and at an airport that is located more than 25 nautical miles from the airport where the applicant normally trains, which includes at least 3 takeoffs and 3 landings; and

(2) Three hours of flight training in the aircraft, that is appropriate to the aircraft category and class for which the course applies, in preparation for the practical test within 60 days preceding the date of the practical test.

(b) Each training flight must include a preflight briefing and a postflight critique of the student by the flight instructor assigned to that flight.

- (c) Areas of operation. Flight training must include the following approved areas of operation appropriate to the aircraft category and class rating for which the course applies:
- (1) For an airplane-single engine course:
 - (i) Preflight preparation;
 - (ii) Preflight procedures;
 - (iii) Airport operations;
- (iv) Takeoffs, landings, and goarounds;
 - (v) Performance maneuvers;
 - (vi) Ground reference maneuvers;
 - (vii) Navigation;
 - (viii) Stalls and slow flight;
 - (ix) Emergency operations; and
 - (x) Postflight procedures.
 - (2) For a rotorcraft-helicopter course:
 - (i) Preflight preparation;
 - (ii) Preflight procedures;
 - (iii) Airport and heliport operations;
- (iv) Hovering maneuvers;
- (v) Takeoffs, landings, and goarounds;
 - (vi) Performance maneuvers;
 - (vii) Navigation;
 - (viii) Emergency operations; and
 - (ix) Postflight procedures.
 - (3) For a rotorcraft-gyroplane course:
 - (i) Preflight preparation;
 - (ii) Preflight procedures;
 - (iii) Airport operations;
- (iv) Takeoffs, landings, and goarounds;
- (v) Performance maneuvers:
- (vi) Ground reference maneuvers;
- (vii) Navigation;
- (viii) Flight at slow airspeeds;
- (ix) Emergency operations; and
- (x) Postflight procedures.
- 5. Supervised pilot-in-command practice. Each approved course must include at least 3 hours of supervised pilot-in-command practice on the areas of operation listed in section 4.(c) of this appendix, that is appropriate to the aircraft category and class rating for which the course applies.
- 6. Stage checks and end-of-course tests.
- (a) Each student enrolled in a recreational pilot course must satisfactorily accomplish the stage

checks and end-of-course tests, in accordance with the school's approved training course, and must consist of the approved areas of operation of section 4 of this appendix for the aircraft category and class rating for which the course applies.

(b) Each student must demonstrate satisfactory proficiency prior to being endorsed to operate an aircraft in supervised PIC flight.

Appendix B—Private Pilot Certification Course

- 1. Applicability. This appendix prescribes the minimum curriculum for a private pilot certification course required under this part, for:
- (a) An airplane category—single-engine class.
- (b) An airplane category—multiengine class.
 - (c) A rotorcraft category—helicopter class.
 - (d) A rotorcraft category—gyroplane class.
 - (e) A powered-lift category.
 - (f) A glider category—nonpowered class.
 - (g) A glider category—powered class.(h) A lighter-than-air category—airship
- (i) A lighter-than-air category—balloon class.
- 2. Eligibility for enrollment. A person must have the following to enroll in the flight portion of the private pilot certification course:
 - (a) A student pilot certificate;
- (b) Except for course of training for a rating in a glider or balloon, hold at least a valid third-class medical certificate issued under part 67 of this chapter.
- (c) For a rating in a glider or a balloon, a signed and dated statement by the person certifying that the person has no known medical defect that makes the person unable to pilot a glider or balloon.
- 3. Aeronautical knowledge training. (a) Each approved course must include at least the aeronautical knowledge areas listed in section 3.(b) of this appendix, appropriate to the aircraft category and class rating, and must include at least:
- (1) 35 hours of training, if the course is for an airplane, rotorcraft, or powered lift category rating.
- (2) 15 hours of training, if the course is for a glider category rating.
- (3) 10 hours of training, if the course is for a lighter-than-air category with a balloon class rating
- (4) 35 hours of training, if the course is for a lighter-than-air category with an airship class rating.
- (b) Aeronautical knowledge areas.
- (1) The applicable Federal Aviation Regulations for private pilot privileges, limitations, and flight operations;
- (2) Accident reporting requirements of the National Transportation Safety Board;
- (3) The applicable subjects of the "Airman's Information Manual" and the appropriate FAA advisory circulars;
- (4) Åeronautical charts for VFR navigation using pilotage, dead reckoning, and radio aids;

- (5) Radio communication procedures;
- (6) The recognition of critical weather situations from the ground and in flight, windshear avoidance, and the procurement and use of aeronautical weather reports and forecasts:
- (7) The safe and efficient operation of aircraft, including collision avoidance, and recognition and avoidance of wake turbulence and windshear conditions;
- (8) The effects of density altitude on takeoff and climb performance;
 - (9) Weight and balance computations;
- (10) Principles of aerodynamics, powerplants, and aircraft systems;
- (11) If the course of training is for an airplane category or glider category rating, stall awareness, spin entry, spins, and spin recovery techniques;
- (12) Åeronautical decision making and judgment; and
 - (13) Preflight action that includes—
- (i) How to obtain information on runway lengths at airports of intended use, data on takeoff and landing distances, weather reports and forecasts, and fuel requirements;
- (ii) How to plan for alternatives if the planned flight cannot be completed; and
- (iii) Proper planning procedures for possible traffic delays.
- 4. Flight training. (a) Each approved course must include the following flight training on the areas of operation listed in section 4.(c) of this appendix, appropriate to the aircraft category and class rating for which the course applies, and must include:
- (1) For an airplane-single engine course. At least 35 hours of flight training (of which 20 hours must be with an authorized flight instructor and 5 hours must be supervised PIC training), on the approved areas of operation in section 4.(c)(1) of this appendix, and the training must include at least—
- (i) Except as provided in §61.111 of this chapter, 3 hours of cross-country flight training in a single engine airplane;
- (ii) Except as provided in §61.110 of this chapter, 3 hours of night flight training in a single engine airplane that includes—
- (A) One cross country flight over 100 nautical miles duration; and
- (B) Ten takeoffs and 10 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.
- (iii) Three hours of instrument flight training in a single engine airplane; and
- (iv) Three hours of flight training in preparation for the practical test in a single engine airplane, and must have been performed within 60 days preceding the date of the test.
- (2) For an airplane-multiengine course. At least 35 hours of flight training (of which 20 hours must be with an authorized flight instructor and 5 hours must be supervised PIC training), on the approved areas of operation in section 4.(c)(2) of this appendix, and the training must include at least—
- (i) Except as provided in § 61.111 of this chapter, 3 hours of cross-country flight training in a multiengine airplane;
- (ii) Except as provided in § 61.110 of this chapter, 3 hours of night flight training in a multiengine airplane that includes—
- (A) One cross country flight over 100 nautical miles duration; and