60th birthday unless there is another pilot in the flight deck crew who has not yet attained 60 years of age.

[Doc. No. 6258, 29 FR 19212, Dec. 31, 1964, as amended by Amdt. 121–144, 43 FR 22646, May 25, 1978; Amdt. 121–344, 74 FR 34234, July 15, 2009]

#### § 121.385 Composition of flight crew.

- (a) No certificate holder may operate an airplane with less than the minimum flight crew in the airworthiness certificate or the airplane Flight Manual approved for that type airplane and required by this part for the kind of operation being conducted.
- (b) In any case in which this part requires the performance of two or more functions for which an airman certificate is necessary, that requirement is not satisfied by the performance of multiple functions at the same time by one airman.
- (c) The minimum pilot crew is two pilots and the certificate holder shall designate one pilot as pilot in command and the other second in command.
- (d) On each flight requiring a flight engineer at least one flight crewmember, other than the flight engineer, must be qualified to provide emergency performance of the flight engineer's functions for the safe completion of the flight if the flight engineer becomes ill or is otherwise incapacitated. A pilot need not hold a flight engineer's certificate to perform the flight engineer's functions in such a situation.

[Doc. No. 6258, 29 FR 19212, Dec. 31, 1964, as amended by Amdt. 121–178, 47 FR 13316, Mar. 29, 1982; Amdt. 121–256, 61 FR 30434, June 14, 1996]

#### §121.387 Flight engineer.

No certificate holder may operate an airplane for which a type certificate was issued before January 2, 1964, having a maximum certificated takeoff weight of more than 80,000 pounds without a flight crewmember holding a current flight engineer certificate. For each airplane type certificated after January 1, 1964, the requirement for a flight engineer is determined under the

type certification requirements of §25.1523.

[Doc. No. 5025, 30 FR 6067, Apr. 29, 1965]

## § 121.389 Flight navigator and specialized navigation equipment.

- (a) No certificate holder may operate an airplane outside the 48 contiguous States and the District of Columbia, when its position cannot be reliably fixed for a period of more than 1 hour, without—
- (1) A flight crewmember who holds a current flight navigator certificate; or
- (2) Specialized means of navigation approved in accordance with §121.355 which enables a reliable determination to be made of the position of the airplane by each pilot seated at his duty station.
- (b) Notwithstanding paragraph (a) of this section, the Administrator may also require a flight navigator or special navigation equipment, or both, when specialized means of navigation are necessary for 1 hour or less. In making this determination, the Administrator considers—
  - (1) The speed of the airplane;
- (2) Normal weather conditions en route:
  - (3) Extent of air traffic control;
  - (4) Traffic congestion;
- (5) Area of navigational radio coverage at destination;
  - (6) Fuel requirements;
- (7) Fuel available for return to point of departure or alternates:
- (8) Predication of flight upon operation beyond the point of no return; and
- (9) Any other factors he determines are relevant in the interest of safety.
- (c) Operations where a flight navigator or special navigation equipment, or both, are required are specified in the operations specifications of the air carrier or commercial operator.

[Doc. No. 10204, 37 FR 6464, Mar. 30, 1972, as amended by Amdt. 121–178, 47 FR 13316, Mar. 29, 1982]

#### §121.391 Flight attendants.

- (a) Each certificate holder shall provide at least the following flight attendants on each passenger-carrying airplane used:
- (1) For airplanes having a maximum payload capacity of more than 7,500

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pounds and having a seating capacity of more than 9 but less than 51 passengers—one flight attendant.

- (2) For airplanes having a maximum payload capacity of 7,500 pounds or less and having a seating capacity of more than 19 but less than 51 passengers—one flight attendant.
- (3) For airplanes having a seating capacity of more than 50 but less than 101 passengers—two flight attendants.
- (4) For airplanes having a seating capacity of more than 100 passengers—two flight attendants plus one additional flight attendant for each unit (or part of a unit) of 50 passenger seats above a seating capacity of 100 passengers.
- (b) If, in conducting the emergency evacuation demonstration required under §121.291 (a) or (b), the certificate holder used more flight attendants than is required under paragraph (a) of this section for the maximum seating capacity of the airplane used in the demonstration, he may not, thereafter, take off that airplane—
- (1) In its maximum seating capacity configuration with fewer flight attendants than the number used during the emergency evacuation demonstration;
- (2) In any reduced seating capacity configuration with fewer flight attendants than the number required by paragraph (a) of this section for that seating capacity plus the number of flight attendants used during the emergency evacuation demonstration that were in excess of those required under paragraph (a) of this section.
- (c) The number of flight attendants approved under paragraphs (a) and (b) of this section are set forth in the certificate holder's operations specifications.
- (d) During takeoff and landing, flight attendants required by this section shall be located as near as practicable to required floor level exists and shall be uniformly distributed throughout the airplane in order to provide the most effective egress of passengers in event of an emergency evacuation. During taxi, flight attendants required by this section must remain at their duty stations with safety belts and shoulder harnesses fastened except to

perform duties related to the safety of the airplane and its occupants.

[Doc. No. 2033, 30 FR 3206, Mar. 9, 1965, as amended by Amdt. 121–30, 32 FR 13268, Sept. 20, 1967; Amdt. 121–46, 34 FR 5545, Mar. 22, 1969; Amdt. 121–84, 37 FR 3975, Feb. 24, 1972; Amdt. 121–159, 45 FR 41593, June 19, 1980; Amdt. 121–176, 46 FR 61454, Dec. 17, 1981; Amdt. 121–180, 47 FR 56463, Dec. 16, 1982; Amdt. 121–251, 60 FR 65933, Dec. 20, 1995]

# § 121.393 Crewmember requirements at stops where passengers remain on board.

At stops where passengers remain on board, the certificate holder must meet the following requirements:

- (a) On each airplane for which a flight attendant is not required by §121.391(a), the certificate holder must ensure that a person who is qualified in the emergency evacuation procedures for the airplane, as required in §121.417, and who is identified to the passengers, remains:
  - (1) On board the airplane; or
- (2) Nearby the airplane, in a position to adequately monitor passenger safety, and:
- (i) The airplane engines are shut
- (ii) At least one floor level exit remains open to provide for the deplaning of passengers.
- (b) On each airplane for which flight attendants are required by \$121.391(a), but the number of flight attendants remaining on board is fewer than required by \$121.391(a), the certificate holder must meet the following requirements:
- (1) The certificate holder shall ensure that:
- (i) The airplane engines are shut down;
- (ii) At least one floor level exit remains open to provide for the deplaning of passengers; and
- (iii) the number of flight attendants on board is at least half the number required by \$121.391(a), rounded down to the next lower number in the case of fractions, but never fewer than one.
- (2) The certificate holder may substitute for the required flight attendants other persons qualified in the emergency evacuation procedures for that aircraft as required in §121.417, if