

Title 14—AERONAUTICS AND SPACE

Chapter I—Federal Aviation Agency
[Regulatory Docket No. 4027; Amdts. 1-3;
61-6; 91-2]

PART 1—DEFINITIONS AND ABBREVIATIONS [NEW]

PART 42a—CERTIFICATION AND OPERATION RULES FOR COMMERCIAL OPERATORS AND AIR TAXI OPERATORS; SMALL AIRCRAFT

PART 47—AIR TAXI CERTIFICATION AND OPERATION RULES AND RULES GOVERNING OTHER SMALL AIRCRAFT COMMERCIAL OPERATIONS

PART 61—CERTIFICATION: PILOTS AND FLIGHT INSTRUCTORS [NEW]

PART 91—GENERAL OPERATING AND FLIGHT RULES [NEW]

PART 135—AIR TAXI OPERATORS AND COMMERCIAL OPERATORS OF SMALL AIRCRAFT [NEW]

Miscellaneous Amendments

This amendment amends Chapter I, Title 14, Code of Federal Regulations, by (1) rescinding Part 47 of the Civil Air Regulations (which never became effective), (2) amending Part 1 [New] of the Federal Aviation Regulations to add certain definitions, (3) amending Part 61 [New] of the Federal Aviation Regulations to make subparagraph (c) of § 61.47 applicable to operations under this Part, (4) amending Part 91 [New] of the Federal Aviation Regulations to make the IFR takeoff minimums of § 91.117(a) applicable to operations under this part, and (5) adding to that chapter a new Subchapter G "Air Carrier and Commercial Operator Certification and Operations" [New], consisting of Part 135, Air Taxi Operators and Commercial Operators of Small Aircraft [New]. Part 135 [New] replaces the air taxi provisions now designated as Part 42a.

In the "Outline and Analysis" for the proposed recodification, contained in Draft Release No. 61-25 and published in the FEDERAL REGISTER on November 15, 1961 (26 F. R. 10698), provision was made for a new Subchapter G "Air Carrier and Commercial Operator Certification and Operations". This amendment, as the first final rule to be published in that subchapter, adds the new Subchapter G to Chapter I of Title 14. Other new parts will be added to the subchapter at a later date in conformity with the "Out-

line and Analysis" or as a result of rule making procedures.

Regulatory provisions relating to "Air Taxi Operators and Commercial Operators using Small Aircraft" were originally published as a notice of proposed rule making and were subsequently promulgated as Part 47 by the Civil Aeronautics Board. The final rule was published in the FEDERAL REGISTER (24 F.R. 91), but the effective date was postponed indefinitely. A new proposed Part 47 was published August 6, 1960, as Draft Release 60-13. After reviewing the comments received on proposed new Part 47, the Agency then determined to produce the proposed Part in recodified form. A new notice of proposed rule making was published designating the part as Part 125 [New] which set forth the general substance of proposed Part 47 in codified form. That notice of proposed rule making was published on November 8, 1962 (27 F.R. 10900). Because of a required renumbering in the process of recodification of the other parts, proposed Part 125 [New], published herein, in its final form, is designated as Part 135 [New].

Part 135 [New] applies to air taxi operators and commercial operators using small aircraft. The Agency intends to issue a notice of proposed rule making to amend Special Civil Air Regulation SR-402 to require "star route" carriers using small aircraft to also conduct their operations under Part 135 [New].

Formerly, Special Civil Air Regulation SR-395A required air taxi operators to conduct operations under the air taxi provisions of Part 42. In the revision of Part 42 (effective November 11, 1963) the air taxi provisions were eliminated, necessitating promulgation of Special Civil Air Regulation SR-395B which perpetuated the air taxi provisions formerly in Part 42, redesignated them as 42a and extended the applicability clause to include air taxi operators and commercial operators using small aircraft. Special Civil Air Regulation SR-395B is rescinded by this rule along with Part 42a, since Part 135 [New] obviates the necessity for them.

The numbering of the sections as proposed in Part 125 as it appeared in Draft Release 62-48 has been changed and each section heading in this preamble relates to the new section as it appears in final form, although the comments are addressed to the sections as they appeared in the NPRM.

§ 135.3

Section 135.3 clarifies the applicability of the other rules of this chapter to operations conducted under this part. Insofar as possible, the rules in this part are limited to those particularly applicable to operations under this part and, except when needed for clarity, other rules of the Federal Aviation Agency of more general applicability have not been repeated in this part, although persons operating under this part must comply with them.

§ 135.9

Section 135.9 requires a person to obtain an air taxi/commercial operator (ATCO) certificate and operations speci-

fications prior to conducting any operation to which Part 135 [New] applies. Sections 135.1 and 135.9 are being made effective April 7, 1964. The remaining sections become effective September 7, 1964. Any person conducting an operation to which Part 135 [New] applies is permitted to continue to operate pending the issue or denial of a certificate and operations specifications if he applies for them before the effective date of the remainder of the part. However, when the entire part is effective and pending the issue or denial of a certificate, he must operate in accordance with the rules of Subpart C, D, and E of Part 135 [New].

§ 135.19

Section 135.19 has been revised to include service of a notice of proposed amendment, amending the operations specifications, prior to formulating the actual amendment, in order to give affected persons an opportunity to comment and participate in the proposed changes, except in emergencies. This revision makes § 135.19 consistent with similar provisions in Parts 40, 41, and 42.

§ 135.49

Comments received in respect to § 125.39 objected to the en route inspections by representatives of the Administrator to determine compliance with the Federal Aviation Act and applicable regulations. The Agency feels that this provision is necessary to permit it to determine compliance with this part and the other regulations applicable to operations conducted under this part. This section is compatible with the inspection authorization in the other air carrier parts and is being retained.

§ 135.63

Draft Release 62-48 proposed the addition of a definition of "passenger" to Part 1 which would, in effect, permit the carriage of certain persons without compliance with the passenger carrying requirements of this part. This was to be done by excluding them from the "passenger" classification. After further consideration of this proposal, the Agency has concluded that it would be more appropriate to provide for this carriage within Part 135; therefore, § 135.63 has been included to accomplish this purpose.

§ 135.73

Several comments received were in opposition to the requirement for a second in command when carrying passengers in IFR conditions as set forth in § 125.61. The Agency feels that safety warrants this requirement and it is being retained.

§ 135.75

Section 135.75 specifies some instances in which a second in command is not required. Proposed § 125.63 did not permit a pilot to depart from an airport under IFR conditions and make an approach and landing at his destination under IFR conditions on any one flight, without a second in command. The Agency has determined that safety would not be compromised by allowing the combination of an IFR departure and an IFR approach and landing, under

the limited conditions set forth in § 135.75. These limitations require that VFR or VFR conditions over-the-top are reported and forecast to exist from a point no more than 15 miles from the departure airport to a point no more than 15 miles from the destination airport.

This section also allows IFR operations en route where unforecast marginal VFR conditions are encountered, and reports and forecasts indicate that the pilot will be able to return to VFR at least 15 miles before reaching the destination airport.

The Agency believes that it is safer to permit limited IFR operations by a qualified pilot with a properly equipped aircraft, without a second pilot, than it is to require him to fly under minimum VFR conditions with the consequent potential hazard of collision with other aircraft, ground obstacles, or rising terrain.

§ 135.77

This section specifies the instances in which an autopilot system may be substituted for a second in command.

Many comments on this portion of the draft release objected to the proposed requirement that the autopilot systems be manufactured under an FAA Technical Standard Order (TSO) and, as such, be of a three-axis type. The principal reasons advanced for these objections were that there are few such autopilots suitable for use with small airplanes, that two-axis systems have been found to be more reliable than many three-axis systems, and that two-axis systems are adequate for single-pilot IFR operations.

Investigation has disclosed that the characteristics of some small airplanes are such that two-axis autopilot systems are capable of maintaining the airplane heading and attitude in flight and maneuvering it about the three axes.

After careful evaluation of this proposal, the Agency has concluded that the requirement that autopilot systems used under this section be manufactured under a TSO can be deleted without compromising safety; however, before its use will be approved the operator must demonstrate to the satisfaction of the Administrator that the autopilot system he proposes to use is capable of operating the controls of the airplane to maintain flight and maneuver it about the three axes.

§ 135.79

Paragraph (b) of § 125.67 was revised by adding a limitation to the use of the autopilot system during an IFR approach in instances where the glide slope is limited for such use below certain altitudes or on certain segments of the approach.

§ 135.83

Section 135.83 provides different requirements for the use of oxygen in unpressurized and pressurized aircraft. Since a pressurized aircraft, when it becomes depressurized or is being operated as an unpressurized aircraft, is for all practical purposes an unpressurized aircraft, § 135.83 makes the same require-

ments for both unpressurized and de-pressurized aircraft.

Many of the comments indicated that the minimum altitudes at which the use of oxygen is required should be increased. The experience of the Agency indicates that safety would be compromised by increasing these minimum altitudes.

§ 135.85

Most of the comments received approved of § 125.73 in general but a number recommended that operation in or into light icing conditions and climb or descent through a light or moderate icing level be permitted in aircraft operated under this Part even though not equipped for deicing. Since light icing (in itself dangerous) may develop rapidly and without warning to moderate or heavy icing, the Agency has determined that operations into even light icing conditions without deicing equipment should be prohibited in the interest of safety. The prohibition against such operations is, therefore, being retained.

§ 135.87

After review and consideration of the comments received relating to the proposed boundary or runway marker light requirements for night operations with helicopters, it was determined that, in view of the flight characteristics of these aircraft, the section could be revised to permit the use of reflecting material as an alternate method of outlining helicopter landing areas, without affecting safety.

§ 135.91

In view of the flight characteristics of helicopters, and in response to comments received in regard to § 125.79(b) of the draft release, the proposed 300-foot minimum altitude for VFR operations with these aircraft has been made applicable only to operations over congested areas.

§ 135.99

As proposed in the notice, § 125.87 permitted "VFR over-the-top" operations en route, carrying passengers, if the weather at the destination allowed descent under VFR or if the weather allowed an en route descent under VFR in the event of engine failure. The limitations in proposed § 125.125, in conjunction with this section, required that, when single-engine airplanes or multi-engine airplanes which are unable to meet the IFR en route climb requirements are used, the weather along the planned flight route be such that flight beneath the ceiling under VFR could be made (VFR weather "buffer"). If broken clouds exist adequate to meet the requirements of paragraph (b) of the proposed section or if an aircraft were able to glide with a dead engine to an area clear of clouds for an emergency descent, VFR over-the-top operations were permitted.

Several comments objected to the prohibition of an IFR descent at the termination of a VFR over-the-top en route operation. The Agency has reviewed the objection and feels that safety would not be compromised by permitting an IFR descent at the termination of such a flight, if the aircraft could reach the

initial approach altitude over the final approach facility clear of the clouds or if the approach is made under radar control. Section 135.99 now reflects this thinking.

§ 135.111

Several of the comments in regard to proposed § 125.99 objected to the fact that the section did not permit "look see" privileges in air taxi and commercial operations using small aircraft. The Agency, after due consideration, felt that safety would be compromised in allowing "look see" privileges in operations under this Part. However, it was felt that safety would not be compromised, and in fact would probably be promoted, if continuation of an IFR approach is permitted where it is commenced under weather reports indicating above minimum ceiling and visibility and after passing the appropriate approach facility a subsequent report indicates that the weather is below minimums. In no event, however, may the pilot continue the approach or land the aircraft if, after reaching the minimum authorized altitude for that particular airport, he finds that the weather is in fact below minimums. This section is now compatible with the similar provisions in Part 42.

§ 135.121

As originally proposed, § 125.101 required, among other things, that the pilot in command of an airplane carrying passengers at night have a current instrument rating. Many of the comments objected to this requirement since the present regulations do not require an instrument rating for VFR flight at night. Recognizing, however, that a higher degree of safety is required in passenger-carrying operations and further that night operations increase the possibility of inadvertently encountering adverse weather conditions, the Agency believes that safety would be compromised if the instrument rating requirement of the section were eliminated. However, since basic instrument capability is adequate for night flights in the absence of IFR conditions, the Agency does not believe that safety would be compromised if the recent experience portion of the instrument rating requirement is eliminated. Section 135.121 now reflects this change as does § 135.123 since the same reasoning applies to passenger carrying in VFR over-the-top operations.

§ 135.129

Section 135.129 sets forth the recent experience requirements for the pilot in command of a small multiengine airplane operating under this Part. Subparagraph (a)(2) of that section has been revised to clearly require that the flight check required be given in the type of airplane to be used in the operation.

§ 135.145

Numerous comments were received in regard to § 125.125 of Draft Release 62-48. Most of these comments were addressed to the proposals concerning IFR operations with passengers in single-engine airplanes. The comments predominately favored allowing single-en-

gine IFR operations; however, a number objected to the VFR weather "buffer" and recommended the same criteria and minimums for these operations as are prescribed for IFR operations with multi-engine airplanes.

The Agency believes that some IFR operations with passengers in single-engine airplanes should be permitted under this part. However, to provide for an acceptable level of safety in such operations, certain limitations are considered necessary, the principal one being the VFR weather "buffer" requirement. The purpose of this limitation is to provide for a zone of VFR weather conditions beneath the ceiling (if a ceiling exists) to provide a "visual reference" area within which maneuvering to an emergency landing or descent to a low altitude could be accomplished in case engine malfunctioning should necessitate such action.

Draft Release 62-48 proposed that an IFR departure or approach be permitted with single-engine airplanes (and multi-engine airplanes unable to meet the IFR one-engine-inoperative climb requirements) with passengers without being subject to the VFR weather "buffer" requirements, provided that the flight can be made in compliance with the VFR or VFR over-the-top requirements of this part from a point no more than 15 miles from the departure airport (in case of an IFR departure) or to a point within 15 miles of the destination airport (in case of an IFR approach). A number of persons recommended that both an IFR departure and IFR approach under these limitations be permitted on the same flight. After further consideration, the Agency has concluded that this could be permitted without compromising safety, and the rule so provides. Provision has also been made for limited en route IFR operation with these airplanes; however, the VFR weather "buffer" will be required for such operations.

It should be noted that, while the provisions of § 135.145 and other related sections of this Part give the pilot in command more latitude with respect to IFR operations with single-engine airplanes (and multiengine airplanes unable to meet the prescribed one-engine-inoperative climb requirements), they also place more responsibility upon him. The Agency believes that these operations can be safely conducted if the pilot accepts and conscientiously discharges those responsibilities. In case operating experience should show otherwise, or should there be widespread failure of pilots to accept these responsibilities, appropriate regulatory action will be taken.

§ 135.161

Section 135.161 sets forth the fire extinguisher requirements for operations under this part. Proposed § 125.141 set forth certain specifications in regard to the fire extinguishers to be used. The detailed specifications have been eliminated from this section after due consideration since this equipment is required to be approved, and the specifications for approval will be set forth in an advisory circular.

§ 135.163

Section 135.163 prescribes the required emergency equipment for overwater operations. This section has been revised to include a requirement for a dye marker and a flashlight.

As originally proposed this section required helicopters equipped for landing on water, when conducting overwater operations beyond autorotative gliding distance from land, to be equipped with a sea anchor. Many of the comments in regard to this section objected to the requirement for a sea anchor and raised considerable doubt as to the effectiveness of a sea anchor when used with certain helicopters. After due consideration the Agency has determined that safety would not be compromised by eliminating that requirement. Section 135.163 now reflects this thinking.

§ 135.165

Section 135.165 prescribes the oxygen equipment requirements for operations at various altitudes with pressurized and unpressurized aircraft. This section has been revised so that the equipment requirements are compatible with the revised oxygen use requirements prescribed in § 135.83 for obvious reasons.

Some comments suggested an increase in the altitude at which oxygen equipment and supply are required. This section has been retained for the reasons set forth in the comments on § 135.83.

Interested persons have been afforded an opportunity to participate in the making of this regulation and due consideration has been given to all relevant matter presented.

These amendments are made 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, 1355, 1421 through 1430, and 1502).

In consideration of the foregoing, Chapter I of Title 14, Code of Federal Regulations is amended by amending Part 1 "Definitions and Abbreviations" [New] as hereinafter set forth, and by adding Subchapter G "Air Carrier and Commercial Operator Certification and Operations" [New], effective April 7, 1964; and also by amending Part 61 "Certification: Pilots and Flight Instructors" [New] as hereinafter set forth, by amending Part 91 "General Operating and Flight Rules" [New] as hereinafter set forth, by rescinding Part 47 of the Civil Air Regulations, as published in the FEDERAL REGISTER (24 F.R. 91), by rescinding Special Civil Air Regulation SR-395B and Part 42a of the Civil Air Regulations effective September 7, 1964, and by adding Part 135 "Air Taxi Operators and Commercial Operators of Small Aircraft" [New] effective September 7, 1964, except sections 135.1 and 135.9 thereof which are effective April 7, 1964.

1. Section 1.1 of Part 1—Definitions and Abbreviations [New] is amended to include the following definitions:

§ 1.1 Definition.

"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".

"Over-the-top" means above the layer of clouds or other obscuring phenomena forming the ceiling.

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

§ 61.47 [Amended]

2. Section 61.47 [New] is amended as follows:

(a) By amending the last sentence of paragraph (a) to read as follows: "This section does not apply to operations requiring an airline transport pilot certificate, or to operations conducted under Part 135."

(b) By amending paragraph (c) to read as follows:

(c) *Airline transport and Part 135 operations.* Neither an airline transport pilot nor a pilot in operations under Part 135 may pilot an aircraft in operations for which an airline transport pilot certificate is required or in operations under Part 135, if it carries any person other than members of its crew, certificated airmen on board in furtherance of their duties, or certificated instructors rated for that aircraft unless, within the preceding 90 days, he has made at least three takeoffs, and three landings to a full stop, in an aircraft of the same category, class, and type.

3. Section 91.117(d) is amended to read as follows:

§ 91.117 Takeoff and landing under IFR.

(d) *Civil airport takeoff minimums.* Unless otherwise authorized by the Administrator, no person operating an aircraft under Part _____, _____, _____ (present Parts 40, 41, 42, or 44) or 135 of this chapter may take off from a civil airport under IFR unless weather conditions are at or above the weather minimums for IFR takeoff prescribed for that airport in Part 97 [New] of this chapter.

- 4. Part 47 is rescinded.
- 5. SR-395B and Part 42a are rescinded.
- 6. The following new Part 135 is added:

Subpart A—General

Sec. 135.1 135.3 135.5 135.7 135.9 135.11 135.13 135.15 135.17 135.19	Applicability. Rules applicable to operations subject to this part. Gyroplane operations. Emergency operations. Certificate and operations specifications required. Duration of certificate. Application and issue of certificate and operations specifications. Eligibility for certificate and operations specifications. Amendment of certificate. Amendment of operations specifications.
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Subpart B—Rules Governing Persons Holding ATCO Certificates Sec. 135.31 135.33 135.35 135.37 135.39 135.41 135.43 135.45 135.47 135.49 135.51	Aircraft requirements. Airmen: Limitations on use of services. Pilot in command or second in command: Designation required. Aircraft and facilities for recent flight experience. Informing personnel of operational information. Business office and operations base. Record keeping requirements. Advertising. Use of business names. Inspections and tests. Termination of operations.
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Subpart C—Operating Rules

135.61 135.63 135.65 135.67 135.69 135.71 135.73 135.75 135.77 135.79 135.81 135.83 135.85 135.87 135.89 135.91 135.93 135.95 135.97 135.99 135.101 135.103 135.105 135.107 135.109 135.111	General. Carriage of persons without compliance with the passenger-carrying provisions of this part. Weather reports and forecasts. Airworthiness check. Area limitations on operations. Operating information required. Second in command required in IFR conditions. Exception to second in command requirement: Limited IFR conditions. Exception to second in command requirement: Approval of use of autopilot system. Autopilot: Minimum altitudes for use. Briefing of occupants: extended overwater operations and operations above 10,000 feet MSL. Requirements for use of oxygen. Icing conditions: Operating limitations. Night takeoff and landing carrying passengers: Lighting and wind determination requirements. Helicopter operations: Emergency landing areas. VFR: minimum altitudes. VFR: visibility requirements. VFR: helicopter ground reference requirements. VFR: fuel supply. VFR over-the-top carrying passengers: Operating limitations. IFR: operating limitations. IFR: takeoff limitations. IFR: destination airport weather minimums. IFR: alternate airport requirements. IFR: alternate airport weather minimums. IFR: takeoff, approach and landing minimums.
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Subpart D—Pilot Qualifications

135.121 135.123 135.125 135.127 135.129 135.131 135.133 135.135	Pilot in command qualifications: Night flight. Pilot in command qualifications: Carrying passengers under VFR over-the-top. Pilot in command qualifications: IFR flight. Second in command qualifications. Pilot in command: Small multi-engine airplane; recent experience requirements. Pilot in command: Instrument check requirements. Pilot checks: Grace provisions. Check pilot authorization: Application and issue.
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Subpart E—Aircraft and Equipment

135.141 135.143 135.145	Applicability. General requirements. Performance requirements: Aircraft operated over-the-top or in IFR conditions.
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135.147	Performance requirements: Land aircraft operated over water.
135.149	Dual controls required.
135.151	Equipment requirements: General.
135.153	Equipment requirements: Carrying passengers at night or under VFR over-the-top conditions.
135.155	Equipment requirements: Airplanes carrying passengers under IFR.
135.157	Radio and navigation equipment: Carrying passengers under VFR at night, over-the-top, or in a control zone.
135.159	Radio and navigation equipment: Extended overwater or IFR operations.
135.161	Fire extinguishers: Passenger-carrying aircraft.
135.163	Emergency equipment: Overwater operations.
135.165	Oxygen equipment requirements.

AUTHORITY: The provisions of this Part 135 issued under sec. 313(a), 314(a), 601 through 610, and 1102 of the Federal Aviation Act of 1958, 49 U.S.C. 1354, 1355, 1421 through 1430, and 1502.

Subpart A—General

§ 135.1 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, 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 sightseeing flights that begin and end at the same airport, and are conducted within a 25-mile radius of that airport;

(3) Ferry or training flights;

(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

(vii) Powerline or pipeline patrol;

(5) Operations conducted under the authority of Part 133 or 375 of this title; or

(6) Any other operations specified by the Administrator.

§ 135.3 Rules applicable to operations subject to this part.

Each person operating an aircraft in operations to which this Part applies shall—

(a) While operating inside the United States, comply with the applicable rules of this chapter; and

(b) While operating outside the United States, 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 61 [New] and 91 [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.

§ 135.5 Gyroplane operations.

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

§ 135.7 Emergency operations.

(a) In an emergency involving the safety of persons or property, the holder of an air taxi/commercial operator (ATCO) operating 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.

§ 135.9 Certificate and operations specifications required.

(a) Except as provided in paragraphs (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 (ATCO) operating certificate, and appropriate operations specifications, issued under the Part.

(b) Any person who holds an air taxi operating certificate issued under Special Civil Air Regulation SR-395A and Part 42, or Part 42a of this chapter and who applies for an operating certificate and operations specifications under this part before September 7, 1964, 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, after September 6, 1964, 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 conducting commercial operations with small aircraft under Part 45 or Part 42a of this chapter and who applies for an operating certificate and operations specifications under this part before September 7, 1964, 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, after September 6, 1964, and pending the issue or denial of a certificate under this part he shall comply with Subparts C, D, and E of this part.

§ 135.11 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.

§ 135.13 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.

§ 135.15 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.

§ 135.17 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 13 of this chapter; 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 allow.

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

§ 135.19 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) Within 30 days after a notice of refusal to approve a holder's application for amendment, the holder may petition the Administrator to reconsider the refusal to amend.

(d) When the Administrator amends operations specifications, he gives notice in writing to the holder of a proposed amendment to the operations specifications, fixing a period of not less than seven days within which the holder may submit written information, views, and arguments concerning the proposed amendment. After consideration of all relevant matter presented, the Administrator notifies the holder of any amendment adopted, or a rescission of the notice. The amendment becomes effective not less than 30 days after the holder receives notice of the adoption of the amendment, unless the holder petitions the Administrator for reconsideration of the amendment. In such a case, the effective date of the amendment is stayed pending a decision by the Administrator. If the Administrator finds that there is an emergency requiring immediate action with respect to safety in air commerce that makes the provisions prescribed by this paragraph impracticable, or contrary to the public interest, he notifies the holder of an amendment to the operations specifications without giving the seven days notice, and the amendment becomes effective when the holder receives it.

Subpart B—Rules Governing Persons Holding ATCO Certificates

§ 135.31 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. How-

ever, 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.

§ 135.33 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.

§ 135.35 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; and

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

§ 135.37 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 is authorized to engage in IFR and multi-engine operations to maintain and demonstrate his ability to conduct those operations.

§ 135.39 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:

(a) Airman's Guide.

(b) This part and Part 91 [New] of this chapter.

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

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

§ 135.41 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 having jurisdiction over the area in which the applicant's principal business office is located.

§ 135.43 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 the following:

(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 the following information:

(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.

(vii) 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.

§ 135.45 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.

§ 135.47 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.

§ 135.49 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.

§ 135.51 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

§ 135.61 General.

This subpart prescribes rules, in addition to those in Part 91 of this chapter, that apply to operations under this part.

§ 135.63 Carriage of persons without compliance with the passenger-carrying provisions of this Part.

The following persons may be carried aboard an aircraft without complying with the passenger-carrying requirements of this part:

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

(c) A person necessary for the safe handling of animals on the aircraft.

(d) A person necessary for the safe handling of radioactive materials (within the meaning of Part 103 of this chapter).

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

(f) 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, if that carriage is specifically authorized by the appropriate military service.

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

§ 135.65 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.

§ 135.67 Airworthiness check.

The pilot in command may not begin a flight unless he determines that the airworthiness inspections required by § 91.169 have been made.

§ 135.69 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.

§ 135.71 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 paragraph (c) 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, one-engine-inoperative climb performance data.

(b) Each cockpit checklist required by subparagraph (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.

§ 135.73 Second in command required in IFR conditions.

Except as provided in §§ 135.75 and 135.77, no person may operate an aircraft carrying passengers in IFR conditions, unless there is a second in command in the aircraft.

§ 135.75 Exception to second in command requirement; limited IFR conditions.

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

(a) If unforecast weather conditions that are marginal or below the VFR minimums of this part are encountered while en route on a flight which was started and intended to be conducted under the VFR or VFR over-the-top requirements of this part (except for limited IFR operation as permitted under paragraph (b) (1) and (2) of this section), operate an airplane in IFR conditions without a second in command if weather reports and forecasts indicate that he will be able to return to VFR or VFR over-the-top operation before reaching a point 15 miles from the destination airport; and

(b) If weather reports and forecasts indicate that the weather along the planned flight route allows flight under the VFR or VFR over-the-top requirements of this part beginning at a point no more than 15 miles from the departure airport and extending to a point within 15 miles of the destination airport, without a second in command—

(1) Take off from the departure airport in IFR conditions and fly in IFR conditions to a point no more than 15 miles from the departure airport; and

(2) Make an IFR approach and land at the destination airport in IFR conditions if:

(i) The weather conditions allow flight, and he flies, clear of the clouds until reaching the prescribed initial approach altitude over the final approach facility; or

(ii) The approach is made with the use of radar as provided in § 91.117(f) of this chapter.

§ 135.77 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 is capable of operating the airplane controls to maintain flight and maneuver it about the three axes; and

(2) 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.

§ 135.79 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 autopilot system during an IFR approach to (but not below) the applicable prescribed minimum approach altitude, unless otherwise limited.

§ 135.81 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, and ditching procedures.

(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.

§ 135.83 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.*

(1) Whenever an aircraft is being operated with the cabin pressure altitude more than 10,000 feet, each pilot shall comply with the requirement of paragraph (a) of this section.

(2) Whenever an aircraft having a pressurized cabin is operated above 25,000 feet, unless each pilot has an

approved quick-donning type oxygen mask—

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

(ii) 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.

(3) Whenever an aircraft having a pressurized cabin is operated above 35,000 feet, at least one pilot at the controls shall wear, secured and sealed, an oxygen mask supplying oxygen.

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

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

§ 135.87 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 take off, his personal observations; and

(b) The limits of the area to be used for landing or takeoff are clearly shown—

(1) In the case of airplanes, by boundary or runway marker lights; or

(2) In the case of helicopters, by boundary or runway marker lights or reflective material.

§ 135.89 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.

§ 135.91 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 over a congested area at an altitude less than 300 feet above the surface.

§ 135.93 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.

§ 135.95 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.

§ 135.97 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.

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

Subject to any additional limitations contained in § 135.145, no person may operate an aircraft VFR over-the-top, carrying passengers, unless:

(a) Weather reports and forecasts indicate that the weather at the intended point of termination of over-the-top flight—

(1) Allows descent to beneath the ceiling under VFR and is forecast to remain so until at least one hour after the estimated time of arrival at that point; or

(2) Allows an IFR approach and landing with flight clear of the clouds until reaching the prescribed initial approach altitude over the final approach facility unless the approach is made with the use of radar as provided in § 91.117(f) of this chapter; 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.

§ 135.101 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.

§ 135.103 IFR: Takeoff limitations.

No person may take off an aircraft under IFR from an airport where weather conditions are above takeoff minimums but 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.

§ 135.105 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.

§ 135.107 IFR: Alternate airport requirements.

(a) Except as provided in paragraph (b) of this section, no person may operate an aircraft under IFR conditions 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 are forecast to be at least one thousand feet above that airport's minimum initial approach altitude and three miles, respectively.

§ 135.109 IFR: Alternate airport weather minimums.

No person may operate an aircraft under IFR conditions 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.

§ 135.111 IFR: Takeoff, 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) If an instrument approach procedure is initiated when the latest weather report indicates that the prescribed ceiling and visibility minimums exist and a later weather report indicating below minimum conditions is received after the airplane—

(1) Is on an ILS final approach and has passed the outer marker;

(2) Is on a final approach using a radio range station or comparable facility and has passed the appropriate facility and has reached the authorized landing minimum altitude; or

(3) Is on PAR final approach and has been turned over to the final approach controller;

Such ILS, Range, or PAR approach may be continued and a landing may be made, provided the pilot in command upon reaching the authorized landing minimum altitude finds that actual weather conditions are equal to or better than the prescribed minimums.

(c) The ceiling and visibility landing minimums prescribed in Part 91 of this chapter 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 airplane 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 visibility is less than one-half mile.

Subpart D—Pilot Qualifications

§ 135.121 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 an instrument rating.

§ 135.123 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) An instrument 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.

§ 135.125 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.

§ 135.127 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.

§ 135.129 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, in the type of airplane to be used.

(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 rating. The six-month instrument check required by § 135.131, if it is taken in a small multiengine airplane, may be substituted for this flight and oral check for that type of airplane.

§ 135.131 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.

§ 135.133 Pilot checks: Grace provisions.

If a pilot who is required to take a pilot check by § 135.129 or § 135.131 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.

§ 135.135 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**§ 135.141 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 Part 91 of this chapter. However, this part does not require the duplication of any equipment required by another part.

§ 135.143 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.

§ 135.145 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 a weight that will not 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—

(1) If weather reports and forecasts indicate that weather along the planned route (including takeoff and landing) allows flight under VFR under the ceiling (if a ceiling exists) and is forecast to remain so at every point ahead on the route until at least one hour after the estimated time of arrival at the point, a person may operate an airplane in IFR conditions, or "over-the-top"; and

(2) If weather reports and forecasts indicate that the weather along the planned route allows flight under VFR conditions under the ceiling (if a ceiling exists), beginning at a point no more than 15 miles from the departure airport and extending to a point within 15 miles of the destination airport, a person may—

(i) Take off from the departure airport in IFR conditions and fly in IFR conditions to a point no more than 15 miles from the departure airport;

(ii) Operate an airplane en route over-the-top;

(iii) If unforecast marginal VFR weather conditions are encountered while en route on a flight which was started and intended to be conducted under the VFR or VFR over-the-top requirements of this Part (except for limited IFR operation as permitted under subdivisions (i) and (iv) of this subparagraph) operate an airplane in IFR conditions if weather reports and forecasts indicate that he will be able to return to VFR or VFR over-the-top opera-

tion before reaching a point 15 miles from the destination airport; and

(iv) Make an IFR approach and land at the destination airport in IFR conditions if the weather conditions allow flight, and he flies, clear of the clouds from a point en route at least 15 miles from the destination airport until reaching the prescribed initial approach altitude over the final approach facility or if the approach is made with the use of radar as provided in § 91.117(f) of this chapter.

(c) Without regard to subparagraphs (a) (1) and (2) of this section, a person may operate an airplane over-the-top under conditions allowing—

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

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

§ 135.147 Performance requirements: Land aircraft operated over water.

(a) No person may operate a land aircraft carrying passengers over water 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.

§ 135.149 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 throw-over control wheel may be used in place of two control wheels.

§ 135.151 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.

§ 135.153 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 re-

quired equipment and for recharging the battery; 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 flashlight having at least two size "D" cells or equivalent.

For the purposes of subparagraph (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 size "D" cells or equivalent.

(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.

§ 135.155 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 vertical speed 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 for required equipment and for recharging the battery;

(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

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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.

§ 135.157 Radio and navigational 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.

§ 135.159 Radio and navigational 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 navigational 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.

§ 135.161 Fire extinguishers: Passenger-carrying aircraft.

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.

§ 135.163 Emergency equipment: Overwater operations.

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

- (a) One canopy (for sail, sunshade, or for rain catcher);
- (b) One radar reflector (or similar device);
- (c) One liferaft repair kit;
- (d) One bailing bucket;
- (e) One signaling mirror;
- (f) One police whistle;
- (g) One raft knife;
- (h) One CO₂ bottle for emergency inflation;
 - (1) One inflation pump;
 - (j) Two oars;
 - (k) One 75-foot retaining line;
 - (l) One magnetic compass;
 - (m) One dye marker;
 - (n) One flashlight;
 - (o) One pyrotechnic pistol and six cartridges;
 - (p) A two-day supply of emergency food rations supplying at least 1,000 calories a day for each person;
 - (q) One sea water desalting kit for each two persons the raft is rated to carry, or two pints of water for each person;
 - (r) One fishing kit; and
 - (s) 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.

§ 135.165 Oxygen equipment requirements.

(a) *Unpressurized aircraft:* No person may operate an aircraft at altitudes prescribed in this section unless it is equipped with enough oxygen dispensers and oxygen to supply the oxygen required for pilots by § 135.83(a) and to supply, when flying—

(1) At altitudes above 10,000 up to and including 15,000 feet MSL, oxygen so 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, in the event of cabin pressurization failure, comply with § 135.83(a), 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 15,000 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 descend to 15,000 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.

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

Issued in Washington, D.C., on February 28, 1964.

N. E. HALABY,
Administrator.

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