

(vii) Effects of vertical and horizontal windshear;

(viii) Characteristics and limitations of the ILS and runway lighting system;

(ix) Characteristics and limitations of the flight director system, auto approach coupler (including split axis type if equipped), auto throttle system (if equipped), and other required Category II equipment;

(x) Assigned duties of the second in command during Category II approaches, unless the aircraft for which authorization is sought does not require a second in command; and

(xi) Instrument and equipment failure warning systems.

(2) *Flight increment.* The following requirements apply to the flight increment of the practical test:

(i) The flight increment must be conducted in an aircraft of the same category, class, and type, as applicable, as the aircraft in which the authorization is sought or in a flight simulator that—

(A) Represents an aircraft of the same category and class, and type, as applicable, as the aircraft in which the authorization is sought; and

(B) Is used in accordance with an approved course conducted by a training center certificated under part 142 of this chapter.

(ii) The flight increment must consist of at least two ILS approaches to 100 feet AGL including at least one landing and one missed approach.

(iii) All approaches performed during the flight increment must be made with the use of an approved flight control guidance system, except if an approved auto approach coupler is installed, at least one approach must be hand flown using flight director commands.

(iv) If a multiengine airplane with the performance capability to execute a missed approach with one engine inoperative is used for the practical test, the flight increment must include the performance of one missed approach with an engine, which shall be the most critical engine, if applicable, set at idle or zero thrust before reaching the middle marker.

(v) If a multiengine flight simulator or multiengine flight training device is used for the practical test, the appli-

cant must execute a missed approach with the most critical engine, if applicable, failed.

(vi) For an authorization for an aircraft that requires a type rating, the practical test must be performed in coordination with a second in command who holds a type rating in the aircraft in which the authorization is sought.

(vii) Oral questioning may be conducted at any time during a practical test.

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#### § 61.68 Category III pilot authorization requirements.

(a) *General.* A person who applies for a Category III pilot authorization must hold:

(1) At least a private pilot certificate or commercial pilot certificate with an instrument rating or an airline transport pilot certificate;

(2) A type rating for the aircraft for which the authorization is sought if that aircraft requires a type rating; and

(3) A category and class rating for the aircraft for which the authorization is sought.

(b) *Experience requirements.* An applicant for a Category III pilot authorization must have at least—

(1) 50 hours of night flight time as pilot in command.

(2) 75 hours of instrument flight time during actual or simulated instrument conditions that may include not more than—

(i) A combination of 25 hours of simulated instrument flight time in a flight simulator or flight training device; or

(ii) 40 hours of simulated instrument flight time if accomplished in an approved course conducted by an appropriately rated training center certificated under part 142 of this chapter.

(3) 250 hours of cross-country flight time as pilot in command.

(c) *Practical test requirements.* (1) A practical test must be passed by a person who applies for—

(i) Issuance or renewal of a Category III pilot authorization; and

(ii) The addition of another type of aircraft to the applicant's Category III pilot authorization.

(2) To be eligible for the practical test for an authorization under this section, an applicant must—

(i) Meet the requirements of paragraphs (a) and (b) of this section; and

(ii) If the applicant has not passed a practical test for this authorization during the 12 calendar months preceding the month of the test, then that person must—

(A) Meet the requirements of §61.57(c); and

(B) Have performed at least six ILS approaches during the 6 calendar months preceding the month of the test, of which at least three of the approaches must have been conducted without the use of an approach coupler.

(3) The approaches specified in paragraph (c)(2)(ii)(B) of this section—

(i) Must be conducted under actual or simulated instrument flight conditions;

(ii) Must be conducted to the alert height or decision height for the ILS approach in the type aircraft in which the practical test is to be conducted;

(iii) Need not be conducted to the decision height authorized for Category III operations;

(iv) Must be conducted to the alert height or decision height, as applicable, authorized for Category III operations only if conducted in a flight simulator or flight training device; and

(v) Must be accomplished in an aircraft of the same category and class, and type, as applicable, as the aircraft in which the practical test is to be conducted or in a flight simulator that—

(A) Represents an aircraft of the same category and class, and type, as applicable, as the aircraft for which the authorization is sought; and

(B) Is used in accordance with an approved course conducted by a training center certificated under part 142 of this chapter.

(4) The flight time acquired in meeting the requirements of paragraph (c)(2)(ii)(B) of this section may be used to meet the requirements of paragraph (c)(2)(ii)(A) of this section.

(d) *Practical test procedures.* The practical test consists of an oral increment and a flight increment.

(1) *Oral increment.* In the oral increment of the practical test an applicant

must demonstrate knowledge of the following:

(i) Required landing distance;

(ii) Determination and recognition of the alert height or decision height, as applicable, including use of a radar altimeter;

(iii) Recognition of and proper reaction to significant failures encountered prior to and after reaching the alert height or decision height, as applicable;

(iv) Missed approach procedures and techniques using computed or fixed attitude guidance displays and expected height loss as they relate to manual go-around or automatic go-around, and initiation altitude, as applicable;

(v) Use and limitations of RVR, including determination of controlling RVR and required transmissometers;

(vi) Use, availability, or limitations of visual cues and the altitude at which they are normally discernible at reduced RVR readings including—

(A) Unexpected deterioration of conditions to less than minimum RVR during approach, flare, and rollout;

(B) Demonstration of expected visual references with weather at minimum conditions;

(C) The expected sequence of visual cues during an approach in which visibility is at or above landing minima; and

(D) Procedures and techniques for making a transition from instrument reference flight to visual flight during a final approach under reduced RVR.

(vii) Effects of vertical and horizontal windshear;

(viii) Characteristics and limitations of the ILS and runway lighting system;

(ix) Characteristics and limitations of the flight director system auto approach coupler (including split axis type if equipped), auto throttle system (if equipped), and other Category III equipment;

(x) Assigned duties of the second in command during Category III operations, unless the aircraft for which authorization is sought does not require a second in command;

(xi) Recognition of the limits of acceptable aircraft position and flight path tracking during approach, flare, and, if applicable, rollout; and

(xii) Recognition of, and reaction to, airborne or ground system faults or abnormalities, particularly after passing alert height or decision height, as applicable.

(2) *Flight increment.* The following requirements apply to the flight increment of the practical test—

(i) The flight increment may be conducted in an aircraft of the same category and class, and type, as applicable, as the aircraft for which the authorization is sought, or in a flight simulator that—

(A) Represents an aircraft of the same category and class, and type, as applicable, as the aircraft in which the authorization is sought; and

(B) Is used in accordance with an approved course conducted by a training center certificated under part 142 of this chapter.

(ii) The flight increment must consist of at least two ILS approaches to 100 feet AGL, including one landing and one missed approach initiated from a very low altitude that may result in a touchdown during the go-around maneuver;

(iii) All approaches performed during the flight increment must be made with the approved automatic landing system or an equivalent landing system approved by the Administrator;

(iv) If a multiengine aircraft with the performance capability to execute a missed approach with one engine inoperative is used for the practical test, the flight increment must include the performance of one missed approach with the most critical engine, if applicable, set at idle or zero thrust before reaching the middle or outer marker;

(v) If a multiengine flight simulator or multiengine flight training device is used, a missed approach must be executed with an engine, which shall be the most critical engine, if applicable, failed;

(vi) For an authorization for an aircraft that requires a type rating, the practical test must be performed in coordination with a second in command who holds a type rating in the aircraft in which the authorization is sought;

(vii) Oral questioning may be conducted at any time during the practical test;

(viii) Subject to the limitations of this paragraph, for Category IIIb operations predicated on the use of a fail-passive rollout control system, at least one manual rollout using visual reference or a combination of visual and instrument references must be executed. The maneuver required by this paragraph shall be initiated by a fail-passive disconnect of the rollout control system—

(A) After main gear touchdown;

(B) Prior to nose gear touchdown;

(C) In conditions representative of the most adverse lateral touchdown displacement allowing a safe landing on the runway; and

(D) In weather conditions anticipated in Category IIIb operations.

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**§ 61.69 Glider and unpowered ultralight vehicle towing: Experience and training requirements.**

(a) No person may act as pilot in command for towing a glider or unpowered ultralight vehicle unless that person—

(1) Holds at least a private pilot certificate with a category rating for powered aircraft;

(2) Has logged at least 100 hours of pilot-in-command time in the aircraft category, class and type, if required, that the pilot is using to tow a glider or unpowered ultralight vehicle;

(3) Has a logbook endorsement from an authorized instructor who certifies that the person has received ground and flight training in gliders or unpowered ultralight vehicles and is proficient in—

(i) The techniques and procedures essential to the safe towing of gliders or unpowered ultralight vehicles, including airspeed limitations;

(ii) Emergency procedures;

(iii) Signals used; and

(iv) Maximum angles of bank.

(4) Except as provided in paragraph (b) of this section, has logged at least three flights as the sole manipulator of the controls of an aircraft towing a glider or unpowered ultralight vehicle simulating towing flight procedures while accompanied by a pilot who meets the requirements of paragraphs (c) and (d) of this section;