

APPENDIX A TO PART 141—RECREATIONAL PILOT CERTIFICATION COURSE

1. *Applicability.* This appendix prescribes the minimum curriculum required for a recreational pilot certification course under this part, for the following ratings:

- (a) Airplane single-engine.
- (b) Rotorcraft helicopter.
- (c) Rotorcraft gyroplane.

2. *Eligibility for enrollment.* A person must hold a student pilot certificate prior to enrolling in the flight portion of the recreational pilot certification course.

3. *Aeronautical knowledge training.* Each approved course must include at least 20 hours of ground training on the following aeronautical knowledge areas, appropriate to the aircraft category and class for which the course applies:

- (a) Applicable Federal Aviation Regulations for recreational pilot privileges, limitations, and flight operations;
- (b) Accident reporting requirements of the National Transportation Safety Board;
- (c) Applicable subjects in the “Aeronautical Information Manual” and the appropriate FAA advisory circulars;
- (d) Use of aeronautical charts for VFR navigation using pilotage with the aid of a magnetic compass;
- (e) Recognition of critical weather situations from the ground and in flight, windshear avoidance, and the procurement and use of aeronautical weather reports and forecasts;
- (f) Safe and efficient operation of aircraft, including collision avoidance, and recognition and avoidance of wake turbulence;
- (g) Effects of density altitude on takeoff and climb performance;
- (h) Weight and balance computations;
- (i) Principles of aerodynamics, powerplants, and aircraft systems;
- (j) Stall awareness, spin entry, spins, and spin recovery techniques, if applying for an airplane single-engine rating;
- (k) Aeronautical decision making and judgment; and

(1) Preflight action that includes—

(1) 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; and

(2) How to plan for alternatives if the planned flight cannot be completed or delays are encountered.

4. *Flight training.* (a) Each approved course must include at least 30 hours of flight training (of which 15 hours must be with a certificated flight instructor and 3 hours must be solo flight training as provided in section No. 5 of this appendix) on the approved areas of operation listed in paragraph (c) of this section that are appropriate to the aircraft

category and class rating for which the course applies, including:

(1) Except as provided in §61.100 of this chapter, 2 hours of dual flight training to and at an airport that is located more than 25 nautical miles from the airport where the applicant normally trains, with at least three takeoffs and three landings; and

(2) 3 hours of dual flight training in an 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 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) Flight training must include the following approved areas of operation appropriate to the aircraft category and class rating—

- (1) *For an airplane single-engine course:* (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Airport operations;
- (iv) Takeoffs, landings, and go-arounds;
- (v) Performance maneuvers;
- (vi) Ground reference maneuvers;
- (vii) Navigation;
- (viii) Slow flight and stalls;
- (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 go-arounds;
- (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 go-arounds;
- (v) Performance maneuvers;
- (vi) Ground reference maneuvers;
- (vii) Navigation;
- (viii) Flight at slow airspeeds;
- (ix) Emergency operations; and
- (x) Postflight procedures.

5. *Solo flight training.* Each approved course must include at least 3 hours of solo flight training on the approved areas of operation listed in paragraph (c) of section No. 4 of this appendix that are 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, consisting of the approved areas of operation listed in paragraph (c) of section

No. 4 of this appendix that are appropriate to the aircraft category and class rating for which the course applies.

(b) Each student must demonstrate satisfactory proficiency prior to receiving an endorsement to operate an aircraft in solo flight.

[Doc. No. 25910, 62 FR 16347, Apr. 4, 1997; Amdt. 141-9, 62 FR 40908, July 30, 1997]

APPENDIX B TO PART 141—PRIVATE PILOT CERTIFICATION COURSE

1. *Applicability.* This appendix prescribes the minimum curriculum for a private pilot certification course required under this part, for the following ratings:

- (a) Airplane single-engine.
- (b) Airplane multiengine.
- (c) Rotorcraft helicopter.
- (d) Rotorcraft gyroplane.
- (e) Powered-lift.
- (f) Glider.
- (g) Lighter-than-air airship.
- (h) Lighter-than-air balloon.

2. *Eligibility for enrollment.* A person must hold either a recreational pilot certificate, sport pilot certificate, or student pilot certificate before enrolling in the solo flight phase of the private pilot certification course.

3. *Aeronautical knowledge training.*

(a) Each approved course must include at least the following ground training on the aeronautical knowledge areas listed in paragraph (b) of this section, appropriate to the aircraft category and class rating:

- (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) Ground training must include the following aeronautical knowledge areas:

- (1) Applicable Federal Aviation Regulations for private pilot privileges, limitations, and flight operations;
- (2) Accident reporting requirements of the National Transportation Safety Board;
- (3) Applicable subjects of the "Aeronautical Information Manual" and the appropriate FAA advisory circulars;
- (4) Aeronautical charts for VFR navigation using pilotage, dead reckoning, and navigation systems;
- (5) Radio communication procedures;
- (6) 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) Safe and efficient operation of aircraft, including collision avoidance, and recognition and avoidance of wake turbulence;

(8) 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) Aeronautical 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; and

(ii) How to plan for alternatives if the planned flight cannot be completed or delays are encountered.

4. *Flight training.* (a) Each approved course must include at least the following flight training, as provided in this section and section No. 5 of this appendix, on the approved areas of operation listed in paragraph (d) of this section, appropriate to the aircraft category and class rating:

(1) 35 hours of training if the course is for an airplane, rotorcraft, powered-lift, or airship rating.

(2) 6 hours of training if the course is for a glider rating.

(3) 8 hours of training if the course is for a balloon rating.

(b) Each approved course must include at least the following flight training:

(1) *For an airplane single-engine course:* 20 hours of flight training from a certificated flight instructor on the approved areas of operation in paragraph (d)(1) of this section that includes 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) 3 hours of night flight training in a single-engine airplane that includes—

(A) One cross-country flight of more than 100-nautical-miles total distance; and

(B) 10 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 flight training in a single engine airplane on the control and maneuvering of a single engine airplane solely by reference to instruments, including straight and level flight, constant airspeed climbs and descents, turns to a heading, recovery from unusual flight attitudes, radio communications, and the use of navigation systems/facilities and radar services appropriate to instrument flight; and