Proposed amends to 7AR Pts 1, & 61
CAR Pts 40, 41, 42, 45, 46
Pt 609 of Regs of Adm
Proposed cancellation of Pt 47 of CARs
Proposed new FAR Part 125
Master file

Return to LR for master file

FEDERAL AVIATION AGENCY
FLIGHT STANDARDS SERVICE
Washington 25, D. C.

November 8, 1962

FEDERAL AVIATION REGULATIONS DRAFT RELEASE NO. 62-48

SUBJECT: Air Taxi Operators and Commercial Operators of Small Aircraft

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The Flight Standards Service of the Federal Aviation Agency has under consideration a new Part 125 of the Federal Aviation Regulations to prescribe rules applicable to air taxi and commercial operations with small aircraft. These operations were the subject of a previous draft release (No. 60-13) concerning a proposed revision of Part 47 of the Civil Air Regulations. The reasons therefor are set forth in the explanatory statement of the attached proposal, which was published today in the Federal Register as a notice of proposed rule making.

The Flight Standards Service desires that all persons who will be affected by the requirements of this proposal be fully informed as to its effect upon them and is therefore circulating copies in order to afford interested persons ample opportunity to submit comments as they may desire.

Because of the large number of comments which we anticipate receiving in response to this draft release, we will be unable to acknowledge receipt of each reply. However, you may be assured that all comment will be given careful consideration.

It should be noted that comments should be submitted, preferably in duplicate, to the Docket Section of the Federal Aviation Agency, and in order to insure consideration must be received on or before January 25, 1963.

J. S. Moore

Acting Director,
Flight Standards Service

913

As published in the Federal Register on November 8, 1962 (27 F.R. 10900)

FEDERAL AVIATION AGENCY

[14 CFR Parts 1 [New], 40, 41, 42, 45, 46, 47, 61 [New], 125 [New], 609]

[Reg. Docket No. 471; Draft Release No. 62-48]

AIR TAXI OPERATORS AND COMMERCIAL OPERATORS OF SMALL AIRCRAFT

Notice of Proposed Rule Making

Pursuant to the authority delegated to me by the Administrator (14 CFR 405.27), notice is hereby given that there is under consideration a proposal to amend Chapters I and III of Title 14 of the Code of Federal Regulations by amending Parts 1 [New], 40, 41, 42, 45, 46, 61 [New], and 609, withdrawing Part 47 (which has never become effective), and adding a Part 125—Air Taxi Operators and Commercial Operators of Small Aircraft [New].

Interested persons are invited to participate in the proposed rule making by submitting such written data, views, or arguments as they may desire. Communications must be submitted, preferably in duplicate, to the Docket Section of the Federal Aviation Agency, Room A-103, 1711 New York Avenue, NW., Washington 25, D.C. All comments received on or before January 25, 1963, will be considered before taking action on the proposed rule. The proposal may be changed in the light of comments received. All comments submitted will be available, both before and after the closing date for comments, in the Docket Section for examination by interested persons.

Part 125 [New] is being proposed in the format and terminology of the Agency's recodification program. It is based on the notice of proposed rule making on Part 47, published in the FEDERAL REGISTER on August 6, 1960, (25 F.R. 7452) and circulated as Draft Release 60-13, and the comments received on that notice.

The definitions, abbreviations, and rules of construction contained in Part 1 [New] apply to proposed Part 125 [New]. Further, this notice also proposes to add certain definitions to Part 1 [New].

Part 125 [New], insofar as possible, is limited to those rules peculiarly applicable to operations governed by it and does not repeat other rules of the FAA of more general applicability with which a person operating under the part must comply. For example, the equipment requirements contained in Part 125 [New] are in addition to those contained in other parts.

Section 125.121, however, makes it clear that if equipment installed to meet a requirement of another part also meets the added requirements of this part, duplication of equipment is not required.

The new part would apply to air taxi operators and commercial operators of small aircraft. Certain exceptions, including local sightseeing flights, are listed in § 125.1. In addition, it is proposed to amend Parts 40, 41, 42, and 46 to require each air carrier who operates small aircraft in other than scheduled operations (including charter flights and special services) to operate them under Part 125. A certificated route air carrier may be authorized to conduct those small aircraft operations, between points it is authorized to serve, under Part 40, 41, or 46, as the case may be. The specific language of the amendments to Parts 40, 41, 42, and 46 is not included herein as their recodification will require further language changes. Part 45 would be amended to limit its coverage to large aircraft.

Section 125.3 specifies the additional rules applicable to operations outside the United States. It recognizes the obligation of the United States to require compliance with Annex 2 (Rules of the Air) to the Convention on International Civil Aviation when operations are conducted over the high seas, and with the rules of a foreign country when operations are conducted in that country.

Section 125.5 has been added to make it clear that rules applicable to the operation of an airplane also apply to the operation of a gyroplane. It should also be noted that, except where made specifically applicable only to airplanes or to helicopters, the equipment and operating requirements prescribed for any particular operation apply to any kind of aircraft used in that operation.

Section 125.9 requires a person to obtain an operating certificate and operations specifications prior to conducting an operation to which Part 125 applies. Sections 125.1 and 125.9 would be made effective approximately 90 days before the remainder of the part to provide a means for continuation of existing operating authority. Any person conducting an operation to which Part 125 applies will be permitted to continue to operate pending the issue or denial of a certificate and specifications if he applies for them before the effective date of the remainder of the part. However, after the entire part becomes effective and pending the issue or denial, he must operate in accordance with the rules of Subparts C, D, and E of Part 125 [New].

Section 125.11 eliminates the certificate renewal requirement proposed in Draft Release 60-13. Since surveillance inspections of all air taxi and commercial operators (to determine their continued compliance with the certification and operating requirements) will be conducted at periodic intervals by Agency inspectors, safety would not be appreciably increased by requiring periodic certificate renewal.

Draft Release 60-13 proposed to issue separate certificates to air taxi and commercial operators. As the issue requirements are the same, the two certificates have been combined into an "Air Taxi/Commercial Operator (ATCO) operating certificate". Section 125.17 has been added to prescribe the procedures which apply to the amendment of an ATCO certificate. It should also be noted that Part 13 [New] prescribes procedures governing investigations and hearings in connection with reports of violations of the Federal Aviation Act or any rules, regulations, or orders issued thereunder; and any action which amends, modifies, suspends, or revokes a certificate issued by the Administrator. Among other things, it provides that the certificate holder be advised of the charges or reasons which are the basis for the proposed certificate action and, except in case of emergency, provides that he be given an opportunity to answer the charges before any action is taken.

Section 125.19 provides procedures for amending operations specifications. An air taxi or commercial operator may petition the Administrator to reconsider the amendment of, or refusal to amend, operations specifications. Except in the case of an emergency amendment, the filing of a petition to reconsider an amendment will stay the effectiveness of that amendment pending a determination of the matter.

Section 125.41 requires an air taxi and commercial operator who has terminated operations to surrender his operating certificate and operations specifications to the local Federal Aviation Agency District Office within 30 days after the termination. This requirement is necessary for administrative reasons.

Many comments expressed anticipated difficulty in complying with the proposed requirement in § 47.36 of Draft Release 60-13 for an alternate source of energy for gyroscopic instruments when single-engine airplanes are used. In view of the limitations (VFR weather "buffer") prescribed for IFR operations with single-engine airplanes, § 125.135 does not require an alternate source of energy for each gyroscopic instrument if the gyro-

scopic rate-of-turn indicator and the gyroscopic bank-and-pitch indicator are operated from separate energy sources, such as one electrical source and one vacuum source, or two separate vacuum sources.

Section 125.65 modifies § 47.35 of Draft Release 60-13 by reducing the information required on the application for authorization to use an autopilot system in lieu of a second pilot in IFR passenger operations. The specific reference to items with which the pilot is expected to be familiar has also been deleted as this matter is adequately covered by § 47.87, which outlines the responsibilities of the pilot in command.

The draft release proposed that autopilot systems used in lieu of a second pilot in operations with passengers under IFR and IFR weather conditions be approved, and stipulated type certification or manufacture in accordance with a technical standard order (TSO) as the means of approval. It was further proposed that the autopilot system be capable of maintaining the heading of the aircraft in flight without attention by the pilot for periods of at least five minutes. As there are no type certificated autopilot systems for small aircraft, manufacture in accordance with a TSO is the only means of approval under the provisions of this Part; accordingly, reference to type certification has been deleted. The TSO for autopilots requires that they be capable of maneuvering about the three axes. Therefore, to avoid any misunderstanding concerning this requirement, it has been expressly included in § 125.65. Since the use of the autopilot will replace a qualified pilot, the ability to maneuver about the three axes is necessary if an acceptable level of safety in IFR operations with passengers is to be maintained.

The proposed requirement that the autopilot be capable of maintaining the heading of the aircraft in flight without attention by the pilot for periods of at least five minutes would be in excess of the TSO requirements and might, under some conditions, be beyond the capabilities of the autopilot. Therefore, this proposal is not included in these rules. Operations specifications for use of an autopilot system in lieu of a second pilot will contain the terms and conditions under which it may be used and will include any limitations required for safety.

The requirement in proposed § 47.36 that helicopters used in VFR night operations have radio navigational equipment has been dropped. Since ground reference lights are required by § 125.83 and as most of these operations involve flights of relatively short distances, it is not considered necessary to require that radio navigational equipment be provided.

Some comments indicated that the IFR aircraft requirements of proposed § 47.36 were excessive. However, in view of the complexities of present day IFR operations, those requirements are considered the minimum necessary to provide an acceptable level of safety and they are contained in § 125.139.

Section 125.143(b) adds a sea anchor as an additional item of required emergency equipment for a helicopter which is designed for operations on water, or is equipped with landing gear floats or other similar flotation devices, when it is operated over water beyond autorotative gliding distance from land. This requirement is necessary in view of cases in which such a helicopter has overturned and sunk after drifting broadside to swells or waves. Use of a sea anchor keeps the helicopter headed into the wind and reduces the possibility of capsizing.

Section 125.21 modifies the exclusive use requirements of proposed § 47.51 by requiring only that the holder of an ATCO certificate have the exclusive use of at least one aircraft that meets the requirements for one kind of operation authorized by his operations specifications.

Section 125.33 would require the holder of an ATCO certificate to maintain a current list of aircraft used or available for use by him. The requirement in Draft Release 60-13 that this list be submitted to the local FAA District office has been deleted.

Numerous comments were received on proposed § 47.53. A majority expressed objection to the requirement of fully functioning dual controls when a second pilot is required, and to the limitations proposed for IFR operations with single-engine airplanes. Some of these comments further recommended that provision be made to permit en route IFR operations and operations into and out of "local conditions" without a second pilot or an autopilot system.

In light of these comments, we have conducted further studies and have decided that the use of a throw-over wheel in lieu of dual control wheels is acceptable in small aircraft, except when the type certification operating limitations prescribed for the particular aircraft require a crew of two pilots.

Draft Release 60-13 provided that, with appropriate limitations, IFR passenger operations could be conducted with single-engine airplanes and multi-engine airplanes which are unable to meet the regular IFR en route performance requirements of this Part. The principal limitation proposed in the draft release was the requirement of a ceiling and visibility "buffer" beneath the overcast. The purpose of this "buffer" was to provide for at least minimum VFR conditions beneath the overcast in case engine malfunctioning should necessitate an emergency landing or descent to a low altitude.

It was proposed to meet this "buffer" requirement by specifying that the ceiling be at least 1,000 feet and the visibility at least one mile for day and two miles for night at each weather reporting station along the planned flight route. The use of such minimums in mountainous terrain, would provide no assurance that VFR conditions would be present between reporting stations. On the other hand, these minimums would be unduly restrictive in many non-mountainous areas.

The basic concept of the VFR "buffer" beneath the overcast has been retained but, instead of prescribing specific minimums at selected points, these rules would require that the weather conditions along the planned flight route be such that the flight could be made under the ceiling under VFR should the pilot in command choose to do so. This would mean that, over mountainous terrain, consideration must be given to the ceilings necessary to provide the required VFR clearance over ridges and other high areas along the planned flight route. By the same token, over nonmountainous terrain, the pilot in command could use minimums lower than those proposed in Draft Release 60-13. It must be emphasized, however, that the term "VFR" refers to all the visual flight rules that apply to operations under this part, regardless of whether they are prescribed in this part or in Part 60.

Section 125.63 provides for IFR departures and approaches under local IFR conditions, and en route IFR operations of limited duration, without a second in command or an autopilot system. These departures and approaches would not be subject to the VFR weather "buffer" requirements.

Proposed § 47.56 specified a flight manifest for IFR operations with passengers. The primary purpose of that document is to provide a passenger list and facts allowing the circumstances surrounding a particular flight to be reconstructed. We believe that most, if not all, air taxi and commercial operators maintain a record of that information already. Therefore, the requirement for a flight manifest has been dropped.

Section 125.79, concerning VFR visibility requirements, deletes the horizontal clearance limits for helicopters as proposed in the draft release and reduces to 300 feet the minimum altitude for night operations with helicopters.

Many comments were received on the pilot qualification requirements proposed in Draft Release 60-13. Some recommended increased requirements, while others objected to the proposal to require the pilot in command of an airplane in VFR night operations with passengers to hold a currently effective instrument rating.

We consider the minimum pilot in command and second in command pilot qualifications contained in the draft release to be adequate and necessary in the interest of safety and they are included in Subpart D of this proposal. As was pointed out in the draft release, a pilot in command engaging in VFR night operations with airplanes may often unexpectedly encounter unpredicted adverse weather conditions which require the use of instruments to safely pilot the airplane out of the area. Moreover, during flights on dark nights over areas in which few, if any, ground reference lights are available, control of the airplane is to a great extent, dependent upon reference to instruments. Therefore, requiring the pilot in command of an airplane to hold a currently effective instrument rating is considered a necessary safety requirement when passengers are being carried at night and § 125.101 so provides.

As the basic recent flight experience requirements for all pilots have been consolidated in Part 61 [New], it is proposed that § 61.47(c) be amended to include pilots operating under Part 125 [New] and that these pilots be excluded from § 61.47(a).

Rather than require compliance in Part 125 [New], with the takeoff minimums of Part 609 it is proposed to amend § 609.2 to extend its applicability to operations conducted under Part 125 [New].

Some persons commented that to require pilots in command of multiengine airplanes to have 20 hours of small multiengine airplane pilot in command time within the preceding six months might be unduly restrictive. Upon further consideration of this matter we have concluded that to require such flight experience within the preceding 12 months rather than within the preceding six months would not adversely affect safety and § 125.109 reflects this thinking.

In consideration of the foregoing and in addition to the amendments to Parts 40, 41, 42, 45, 46, 61 [New], and 609, discussed above, it is proposed to amend Chapter I of Title 14 of the Code of Federal Regulations by adding a Part 125 [New] and amending Part 1 [New], as hereinafter set forth.

This amendment is proposed under the authority of sections 313(a), 314(a), 601 through 610, and 1102 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1355, 1421 through 1430, and 1502).

Issued in Washington, D.C., on November 1, 1962.

G. S. MOORE,
Acting Director,
Flight Standards Service.

PART 125—AIR TAXI OPERATORS AND COMMERCIAL OPERATORS OF SMALL AIRCRAFT [NEW]

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Subpart A—General

§ 125.1 Applicability.

(a) Except as provided in paragraph (b) of this section, this part prescribes rules governing:

(1) Air taxi operations conducted under the exemption authority of Part 298 of this title; and

(2) The carrying in air commerce, by any person as other than an air carrier, of persons or property, for compensation or hire (commercial operations), in small aircraft.

(b) This part does not apply to:

(1) Student instruction;

(2) Nonstop local sightseeing flights that begin and end at the same airport.

(3) Ferry or training flights; or

(4) Aerial work operations, including:

(i) Crop dusting, seeding, spraying, and bird chasing;

(ii) Banner towing;

(iii) Aerial photography or survey;

(iv) Fire fighting;

(v) Rescue operations;

(vi) Helicopter operations in construction or repair work (but not including transportation to and from the site of operations); and

(viii) Powerline or pipeline patrol; and

(5) Any other operations specified by the Administrator.

§ 125.3 Rules applicable to operations subject to this part.

(a) Each person operating an aircraft in operations to which this part applies shall:

(1) While operating inside the U.S., comply with the applicable rules of this chapter; and

(2) While operating outside the U.S., comply with Annex 2, Rules of the Air to the Convention on International Civil Aviation or the regulations of any foreign country, whichever applies, and any rules of Parts 43, 60, 61 [New], of this chapter and this part that are more restrictive than that Annex or those regulations and can be complied with without violating that Annex or those regulations.

This paragraph does not apply to the operation of foreign aircraft.

(b) Each person operating a foreign aircraft, under section 1108(b) of the Federal Aviation Act of 1958 (49 U.S.C. 1508(b)), in operations to which this part applies shall, in addition to complying with any other applicable parts of this chapter, comply with the operating rules in Subpart C of this part except §§ 125.57, 125.59, and 125.65.

§ 125.5 Gyroplane operations.

The rules in this part that apply to airplane operations apply also to gyroplane operations.

§ 125.7 Emergency operations.

(a) In an emergency involving the safety of persons or property, the holder of an ATCO certificate may deviate, to

the extent required to meet that emergency, from the rules of this part relating to aircraft and equipment and weather minimums.

(b) In an inflight emergency involving the safety of persons or property, the pilot in command may deviate from any rule of this part to the extent required to meet that emergency.

(c) Each person who, under the authority of this section, deviates from a rule of this part shall, within 10 days after the deviation, send to the nearest FAA District office a complete report of the aircraft operation involved, including a description of the deviation and the reasons for it.

§ 125.9 Certificate and operations specifications required.

(a) Except as provided in paragraph (b) and (c) of this section, no person may operate an aircraft in operations to which this part applies without, or in violation of, an air taxi/commerical operator (ATCO) operating certificate, and appropriate operations specifications, issued under this part.

(b) Any person who holds an air taxi operating certificate under Special Civil Air Regulation SR-395A and Part 42 of this chapter and who applies for an operating certificate and operations specification under this part before _____ [the effective date of the remainder of this part], may continue operations until a certificate and specifications are issued to him under this part, or until the Administrator notifies him that his application is denied. However on and after _____ [the effective date of the remainder of this part] and pending the issue or denial of a certificate under this part he shall comply with Subparts C, D, and E of this part and continue to comply with the air taxi operating certificate and the operations specifications that he holds.

(c) Any person who is operating small aircraft under Part 45 of this chapter and who applies for an operating certificate and operations specifications under this part before _____ [the effective date of the remainder of this part], may continue those operations until a certificate and specifications are issued to him under this part, or until the Administrator notifies him that his application is denied. However, on and after _____ [the effective date of the remainder of this part] and pending the issue or denial of a certificate under this part he shall comply with Subparts C, D, and E of this part.

(d) This section does not apply to any person operating a foreign aircraft under section 1108(b) of the Federal Aviation Act of 1958 (49 U.S.C. 1508(b)).

§ 125.11 *Duration of certificate.*

An ATCO certificate is effective until surrendered, suspended, or revoked. The holder of an ATCO certificate that is suspended or revoked shall return it to the Administrator.

§ 125.13 Application and issue of certificate and operations specifications.

(a) An application for an ATCO certificate and appropriate operations specifications is made on a form and in a manner prescribed by the Administrator and filed with the FAA District office that has jurisdiction over the area in which the applicant's principal business office is located.

(b) An applicant who meets the requirements of this part is entitled to:

(1) An ATCO certificate containing all business names under which he may conduct operations and the address of each business office used by the holder; and

(2) Separate operations specifications containing the type and area of operations authorized, the class and category of aircraft that he may use in those operations, any authorized deviations from this part, and such other items as the Administrator may require or allow to meet any particular situation.

§ 125.15 Eligibility for certificate and operations specifications.

To be eligible for an ATCO certificate and appropriate operations specifications a person must:

(a) Be a citizen of the United States, a partnership of which each member is a citizen of the United States, or a corporation or association created or organized under the laws of the United States or any State or possession of the United States, of which the president and two-thirds or more of the board of directors and other managing officers thereof are citizens of the United States and in which at least 75 percent of the voting interest is owned or controlled by citizens of the United States or one of its possessions;

(b) Hold such economic authority as may be required by the Civil Aeronautics Board; and

(c) Show, to the satisfaction of the Administrator, that he is able to conduct each kind of operation for which he seeks authorization in compliance with applicable regulations.

§ 125.17 Amendment of certificate.

(a) The Administrator may amend an ATCO certificate:

(1) On his own initiative, under section 609 of the Federal Aviation Act of 1958 (49 U.S.C. 1429) and Part ____ of this chapter [present Part 408]; or

(2) Upon application by the holder of that certificate.

(b) An application to amend an ATCO certificate is submitted on a form and in a manner prescribed by the Administrator. The applicant must file the application with the FAA District office having jurisdiction over the area in which the applicant's principal business office is located at least 15 days before the date that he proposes for the amendment to become effective, unless a shorter filing period is approved by that office.

(c) The Administrator grants a request to amend an ATCO certificate if he determines that safety in air commerce and the public interest so allows.

(d) Within 30 days after receiving a refusal to amend, the holder may petition the Administrator to reconsider the refusal.

§ 125.19 Amendment of operations specifications.

(a) The Administrator may amend any operations specification issued under this part if:

(1) He determines that safety in air commerce requires that amendment; or

(2) Upon an application by the holder, the Administrator determines that safety in air commerce allows that amendment.

(b) An application to amend operations specifications is submitted on a form and in a manner prescribed by the Administrator. The applicant must file the application with the FAA District office having jurisdiction over the area in which the applicant's principal business office is located at least 15 days before the date that he proposes for the amendment to become effective, unless a shorter filing period is approved by that office.

(c) Except in an emergency when immediate action is necessary for safety in air commerce, or upon the consent of the holder, an amendment issued under this section becomes effective as stated therein, but not less than 30 days after the holder receives notice of the amendment.

(d) Within 30 days after receiving a notice of amendment or refusal to amend, the holder may petition the Administrator to reconsider the amendment or refusal to amend. Except in the case of an emergency amendment, the filing of this petition stays the effective date of the amendment pending the Administrator's decision.

Subpart B—Rules Governing Persons Holding ATCO Certificates

§ 125.21 Aircraft requirements.

(a) Each person holding an ATCO certificate must have the exclusive use of at least one aircraft that meets the requirements for at least one kind of operation authorized in his operations specifications. In addition, for each kind of operation for which he does not have the exclusive use of an aircraft, he must have available for use, under a written agreement (including arrangements for performing required maintenance) at least one aircraft that meets the requirements for that kind of operation. However, this paragraph does not prohibit the operator from using the aircraft for other than air taxi or commercial operations, nor require him to have exclusive use of each aircraft that he uses.

(b) For the purposes of paragraph (a) of this section, a person has exclusive use of an aircraft if he has the sole possession, control, and use of it for flight, as owner, or has a written agreement (including arrangements for the performance of required maintenance) giving him that possession, control, and use for at least six consecutive months.

§ 125.23 Airmen: limitations on use of services.

No person holding an ATCO certificate may use the services of any person as an airman, unless the person performing those services holds an appropriate and current airman certificate issued under this chapter and is qualified, under this chapter, for the operation concerned.

§ 125.25 Pilot in command or second in command: designation required.

Each person holding an ATCO certificate shall designate a:

(a) Pilot in command for each flight under that certificate; and

(b) A second in command for each flight under that certificate requiring two pilots.

§ 125.27 Aircraft and facilities for recent flight experience.

Each person holding an ATCO certificate shall provide aircraft and facilities to enable each of his pilots who are authorized to engage in IFR and multiengine operations to maintain and demonstrate their ability to conduct those operations.

§ 125.29 Informing personnel of operational information.

Each person holding an ATCO certificate shall inform each person in his employ of the operations specifications that apply to his duties and responsibilities and shall make available to each of his pilots the following materials in current form:

(1) Airman's Guide.

(2) Parts ____, ____, and ____ of this chapter [Parts 43, 125 [New], and 60].

(3) Flight Information Manual, Aircraft Equipment Manuals, and Aircraft Owner's Manual, or Owner's or Flight Handbook.

(4) For foreign operations, the International Flight Information Manual, and information concerning the pertinent operational and entry requirements of the foreign country or countries involved.

§ 125.31 Business office and operations base.

(a) Each person holding an ATCO certificate shall maintain a principal business office.

(b) Each person holding an ATCO certificate shall, before changing the location of any business office or operations base, notify in writing the FAA District office that has jurisdiction over the area in which the applicant's principal business office is located.

§ 125.33 Record keeping requirements.

(a) Each person holding an ATCO certificate shall keep at his principal business office and make available for inspection by the Administrator:

(1) His ATCO certificate;

(2) His operations specifications;

(3) A current list of the aircraft used or available for use by him in operations subject to this part and the operations for which each is equipped;

(4) An individual record of each pilot used by him in operations subject to this part, including:

(i) The full name of the pilot;

(ii) The pilot certificate (by type and number) and ratings that the pilot holds;

(iii) The pilot's aeronautical experience, in sufficient detail to determine his qualifications to pilot aircraft in operations subject to this part;

(iv) The pilot's current duties and the date of his assignment to those duties;

(v) The effective date and class of the medical certificate that the pilot holds;

(vi) The date and result of each of the pilot's six months instrument checks and the type of aircraft flown during that check; and

(viii) The pilot's check pilot authorization, if any.

(b) Each person holding an ATCO certificate shall keep each record required by paragraph (a)(3) or (4) of this section for at least one year after it is made.

§ 125.35 Advertising.

No person holding an ATCO certificate may advertise or otherwise offer to perform operations subject to this part that are not authorized by his ATCO certificate and operations specifications.

§ 125.37 Use of business names.

No person holding an ATCO certificate may operate an aircraft in operations subject to this part under a business name that is not on his ATCO certificate.

§ 125.39 Inspections and tests.

Each person holding an ATCO certificate shall allow the Administrator, at any time or place, to make inspections or tests (including en route inspections) to determine the holder's compliance with the Federal Aviation Act of 1958, applicable regulations, his ATCO certificate, and his operations specifications.

§ 125.41 Termination of operations.

Within 30 days after a person holding an ATCO certificate ceases operations under this part, he shall surrender his operating certificate and operations specifications to the FAA District office last having jurisdiction over these operations.

Subpart C—Operating Rules

§ 125.51 General.

This subpart prescribes rules, in addition to those in Parts ____ and ____ of this chapter [present Parts 43 and 60], that apply to operations under this part.

§ 125.53 Weather reports and forecasts.

Whenever a person operating an aircraft in operations to which this part applies is required to use a weather report or forecast, he shall use that of the U.S. Weather Bureau or an accredited observer. However, in the case of operations under VFR, the pilot in command may, if such a report or forecast is not available, use weather information based on his own observations or on those of other persons able to supply appropriate observations.

§ 125.55 Airworthiness check.

The pilot in command may not begin a flight unless he determines that the airworthiness inspections required by § ____ [present § 43.22] have been made.

§ 125.57 Area limitations on operations.

(a) No person may operate an aircraft in a geographical area that is not specifically authorized by appropriate operations specifications issued under this part.

(b) No person may operate an aircraft in a foreign country unless he is authorized to do so by that country.

§ 125.59 Operating information required.

(a) The operator of an aircraft must provide the following materials, in current and appropriate form, accessible to the pilot at the pilot station, and the pilot shall use them:

(1) A cockpit checklist.

(2) In the case of multiengine aircraft or aircraft with retractable landing gear, an emergency cockpit checklist, containing the procedures required by paragraphs (c) and (d) of this section, as appropriate.

(3) Pertinent aeronautical charts.

(4) For IFR operations, each pertinent navigational en route, terminal area, and approach and letdown chart.

(5) In the case of multiengine aircraft, applicable performance charts.

(b) Each cockpit checklist required by paragraph (a)(1) of this section must contain the following procedures:

(1) Before starting engines.

(2) Before takeoff.

(3) Cruise.

(4) Before landing.

(5) After landing.

(6) Stopping engines.

(c) Each emergency cockpit checklist required by paragraph (a)(2) of this section must contain the following procedures, as appropriate:

(1) Emergency operation of fuel, hydraulic, electrical, and mechanical systems.

(2) Emergency operation of instruments and controls.

(3) Engine inoperative procedures.

(4) Any other emergency procedures necessary for safety.

§ 125.61 Second in command required in IFR conditions.

Except as provided in §§ 125.63 and 125.65, no person may operate an aircraft carrying passengers in IFR conditions, unless there is a second in command in the aircraft.

§ 125.63 Exception to second in command requirement: Limited IFR conditions.

Unless the aircraft operating limitations require a crew of two pilots, the pilot of an aircraft carrying passengers may—

(a) Depart in IFR conditions, without a second in command, if weather reports and forecasts indicate that IFR conditions do not extend along the proposed route of flight more than 15 miles from the airport of departure;

(b) Make a flight under en route IFR weather conditions, without a second in command, if:

(1) He began, and reasonably expected, on the basis of weather reports

and forecasts, to conduct the entire flight under VFR; and

(2) Weather reports and forecasts indicate that weather conditions will allow letdown and approach to the airport of intended landing under VFR; or

(c) Make an IFR approach and landing without a second in command if:

(1) He began, and reasonably expected, on the basis of weather reports and forecasts, to conduct the flight (until within 15 miles of the destination airport) under VFR; and

(2) Thereafter, weather conditions allow flight clear of clouds until reaching the prescribed initial approach altitude over the final approach facility.

§ 125.65 Exception to second in command requirement: Approval of use of autopilot system.

(a) Unless the airplane operating limitations require a crew of two pilots, a person may operate an airplane without a second in command if it is equipped with an operative autopilot system and the use of that system is authorized by appropriate operations specifications.

(b) The holder of an ATCO certificate may request amendment of his operations specifications to authorize the use of an autopilot system in place of a second in command. The application must contain the make, model, and registration number of each airplane in which an autopilot is installed and the make and model of each autopilot installed.

(c) The Administrator issues an amendment to the operations specifications authorizing the use of an autopilot system, in place of a second in command, if:

(1) The autopilot system was manufactured under an FAA technical standard order;

(2) The autopilot system is capable of maintaining flight and maneuvering about the three airplane axes; and

(3) The holder of the ATCO certificate shows, to the satisfaction of the Administrator, that operations using the autopilot system can be conducted safely and in compliance with this part.

The amendment contains any conditions or limitations on the use of the autopilot system that the Administrator determines are needed in the interest of safety.

§ 125.67 Autopilot: Minimum altitudes for use.

(a) Except as provided in paragraph (b) of this section, no pilot may use an autopilot at an altitude less than 500 feet above the surface while en route (including climb and descent).

(b) If an approach coupler is used, a pilot may use an approved autopilot system during an IFR approach to (but not below) the applicable prescribed minimum approach altitude.

§ 125.69 Briefing of occupants: Extended overwater operations and operations above 10,000 feet MSL.

(a) Before beginning a flight that involves an extended overwater operation, the pilot in command shall brief the occupants of the aircraft (other than the second in command) on the use of required flotation equipment.

(b) Before beginning an operation above 10,000 feet MSL, a crewmember shall brief the occupants of the aircraft (other than the crewmembers) on the normal and emergency use of oxygen.

§ 125.71 Requirements for use of oxygen.

(a) *Unpressurized aircraft.* Each pilot of an aircraft that has an unpressurized cabin shall use oxygen continuously when flying:

(1) At altitudes above 10,000, up to and including 12,000 feet MSL for that part of the flight at those altitudes that is of more than 30 minutes duration; and

(2) Above 12,000 feet MSL.

(b) *Pressurized aircraft.* Whenever an aircraft having a pressurized cabin is operated above 25,000 feet:

(1) At least one pilot at the controls shall wear, secured and sealed, an oxygen mask supplying oxygen; and

(2) In addition, during such a flight each other pilot on flight deck duty shall have an oxygen mask, connected to an oxygen supply, located so as to allow immediate placing of the mask on his face, sealed and secured for use.

This paragraph does not apply when an aircraft having a pressurized cabin is flown at or below 35,000 feet MSL, if each pilot has a quick-donning type oxygen mask.

§ 125.73 Icing conditions: Operating limitations.

(a) No pilot may take off an aircraft that has:

(1) Frost, snow, or ice adhering to any rotor blade, propeller, windshield, or powerplant installation, or to an airspeed, altimeter, rate of climb, or flight attitude instrument system;

(2) Snow or ice adhering to the wings, or stabilizing or control surfaces; or

(3) Any frost adhering to the wings, or stabilizing or control surfaces, unless that frost has been polished to make it smooth.

(b) No pilot may fly:

(1) Under IFR into known or forecast light or moderate icing conditions, or

(2) Under VFR into known light or moderate icing condition,

unless the aircraft has functioning deicing and anti-icing equipment protecting each rotor blade, propeller, windshield, powerplant installation, wing, stabilizing or control surface, and each airspeed indicator, altimeter, rate of climb indicator, or flight attitude instrument system.

(c) No pilot may fly an aircraft into known or forecast heavy icing conditions.

§ 125.75 Night takeoff and landing carrying passengers: Lighting and wind determination requirements.

No pilot of an aircraft carrying passengers at night may take off from, or land on, an airport unless:

(a) He has determined the wind direction from an illuminated wind direction indicator or local ground communications or, in the case of takeoff, his personal observations; and

(b) The limits of the area to be used for the landing or takeoff are clearly shown by boundary or runway marker lights of appropriate color.

§ 125.77 Helicopter operations: Emergency landing areas.

No person may operate a helicopter unless areas are available which allow an emergency landing to be made without undue hazard to passengers or to persons or property on the surface. For the purposes of this section, areas such as school yards, parking lots, recreation areas, highways, shopping centers, and public docks are not considered available for possible emergency use when they are occupied by persons or vehicles unless there are unoccupied parts thereof that are large enough to allow a landing without that hazard.

§ 125.79 VFR: Minimum altitudes.

Except when necessary for takeoff and landing, no person may operate, under VFR—

(a) An airplane:

(1) During the day, below 500 feet above the surface or less than 500 feet horizontally from any obstacle; or

(2) At night, at an altitude less than 1,000 feet above the highest obstacle within a horizontal distance of five miles from the course intended to be flown or, in designated mountainous terrain, less than 2,000 feet above the highest obstacle within a horizontal distance of five miles from the course intended to be flown; or

(b) A helicopter at an altitude less than 300 feet above the surface.

§ 125.81 VFR: Visibility requirements.

(a) No person may operate an airplane under VFR, in uncontrolled airspace at night, or in uncontrolled airspace during the day when the ceiling is less than 1,000 feet, unless flight visibility is at least two miles.

(b) No person may operate a helicopter, under VFR, in uncontrolled airspace at an altitude of 1,200 feet or less above the surface or in control zones unless the visibility is at least:

(1) During the day—one-half mile; or

(2) At night—one mile.

§ 125.83 VFR: Helicopter ground reference requirements.

No person may pilot a helicopter under VFR unless he has visual ground reference or, at night, visual ground light reference, enough to properly control the helicopter.

§ 125.85 VFR: Fuel supply.

(a) No person may begin a flight operation in an airplane under VFR unless, considering wind and forecast weather conditions, it has enough fuel to fly to the first point of intended landing and, assuming normal cruising fuel consumption:

(1) During the day, to fly thereafter for at least 30 minutes; or

(2) At night, to fly thereafter for at least one hour.

(b) No person may begin a flight operation in a helicopter under VFR unless, considering wind and forecast weather conditions, it has enough fuel to fly to

the first point of intended landing and, assuming normal cruising fuel consumption, to fly thereafter for at least 20 minutes.

§ 125.87 VFR over-the-top carrying passengers: Operating limitations.

Subject to the limitations contained in § 125.125, no person may operate an aircraft VFR over-the-top, carrying passengers, unless:

(a) Weather reports indicate that the weather at the intended point of termination of over-the-top flight allows descent under VFR and is forecast to remain so until at least one hour after the estimated time of arrival at that point; or

(b) It is operated under conditions allowing:

(1) In the case of multiengine aircraft, descent or continuation of the flight under VFR if its critical engine fails; or

(2) In the case of single-engine aircraft, descent under VFR if its engine fails.

§ 125.89 IFR: Operating limitations.

(a) Except as provided in paragraph (b) of this section, no person may operate an aircraft, under IFR, outside of controlled airspace or at any airport that does not have an approved standard instrument approach procedure.

(b) The FAA issues operations specifications to the holder of an ATCO certificate to allow him to operate IFR over routes outside controlled airspace if:

(1) His designated flight crew shows the Administrator their ability to navigate, without visual reference to the ground, over an intended track without deviating more than five degrees or five miles, whichever is less, from that track; and

(2) The Administrator otherwise determines that the proposed operations can be conducted safely.

§ 125.91 IFR: Takeoff limitations.

No person may operate an aircraft under IFR from an airport where weather conditions are below authorized IFR landing minimums unless there is an alternate airport within one hour's flying time (at normal cruising speed, in still air) of the airport of departure.

§ 125.93 IFR: Destination airport weather minimums.

No person may take off an aircraft under IFR or begin an IFR operation in flight unless weather reports and forecasts indicate that weather conditions, at the estimated time of arrival at the next airport of intended landing, will be at or above authorized IFR landing minimums.

§ 125.95 IFR: Alternate airport requirements.

(a) Except as provided in paragraph (b) of this section, no person may operate an aircraft under IFR unless there is an alternate airport available for the next airport of intended landing.

(b) Paragraph (a) of this section does not apply if, from two hours before to two hours after the estimated time of arrival, the ceiling and visibility at the next airport of intended landing is forecast to be at least one thousand feet above that airport's minimum initial approach altitude and three miles, respectively.

§ 125.97 IFR: Alternate airport weather minimums.

No person may operate an aircraft under IFR unless, at the time that operation begins, weather conditions at each required alternate airport are at or above authorized alternate airport landing minimums for that airport and weather reports and forecasts indicate that it will remain so until the estimated time of arrival at that airport.

§ 125.99 IFR: Approach and landing minimums.

(a) No pilot may begin an instrument approach procedure if the latest weather report indicates the weather conditions at that airport are below its authorized IFR landing minimums.

(b) No pilot may operate an aircraft below the prescribed minimum approach altitude unless clear of clouds. If, below that minimum altitude, the pilot in command cannot maintain visual reference to the ground or ground lights, he shall execute the appropriate prescribed missed approach procedure.

(c) The ceiling and visibility landing minimums prescribed in Part ____ of this chapter [present Part 609] or in the operator's operations specifications are increased by 100 feet and one-half mile respectively, but not to exceed the ceiling and visibility minimums for that airport when used as an alternate airport, for each pilot in command of a turbine powered aircraft who has not served at least 100 hours as pilot in command in that type of airplane.

(d) Each pilot making an IFR takeoff or approach and landing at a military or foreign airport shall comply with applicable instrument approach procedures and weather minimums prescribed by the authority having jurisdiction over that airport. In addition, no pilot may, at such an airport:

(1) Take off under IFR when the ceiling is less than 300 feet or the visibility is less than one mile; or

(2) Make an instrument approach when the ceiling is less than 200 feet or the visibilty is less than one-half mile.

Subpart D—Pilot Qualifications

§ 125.101 Pilot in command qualifications: Night flight.

(a) No person may act as pilot in command of an aircraft at night unless he has had at least 500 hours of flight time as a pilot, including at least 100 hours of cross-country flight time, at least 25 hours of which were at night.

(b) No person may act as pilot in command of an airplane carrying passengers at night unless he holds a current instrument rating and has met the recent experience requirements applicable to that rating.

§ 125.103 Pilot in command qualifications: Carrying passengers under VFR over-the-top.

(a) No person may act as pilot in command of an aircraft under VFR over-the-top unless he has:

(1) Had at least 500 hours of flight time as a pilot including at least 100 hours of cross-country time; and

(2) A current instrument rating and meets the recent experience requirements applicable to that rating.

(b) Paragraph (a) of this section does not apply to flight under conditions that allow:

(1) In the case of multiengine aircraft, descent or continuance of the flight under VFR if the critical engine fails; or

(2) In the case of single-engine aircraft, descent under VFR if the engine fails.

§ 125.105 Pilot in command qualifications: IFR flight.

No person may act as pilot in command of an aircraft under IFR unless he has had at least 500 hours of flight time as a pilot, including at least 100 hours of cross-country flight time.

§ 125.107 Second in command qualifications.

No person may act as second in command of an aircraft unless he holds at least a current commercial pilot certificate with appropriate category and class ratings and, in the case of flight under IFR, a current instrument rating and has met the recent instrument experience requirements prescribed for a pilot in command in § 61.47(d) of this chapter.

§ 125.109 Pilot in command: Small multiengine airplane; recent experience requirements.

(a) No person may act as pilot in command of a small multiengine airplane unless he has, within the preceding 12 calendar months:

(1) Had at least 20 hours of pilot in command time in small multiengine airplanes, including at least 10 hours in the type of airplane in which he is to act as pilot in command; or

(2) Passed a flight and oral check, given by the Administrator or an authorized check pilot.

(b) For the purposes of paragraph (a)(2) of this section, the flight and oral check, appropriate to the class and type of airplane to be flown, includes normal and emergency flight procedures. The person taking the check must show that standard of proficiency required for the original issue of a multiengine class or type rating. The six months instrument check required by § 125.111, if it is taken in a small multiengine airplane, may be substituted for this flight and oral check for that type of airplane.

§ 125.111 Pilot in command: Instrument check requirements.

(a) No person may act as pilot in command of an aircraft under IFR unless

he passed, within the preceding six calendar months, the most recent instrument check given to him by the Administrator or an authorized check pilot.

(b) The instrument check required by paragraph (a) of this section consists of an oral or written equipment test and a flight check under simulated instrument conditions. The equipment test includes questions on emergency procedures, engine operation, fuel and lubrication systems, power settings, stall speeds, best engine out speed, propeller and supercharger operations, and hydraulic, mechanical, and electrical systems. The flight check includes navigation by instruments, recovery from simulated emergencies, and standard instrument approaches involving navigational facilities that he is likely to use. Each person taking the instrument check must show that standard of proficiency required for the original issue of an instrument rating.

(c) If the pilot in command is assigned to pilot only one type of aircraft, he must take the instrument check required by paragraph (a) of this section in that type of aircraft.

(d) If the pilot in command is assigned to pilot more than one type of aircraft, he must take the instrument check required by paragraph (a) of this section in each type of aircraft to which he is assigned, in rotation, but not more than one flight check during each period described in paragraph (a) of this section.

(e) If the pilot in command is assigned to pilot both single and multiengine aircraft, he must take the instrument checks required by paragraph (a) of this section alternately in multiengine and single-engine aircraft, but not more than one flight check during each period described in paragraph (a) of this section.

(f) If the pilot in command is authorized to use an autopilot system in place of a second pilot, he must show, during the required instrument check, that he is able (without a second in command) both with and without using the autopilot, to:

(1) Conduct instrument operations competently; and

(2) Properly conduct air-ground communications and comply with complex air traffic control instructions.

Each person taking the autopilot check must show that, while using the autopilot, the airplane is operated as proficiently as it would be if a second in command were present to handle air-ground communications and copy air traffic control instructions.

§ 125.113 Pilot checks: Grace provisions.

If a pilot who is required to take a pilot check by § 125.109 or § 125.111 takes that check in the calendar month before, or the calendar month after, the month in which it becomes due, he is considered to have taken it during the month it became due.

§ 125.115 Check pilot authorization: Application and issue.

Each holder of an ATCO certificate desiring FAA approval of a check pilot, shall submit his request in writing to the FAA District office having jurisdiction over the area in which the holder's principal business office is located. The Administrator may issue a letter of authority to each check pilot if he passes the appropriate oral and flight test.

Subpart E—Aircraft and Equipment

§ 125.121 Applicability.

This subpart prescribes aircraft and equipment requirements for operations under this part. The requirements of this subpart are in addition to the applicable aircraft and equipment requirements of other parts of this chapter [present Parts 43 and 60]. However, this part does not require the duplication of any equipment required by another part.

§ 125.123 General requirements.

(a) No person may operate an aircraft in operations to which this part applies unless that aircraft and its equipment meet the requirements of applicable regulations.

(b) No person may operate an aircraft in operations to which this part applies, unless the required instruments and equipment in it have been approved and are functioning.

§ 125.125 Performance requirements: Aircraft operated over-the-top or in IFR conditions.

(a) Except as provided in paragraphs (b) and (c) of this section, no person may:

(1) Operate a single-engine airplane carrying passengers over-the-top or in IFR conditions; or

(2) Operate a multiengine airplane carrying passengers over-the-top or in IFR conditions at any weight more than the weight that will allow it to climb, with the critical engine inoperative, at least 50 feet a minute when operating at the MEAs of the route to be flown or 5,000 feet MSL, whichever is higher.

(b) Without regard to paragraph (a) (1) or (2) of this section, a person may operate an airplane in IFR conditions:

(1) If weather reports and forecasts indicate that the weather along the planned route (including takeoff and landing) allows flight under the ceiling under VFR and is forecast to remain so at any point on the route until at least one hour after the estimated time of arrival at that point;

(2) If weather reports and forecasts indicate that IFR weather conditions do not extend along the proposed route more than 15 miles from the departure airport; or

(3) If:

(i) He began, and reasonably expected, on the basis of weather reports and forecasts, to conduct the flight (until within 15 miles of the destination airport) under VFR; and

(ii) Thereafter, weather conditions allow flight clear of clouds until reaching the prescribed initial approach altitude over the final approach facility.

(c) Without regard to paragraph (a) (1) or (2) of this section, a person may operate an airplane over-the-top:

(1) Under conditions allowing:

(i) In the case of a multiengine airplane, descent or continuance of the flight under VFR if its critical engine fails; or

(ii) In the case of a single-engine airplane, descent under VFR if its engine fails; or

(2) If weather reports and forecasts indicate that the weather along the planned route allows flight under the ceiling under VFR and is forecast to remain so at any point on the route until at least one hour after the estimated time of arrival at that point.

§ 125.127 Performance requirements: Land aircraft operated over water.

(a) No person may operate a land aircraft carrying passengers overwater unless:

(1) It is operated at an altitude that allows it to reach land in the case of engine failure;

(2) It is necessary for takeoff or landing; or

(3) It is a multiengine aircraft operated at a weight that will allow it to climb, with the critical engine inoperative, at least 50 feet a minute, at an altitude of 1,000 feet above the surface.

§ 125.129 Dual controls required.

No person may operate an aircraft in operations requiring two pilots unless that aircraft is equipped with functioning dual controls. However, if the aircraft type certification operating limitations do not require two pilots, a throwover control wheel may be used in place of two control wheels.

§ 125.131 Equipment requirements: General.

No person may operate an aircraft unless it is equipped with:

(a) A sensitive altimeter that is adjustable for barometric pressure;

(b) Heating or de-icing equipment for each carburetor or, in the case of a pressure carburetor, an alternate air source; and

(c) In the case of turbine engine aircraft, such other equipment as the Administrator may require.

§ 125.133 Equipment requirements: Carrying passengers at night or under VFR over-the-top conditions.

(a) Except as provided in paragraph (c) of this section, no person may operate an airplane, carrying passengers, at night or under VFR over-the-top, unless it is equipped with:

(1) A gyroscopic rate-of-turn indicator combined with a slip skid indicator;

(2) A gyroscopic bank-and-pitch indicator;

(3) A gyroscopic direction indicator;

(4) A generator or generators able to supply all probable combinations of continuous in-flight electrical loads for required equipment and for recharging the battery (with the maximum probable continuous load not to be more than 80 percent of the total generator rating); and

(5) In the case of night flights:

(i) An anticollision light system;

(ii) Instrument lights to make all instruments, switches, and gauges easily

readable, the direct rays of which are shielded from the pilot's eyes; and

(iii) A standard size flashlight having at least two cells.

For the purposes of subparagrah (4) of this paragraph, a continuous electrical load includes one that draws current continuously during flight, such as radio equipment, electrically driven instruments, and lights, but does not include occasional intermittent loads.

(b) Except as provided in paragraph (c) of this section, no person may operate a helicopter, carrying passengers, at night or under VFR over-the-top unless—

(1) In the case of VFR over-the-top operations it is certificated for IFR operations; and

(2) In the case of night operations, it is equipped with an anticollision light system and a standard size flashlight having at least two cells.

(c) This section does not apply to persons operating aircraft under VFR over-the-top during the day under conditions allowing:

(1) In the case of a multiengine aircraft, descent or continuation of the flight under VFR if its critical engine fails; or

(2) In the case of a single-engine aircraft, descent under VFR if its engine fails.

§ 125.135 Equipment requirements: Airplanes carrying passengers under IFR.

No person may operate an airplane under IFR, carrying passengers, unless it has—

(a) A vertical speed indicator;

(b) A free-air temperature indicator;

(c) A heated pitot tube for each airspeed indicator;

(d) A power failure warning device or vacuum indicator to show the power available for gyroscopic instruments from each power source;

(e) An alternate source of static pressure for the altimeter and the airspeed and rate of climb indicators;

(f) In the case of a single-engine airplane, a generator or generators able to supply all probable combinations of continuous in-flight electrical loads of required equipment and recharging the battery (with the maximum probable continuous load not to be more than 80 percent of the total generator rating);

(g) In the case of multiengine airplanes, at least two generators, each of which is on a separate engine, of which any combination of one half of the total number are rated sufficiently to supply the electrical loads of all required instruments and equipment necessary for safe emergency operation of the airplane; and

(h) Two independent sources of energy (with a means of selecting either), of which at least one is an engine driven pump or generator, each of which is able to drive all gyroscopic instruments and installed so that failure of one instrument or source does not interfere with the energy supply to the remaining instruments or the other energy source, unless, in the case of a single-engine aircraft, the rate-of-turn and bank-and-pitch indicators, have separate sources of energy. For the purposes of paragraph (f) of this section, a continuous electrical load includes one that draws current continuously during flight, such as radio equipment, electrically driven instruments and lights, but does not include occasional intermittent loads. For the purpose of paragraph (h) of this section, in the case of a multiengine airplane, each engine driven source of energy must be on a different engine.

§ 125.137 Radio and navigation equipment: Carrying passengers under VFR at night, over-the-top, or in a control zone.

(a) No person may operate, under VFR, an aircraft carrying passengers at night, in a control zone, or, except as provided in paragraph (c) of this section, over-the-top unless that aircraft has two-way radio communications equipment able at least, in flight, to transmit to, and receive from, ground facilities 25 miles away.

(b) No person may operate an airplane at night, or, except as provided in paragraph (c) of this section, any aircraft over-the-top, carrying passengers under VFR unless it has radio navigational equipment able to receive radio signals from the ground facilities to be used.

(c) Paragraphs (a) and (b) of this section do not apply to a person operating an aircraft under VFR over-the-top under conditions that allow:

(1) In the case of a single-engine aircraft, descent under VFR if its engine fails; or

(2) In the case of a multiengine aircraft, descent or continuation of the flight under VFR if its critical engine fails.

However, this paragraph does not exempt a person from complying with the requirements of paragraph (a) of this section when operating an aircraft at night or in a control zone; nor the requirements of paragraph (b) of this section when operating an airplane at night.

§ 125.139 Radio and navigation equipment: Extended overwater or IFR operations

(a) No person may operate an aircraft under IFR or in extended overwater operations unless it has at least the following radio communication and navigation equipment appropriate to the facilities to be used and able to transmit to, and receive from, at any place on the route, at least one ground facility:

(1) A transmitter.

(2) Two microphones.

(3) Two headsets or one headset and one speaker.

(4) A marker beacon receiver.

(5) Two independent receivers for navigation.

(6) Two independent receivers for communications.

(7) For extended overwater operations only, an additional transmitter.

However, a receiver that can receive both communications and navigational signals may be used in place of a separate communications receiver and a separate navigational signal receiver.

(b) For the purposes of paragraphs (a) (5) and (6) of this section, a receiver is independent if the function of any part of it does not depend on the functioning of any part of another receiver.

§ 125.141 Fire extinguishers: Passenger carrying aircraft.

(a) No person may operate an aircraft carrying passengers unless it is equipped with a hand fire extinguisher that is accessible to the pilot and passengers or two hand type fire extinguishers, one of which is accessible to the pilot and the other to the passengers.

(b) Each fire extinguisher required by paragraph (a) of this section must:

(1) If it contains carbon dioxide, be of at least two pounds capacity; or

(2) If it contains any other kind of extinguishing agent, be of a capacity that at least is equal in effectiveness to a carbon dioxide extinguisher of two pounds capacity.

§ 125.143 Emergency equipment: Overwater operations.

(a) No person may operate an aircraft in extended overwater operations unless it carries enough life rafts (with proper buoyancy) to carry all occupants of the aircraft, and unless there is attached to each life raft at least:

(1) One canopy (for sail, sunshade, or for rain catcher);

(2) One radar reflector (or similar device);

(3) One life raft repair kit;

(4) One bailing bucket;

(5) One signaling mirror;

(6) One police whistle;

(7) One raft knife;

(8) One CO_2 bottle for emergency inflation;

(9) One inflation pump;

(10) Two oars;

(11) One 75-foot retaining line;

(12) One magnetic compass;

(13) One pyrotechnic pistol and six cartridges;

(14) A two-day supply of emergency food ration supplying at least 1,000 calories a day for each person;

(15) One sea water desalting kit for each two persons the raft is rated to carry, or two pints of water for each person;

(16) One fishing kit; and

(17) One book on survival appropriate for the area in which the aircraft is operated.

The equipment required by this paragraph must be clearly marked for identification.

(b) No person may operate a helicopter equipped for landing on water, over water beyond autorotative gliding distance from land, unless the helicopter is equipped with a sea anchor.

§ 125.145 Oxygen equipment requirements.

(a) Unpressurized aircraft: No person may operate an aircraft that has an unpressurized cabin unless it is equipped with enough oxygen dispensers and oxygen to supply the oxygen required for pilots by § 125.71(a) and to supply, when flying:

(1) At altitudes above 10,000 up to and including 15,000 feet MSL, oxygen

to at least one occupant of the aircraft other than the pilots, for that part of the flight at those altitudes that is of more than 30 minutes duration; and

(2) Above 15,000 feet MSL, oxygen to each occupant of the aircraft, except the pilots.

(b) Pressurized aircraft: No person may operate an aircraft having a pressurized cabin unless it is equipped with enough oxygen dispensers and oxygen to supply the oxygen required for pilots by § 125.71(b) or a two hour supply for each pilot, whichever is greater, and to supply, when flying:

(1) At altitudes above 10,000, up to and including 15,000 feet MSL, oxygen to at least one occupant of the aircraft other than the pilots, for that part of the flight at those altitudes that is of more than 30 minutes duration; and

(2) Above 14,000 feet MSL, oxygen to each occupant of the aircraft, except the pilots, for one hour unless, at all times during flight above that altitude, the aircraft can safely descent to 14,000 feet MSL within four minutes, in which case only a 30 minute supply is required.

(c) The equipment required by this section must have a means to enable the pilot to readily determine, in flight, the amount of oxygen available in each source of supply and whether the oxygen is being delivered to the dispensing units or, in the case of individual dispensing units, a means to enable each user to make those determinations with respect to his oxygen supply and delivery.

The following definitions would be added to Part 1—Definitions and Abbreviations [New]:

(a) "IFR over-the-top", with respect to the operation of aircraft means the operation of an aircraft over-the-top on an IFR flight plan when cleared by air traffic control to maintain "VFR conditions" or "VFR conditions on top".

(b) "Over-the-top" means above a layer of clouds or other obscuring phenomena that is reported as "broken", "overcast", or "obscuration" and not classified as "thin" or "partial".

(c) "Passenger" means an occupant of an aircraft (during flight time) other than:

(1) A crewmember;

(2) A person traveling to or from a crewmember assignment when the operator of the aircraft finds that other means of transportation are not practicable;

(3) A person necessary for the safe handling of animals on the aircraft;

(4) A person necessary for the safe handling of radioactive materials (within the meaning of § ____ of this chapter [§ 49.2]);

(5) A person performing duty as a security or honor guard accompanying a shipment made by or under the authority of the U.S. Government;

(6) A military courier or a military route supervisor carried by a military cargo contract air carrier or commercial operator in operations under a military cargo contract and this carriage is specifically authorized by the appropriate military service; or

(7) An authorized representative of the Administrator conducting an en route inspection.

(d) "VFR over-the-top", with respect to the operation of aircraft, means the operation of an aircraft over-the-top under visual flight rules when it is not being operated on an IFR flight plan.

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