

(8) For flight instructors who conduct training in an FFS or a flight training device, the following subjects specific to the device(s) for the airplane type:

- (i) Proper operation of the controls and systems;
- (ii) Proper operation of environmental and fault panels;
- (iii) Data and motion limitations of simulation; and
- (iv) The minimum airplane simulator equipment required by this part or part 60 of this chapter, for each maneuver and procedure completed in an FFS or a flight training device.

(d) The transition ground training for flight instructors must include the following:

(1) The approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures applicable to the airplane to which the flight instructor is transitioning.

(2) For flight instructors who conduct training in an FFS or a flight training device, the following subjects specific to the device(s) for the airplane type to which the flight instructor is transitioning:

- (i) Proper operation of the controls and systems;
- (ii) Proper operation of environmental and fault panels;
- (iii) Data and motion limitations of simulation; and
- (iv) The minimum airplane simulator equipment required by this part or part 60 of this chapter, for each maneuver and procedure completed in an FFS or a flight training device.

(e) The initial and transition flight training for flight instructors (airplane) must include the following:

(1) The safety measures for emergency situations that are likely to develop during instruction.

(2) The potential results of improper, untimely, or non-execution of safety measures during instruction.

(3) For pilot flight instructor (airplane)—

(i) Inflight training and practice in conducting flight instruction from the left and right pilot seats in the required normal, abnormal, and emergency procedures to ensure competence as an instructor; and

(ii) The safety measures to be taken from either pilot seat for emergency situations that are likely to develop during instruction.

(4) For flight engineer instructors (airplane), inflight training to ensure competence to perform assigned duties.

(f) The requirements of paragraph (e) of this section may be accomplished in full or in part inflight, in an FFS, or in a flight training device, as appropriate.

(g) The initial and transition flight training for flight instructors who conduct training in an FFS or a flight training device must include the following:

(1) Training and practice in the required normal, abnormal, and emergency procedures to ensure competence to conduct the flight instruction required by this part. This training and practice must be accomplished in full or in part in an FFS or in a flight training device.

(2) Training in the operation of FFSs or flight training devices, or both, to ensure competence to conduct the flight instruction required by this part.

(h) Recurrent flight instructor ground training for flight instructors who conduct training in an FFS or a flight training device must be completed every 12 calendar months and must include the subjects required in paragraph (c)(8) of this section.

(i) Compliance with paragraphs (c)(8), (d)(2), and (h) of this section is required no later than March 12, 2019.

[Doc. No. 28471, 61 FR 30743, June 17, 1996; 62 FR 3739, Jan. 24, 1997, as amended by Amdt. 121–366, 78 FR 67838, Nov. 12, 2013; Amdt. 121–382, 85 FR 10922, Feb. 25, 2020]

§ 121.415 Crewmember and dispatcher training program requirements.

(a) Each training program must provide the following ground training as appropriate to the particular assignment of the crewmember or dispatcher:

(1) Basic indoctrination ground training for newly hired crewmembers or dispatchers including 40 programmed hours of instruction, unless reduced under § 121.405 or as specified in § 121.401(d), in at least the following—

(i) Duties and responsibilities of crewmembers or dispatchers, as applicable;

(ii) Appropriate provisions of the Federal Aviation Regulations;

(iii) Contents of the certificate holder's operating certificate and operations specifications (not required for flight attendants); and

(iv) Appropriate portions of the certificate holder's operating manual.

(2) The initial and transition ground training specified in §§ 121.419, 121.421 and 121.422, as applicable.

(3) For crewmembers, emergency training as specified in §§ 121.417 and 121.805.

(4) After February 15, 2008, training for crewmembers and dispatchers in their roles and responsibilities in the certificate holder's passenger recovery plan, if applicable.

(b) Each training program must provide the flight training specified in §§ 121.424 through 121.426, as applicable.

(c) Each training program must provide recurrent ground and flight training as provided in § 121.427.

(d) Each training program must provide the differences training specified in § 121.418(a) if the Administrator finds that, due to differences between airplanes of the same type operated by the certificate holder, additional training is necessary to insure that each crewmember and dispatcher is adequately trained to perform their assigned duties.

(e) Upgrade training:

(1) Upgrade training as specified in §§ 121.420 and 121.426 for a particular type airplane may be included in the training program for flightcrew members who have qualified and served as second in command pilot on that airplane; or

(2) Before April 27, 2022, upgrade training as specified in §§ 121.419 and 121.424 for a particular type airplane may be included in the training program for flightcrew members who have qualified and served as second in command pilot on that airplane.

(f) Conversion training as specified in §§ 121.419 and 121.424 for a particular type airplane may be included in the training program for flightcrew members who have qualified and served as flight engineer on that airplane.

(g) Particular subjects, maneuvers, procedures, or parts thereof specified in §§ 121.419, 121.420, 121.421, 121.422, 121.424,

121.425, and 121.426 for transition, conversion or upgrade training, as applicable, may be omitted, or the programmed hours of ground instruction or inflight training may be reduced, as provided in § 121.405.

(h) In addition to initial, transition, conversion, upgrade, recurrent and differences training, each training program must also provide ground and flight training, instruction, and practice as necessary to insure that each crewmember and aircraft dispatcher—

(1) Remains adequately trained and currently proficient with respect to each airplane, crewmember position, and type of operation in which he serves; and

(2) Qualifies in new equipment, facilities, procedures, and techniques, including modifications to airplanes.

(i) Each training program must include a process to provide for the regular analysis of individual pilot performance to identify pilots with performance deficiencies during training and checking and multiple failures during checking.

(j) Each training program must include methods for remedial training and tracking of pilots identified in the analysis performed in accordance with paragraph (i) of this section.

(k) Compliance with paragraphs (i) and (j) of this section is required no later than March 12, 2019.

[Doc. No. 9509, 35 FR 90, Jan. 3, 1970, as amended by Amdt. 121-130, 41 FR 47229, Oct. 28, 1976; Amdt. 121-281, 66 FR 19043, Apr. 12, 2001; Amdt. 121-329, 72 FR 1881, Jan. 16, 2007; Amdt. 121-366, 78 FR 67839, Nov. 12, 2013; Amdt. 121-382, 85 FR 10922, Feb. 25, 2020]

§ 121.417 Crewmember emergency training.

(a) Each training program must provide the emergency training set forth in this section with respect to each airplane type, model, and configuration, each required crewmember, and each kind of operation conducted, insofar as appropriate for each crewmember and the certificate holder.

(b) Emergency training must provide the following:

(1) Instruction in emergency assignments and procedures, including coordination among crewmembers.