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- (2) Must be in addition to the throttle-actuated device installed under the type certification airworthiness requirements; and
- (3) May utilize any part of the throttle-actuated system including the aural warning device.
- (c) The flap position sensing unit may be installed at any suitable place in the airplane.

[Doc. No. 6258, 29 FR 19202, Dec. 31, 1964, as amended by Amdt. 121–3, 30 FR 3638, Mar. 19, 1965; Amdt. 121–130, 41 FR 47229, Oct. 28, 1976; Amdt. 121–227, 56 FR 63762, Dec. 5, 1991; Amdt. 121–251, 60 FR 65929, Dec. 20, 1995]

### § 121.291 Demonstration of emergency evacuation procedures.

- (a) Except as provided in paragraph (a)(1) of this section, each certificate holder must conduct an actual demonstration of emergency evacuation procedures in accordance with paragraph (a) of appendix D to this part to show that each type and model of airplane with a seating capacity of more than 44 passengers to be used in its passenger-carrying operations allows the evacuation of the full capacity, including crewmembers, in 90 seconds or less.
- (1) An actual demonstration need not be conducted if that airplane type and model has been shown to be in compliance with this paragraph in effect on or after October 24, 1967, or, if during type certification, with §25.803 of this chapter in effect on or after December 1, 1978
- (2) Any actual demonstration conducted after September 27, 1993, must be in accordance with paragraph (a) of appendix D to this part in effect on or after that date or with §25.803 in effect on or after that date.
- (b) Each certificate holder conducting operations with airplanes with a seating capacity of more than 44 passengers must conduct a partial demonstration of emergency evacuation procedures in accordance with paragraph (c) of this section upon:
- (1) Initial introduction of a type and model of airplane into passenger-carrying operation;
- (2) Changing the number, location, or emergency evacuation duties or procedures of flight attendants who are required by §121.391; or

- (3) Changing the number, location, type of emergency exits, or type of opening mechanism on emergency exits available for evacuation.
- (c) In conducting the partial demonstration required by paragraph (b) of this section, each certificate holder must:
- (1) Demonstrate the effectiveness of its crewmember emergency training and evacuation procedures by conducting a demonstration, not requiring passengers and observed by the Administrator, in which the flight attendants for that type and model of airplane, using that operator's line operating procedures, open 50 percent of the required floor-level emergency exits and 50 percent of the required non-floorlevel emergency exits whose opening by a flight attendant is defined as an emergency evacuation duty under §121.397, and deploy 50 percent of the exit slides. The exits and slides will be selected by the administrator and must be ready for use within 15 seconds:
- (2) Apply for and obtain approval from the responsible Flight Standards office before conducting the demonstration:
- (3) Use flight attendants in this demonstration who have been selected at random by the Administrator, have completed the certificate holder's FAA-approved training program for the type and model of airplane, and have passed a written or practical examination on the emergency equipment and procedures; and
- (4) Apply for and obtain approval from the responsible Flight Standards office before commencing operations with this type and model airplane.
- (d) Each certificate holder operating or proposing to operate one or more landplanes in extended overwater operations, or otherwise required to have certain equipment under §121.339, must show, by simulated ditching conducted in accordance with paragraph (b) of appendix D to this part, that it has the ability to efficiently carry out its ditching procedures. For certificate holders subject to §121.2(a)(1), this paragraph applies only when a new type or model airplane is introduced into the certificate holder's operations after January 19, 1996.

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(e) For a type and model airplane for which the simulated ditching specified in paragraph (d) has been conducted by a part 121 certificate holder, the requirements of paragraphs (b)(2), (b)(4), and (b)(5) of appendix D to this part are complied with if each life raft is removed from stowage, one life raft is launched and inflated (or one slide life raft is inflated) and crewmembers assigned to the inflated life raft display and describe the use of each item of required emergency equipment. The life raft or slide life raft to be inflated will be selected by the Administrator.

[Doc. No. 21269, 46 FR 61453, Dec. 17, 1981, as amended by Amdt. 121–233, 58 FR 45230, Aug. 26, 1993; Amdt. 121–251, 60 FR 65929, Dec. 20, 1995; Amdt. 121–307, 69 FR 67499, Nov. 17, 2004; Docket FAA–2018–0119, Amdt. 121–380, 83 FR 9172, Mar. 5, 2018]

# § 121.293 Special airworthiness requirements for nontransport category airplanes type certificated after December 31, 1964.

No certificate holder may operate a nontransport category airplane manufactured after December 20, 1999 unless the airplane contains a takeoff warning system that meets the requirements of 14 CFR 25.703. However, the takeoff warning system does not have to cover any device for which it has been demonstrated that takeoff with that device in the most adverse position would not create a hazardous condition.

[Doc. No. 28154, 60 FR 65929, Dec. 20, 1995]

#### § 121.295 Location for a suspect device.

After November 28, 2009, all airplanes with a maximum certificated passenger seating capacity of more than 60 persons must have a location where a suspected explosive or incendiary device found in flight can be placed to minimize the risk to the airplane.

[Doc. No. FAA–2006–26722, 73 FR 63880, Oct. 28, 2008]

# Subpart K—Instrument and Equipment Requirements

SOURCE: Docket No. 6258, 29 FR 19205, Dec. 31, 1964, unless otherwise noted.

#### §121.301 Applicability.

This subpart prescribes instrument and equipment requirements for all certificate holders.

# § 121.303 Airplane instruments and equipment.

- (a) Unless otherwise specified, the instrument and equipment requirements of this subpart apply to all operations under this part.
- (b) Instruments and equipment required by §§ 121.305 through 121.359 and 121.803 must be approved and installed in accordance with the airworthiness requirements applicable to them.
- (c) Each airspeed indicator must be calibrated in knots, and each airspeed limitation and item of related information in the Airplane Flight Manual and pertinent placards must be expressed in knots.
- (d) Except as provided in §§121.627(b) and 121.628, no person may take off any airplane unless the following instruments and equipment are in operable condition:
- (1) Instruments and equipment required to comply with airworthiness requirements under which the airplane is type certificated and as required by §§ 121.213 through 121.283 and 121.289.
- (2) Instruments and equipment specified in §§ 121.305 through 121.321, 121.359, 121.360, and 121.803 for all operations, and the instruments and equipment specified in §§ 121.323 through 121.351 for the kind of operation indicated, wherever these items are not already required by paragraph (d)(1) of this section.

[Doc. No. 6258, 29 FR 19202, Dec. 31, 1964, as amended by Amdt. 121–44, 33 FR 14406, Sept. 25, 1968; Amdt. 121–65, 35 FR 12709, Aug. 11, 1970; Amdt. 121–114, 39 FR 44440, Dec. 24, 1974; Amdt. 121–126, 40 FR 55314, Nov. 28, 1975; Amdt. 121–222, 56 FR 12310, Mar. 22, 1991; Amdt. 121–253, 61 FR 2611, Jan. 26, 1996; Amdt. 121–281, 66 FR 19043, Apr. 12, 2001]

## § 121.305 Flight and navigational equipment.

No person may operate an airplane unless it is equipped with the following flight and navigational instruments and equipment:

(a) An airspeed indicating system with heated pitot tube or equivalent