

§61.155

(g) Pass the practical test on the areas of operation listed in §61.157(e) of this part that apply to the aircraft category and class rating sought; and

(h) Comply with the sections of this subpart that apply to the aircraft category and class rating sought.

[Doc. No. 25910, 62 FR 16298, Apr. 4, 1997; Amdt. 61-103, 62 FR 40905, July 30, 1997; Amdt. 61-124, 74 FR 42559, Aug. 21, 2009]

§61.155 Aeronautical knowledge.

(a) *General.* The knowledge test for an airline transport pilot certificate is based on the aeronautical knowledge areas listed in paragraph (c) of this section that are appropriate to the aircraft category and class rating sought.

(b) *Aircraft type rating.* A person who is applying for an additional aircraft type rating to be added to an airline transport pilot certificate is not required to pass a knowledge test if that person's airline transport pilot certificate lists the aircraft category and class rating that is appropriate to the type rating sought.

(c) *Aeronautical knowledge areas.* (1) Applicable Federal Aviation Regulations of this chapter that relate to airline transport pilot privileges, limitations, and flight operations;

(2) Meteorology, including knowledge of and effects of fronts, frontal characteristics, cloud formations, icing, and upper-air data;

(3) General system of weather and NOTAM collection, dissemination, interpretation, and use;

(4) Interpretation and use of weather charts, maps, forecasts, sequence reports, abbreviations, and symbols;

(5) National Weather Service functions as they pertain to operations in the National Airspace System;

(6) Windshear and microburst awareness, identification, and avoidance;

(7) Principles of air navigation under instrument meteorological conditions in the National Airspace System;

(8) Air traffic control procedures and pilot responsibilities as they relate to en route operations, terminal area and radar operations, and instrument departure and approach procedures;

(9) Aircraft loading, weight and balance, use of charts, graphs, tables, formulas, and computations, and their effect on aircraft performance;

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(10) Aerodynamics relating to an aircraft's flight characteristics and performance in normal and abnormal flight regimes;

(11) Human factors;

(12) Aeronautical decision making and judgment; and

(13) Crew resource management to include crew communication and coordination.

§61.157 Flight proficiency.

(a) *General.* (1) The practical test for an airline transport pilot certificate is given for—

(i) An airplane category and single engine class rating.

(ii) An airplane category and multi-engine class rating.

(iii) A rotorcraft category and helicopter class rating.

(iv) A powered-lift category rating.

(v) An aircraft type rating.

(2) A person who is applying for an airline transport pilot practical test must meet—

(i) The eligibility requirements of §61.153; and

(ii) The aeronautical knowledge and aeronautical experience requirements of this subpart that apply to the aircraft category and class rating sought.

(b) *Aircraft type rating.* Except as provided in paragraph (c) of this section, a person who applies for an aircraft type rating to be added to an airline transport pilot certificate or applies for a type rating to be concurrently completed with an airline transport pilot certificate:

(1) Must receive and log ground and flight training from an authorized instructor on the areas of operation under this section that apply to the aircraft type rating;

(2) Must receive a logbook endorsement from an authorized instructor that certifies the applicant completed the training on the areas of operation listed under paragraph (e) of this section that apply to the aircraft type rating; and

(3) Must perform the practical test in actual or simulated instrument conditions, except as provided under paragraph (g) of this section.

(c) *Exceptions.* A person who applies for an aircraft type rating to be added to an airline transport pilot certificate