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might require undiluted oxygen following descent from cabin pressure altitudes above flight level 250, a supply of oxygen in accordance with the requirements of §25.1443(d) must be provided for two percent of the occupants for the entire flight after cabin depressurization at cabin pressure altitudes above 8,000 feet, but in no case to less than one person. An appropriate number of acceptable dispensing units, but in no case less than two, must be provided, with a means for the cabin attendants to use this supply.

(f) Passenger briefing. Before flight is conducted above flight level 250, a crewmember shall instruct the passengers on the necessity of using oxygen in the event of cabin depressurization and shall point out to them the location and demonstrate the use of the oxygen-dispensing equipment.

[Doc. No. 6258, 29 FR 19205, Dec. 31, 1964, as amended by Amdt. 121–11, 30 FR 12466, Sept. 30, 1965; Amdt. 121–132, 41 FR 55475, Dec. 20, 1976; Amdt. 121–262, 62 FR 13256, Mar. 19, 1997; 62 FR 15570, Apr. 1, 1997; Amdt. 121–306, 69 FR 62789, Oct. 27, 2004]

§ 121.335 Equipment standards.

(a) Reciprocating engine powered airplanes. The oxygen apparatus, the minimum rates of oxygen flow, and the supply of oxygen necessary to comply with §121.327 must meet the standards established in section 4b.651 of the Civil Air Regulations as in effect on July 20, 1950, except that if the certificate holder shows full compliance with those standards to be impracticable, the Administrator may authorize any change in those standards that he finds will provide an equivalent level of safety.

(b) Turbine engine powered airplanes. The oxygen apparatus, the minimum rate of oxygen flow, and the supply of oxygen necessary to comply with §§ 121.329 and 121.333 must meet the standards established in section 4b.651 of the Civil Air Regulations as in effect on September 1, 1958, except that if the certificate holder shows full compliance with those standards to be impracticable, the Administrator may authorize any changes in those standards that he finds will provide an equivalent level of safety.

§ 121.337 Protective breathing equipment.

- (a) The certificate holder shall furnish approved protective breathing equipment (PBE) meeting the equipment, breathing gas, and communication requirements contained in paragraph (b) of this section.
- (b) Pressurized and nonpressurized cabin airplanes. Except as provided in paragraph (f) of this section, no person may operate an airplane unless protective breathing equipment meeting the requirements of this section is provided as follows:
- (1) General. The equipment must protect the flightcrew from the effects of smoke, carbon dioxide or other harmful gases or an oxygen deficient environment caused by other than an airplane depressurization while on flight deck duty and must protect crewmembers from the above effects while combatting fires on board the airplane.
- (2) The equipment must be inspected regularly in accordance with inspection guidelines and the inspection periods established by the equipment manufacturer to ensure its condition for continued serviceability and immediate readiness to perform its intended emergency purposes. The inspection periods may be changed upon a showing by the certificate holder that the changes would provide an equivalent level of safety.
- (3) That part of the equipment protecting the eyes must not impair the wearer's vision to the extent that a crewmember's duties cannot be accomplished and must allow corrective glasses to be worn without impairment of vision or loss of the protection required by paragraph (b)(1) of this section
- (4) The equipment, while in use, must allow the flightcrew to communicate using the airplane radio equipment and to communicate by interphone with each other while at their assigned duty stations. The equipment, while in use, must also allow crewmember interphone communications between each of two flight crewmember stations in the pilot compartment and at least one normal flight attendant station in each passenger compartment.

- (5) The equipment, while in use, must allow any crewmember to use the airplane interphone system at any of the flight attendant stations referred to in paragraph (b)(4) of this section.
- (6) The equipment may also be used to meet the supplemental oxygen requirements of this part provided it meets the oxygen equipment standards of § 121.335 of this part.
- (7) Protective breathing gas duration and supply system equipment requirements are as follows:
- (i) The equipment must supply breathing gas for 15 minutes at a pressure altitude of 8,000 feet for the following:
- (A) Flight crewmembers while performing flight deck duties; and
- (B) Crewmembers while combatting an in-flight fire.
- (ii) The breathing gas system must be free from hazards in itself, in its method of operation, and in its effect upon other components.
- (iii) For breathing gas systems other than chemical oxygen generators, there must be a means to allow the crew to readily determine, during the equipment preflight described in paragraph (c) of this section, that the gas supply is fully charged.
- (iv) For each chemical oxygen generator, the supply system equipment must meet the requirements of §25.1450 (b) and (c) of this chapter.
- (8) Smoke and fume protection. Protective breathing equipment with a fixed or portable breathing gas supply meeting the requirements of this section must be conveniently located on the flight deck and be easily accessible for immediate use by each required flight crewmember at his or her assigned duty station.
- (9) Fire combatting. Except for non-transport category airplanes type certificated after December 31, 1964, protective breathing equipment with a portable breathing gas supply meeting the requirements of this section must be easily accessible and conveniently located for immediate use by crewmembers in combatting fires as follows:
- (i) One PBE is required for each hand fire extinguisher located for use in a galley other than a galley located in a

- passenger, cargo, or crew compartment.
- (ii) One on the flight deck, except that the Administrator may authorize another location for this PBE if special circumstances exist that make compliance impractical and the proposed deviation would provide an equivalent level of safety.
- (iii) In each passenger compartment, one for each hand fire extinguisher required by §121.309 of this part, to be located within 3 feet of each required hand fire extinguisher, except that the Administrator may authorize a deviation allowing locations of PBE more than 3 feet from required hand fire extinguisher locations if special circumstances exist that make compliance impractical and if the proposed deviation provides an equivalent level of safety.
- (c) Equipment preflight. (1) Before each flight, each item of PBE at flight crewmember duty stations must be checked by the flight crewmember who will use the equipment to ensure that the equipment—
- (i) For other than chemical oxygen generator systems, is functioning, is serviceable, fits properly (unless a universal-fit type), and is connected to supply terminals and that the breathing gas supply and pressure are adequate for use; and
- (ii) For chemical oxygen generator systems, is serviceable and fits properly (unless a universal-fit type).
- (2) Each item of PBE located at other than a flight crewmember duty station must be checked by a designated crewmember to ensure that each is properly stowed and serviceable, and, for other than chemical oxygen generator systems, the breathing gas supply is fully charged. Each certificate holder, in its operations manual, must designate at least one crewmember to perform those checks before he or she takes off in that airplane for his or her first flight of the day.

[Doc. No. 24792, 52 FR 20957, June 3, 1987, as amended by Amdt. 121–204, 54 FR 22271, May 22, 1989; Amdt. 121–212, 55 FR 5551, Feb. 15, 1990; Amdt. 121–218, 55 FR 31565, Aug. 2, 1990; Amdt. 121–230, 57 FR 42674, Sept. 15, 1992; Amdt. 121–251, 60 FR 65932, Dec. 20, 1995; Amdt. 121–261, 61 FR 43921, Aug. 26, 1996]