



Pre-Solo Requirements

(and new student solo endorsement requirements)

- Pre-solo knowledge test and appropriate ground instruction of relevant items
 - Applicable regulations
 - Solo limitations
 - Airspace rules in the flight area for solo
 - Flight characteristics and operational limitations of specific airplane
 - Emergency procedures
 - Engine fire on startup and in flight
 - Electrical fire
 - Pitot-static blockages
 - Vacuum system failure
 - Icing
 - Alternator failure
 - Engine loss in flight and shortly after takeoff
- Flight training and satisfactory performance
 - Pre-flight preparation
 - Performance limitations, weather check, NOTAM check
 - Flight planning: fuel, altitude, frequencies
 - Powerplant operation
 - Aircraft systems
 - Other considerations (e.g., runway condition, frost, fog)
 - Taxiing and surface operations
 - Knowledge of airport layout, taxiways, frequencies
 - Runup checks
 - Runway selection and control positioning for wind
 - Radio calls, traffic avoidance



Pre-Solo Requirements, cont'd

- Takeoffs and landings
 - Normal and crosswind takeoff and landings
 - Slip to landing
 - Landings with flaps and no flaps,
 - Go-around procedures
- Flight basics and maneuvers
 - Straight and level flight, level-offs
 - Turns in both directions – including check for traffic
 - Climbs and climbing turns
 - Descents with and without turns – in both high and low drag configurations
 - Flight at various airspeeds from cruise to slow flight
 - Collision avoidance, windshear avoidance, wake turbulence avoidance
 - Airport traffic patterns, entries, and departure procedures
 - Ground reference maneuvers
 - Stall entries with various entries and configurations (power, airspeed, flaps)
 - Recovery from incipient and full stall
 - Simulated engine failures on and off-airport