- (7) Ground reference maneuvers;
- (8) Navigation;
- (9) Stalls and slow flight;
- (10) Basic instrument maneuvers;
- (11) Emergency operations;
- (12) Night operations, except as provided in § 61.110 of this part; and
 - (13) Postflight procedures.
- (g) Areas of operation for a glider category rating with a non-powered class rating. Areas of operation for a glider category rating with a nonpowered class rating are the following:
 - (1) Preflight preparation;
 - (2) Preflight procedures;
 - (3) Airport and gliderport operations;
 - (4) Launches and landings;
 - (5) Performance speeds;
 - (6) Soaring techniques;
 - (7) Performance maneuvers;
 - (8) Navigation;
 - (9) Stalls and slow flight;
 - (10) Emergency operations; and
 - (11) Postflight procedures.
- (h) Areas of operation for a glider category rating with a powered class rating. Areas of operation for a glider category rating with a powered class rating are the following:
 - (1) Preflight preparation;
 - (2) Preflight procedures;
 - (3) Airport and gliderport operations;
- (4) Takeoffs, landings, and goarounds;
 - (5) Performance speeds;
 - (6) Soaring techniques:
 - (7) Performance maneuvers;
 - (8) Navigation;
 - (9) Stalls and slow flight;
 - (10) Emergency operations; and
 - (11) Postflight procedures.
- (i) Areas of operation for a lighterthan-air category rating with an airship class rating. Areas of operation for a lighter-than-air category rating with an airship class rating are the following:
 - (1) Preflight preparation;
 - (2) Preflight procedures;
 - (3) Airport operations;
- (4) Takeoffs, landings, and goarounds;
 - (5) Performance maneuvers;
 - (6) Ground reference maneuvers;
 - (7) Navigation;
 - (8) Emergency operations; and
 - (9) Postflight procedures.
- (j) Areas of operation for a lighterthan-air category rating with a balloon class rating. Areas of operation for a lighter-than-air category rating with a balloon class rating are the following:
 - (1) Preflight preparation;
 - (2) Preflight procedures;
 - (3) Balloonport operations;
 - (4) Lift-offs and landings;
 - (5) Performance maneuvers;
 - (6) Navigation;
 - (7) Emergency operations; and
 - (8) Postflight procedures.

§ 61.109 Aeronautical experience.

- (a) A person who applies for a private pilot certificate with an airplane, rotorcraft, or powered-lift category rating must accomplish and log at least 40 hours of flight time that includes at least 20 hours of flight training time from an authorized flight instructor and 5 hours of supervised PIC flight time, on the approved areas of operation listed in § 61.107 of this part, and the training must include at least:
- (1) For an airplane single engine rating.
- (i) Three hours of cross-country flight training in a single engine airplane;
- (ii) Except as provided in §61.110 of this part, 3 hours of night flight training in a single engine airplane that includes—
- (A) One cross country flight of 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;

- (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; and
- (v) Supervised PIC flying in a single engine airplane, consisting of at least—
- (A) One supervised PIC cross-country flight of over 100 nautical miles, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 50 nautical miles between the takeoff and landing locations; and
- (B) 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.
 - (2) For an airplane multiengine rating.
- (i) Three hours of cross-country flight training in a multiengine airplane;
- (ii) Except as provided in § 61.110 of this part, 3 hours of night flight training in a multiengine airplane that includes—
- (A) One cross country flight of over 100 nautical miles duration; and
- (B) Ten takeoffs and ten 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 multiengine airplane;

- (iv) Three hours of flight training in preparation for the practical test in a multiengine airplane, and must have been performed within the 60-day period preceding the date of the test; and
- (v) Supervised PIC flying in a multiengine airplane, consisting of at least—

- (A) One supervised PIC cross-country flight of over 100 nautical miles, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 50 nautical miles between the takeoff and landing locations; and
- (B) 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
- (3) For a rotorcraft-helicopter rating.
- (i) Three hours of cross-country flight training in a helicopter;
- (ii) Except as provided in § 61.110 of this part, 3 hours of night flight training in a helicopter that includes—
- (A) One cross country flight of over 50 nautical miles duration; and
- (B) Ten takeoffs and ten 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 preparation for the practical test in a helicopter, and must have been performed within 60 days preceding the date of the test; and
- (iv) Supervised PIC flying in a helicopter, consisting of at least—
- (A) One supervised PIC cross-country flight of over 50 nautical miles, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 25 nautical miles between the takeoff and landing locations: and
- (B) 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.
- (4) For a rotorcraft-gyroplane rating.(i) Three hours of cross-country flight training in a gyroplane;
- (ii) Except as provided in § 61.110 of this part, 3 hours of night flight training in a gyroplane that includes—
- (A) One cross country flight of over 50 nautical miles duration; and
- (B) Ten takeoffs and ten 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 preparation for the practical test in a gyroplane, and must have been performed within the 60-day period preceding the date of the test; and
- (iv) Supervised PIC flying in a gyroplane, and consisting of at least—
- (A) One supervised PIC cross-country flight of over 50 nautical miles, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 25 nautical miles between the takeoff and landing locations; and
- (B) Three takeoffs and three landings to a full stop (with each landing