engine is inoperative;

(ii) The propeller of the inoperative engine is in the minimum drag position;

(iii) The wing flaps and landing gear are in the most favorable positions;

(iv) The operative engine or engines are operating at the maximum continuous power available;

(v) The aircraft is operating in the standard atmosphere; and

(vi) The weight of the aircraft is progressively reduced by the weight of the anticipated consumption of fuel and oil.

NOTE: See § 47.80 for use of an autopilot system in lieu of a second pilot.

(b) *Land aircraft over water.* Land aircraft shall be multiengine, and flown at a weight which will permit the aircraft to climb with the critical engine inoperative at a rate of at least 50 feet per minute at an altitude of at least 1,000 feet above the surface unless an overwater operation consists only of take-offs and landings or the aircraft is flown at such an altitude that it can reach land in the event of power failure.

§ 47.40 Instruments and equipment.

Instruments and equipment required by §§ 47.41 through 47.45 shall be an approved type or a type acceptable to the Administrator, shall be installed in accordance with applicable airworthiness requirements, and shall be maintained and inspected in accordance with the provisions of Part 43 of this subchapter.

§ 47.41 Instruments and equipment for all operations.

The following flight and navigational instruments and equipment are required for all operations:

(a) Air-speed indicator;

(b) Altimeter;

(c) Magnetic direction indicator;

(d) Tachometer for each engine;

(e) Oil pressure indicator for each engine using pressure system;

(f) Oil temperature indicator for each air-cooled engine;

(g) Carburetor heating or de-icing equipment for each engine or alternate air source for pressure-type carburetors;

(h) Manifold pressure indicator or equivalent when required for the proper operation of each engine;

(i) Means for indicating the quantity of fuel in each tank;

(j) Position indicator if aircraft has retractable landing gear;

(k) A seat and a safety belt for each occupant; and

(l) In passenger service, a minimum of 2 hand-type fire extinguishers, one of which is installed in the pilot compartment, the other accessible to the passengers and ground personnel, unless the aircraft is so designed that the fire extinguisher in the pilot compartment is directly available to passengers and ground personnel, in which case only one fire extinguisher is required.

§ 47.42 Emergency equipment.

Each aircraft shall be equipped with readily available emergency equipment adequate for the type of operation and number of persons carried as follows:

(a) Each aircraft operated over uninhabited terrain shall carry such emergency equipment as the Administrator prescribes for the preservation of life for the particular operation.

(b) Each aircraft operated over water shall be equipped with individual life preservers or flotation devices readily available to each person aboard the aircraft except for take-offs, landings, and for short distances for which the Administrator finds that such equipment is unnecessary.

(c) Each aircraft used in extended overwater operation, in addition to the requirements of paragraph (b) of this section, shall be equipped with:

(1) Life rafts sufficient in number and of such rated capacity and buoyancy as to accommodate all occupants of the aircraft, and

(2) Such additional emergency equipment as the Administrator finds necessary for the preservation of life for the particular operation involved.

(d) When operations involve paragraph (a), (b), or (c) of this section, the pilot shall brief passengers on the use of required emergency equipment.

§ 47.43 Instruments and equipment for operations at night.

In addition to the instruments and equipment required by §§ 47.41 and 47.42, the following will be required for operations conducted at night:

(a) Sensitive altimeter;
(b) Turn indicator;
(c) At least one landing light;
(d) Generator of adequate capacity for the equipment installed in the aircraft;
(e) Set of forward and rear position lights;
(f) One anti-collision light;
(g) One set of instrument lights;
(h) One flashlight; and
(i) Approved landing flares as follows if aircraft is operated at night in extended overwater operations:

Maximum authorized weight of aircraft:
3,500 pounds or less: five class 3 or three class 2 flares.
3,500 pounds to 5,000 pounds: four class 2 flares.
Above 5,000 pounds: two class 1 or three class 2 and one class 1 flares.

§ 47.44 Instruments and equipment for IFR flight.

In addition to the instruments and equipment required by §§ 47.41 and 47.42, the following are required for IFR operations:

(a) Turn indicator;
(b) Gyroscopic bank and pitch indicator (artificial horizon);
(c) Clock with sweep second hand;
(d) Sensitive altimeter;
(e) Gyroscopic direction indicator (directional gyro or equivalent);
(f) Outside air temperature gauge;
(g) Power failure warning means or vacuum indicator on instrument panel connecting to lines leading to gyroscopic instruments;
(h) Heated pitot tube for each airspeed indicator;
(i) Generator of adequate capacity for the equipment installed in the aircraft;
(j) Alternate source of energy to supply gyroscopic instruments which shall be capable of carrying the required load. The installation shall be such that the failure of one source of energy will not interfere with the proper functioning of the instruments when the other source is used. Engine-driven pumps, when used, shall be on separate engines; and
(k) For single-engine aircraft the gyroscopic turn indicator and the gyroscopic attitude indicator shall be operated from different power sources. (Either electrical and vacuum sources or two separate vacuum sources shall be acceptable.)

§ 47.45 Oxygen.

(a) Aircraft operated at a cabin altitude exceeding 10,000 feet above sea level continuously for more than 30 minutes, or at an altitude exceeding 12,000 feet above sea level for any length of time, shall be equipped with effective oxygen apparatus and an adequate supply of oxygen available for and used by the pilots.

(b) In addition to the requirements of paragraph (a) of this section, on aircraft to be operated at cabin altitudes in excess of 12,000 feet, there shall be provided a 5-minute supply of oxygen for each passenger carried.

(c) Oxygen equipment may be of the individual dispensing type with means provided to enable the user to determine the amount available and whether or not oxygen is being delivered.

§ 47.60 Radio equipment.

Each aircraft used in operations under this part shall be equipped with radio equipment specified for the type of operation in which it is engaged. Such equipment shall be an approved type or a type acceptable to the Administrator.

(a) *Night and IFR.* Each aircraft used in night and IFR operations shall be equipped with a two-way radio communications system and independent navigational equipment appropriate to the ground facilities.

(b) *Control zones.* Each aircraft operated in control zones shall be equipped with a two-way radio communications system appropriate to the ground facilities.

§ 47.61 Navigational aids for IFR flight.

IFR operations shall be conducted only over civil airways and at airports equipped with radio ranges or equivalent facilities, unless the Administrator has found that instrument navigation can be conducted by the use of radio direction finding equipment installed in the aircraft or by other specialized means and has approved or otherwise authorized such operations.

§ 47.80 Pilot qualifications.

(a) *Pilot in command.* Any pilot serving as pilot in command shall hold at least a valid commercial pilot certificate with an appropriate rating for the aircraft on which he is to serve and shall comply with the following requirements:

(1) For night VFR flight, he shall have had a total of at least 500 hours flight time as pilot, including 100 hours of cross-country flight time of which 25 hours shall have been at night. He shall also have had a total of at least 10 hours of instrument flight experience which shall include at least 5 hours of instrument instruction in flight.

(2) For IFR flight, he shall possess a currently effective instrument rating and have had a total of at least 500 hours of flight time as pilot, including 100 hours of cross-country flight.

(b) *Second pilot.* A second pilot holding at least a valid commercial pilot certificate with an appropriate aircraft rating and a currently effective instrument rating shall be required on aircraft when passenger operations are conducted under IFR and IFR weather conditions unless an operations specification has been issued by the Administrator authorizing the use of an approved or an acceptable auto-pilot system in lieu of a second pilot, after consideration of the area of operations, the take-off and landing weather minimums at the airports to be utilized, the air traffic density, and such other factors as he may deem necessary in the interest of safety.

§ 47.81 Recent flight experience requirements for pilots.

No operator shall utilize a pilot, nor shall any individual serve as pilot, unless he meets the appropriate experience requirements specified below:

(a) Within the preceding 90 days, a pilot shall have made at least 3 take-offs and landings in an aircraft of the same type on which he is to serve. For night flight one of the take-offs and landings required above shall have been made at night.

(b) Within the preceding 6 months, the pilot in command, prior to flight under IFR and IFR weather conditions, shall have passed an instrument check demonstrating his ability to pilot and navigate by instruments, to make a standard instrument approach using radio range facilities, and to make an instrument approach in accordance with VOR, ILS, Radar, or D/F procedures when such facilities are to be used. This instrument check shall have been given by an authorized representative of the Administrator or a check pilot designated by the Administrator.

§ 47.82 Airman records.

Each operator shall maintain at its principal operations base, or at such other location as the Administrator may designate, current records of every airman utilized as a member of a flight crew. These records shall contain such information concerning the qualifications of each airman as the Administrator shall prescribe.

§ 47.90 Responsibilities of pilot in command.

(a) *Preflight action.* Prior to commencing a flight, the pilot in command shall familiarize himself with the latest weather reports pertinent to the flight issued by the United States Weather Bureau or, if unavailable, by the most reliable source. He shall also familiarize himself with information necessary for the safe operation of the aircraft en route, information on the airports or other landing areas to be used, and such other information as is necessary to determine that the flight can be completed with safety.

(b) *Charts and flight equipment.* The pilot in command shall have proper flight and radio facility charts in the cockpit, including instrument approach procedures when instrument flight is authorized, and shall have such other flight equipment as may be necessary properly to conduct the particular flight proposed.

(c) *Serviceability of equipment.* Prior to starting any flight, the pilot shall determine that the aircraft, engines and propellers, appliances and required equipment, including instruments, are in proper operating condition.

(d) *Emergency flights and reports.* In the case of emergencies necessitating the transportation of persons or goods for the protection of life or property, the rules contained herein regarding aircraft, equipment, and weather minimums to be observed need not be complied with. Within 48 hours after the pilot making such flight returns to his base, either he or the operator shall file a report with the

Administrator setting forth the conditions under which the flight was made, the necessity therefor, and the names and addresses of the crew and passengers.

(e) *Emergency decisions.* When required in the interest of safety, a pilot may make any immediate decision and follow any course of action which in his judgment appears necessary, regardless of prescribed methods or requirements. He shall, where practicable, keep the proper ground radio station fully informed regarding the progress of the flight.

§ 47.91 Cockpit check list for multiengine aircraft and aircraft equipped with retractable landing gear.

The operator shall provide for each aircraft a cockpit check list. The check list shall be carried or installed in a readily accessible location in the cockpit of each aircraft and shall be used by the flight crew.

§ 47.92 Weather minimums.

For IFR take-offs and landings the weather minimums, including alternate airport requirements, shall not be less than those specified in Part 609 of this title, or as otherwise specified or authorized by the Administrator. These weather minimums, including alternate airport requirements, also may be found in the Approach and Landing Charts and Radio Facility Charts of the Coast and Geodetic Survey and in the Airman's Guide. For VFR operations, the VFR minimums of Part 60 of this subchapter shall apply.

§ 47.93 Fuel supply.

(a) *VFR.* No flight under VFR shall be started unless the aircraft carries sufficient fuel and oil, considering the wind and other weather conditions forecast, to fly to the point of first intended landing, and to fly thereafter for a period of at least 30 minutes at normal cruising consumption.

(b) *IFR.* Aircraft operated under IFR conditions shall carry sufficient fuel, considering weather reports and forecasts of wind and other weather conditions, to complete the flight to the point of first intended landing, to fly from there to the alternate airport, and to fly thereafter for 45 minutes at normal cruising consumption.

§ 47.94 Lighting for night operations.

No operator shall use a landing area for the take-off or landing of aircraft at night unless such area is adequately lighted.

§ 47.95 Operation in icing conditions.

(a) No aircraft shall be flown into known or probable heavy icing conditions. Aircraft may be flown into light or moderate icing conditions only if the aircraft is equipped with an approved means for de-icing the rotor blades, wings, propellers, and such other parts of the aircraft as are essential to safety.

(b) No aircraft shall take off when frost, snow, or ice is adhering to the rotor blades, wings, control surfaces, or propellers of the aircraft.

§ 47.96 Flight manifest requirements.

(a) For each aircraft carrying passengers under IFR conditions, a complete and accurate flight manifest shall be prepared and signed for each flight by the pilot in command of the aircraft. The form and contents of the manifest shall be prescribed by the Administrator.

(b) A signed copy and any revision of the flight manifest required by this section shall be retained in the personal possession of the pilot for the duration of the flight, and a duplicate copy thereof shall be retained by the operator at its principal operations base, or at such other location as the Administrator may designate, for at least one year after completion of the flight.

NOTE: The reporting and record-keeping requirements of this part have been approved by the Bureau of the Budget in accordance with the Federal Reports Act of 1942.

Effective: July 1, 1959.[1]

Adopted: December 30, 1958.

By the Civil Aeronautics Board.

[SEAL] MABEL MCCART,
Acting Secretary.

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[1] PO 869076