

BGA GLIDING TRAINING SYLLABUS

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1. The BGA Gliding Training Syllabus introduction

The requirements for the BGA Solo Certificate and Endorsements are detailed in Laws and Rules on the BGA website.

The BGA gliding syllabus prepares new glider pilots initially for first solo flight and subsequent supervised solo flying and moves on to post solo training that prepares new pilots for qualification under the Bronze Endorsement and Cross-Country Endorsement.

The syllabus describes theoretical knowledge and flight training element. It is expected that elements of theoretical knowledge are developed with student pilots during their flight training experience.

Student pilots are formally tested on theoretical knowledge ahead of completing the Bronze endorsement. Student pilot rules of the air and local airspace knowledge is assessed prior to first solo.

Flight training should be recorded on a suitable training record with additional detail describing progress recorded in the student pilot's logbook. The BGA publishes recommended training record cards as word and pdf documents for downloading and use by clubs. Hard copies can be requested from the BGA office.

All student pilots are encouraged to obtain a copy of the BGA Student Pilot Manual <u>https://members.gliding.co.uk/student-pilot-manual/</u>

2. Theoretical Knowledge

Student pilots are tested on theoretical knowledge ahead of completing the Bronze endorsement. Rules of the air and local airspace knowledge is assessed prior to first solo. Theoretical knowledge should be referred to throughout the student pilots flight training.

Subject	Detail
Air Law	Rules & regulations relevant to the certificate holder Rules of the air Airfield practices and procedures
General Aircraft Knowledge	Principles of operation of glider systems and instruments Operating limitations of gliders Relevant operational information described in the flight manual or other relevant documents
Flight Performance & Planning	Effects of loading and mass distribution on flight characteristics Mass and balance considerations Use and practical application of launching, landing & other performance data Pre-flight and en-route planning Appropriate airfield procedures Altimeter setting procedures Collision avoidance considerations and techniques
Human Performance & Limitations	Human performance relevant to the glider pilot
Meteorology	Application of elementary aeronautical meteorology Obtaining and use of meteorological information
Navigation	Practical aspects of visual air navigation techniques Use of aeronautical charts Airspace awareness & safety Altimetry
Operational Procedures	Use of aeronautical documentation such as NOTAMs, relevant aeronautical codes and abbreviations Different launch methods and associated procedures Appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather and other relevant operating hazards Soaring safety and protocols
Principles of Flight	Principles of flight relating to gliders
Use of Radio	Knowledge appropriate to gliding needs

To qualify for the Bronze endorsement, an appropriate level of theoretical knowledge must bedemonstrated in at least the following subjects:

3. Flight Training

The following flight training exercises should be completed by all pilots in advance of carrying out a Bronze flying test.

As the flight training progresses, the student pilot should be introduced and progressively be expected to consider and implement threat and error management techniques.

Exercise	Detail
Lookout	Technique & collision avoidance
Effects of Controls	Effects of elevator, rudder, aileron & flaps (if required) Adverse yaw Speed monitoring & control Co-ordination
Use of Trim	
The Straight Glide	Drift, track & heading
Turning	Entry, exit and maintenance Slip & skid Regaining a heading Steeper turns
Airbrakes (and/or Spoilers)	Effects
Approach Control	Normal Undershoot Overshoot
Landing	Final approach Round out Hold off Landing Use of wheel brake Cross wind landing

Circuit Planning	Reference point Normal circuit Modified circuit Effect of wind Height judgement
Launching (available launch method)	Equipment Launch speeds Safe launching techniques Launch failures Launch abandonment
Stalling	Symptoms 1G stalling Accelerated stalling Lack of effective elevator at stall Reduced G not reliable symptom of stalling Stall with wing drop
Spinning & Spiral Dives	Spinning – recognition & recovery Spiral dive – recognition & recovery 'Further spin' loss of control scenarios - recognition and recovery
Solo experience	Including normal take-offs, circuits and landings
Steeper Turns	45+ degrees angle of bank
Soaring	Safe practical conduct of thermal, wave or ridge soaring as appropriate (and required before a planned solo soaring flight)
Pre & Post Flight Operations	 Including Glider post assembly/rigging checks Pre-flight inspection including recording Obtaining NOTAMs Recording of flight time Glider parking/storage

The BGA Gliding Certificate with Solo endorsement is issued on application after the pilot has met the requirements to complete the first solo exercise.

The BGA Bronze endorsement is issued on application after the pilot has met the requirements including a theoretical knowledge and skills assessment.

4. Navigation and Field Landing Training

An appropriate level of theoretical knowledge and practical skill must be established through
training in the following subjects ahead of completing the Cross-Country Endorsement.

Exercise	Detail
Navigation – flight planning	Weather forecast and actual NOTAM and airspace consideration Map selection and preparation Route planning Radio frequencies Pre-flight administration Mass, balance and performance Alternative aerodromes Safety altitudes
Navigation – in flight	Lookout procedures Maintaining track and rerouting considerations Use of radio (where applicable) In flight planning Procedures for transiting regulated airspace or ATC liaison as required Uncertainty of position procedure Lost procedure Use of GPS moving map Joining, arrival and circuit procedures at another aerodrome Maximising cross-country performance Risk reduction and threat reaction
Field Landing	Gliding range Decision to land out Determination of wind direction Field selection, suitability and hazards Circuit and approach judgement Considerations for landing on slope

The BGA Cross-Country endorsement is issued on application after the pilot met the requirements including knowledge and skills assessment.

REFERENCE MATERIAL & SYLLABUS DEVELOPMENT

<u>The following publications should be referred to during the delivery of the BGA Gliding</u> Badge and Bronze & Cross-Country Endorsements syllabus of training:

- Laws and Rules BGA
- Instructors Manual BGA
- BGA Examining Standards BGA

<u>The following publications are recommended study material</u> for the Bronze & Cross-Country Endorsements

- Gliding BGA
- Bronze & Beyond John McCullagh

The following shall be referred to during development of this syllabus by the BGA:

- BGA Laws and Rules
- The Air Navigation Order
- ICAO Annex 1 The Glider Pilot Licence
- SFCL Requirements

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