(v) Use of visual clues, their availability or limitations, and altitude at which they are normally discernible at reduced RVR readings;
(vi) Procedures and techniques related to transition from nonvisual 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 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 applicant 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 a flight 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.


§ 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 altitude 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 re-
quire a second in command;
(x) Recognition of the limits of ac-
ceptable aircraft position and flight
path tracking during approach, flare,
and, if applicable, rollout; and
(xi) Recognition of, and reaction to,
airborne or ground system faults or ab-
normalities, particularly after passing
alert height or decision height, as ap-
plicable.
(2) Flight increment. The following re-
quirements apply to the flight incre-
ment of the practical test—
(i) The flight increment may be con-
ducted in an aircraft of the same cat-
egory and class, and type, as applica-
ble, as the aircraft for which the au-
thorization 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 au-
thorization is sought; and
(B) Is used in accordance with an ap-
proved course conducted by a training
center certificated under part 142 of
this chapter.
(ii) The flight increment must con-
sist 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 ma-
neuver;
(iii) All approaches performed during
the flight increment must be made
with the approved automatic landing
system or an equivalent landing sys-
tem approved by the Administrator;
(iv) If a multiengine aircraft with the
performance capability to execute a
missed approach with one engine inop-
erative is used for the practical test,
the flight increment must include the
performance of one missed approach
with the most critical engine, if applica-
table, 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 exe-
cuted with an engine, which shall be
the most critical engine, if applicable,
failed;
(vi) For an authorization for an air-
craft that requires a type rating, the
practical test must be performed in co-
ordination with a second in command
who holds a type rating in the aircraft
in which the authorization is sought;
(vii) Oral questioning may be con-
ducted at any time during the practical
test;
(viii) Subject to the limitations of
this paragraph, for Category IIIb oper-
ations predicated on the use of a fail-
passive rollout control system, at least
one manual rollout using visual ref-
erece or a combination of visual and
instrument references must be exe-
cuted. The maneuver required by this
paragraph shall be initiated by a fail-
passive disconnect of the rollout con-
trol 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.

§ 61.69 Glider and unpowered ultra-
light 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 a private, commercial or
airline transport 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 es-
ential to the safe towing of gliders or
unpowered ultralight vehicles, includ-
ing 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 while towing