
PRIVATE PILOT GLIDER TRAINING SYLLABUS

The following are requirements specified by the FAA for a private glider rating. Some items are knowledge requirements taught during a ground school or home study course. Other items are skill requirements taught during flight training. Some are combinations of skill and knowledge. Starred items are minimum solo requirements. Soaring sites may require additional solo items because of airspace restrictions, unique soaring conditions, and other factors. Refer to FARs and Practical Test Standards for complete requirements.

___ 1. FAR Part 1, 43, *61, *91, and 830.

- ___a. *Eligibility Requirements.
- ___b. *Medical requirements.
- ___c. *Personal logbook.
- ___d. FCC station license.
- ___e. Glider pilot certificates; privileges, and limitations.
- ___f. Glider and tow pilot recency of experience requirements.
- ___g. *Airworthiness and registration certificates.
- ___h. *Maintenance requirements and records.
- ___i. *General operating rules.
- ___j. *Flight rules.
- ___k. Accident reporting.
- ___l. FAA Advisory Circulars.

___ 2. Glider Flight Manual.

- ___a. *Operating limitations, equipment list.
- ___b. *Performance charts, tables and data.
- ___c. *Weight and balance.
- ___d. *Ballast and its effect on performance.

___ 3. * Glider Assembly, disassembly.

___ 4. Flight Preparation and Planning.

- ___ a. *National airspace system.
- ___ b. *Controlled airspace.
- ___ c. *Special use airspace.
- ___ d. En route checkpoints.
- ___ e. Go ahead points.
- ___ f. Using lift sources and speed between lift sources.
- ___ g. Terrain considerations.
- ___ h. Selecting landing areas.
- ___ i. Personal equipment.
- ___ j. Aeronautical Information Manual.
- ___ k. Navigation, aeronautical charts.
- ___ l. Cross country emergency procedures.

___ 5. Personal Equipment.

- ___ a. High altitude.
- ___ b. Varying terrain.
- ___ c. Long distances.
- ___ d. Climatic conditions.
- ___ e. Oxygen systems.
- ___ f. Parachutes.

___ 6. Flight Instruments and Associated Systems.

- ___ a. Magnetic compass.
- ___ b. *Yaw string.
- ___ c. *Airspeed indicator.
- ___ d. *Altimeter.
- ___ e. *Variometer.
- ___ f. Inclinator.
- ___ g. Total energy compensator.
- ___ h. Gyroscopic instruments.
- ___ i. Electrical system.
- ___ j. Landing gear.
- ___ k. Avionics

___ 7. Soaring Weather.

- ___a. *Recognition of critical weather situations and conditions suitable for soaring flight.
- ___b. *Basic VFR weather minimums.

___ 8. Pilot Weather Reports and Forecasts.

- ___a. Procurement and use of aeronautical weather reports.
- ___b. Area and terminal forecasts.
- ___c. Winds & temperature aloft.
- ___d. Severe weather watch bulletin.
- ___e. Surface analysis chart.
- ___f. Weather depiction chart.
- ___g. Radar summary chart.
- ___h. Composite moisture stability chart.
- ___i. Significant weather prognosis.
- ___j. Effect of density altitude and wind on performance.
- ___k. Severe weather outlook chart.
- ___l. SIGMET=s and AIRMET=s.
- ___m. NOTAM=s.
- ___n. PIREP=s.
- ___o. Wind shear reports.
- ___p. Making sound go-no-go decisions based on weather.

___ 9. Stability Charts.

- ___a. Pressure and temperature lapse rates.
- ___b. Atmospheric instability.
- ___c. Thermal index.
- ___d. Thermal production.
- ___e. Cloud formation and identification.
- ___f. Frontal weather.
- ___g. Other lift sources.

___ 10. Hazards Associated With Thunderstorms.

___ 11. Preflight.

- ___ a. *Line inspections.
- ___ b. *Tie down. Control lock and wheel chock removal.
- ___ c. *Ice and frost removal.
- ___ d. *Written checklists
- ___ e. *Flight controls
- ___ f. *Proper assembly & disassembly
- ___ g. *Personal equipment.
- ___ h. *Tow rope, weak links, towline inspection, releases.
- ___ i. *Launch equipment inspection - tow hitches, releases.
- ___ j. *Structural damage.
- ___ k. *Noting discrepancies.
- ___ l. *Ground handling.

___ 12. Launches, Aerotow and/or Ground tows. (This syllabus includes aerotow only.)

- ___ a. *Pre-takeoff checklists.
- ___ b. *Takeoff.
- ___ c. *Aerotow, including airspeeds.
- ___ d. *High or low tows.
- ___ e. *Signals.
- ___ f. *Safety precautions.
- ___ g. *Release procedures.
- ___ h. *Slack towline procedures.
- ___ i. Boxing the propwash.

___ 13. Aerotow, Abnormal Procedures.

- ___ a. *Towplane power loss during takeoff.
- ___ b. *Towplane power failure at altitude.
- ___ c. *Glider release failure.
- ___ d. *Towline break during takeoff.
- ___ e. *Glider and towplane release failure.
- ___ f. * Porpoising.

___ 14. Precision Maneuvering.

- ___ a. *Straight glides.
- ___ b. *Turns, shallow, medium, steep.
- ___ c. *Spirals.
- ___ d. *Flight at various airspeeds.
- ___ e. *Imminent forward and turning stalls.
- ___ f. *Full stalls, forward stalls.
- ___ g. *Collision avoidance.
- ___ h. *Ground reference maneuvers.
- ___ i. Spin entry, spins, spin recovery technique.

___ 15. Critical Performance Speeds.

- ___ a. *Never exceed speed.
- ___ b. *Minimum sink speed.
- ___ c. *Maneuvering speed.
- ___ d. *Rough air redline.
- ___ e. *Speed to fly.
- ___ f. *Best glide speed.

___ 16. Traffic Patterns.

- ___ a. *Co-existing traffic patterns.
- ___ b. *Rules.
- ___ c. *Pre-landing checklist.
- ___ d. *Collision avoidance.
- ___ e. *Wake turbulence
- ___ f. *Windshear avoidance.
- ___ g. Radio Communication Procedures.

___ 17. Normal Landings.

- ___ a. *Use of dive brakes, spoilers, and flaps.
- ___ b. *Accuracy approaches and landings.
- ___ c. *Faulty approaches.
- ___ d. *Side slips, forward slips, turning slips.

___ 18. *Crosswind Takeoffs and ___ * Landings.

___ 19. Downwind Landings.

___ 20. Off Field Landings.

___ 21. Emergency Procedures. Including

- ___ a. Descents with high drag devices
- ___ b. Equipment malfunctions.
- ___ c. *Towline break procedures.

___ 22. Exercising Judgment.

- ___ a. Aeronautical decision making and judgment.

___ 23. Soaring Techniques.

- ___ a. *Thermal Soaring.
- ___ b. *Ridge and slope soaring.
- ___ c. Wave soaring.
- ___ d. Mountain soaring.
- ___ e. *Convergence soaring

- ___ 24. Recovery From Unusual Attitudes.
 - ___ a. High speed spirals.
 - ___ b. Excessive bank angles.
 - ___ c. Excessive pitch angles.
 - ___ d. Crossed control stalls.
 - ___ e. High sink rates.

- ___ 25. Medical Factors.

- ___ 26. Pre-Solo Written Test

- ___ 27. Flight Test.
 - ___ a. Flight test requirements.
 - ___ b. Written test requirements.
 - ___ c. Use of distractions during flight test.

ADDITIONAL FLIGHT MANEUVERS

- ___ Control functions
- ___ Yaw string
- ___ Use of trim
- ___ Aileron drag
- ___ Shallow, medium, and steep turns
- ___ Spins
- ___ Benign spiral mode
- ___ Low "G" maneuvers
- ___ Unassisted takeoffs
- ___ Landing pattern entry
- ___ Left and right hand landing patterns
- ___ Accuracy landings
- ___ Wheel brake
- ___ Rope breaks, land straight ahead
- ___ Rope breaks above 200 feet
- ___ No instrument flight
- ___ Radio procedures
- ___ Student training area
- ___ Flap usage