

kGBR Solo Phase Syllabus

First Flight

- Pre-flight inspection
- Locate aircraft documents and Operating Handbook
- Engine starting
- Taxiing procedures
- Normal and crosswind
- Checklist usage
- Engine ground check
- Before take-off brief
- Area familiarization
- Four fundamentals
- Straight and level, turns, climbs and descents
- Level turns (medium)
- Use of primary flight controls
- Demonstration of relationship of pitch, power, trim and flaps
- Use of trim
- Effective scanning
- Non-towered radio communication
- Normal take-off and landing
- Parking and securing of aircraft

Airwork

- Level turns
- Medium and steep turns
- Climbs
- Best angle of climb, best rate of climb, cruise climb
- Climbing turns
- Descent
- Cruise descent, power-off glide with/without flaps
- Descending turns
- Level off from climbs and descents
- Left-turning tendencies
- Maneuvering during slow flight
- Stalls and recovery
- Power-off (approach to landing)
- Power-on (departure)
- Emergency procedures
- Steep Spiral to Landing
- Ground reference maneuvers (Turns around a point, S-turns)
- Traffic pattern procedures

- Entry, wind correction
- Go-arounds
- Take-off and landing
- Normal and cross-wind
- Forward slips to landing

Classroom Topics

- Aeronautical Decision Making
- Basic principles of flight
- Aerodynamics
- 4 forces of flight
- 3 axes of flight
- Aircraft stability
- Wing stalls and angle of attack
- Left-turning tendencies
- Spin awareness
- Ground reference maneuvers and wind correction
- Airplane instruments and systems
- Pitot-static, vacuum, airspeed indicator and V-speeds
- Power plant and systems
- Non-towered airport radio procedures
- Traffic pattern procedures
- Airport markings
- Collision avoidance, wind shear, wake turbulence
- Emergency procedures
- Cockpit Management
- Positive Exchange of Flight Controls
- Departure Briefing

