BGA TRAINING ORGANISATION

SPL COURSE PROGRAMME INCLUDING COMPLETION CERTIFICATE

(FOR SPL NON-TMG)

V1.6 AUGUST 2025

CANDIDATE DETAILS

Candidate Full Name	
Candidate Date of Birth	
Gliding Club	
Phone number	
Email	

CONTENTS

1 - INTRODUCTION AND GENERAL INFORMATION

The BGA training organisation supports Part-Sailplane Flight Crew Licensing (SFCL) compliant training.

All SPL training is carried out in accordance with the BGA Training Organisation SPL training programme published on the BGA members website 'Training organisation' webpage.

Site

The BGA training organisation operates from BGA club airfields which are suitable for the training being carried out as assessed by the CFI.

The training instructor(s) and student(s) must have access to a dry, warm and light briefing and rest facility.

Personnel

The BGA Head of Training is responsible for ensuring that the BGA training organisation supplies guidance that is compliant with Part-SFCL and reasonably supports BGA member gliding clubs.

The gliding club CFI is responsible for ensuring that club training is delivered compliant with Part-SFCL and BGA requirements.

Instructors delivering the flight training for this training programme must hold a valid Flight Instructor (Sailplanes) certificate with the relevant launch privileges and BGA instructor membership.

Aircraft

All training aircraft used must hold a valid certificate of airworthiness and hold appropriate insurance.

2 – SAFETY

The BGA office is responsible for publication of the BGA Safety Management System (SMS) manual, which is available on the BGA members website (search Safety Management System).

Clubs are responsible for the safety of all training carried out at and from their site and for compliance with club and BGA incident and accident reporting requirements.

Instructors and student pilots must be directed to published club safety and operating requirements, which should be explained and referred to during training.

The student pilot should be encouraged to openly discuss safety related issues experienced during training in the context of a 'just culture'.

3 – THE SPL COURSE

The SPL flight instruction syllabus includes the principles of threat and error management (TEM) and covers:

- pre-flight operations, including verifying mass and balance, aircraft inspection and servicing, airspace and weather briefing
- rigging of sailplanes, including control surface connections
- aerodrome and traffic pattern operations, collision avoidance precautions and procedures
- control of the aircraft by external visual reference
- flight at high angle of attack (critically low air speeds), recognition of, and recovery from, incipient and full stalls and spins
- flight at critically high air speeds, recognition of, and recovery from spiral dive
- normal and crosswind take-offs in respect of the different launch methods
- normal and crosswind landings
- short field landings and out-landings: field selection, circuit and landing hazards and precautions
- cross-country flying using visual reference, dead reckoning and available navigation aids
- soaring techniques as appropriate to site conditions
- emergency actions
- considerations for soaring at high altitudes; and
- compliance with air traffic services procedures and communication procedures.

This training course is compliant with Part SFCL and includes the following theoretical knowledge and flight instruction:

Theoretical knowledge covers:

- air law
- human performance
- meteorology
- communications
- principles of flight
- operational procedures
- flight performance and planning
- aircraft general knowledge related to sailplanes
- navigation

The theoretical knowledge should be integrated with the flight training and the examination taken as experience of applying theoretical knowledge to flight training is gained. The Part SFCL theoretical knowledge topics are detailed at AMC1 SFCL.130 SPL and reproduced in appendix 1 below.

Flight instruction of at least 15 hours is required including at least:

- 10 hours of dual flight instruction (including dual flight navigation instruction)
- two hours of supervised solo flight time
- 45 launches or take-offs and landings
- one dual cross-country flight of at least 100km, which may be completed in a TMG

At least seven hours of the 15 hours must take place in sailplanes which are not TMGs. Three of those flight instruction hours in sailplanes which are not TMGs must be dual flight instruction.

For initial SPL training (that does not include training for TMG privileges) TMGs can be used for a maximum of 8 hours. It follows that all training exercises in this course must be completed without any TMG-specific manoeuvres. Gliding training in a TMG can be provided by FI(S) certificate holders who do not hold the TMG instructional privileges as specified in point SFCL.315(a)(4), provided that the instructor occupies the pilot seat from which all PIC functions can be executed and holds valid SPL TMG privileges. Out-landing training in a TMG may only be provided by an FI(S) who has been specifically trained to do so.

Example:

Six hours dual flight training in a K21, and four hours dual flight training in a TMG, and five hours solo under supervision in a K21 or single seat glider.

The Part SFCL flight training exercises are detailed at AMC2 SFCL.130 SPL and reproduced in appendix 1 below.

Delivering the flying training

The order of exercises detailed on the student pilot record card (see recording progress below) should be used primarily as a broad instructional sequencing guide; the demonstrations and practices need not necessarily be given in the order listed. The actual order and content will depend upon the following interrelated factors:

- the applicant's progress and ability
- the weather conditions affecting the flight
- the flight time available
- the instructional technique considerations
- the local operating environment; and
- the applicability of the exercises to the sailplane type.

At the discretion of the instructors, some of the exercises listed in the student pilot training record card may be combined and some other exercises may be completed in several flights.

Learning to operate the required systems and equipment, including audio variometer, radio, and electronic conspicuity device should be introduced progressively as the student pilot develops the necessary capacity.

Threat and Error Management (TEM)

Reference to TEM must be included for all flight exercises. As the training progresses, the student pilot should be taught to and be expected to consider TEM as part of their pre-flight preparation, including during solo flight under supervision. Note: distraction and/or interruption are significant hazards.

Recording progress

After each training flight or group of training flights, the FI(S) is expected to update the hard copy or electronic student pilot SPL training record card, with related comments usually included in the student pilot's logbook. Launches and hours should be recorded in the candidate's logbook based on club records.

The BGA minimum recommended student pilot SPL training record card is available on the members website 'Training Organisation' webpage.

The SPL training record card is designed to provide a practical breakdown of the required exercises. It should be retained at the club site where training is taking place (i.e. not held remotely by the student pilot). Note: a separate ground training record card is available on the BGA members website training organisation webpage.

The FI(S)'s should continuously assess student pilot progress. The CFI should maintain a broad overview of student progress and give advice where necessary.

Examination theoretical knowledge instruction (for example video briefings, lectures, self-study) should be documented using the training record card or an electronic equivalent. Examination results are recorded and certified on the SPL application form.

Where a candidate moves to another club during training, the training record card should be copied and retained by the original club. The original student pilot training record card should be transferred to the candidate's 'new' club via the CFI's.

Completed SPL training records and a copy of the signed completion certificate should be retained by the club in hard copy or electronic format.

First solo and student pilot motivation

Full spin training is optional prior to solo (an example might be when learning to glide where spin training is unavailable) and must be completed prior to the SPL skills test.

Before allowing applicants to undertake their first solo flight, the FI(S) should ensure that they can operate the required systems and equipment, including audio variometer, radio, and electronic conspicuity device.

The minimum age for solo is 14 and the pilot must meet the medical requirement to fly as pilot in command.

Following their first solo, the candidate should be encouraged by the supervising FI(S) to:

- apply for their BGA Gliding Certificate – this provides recognition, motivation, engagement with the BGA, and access to sporting badge claims, etc.
- be made aware of the need to seek instructor authorisation for further solo flight
- develop their experience flying solo under supervision, including for example obtaining FAI silver height and duration badges (which are added to the solo certificate)
- complete the remaining SPL training course exercises
- make themselves aware of the content of the SPL skills test

Before a first planned solo soaring flight, the relevant soaring training should have been completed.

Authorisation and supervision of solo flight by student pilots

Student pilots are likely to carry out a significant amount of solo flying during SPL training. Instructors are reminded of SFCL.125 SPL regarding authorisation and supervision of solo flight by a student pilot.

Where authorisation of solo flight is required, the BGA 'solo flight authorisation form' supports compliance with SFCL.125(a). The form is available on the BGA members website.

SPL course completion

Once training has been completed, the student pilot should be able to:

- complete all manoeuvres with smoothness and accuracy
- exercise good judgement and airmanship, and

- apply aeronautical knowledge and regulations as currently apply, and
- at all times maintain control of the sailplane such that the successful outcome of a procedure or manoeuvre in never seriously in doubt.

On completion of training, the CFI is to check the student pilot's training record including logbook recorded experience and complete the SPL course completion certificate declaration. The student pilot is to confirm on the SPL course completion certificate declaration that they are satisfied that they have completed the certified training.

Skill test

Following course completion, an SPL skill test should be arranged with a Flight Examiner (Sailplanes).

Applying for an SPL

On successful completion of the skill test, an SPL application form must be submitted to the BGA for subsequent licensing action by the CAA (SFCL.015 refers).

A copy of this completed SPL training course completion certificate and a copy of the SPL training record card (or electronic equivalent) should be retained by the student pilot's club that completed the training, either in hard copy or electronically.

Appendix 1 – SPL Flight Training Exercises (ref AMC2 SFCL.130)

1: Familiarisation with the sailplane

(i) characteristics of the sailplane
(ii) cockpit layout: instruments and equipment including radio
(iii) flight controls: stick, pedals, airbrakes, flaps (if available) and trim
(iv) cable release and undercarriage
(v) checklists, drills and controls
(vii) canopy jettison system

2: Emergency procedures

(i) use of safety equipment (parachute)
(ii) reaction to system failures and errors
(iii) bail-out procedure drills; and
(iv) parachute landing fall guidance

3: Preparation for flight

(i) pre-flight briefings
(ii) required documents checked and on board as required
(iii) equipment required for the intended flight
(iv) ground handling, movements, tow out, parking and security
(v) rigging including connection of control surfaces, daily inspection including positive control checks, pre-flight external and internal checks including those specified in the aircraft flight manual
(vi) verifying in-limits mass and balance
(vii) harness, seat or rudder pedal adjustments
(viii) pre-launch checks

4: Initial air experience

(i) area familiarisation
(ii) look-out procedures

5: Effects of controls
(i) look-out procedures
(ii) use of visual references
(iii) primary effects when laterally level and when banked
(iv) reference attitude and effect of elevator
(v) relationship between attitude and speed
(vi) effects of:
  (A) flaps (if available)
  (B) airbrakes or spoilers (as applicable)
  (C) undercarriage (if available)

6: Coordinated rolling to and from moderate angles of bank
(i) look-out procedures
(ii) further effects of aileron (adverse yaw) and rudder (roll)
(iii) coordination
(iv) rolling to and from moderate angles of bank and return to straight flight

7: Straight flying
(i) look-out procedures
(ii) maintaining straight flight
(iii) flight at critically high air speeds
(iv) demonstration of inherent longitudinal stability
(v) control of pitch, including use of trim
(vi) lateral level, direction and balance
(vii) air speed: monitoring and control

8: Turning
(i) look-out procedures;
(ii) demonstration and correction of adverse yaw
(iii) entry to turn (medium turns)
(iv) stabilised turns
(v) exiting turns
(vi) faults in the turn (slipping, skidding and speed control)
(vii) maintaining appropriate look-out procedures
(viii) turns on to selected headings and use of compass
(ix) use of instruments (slip ball or yaw string) for precision.

9a: Slow flight

Note: The objective is to improve the student's ability to recognise inadvertent flight at critically low speeds (high angle of attack) and to provide practice in maintaining the sailplane at a safe attitude and speed.
(i) HASSELL checks
(ii) introduction to characteristics of slow flight
(iii) controlled flight down to critically high angle of attack (slow air speed)

9b: Stalling

(i) HASSELL checks
(ii) pre-stall symptoms, recognition and recovery
(iii) stall symptoms, recognition and recovery in straight flight and in turn
(iv) recovery when a wing drops
(v) approach to stall in the approach and in the landing configurations
(vi) recognition and recovery from accelerated stalls

10: Recognition and avoidance of spins and spiral dives
Note (Exercise 10): If a sailplane suitable for spin training is not available, at least items (i), (ii), and (vii) and (viii) should be satisfactorily completed before solo.

(i) HASSELL checks
(ii) stalling and recovery at the incipient spin stage (stall with un-commanded roll/wing drop to about 45 ° and associated yaw)
(iii) recognition of entry into fully developed spins
(iv) recognition of full spins
(v) standard spin recovery (see note)
(vi) instructor induced distraction scenario during a spin entry
(vii) recognition of spiral dives
(viii) spiral dive recovery
(ix) differentiation between spins and spiral dives
Note: Consideration of manoeuvre limitations and the need to **refer to the aircraft flight manual** and mass and balance calculations.

11a to 11e Launch methods:

At least one of either Ex11a winch, Ex11b aerotow or Ex11c self-launch launch method must be taught containing all subjects below.

Any additional launch method 11a-11e may be taught containing all subjects below during or after completing the course. Refer to SFCL.155.

An 'eventualities' briefing that follows TEM principles should be conducted before every launch.

11a: Winch launch

(i) signals or communication before and during launch
(ii) use of the launching equipment
(iii) pre-take-off checks
(iv) into wind take-off
(v) crosswind take-off
(vi) safe and adequate profile of winch launch and limitations
(vii) release procedures
(viii) launch failure procedures simulated during the winch launch

11b: Aero tow

(i) signals or communication before and during launch
(ii) use of the launch equipment
(iii) pre-take-off checks
(iv) into wind take-off
(v) crosswind take-off
(vi) on tow: straight flight, turning and slip stream
(vii) out of position in tow and recovery
(viii) descending on tow (towing aircraft and sailplane)
(ix) release procedures
(x) launch failure and abandonment, simulated by releasing the cable at a suitable height, with and without response to a signal from the tow plane (see note), including *briefing* of straight ahead/other off-airfield landing options.

11c: Self-launch

(i) review of the flight manual for the sailplane used
(ii) engine extending and retraction procedures
(iii) engine starting and safety precautions

(iv) pre-take-off checks
(v) in-flight engine start checks
(vi) noise abatement procedures
(vii) checks during and after take-off
(viii) into wind take-off
(ix) crosswind take-off
(x) power failures and procedures, including partial power loss
(xi) abandoned take-off
(xii) maximum performance (short field and obstacle clearance) take-off
(xiii) short field take-off, soft field procedure or techniques and performance calculations

(xiv) in-flight retraction of engine and engine cooling
(xv) propeller drag
(xvi) effects of reduction and increase of power

(xvii) pitch nose-up tendency in case of engine shutdown (in case of over-wing propeller installation)
(xviii) approach with extended retractable engine inoperative (may be simulated by extended airbrakes)
(xix) decision process and reasons to terminate the soaring flight and to switch to powered flight
(xx) decision process and reasons for not starting the engine and to end the flight as a non-powered sailplane

11d: Car launch

(i) signals before and during launch
(ii) use of the launch equipment
(iii) pre-take-off checks
(iv) into wind take-off
(v) crosswind take-off
(vi) safe and adequate launch profile and limitations
(vii) release procedures
(viii) launch failure procedures

11e: Bungee launch

(i) signals before and during launch
(ii) use of the launch equipment
(iii) pre-take-off checks
(iv) into wind take-off

12: Circuit, approach and landing

(i) procedures for rejoining the circuit
(ii) collision avoidance, look-out techniques and procedures, radio calls
(iii) pre-landing checks: circuit procedures, downwind and base leg
(iv) effect of wind and wind shear on approach and touchdown speeds
(v) use of flaps (if applicable)
(vi) visualisation of a reference point
(vii) approach control and use of airbrakes
(viii) normal and crosswind approach and landing
(ix) short landing procedures or techniques, including sideslip
(x) balloon landing recovery (demonstration)

13: First solo flight

(i) required training record complete and medical requirement satisfied
(ii) instructor's briefing including limitations of the flight and use of required equipment
(ii) awareness of the local area and restrictions including airspace
(iv) effects of the centre of gravity (CG) on controllability of sailplane
(v) observation of flight and debriefing by instructor
Note: after solo, apply for the BGA Gliding Certificate

14: Advanced turning

(i) steep turns (45 ° or more)
(ii) stalling and spin avoidance in the turn and recovery
(iii) recoveries from unusual attitudes, including spiral dives

15a to 15c:

<u>At least one</u> of the three soaring techniques must be taught containing all subjects below.

Soaring opportunities occur during the student pilots flight training. Therefore, it is helpful if the student pilot is aware of the associated theory and TEM in advance.

The BGA 'Soaring Protocol' is to be discussed and applied during training.

15a: Thermal flying
(i) look-out procedures
(ii) detection and recognition of thermals
(iii) use of audio soaring instruments
(iv) joining a thermal and giving way
(v) flying safely in proximity to other sailplanes
(vi) centring in thermals
(vii) leaving thermals
(viii) considerations for use of oxygen (discussion)

15b: Ridge flying
(i) look-out procedures
(ii) practical safe application of ridge flying rules
(iii) optimisation of flight path
(iv) speed control
(v) wind shear
(vi) considerations for change of turning radius when high altitude mountain soaring (discussion only)

15c: Wave flying

(i) look-out procedures
(ii) considerations and techniques for safe wave access, use, and exit
(iii) speed limitations with increasing height
(iv) considerations for use of oxygen (discussion if conditions for use unavailable)

16: Out-landings (normally completed in a TMG)
(i) gliding range
(ii) restart procedures (only for self-launching and self-sustaining sailplanes)
(iii) decision process to outland
(iv) selection of landing area
(v) circuit and approach judgement and key positions
(vi) circuit and approach procedures
(vii) actions after landing
(viii) determination of wind direction
(ix) selection of landing direction
(x) considerations for landing on sloped landing surfaces

Notes re exercises 17a - 17c.

A dual training cross-country flight of 100km is required prior to and during which the student pilot is required to satisfactorily demonstrate the knowledge and skills acquired during exercises 17a, 17b and 17c.

Exercises 17b and 17c may be completed in a TMG.

17a: Flight planning
(i) weather forecast and actuals
(ii) notices to airmen (NOTAMs) and airspace considerations
(iii) map selection and preparation, including GPS moving map considerations
(iv) route planning
(v) radio frequencies (if applicable)
(vi) pre-flight administrative procedure, including preparation of additional required equipment, as applicable (e.g. life vest, personal locator beacon)
(vii) ICAO flight plan where required
(viii) mass and performance
(ix) mass and balance
(x) alternate aerodromes and landing areas
(xi) safety altitudes

17b and 17c: In-flight navigation & cross-country techniques
(i) lookout procedures
(ii) maintaining track and re-routing considerations using map and, separately, GPS moving map
(iii) use of additional equipment where required including use of radio and phraseology (if applicable)
(iv) in-flight planning
(v) procedures for transiting regulated airspace or ATC liaison (where required)
(vi) uncertainty of position procedure and lost procedure
(vii) maximising potential cross-country performance
(viii) risk reduction and threat response
(ix) joining, arrival and circuit procedures at remote aerodrome
(x) completion of a dual training cross-country flight

Appendix 2 - SPL Theoretical Knowledge Topics (ref AMC1 SFCL.130)	
1	AIR LAW AND ATC PROCEDURES
1.1.	International law: conventions, agreements and organisations
1.2.	Airworthiness of aircraft
1.3.	Aircraft nationality and registration marks
1.4.	Personnel licensing
1.5.	Rules of the air
1.6.	Procedures for air navigation: aircraft operations
1.7.	Air traffic regulations: airspace structure
1.8.	Air traffic service (ATS) and air traffic management (ATM)
1.9.	Aeronautical information services (AIS)
1.10.	Aerodromes, external take-off sites
1.11.	Accident reporting
1.12.	National law
1.13.	ICAO Flight Plans
2.	HUMAN PERFORMANCE
2.1.	Human factors: basic concepts
2.2.	Basic aviation physiology and health maintenance
2.3.	Basic aviation psychology
2.4.	Use of oxygen
3.	METEOROLOGY
3.1.	The atmosphere
3.2.	Wind
3.3.	Thermodynamics
3.4.	Clouds and fog
3.5.	Precipitation
3.6.	Air masses and fronts
3.7	Pressure systems
3.8.	Climatology
3.9.	Flight hazards
3.10.	Meteorological information
4.	COMMUNICATIONS
4.1.	Definitions
4.2.	VFR communications
4.2.1.	VFR communication at uncontrolled airfields
4.2.2.	VFR communication at controlled airfields
4.2.3.	VFR communication with ATC (en-route)
4.3.	General operating procedures
4.4.	Relevant weather information terms (VFR)
4.5.	Action required to be taken in case of communication failure
4.6.	Distress and urgency procedures
4.7.	General principles of VHF propagation and allocation of frequencies
5.	PRINCIPLES OF FLIGHT
5.1.	Aerodynamics (airflow)
5.2.	Flight mechanics
5.3.	Stability
5.4.	Control
5.5.	Limitations (load factor and manoeuvres)
5.6.	Stalling and spinning
5.7	Spiral dive
6.	OPERATIONAL PROCEDURES
6.1.	General requirements

6.2.	Launch methods
6.3.	Soaring techniques
6.4.	Circuits and landing
6.5.	Outlanding
6.6.	Special operational procedures and hazards
6.7.	Emergency procedures
6.8	Emergency parachute operation and landing
7.	AIRCRAFT GENERAL KNOWLEDGE, AIRFRAME AND SYSTEMS AND EMERGENCY EQUIPMENT
7.1.	Airframe
7.2.	System design, loads and stresses
7.3.	Landing gear, wheels, tyres and brakes
7.4.	Mass and balance
7.5.	Flight controls
7.6.	Instruments
7.7.	Rigging of aircraft, connection of control surfaces
7.8.	Manuals and documents
7.9.	Airworthiness and maintenance
7.10.	Airframe, engines and propellers
7.11	Water ballast systems
7.12	Batteries (performance and operational limitations)
7.13	Emergency parachutes
8.	NAVIGATION
8.1.	Basics of navigation
8.2.	Magnetism and compasses
8.3.	Charts
8.4.	Dead reckoning navigation
8.5.	In-flight navigation
8.6.	Use of GNSS
8.7.	Use of ATS
8.8	Flight planning and task setting
8.9	Flight monitoring and in-flight re-planning

SPL Training Course Completion Certificate Declaration

I certify that (full name) ……..

has completed the BGA Sailplane Pilot Licence (non-TMG) training course including the theoretical knowledge examinations (results of which are certified on the SPL application form).

The sailplane types used during training were: ……

……

The training consisted of……flying hours and……launches, of which

…….flying hours were completed in TMGs.

I certify that I have checked that the student pilot's flight training has been correctly recorded.
I confirm that the student pilot has completed at least 15hrs of instruction including at least:

- 10 hours of dual flight instruction (including dual flight navigation instruction)
- two hours of supervised solo flight time
- 45 launches or take-offs and landings
- one dual cross-country flight of at least 100km, which may be completed in a TMG

The candidate is ready for a skill test by a Flight Examiner (Sailplanes).

CFI signature: CFI name:

Club: Date:

Candidate statement

I agree that I (name) ……..

have completed the course of training for the Sailplane Pilot Licence (non-TMG) as described above.

Signature: Date:

A copy of this completed course completion certificate along with the completed student pilot training record card should be retained by the club completing the training.