

- (11) Emergency procedures and equipment malfunctions;
- (12) Ground reference maneuvers;
- (13) Approaches to a landing with simulated engine malfunctions;
- (14) Go-arounds;
- (15) Approaches to the landing area;
- (16) Hovering and hovering turns; and
- (17) For multiengine powered-lifts, simulated one-engine-inoperative approaches and landings.
- (i) *Maneuvers and procedures for pre-solo flight training in a glider.* A student pilot who is receiving training for a glider rating or privileges must receive and log flight training for the following maneuvers and procedures:
 - (1) Proper flight preparation procedures, including preflight planning, preparation, aircraft systems, and, if appropriate, powerplant operations;
 - (2) Taxiing or surface operations, including runups, if applicable;
 - (3) Launches, including normal and crosswind;
 - (4) Straight and level flight, and turns in both directions, if applicable;
 - (5) Airport traffic patterns, including entry procedures;
 - (6) Collision avoidance, windshear avoidance, and wake turbulence avoidance;
 - (7) Descents with and without turns using high and low drag configurations;
 - (8) Flight at various airspeeds;
 - (9) Emergency procedures and equipment malfunctions;
 - (10) Ground reference maneuvers, if applicable;
 - (11) Inspection of towline rigging and review of signals and release procedures, if applicable;
 - (12) Aerotow, ground tow, or self-launch procedures;
 - (13) Procedures for disassembly and assembly of the glider;
 - (14) Stall entry, stall, and stall recovery;
 - (15) Straight glides, turns, and spirals;
 - (16) Landings, including normal and crosswind;
 - (17) Slips to a landing;
 - (18) Procedures and techniques for thermalling; and
 - (19) Emergency operations, including towline break procedures.
- (j) *Maneuvers and procedures for pre-solo flight training in an airship.* A stu-

- dent pilot who is receiving training for an airship rating or privileges must receive and log flight training for the following maneuvers and procedures:
 - (1) Proper flight preparation procedures, including preflight planning and preparation, powerplant operation, and aircraft systems;
 - (2) Taxiing or surface operations, including runups;
 - (3) Takeoffs and landings, including normal and crosswind;
 - (4) Straight and level flight, and turns in both directions;
 - (5) Climbs and climbing turns;
 - (6) Airport traffic patterns, including entry and departure procedures;
 - (7) Collision avoidance, windshear avoidance, and wake turbulence avoidance;
 - (8) Descents with and without turns;
 - (9) Flight at various airspeeds from cruise to slow flight;
 - (10) Emergency procedures and equipment malfunctions;
 - (11) Ground reference maneuvers;
 - (12) Rigging, ballasting, and controlling pressure in the ballonets, and superheating; and
 - (13) Landings with positive and with negative static trim.
- (k) *Maneuvers and procedures for pre-solo flight training in a balloon.* A student pilot who is receiving training in a balloon must receive and log flight training for the following maneuvers and procedures:
 - (1) Layout and assembly procedures;
 - (2) Proper flight preparation procedures, including preflight planning and preparation, and aircraft systems;
 - (3) Ascents and descents;
 - (4) Landing and recovery procedures;
 - (5) Emergency procedures and equipment malfunctions;
 - (6) Operation of hot air or gas source, ballast, valves, vents, and rip panels, as appropriate;
 - (7) Use of deflation valves or rip panels for simulating an emergency;
 - (8) The effects of wind on climb and approach angles; and
 - (9) Obstruction detection and avoidance techniques.
- (l) *Maneuvers and procedures for pre-solo flight training in a powered parachute.* A student pilot who is receiving training for a powered parachute rating or privileges must receive and log