

- (xii) Postflight procedures.
- (2) *For a multiengine airplane course:* (i) Preflight preparation;
  - (ii) Preflight procedures;
  - (iii) Airport and seaplane base operations;
  - (iv) Takeoffs, landings, and go-arounds;
  - (v) Performance maneuvers;
  - (vi) Ground reference maneuvers;
  - (vii) Navigation;
  - (viii) Slow flight and stalls;
  - (ix) Basic instrument maneuvers;
  - (x) Emergency operations;
  - (xi) Multiengine operations;
  - (xii) Night operations; and
  - (xiii) Postflight procedures.
- (3) *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;
  - (ix) Night operations; and
  - (x) Postflight procedures.
- (4) *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;
  - (x) Night operations; and
  - (xi) Postflight procedures.
- (5) *For a powered-lift 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) Ground reference maneuvers;
  - (viii) Navigation;
  - (ix) Slow flight and stalls;
  - (x) Basic instrument maneuvers;
  - (xi) Emergency operations;
  - (xii) Night operations; and
  - (xiii) Postflight procedures.
- (6) *For a glider course:* (i) Preflight preparation;
  - (ii) Preflight procedures;
  - (iii) Airport and gliderport operations;
  - (iv) Launches/tows, as appropriate, and landings;
  - (v) Performance speeds;
  - (vi) Soaring techniques;
  - (vii) Performance maneuvers;
  - (viii) Navigation;
  - (ix) Slow flight and stalls;
  - (x) Emergency operations; and
  - (xi) Postflight procedures.
- (7) *For a lighter-than-air airship 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) Emergency operations; and
  - (ix) Postflight procedures.
  - (8) *For a lighter-than-air balloon course:* (i) Preflight preparation;
    - (ii) Preflight procedures;
    - (iii) Airport operations;
    - (iv) Launches and landings;
    - (v) Performance maneuvers;
    - (vi) Navigation;
    - (vii) Emergency operations; and
    - (viii) Postflight procedures.
5. *Solo flight training.* Each approved course must include at least the following solo flight training:
- (a) *For an airplane single-engine course:* 5 hours of solo flight training in a single-engine airplane on the approved areas of operation in paragraph (d)(1) of section No. 4 of this appendix that includes at least—
    - (1) One solo 100 nautical miles cross country flight with landings at a minimum of three points and one segment of the flight consisting of a straight-line distance of more than 50 nautical miles between the takeoff and landing locations; and
    - (2) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.
  - (b) *For an airplane multiengine course:* 5 hours of flight training in a multiengine airplane performing the duties of a pilot in command while under the supervision of a certificated flight instructor. The training must consist of the approved areas of operation in paragraph (d)(2) of section No. 4 of this appendix, and include at least—
    - (1) One 100 nautical miles cross country flight with landings at a minimum of three points and one segment of the flight consisting of a straight-line distance of more than 50 nautical miles between the takeoff and landing locations; and
    - (2) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.
  - (c) *For a rotorcraft helicopter course:* 5 hours of solo flight training in a helicopter on the approved areas of operation in paragraph (d)(3) of section No. 4 of this appendix that includes at least—
    - (1) One solo 100 nautical miles cross country flight with landings at a minimum of three points and one segment of the flight consisting of a straight-line distance of more than 25 nautical miles between the takeoff and landing locations; and
    - (2) Three takeoffs and three landings to a full stop (with each landing involving a