

The Gliding Federation of Australia Inc. trading as Gliding Australia



TRAINING MANUAL

Revision 1
December 2023

C4 / 1-13, The Gateway
Broadmeadows VIC 3045

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All references to Gliding Australia in this document means the Gliding Federation of Australia Incorporated

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1 REVISION HISTORY

1.1. Amendment Procedures

Amendments will be promulgated by the Accountable Manager in conjunction with the Head of Operations and will be published online as a complete revised document. All nominated key position holders will be advised of approved published revisions. The Gliding Australia website online version will be the approved revision. Printed documents should be checked against the online revision to ensure the approved revision is used.

1.2. Original Document History

Revision No 1

	Prepared	Approved	Control
Signed	David Boulter, Executive Manager, Operations	Gliding Australia Board	EMO
Date			
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1.3. Record of Amendments

Revision No

	Prepared	Approved	Control
Signed			
Date			
Précis of changes			
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Gliding Australia Feedback/Change Proposal Form

Document Title: Training Manual	Tracking Details (Office use only)	
	Number:	Date Received:
Name of person submitting change proposal:		
Email Address:	Phone:	Membership Number:
What should be changed? (Include Section or Chapter reference if for a document. Attachments if required.)		
Why? Description and Reason for change: (Please include brief description and supporting comments as to why the change is needed, or the new initiative or the opportunity for change. Attachments if required.)		
Sources for supporting data or details that may assist the review: (Attachments if required.)		
Benefits (How will the proposed change, new initiative or opportunity benefit members or improve compliance or safety?)		
<p>NOTE: Please ensure a clear description of the issue / opportunity has been given, supporting data if available has been identified and / or attached.</p> <p>This form may be sent to Gliding Australia by the following means:</p> <p>Email: documents@glidingaustralia.org</p> <p>Mail: Gliding Australia, C4/1-13 The Gateway, Broadmeadows, VIC 3047</p> <p>NOTE: Gliding Australia Management of Change Manual (MCM) applies</p>		

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3 INTRODUCTION

Gliding Australia is a CASA Approved Self-administering Aviation Organisation (ASAO) under [Civil Aviation Safety Regulations 1998](#) (CASR) Part 149.

Gliding Australia consists of a central organisation, supporting a federation of Regional Associations and gliding clubs. Gliding is both a recreational aviation pursuit and competitive sport.

The role of Gliding Australia is to provide a framework for safe gliding operations and airworthiness, specified in the Exposition and supporting Manuals.

This Training Manual outlines the knowledge, skills and attitudes for training courses delivered by Gliding Australia Approved Training Organisations (ATOs).

This document will be reviewed annually by the GFA Operations Panel and amendments approved in accordance with the Gliding Australia's Change Management procedures as required by Regulation subpart 149.C.

4 OVERVIEW

The Training Manual describes the training for Glider Pilot Certificate, Basic Aerobatics, Advanced Aerobatics, Ridge Soaring, Wave Soaring, Instructor training and low-level finish training.

5 DEFINITIONS

For the purpose of these requirements, the following definitions shall apply:

'Aerobatic flight' means an intentional manoeuvre involving an abrupt change in a sailplane's attitude, an abnormal attitude or abnormal acceleration, not necessary for normal flight or for instruction for certificates or ratings other than the aerobatic rating;

'Aircraft' means any machine which can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

'Air experience flight' means any air operation with a sailplane against remuneration or other valuable consideration consisting of an air tour of short duration for the purpose of attracting new trainees or new members, performed by a training organisation.

'Approved self-administering organisation (ASAO)' means an organisation approved by CASA under CASR Part 149 to carry out an aviation self-administration function.

'Assessment of competence' means the demonstration of skill, knowledge and attitude as appropriate to a learning unit.;

'Competency' means a combination of skills, knowledge and attitude required to perform a task to the prescribed standard. Standards of competency are defined in Appendix 9.

'Critical phases of flight' means take-off run, take-off flight path, final approach, missed approach, landing, including landing roll, and any other phases of flight which the pilot-in-command determines as critical for the safe operation of the sailplane;

'Cross-country flight' means a flight along a route during which the pilot uses geometry, topography, or radio navigation aids to determine the aircraft's position and course.

'Dual instruction time' means flight time or instrument ground time during which a person is receiving flight instruction from a properly authorised instructor.

'Error' means an action or inaction taken by the flight crew which leads to deviations from organisational or flight intentions or expectations.

'Error management' means the process of detecting and responding to errors with countermeasures which reduce or eliminate the consequences of errors and mitigate the probability of errors or undesired aircraft states.

'Flight simulation training device (FSTD)' means a device for the training of pilots that artificially re-creates aircraft flight and the environment in which it flies. Sailplane FSTDs are rudimentary, but are useful for practicing aircraft control, procedures, checklists, emergencies, etc. for student pilots. However, as sailplane simulators are not accredited, simulator time cannot substitute for actual flight time in a sailplane.

'Flight time' means:

- a) for self-launch sailplanes and touring motor gliders, the total time from the moment an aircraft first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight;
- b) for sailplanes, the total time from the moment the sailplane commences the ground run in the process of taking off until the moment the sailplane finally comes to a rest at the end of flight;

'Low-level finish' means a circuit entry and landing technique where the sailplane descends below 500 ft above ground level, within 3 nautical miles of an aerodrome, with sufficient kinetic energy to enable the sailplane to join the circuit at a height above ground level that is sufficient for a safe circuit and landing to be conducted.

'Operating site' means a site, other than an aerodrome, selected by the pilot-in-command or the operator for landing or take-off;

'Powered sailplane' means a sailplane equipped with one or more engines having, with engine(s) inoperative, the characteristics of a sailplane;

'Proficiency check' means the demonstration of skill for the purpose of complying with the recency requirements as established in the Regulations, and including examinations as may be required;

'Renewal' (of, e.g. a rating or certificate) means the administrative action taken after a rating or certificate has lapsed for the purpose of renewing the privileges of the rating or certificate for a further specified period consequent upon the fulfilment of specified requirements.

'Revalidation' (of, e.g. a rating or certificate) means the administrative action taken within the period of validity of a rating or certificate which allows the holder to continue to exercise the privileges of a rating or certificate for a further specified period consequent upon the fulfilment of specified requirements.

'Sailplane' means a heavier-than-air aircraft that is supported in flight by the dynamic reaction of the air against its fixed lifting surfaces, the free flight of which does not depend on an engine;

'Skill test' means the demonstration of skill for the purpose of issuing a certificate or rating, or extension of a privilege, including oral examinations as may be required;

'Solo flight' means a flight during which a student pilot is the sole occupant of an aircraft;

'Threat' means events or errors which occur beyond the influence of the flight crew, increase operational complexity and which must be managed to maintain the margin of safety.

'Threat management' means the process of detecting and responding to the threats with countermeasures which reduce or eliminate the consequences of threats, and mitigate the probability of errors or undesired aircraft states.

'Touring Motor Glider' (TMG) means a specific class of powered sailplanes that has an integrally mounted, non-retractable engine and a non-retractable propeller. It shall be capable of taking off and climbing under its engine power according to its flight manual.

6 GLIDER PILOT CERTIFICATE (GPC) TRAINING

6.1. Training course and experience requirements

6.1.1. Applicants for a GPC shall complete a training course at an Approved Training Organisation which covers the 44 Units of Competency listed below and shall include:

- (a) theoretical knowledge as specified at paragraph 6.2; and
- (b) practical training as specified at paragraph 6.2.3:

Syllabus Item	AEI	(L1, L2, L3)	Silver Coach
1. Lookout awareness	✓	✓	
2. Ground handling, signals	✓	✓	
3. Pre-flight preparation	✓	✓	
4. Orientation, sailplane stability	✓	✓	
5. Primary effects of controls	✓	✓	
6. Aileron drag, rudder co-ordination	✓	✓	
7. Straight flight, various speeds, trim	✓	✓	
8. Sustained turns, all controls	✓	✓	
9. Lookout scan procedures		✓	
10. Use of ancillary controls		✓	
11. Introduction to Soaring		✓	✓
12. Slow flight, stalling		✓	
13. Launch and release		✓	
14. Take-off		✓	
15. Break-off and Circuit Planning		✓	
16. Circuit joining and execution		✓	
17. Stabilised approach and landing		✓	
18. Spin/Spiral Dive avoidance and recovery		✓	
19. Crosswind take-off and landing		✓	
20. Launch emergencies		✓	
21. Radio use and endorsement		✓	
22. Use of Situational Awareness Aids (FLARM/ADS-B/Radio)		✓	✓
23. Rules of the air		✓	
24. Human Factors and Pilot Limitations		✓	
25. Threat and Error Management		✓	
26. Assessment of competence for First Solo		L1 & L2	
27. Advanced aerotowing		✓	
28. Side slipping		✓	
29. Steep turns		✓	
30. Thermal centring techniques		✓	✓
31. Thermal entry		✓	✓
32. Soaring with other gliders		✓	✓
33. Thermal sources and structure			✓
34. Outlanding planning, demonstration and execution		✓	

Syllabus Item	AEI	(L1, L2, L3)	Silver Coach
35. Flight preparation, sailplane, trailer and pilot		✓	✓
36. Navigation and airspace		✓	✓
37. Passenger carrying		✓	
38. Meteorology and flight planning			✓
39. Advanced soaring instruments and flight computers			✓
40. Cruising, speed to fly, height bands and thermal selection			✓
41. Demonstrated cross country capability			✓
42. Daily Inspections, Pilot Maintenance limits, DI Certificate		DI Examiner	
43. Independent operator responsibilities		✓	
44. Glider Pilot Certificate (application authorised)		CFI	

6.2. Theoretical knowledge instruction for the GPC

6.2.1. General

The training should cover aspects related to non-technical skills in an integrated manner, taking into account the particular risks associated with the certificate and the activity. The theoretical knowledge instruction provided by the Approved Training Organisation (ATO) should include a certain element of formal classroom work but may also include other methods of delivery — for example, interactive video, slide or tape presentation, computer-based training and other media distance-learning courses. The training organisation responsible for the training must check whether all the appropriate elements of the training course of theoretical knowledge instruction have been completed to a satisfactory standard before recommending the applicant for the issue of a certificate.

6.2.2. Syllabus

The following table contains the syllabus for theoretical knowledge instruction for the GPC:

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
1	1. Lookout Priority	Describe: <ul style="list-style-type: none"> the priority of lookout to avoid collisions through see and avoid; the potential collision risks in flight; the use of radio for alerted see-and-avoid; Situational Awareness at all times in flight; the risks of excessive focus on instruments and devices.
	2. Application of Lookout	Describe: <ul style="list-style-type: none"> the importance of checking airspace before commencing any manoeuvre.
	3. Collision Avoidance	Describe: <ul style="list-style-type: none"> the rules of the air applicable to aircraft safe separation (head to head actions, give way to the right, overtaking on the right, no flying over the top of another aircraft).

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
2	1. Control, move and secure the aircraft on the ground.	Describe: <ul style="list-style-type: none"> The boundaries between the runways, operational and non-operational areas. The responsibilities of a person on a wing tip to steer the sailplane. The concept of a sterile environment.
	2. Use the standard ground signals.	Describe: <ul style="list-style-type: none"> Who can stop a launch.
	3. Correctly perform wing tip runner and hook-on duties.	Describe: <ul style="list-style-type: none"> Correct tow-rope and weak link configuration for launch. Correct radio calls, runway and airspace clearance requirements for launch.
3	1. Access required information before flight.	Describe: <ul style="list-style-type: none"> The information available from: <ul style="list-style-type: none"> Airfield Procedures and radio requirements. The Maintenance Release. Sailplane Placards. Meteorological resources. How this information applies to the flight.
	2. Use the aircraft documentation.	Describe: <ul style="list-style-type: none"> the Weight and Balance requirement for the flight given the flight crew weights. For a powered sailplane calculate: <ul style="list-style-type: none"> Take-off and landing performance. Forward and cross wind limits. Take-off distance.
	3. Inspect the aircraft	Describe: <ul style="list-style-type: none"> the difference between a pre-flight and a daily inspection (DI).
	4. Identify and operate basic instruments	Describe: <ul style="list-style-type: none"> Basic instruments (ASI, Altimeter, Variometer, Radio, FLARM). Need for looking outside the cockpit and not fixated on instruments.
	5. Confirm Cockpit Safety	Describe: <ul style="list-style-type: none"> The canopy operation & canopy jettison system. Ventilation controls and their operation.
	6. Conduct Pre-Flight Checks	Describe: <ul style="list-style-type: none"> The need for a sterile environment during pre-launch checks. The action to take if a check is interrupted.
	7. Prepare and fit the Parachute (when required)	Describe: <ul style="list-style-type: none"> The steps to deploy the parachute in an emergency. How to deploy the parachute.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
4	2. Sailplane stability.	Describe: <ul style="list-style-type: none"> The horizon as the primary attitude reference. Stability in all 3 axes/planes. Positive stability in Pitch and Yaw. Neutral stability in Roll. Hands off stability. Lateral damping.
	3. Knowledge of basic sailplane aerodynamics and components.	Describe: <ul style="list-style-type: none"> Basic sailplane aerodynamics. The principles of Lift, Weight, Drag and Forward Flight. Three axes: pitch, roll and yaw. The aircraft's flying surfaces and ancillary equipment.
5	1. Effects of controls – general	Describe: <ul style="list-style-type: none"> The need for aircraft controls. How to use aircraft attitude as a reference. The primary aerodynamic effect of each flight control and the resultant force on the aircraft. The type of stability encountered in the use of each control (positive, neutral, negative). The result of varying air speed on control effectiveness. How incorrect operation of each control could pose a threat to the safety of the flight.
	2. Effect of controls – elevator	Describe: <ul style="list-style-type: none"> The use of elevator in controlling the aircraft's attitude.
	3. Effect of controls – aileron.	Describe: <ul style="list-style-type: none"> The use of aileron in controlling the extent of roll and roll rate on the aircraft.
	4. Effect of controls – rudder.	Describe: <ul style="list-style-type: none"> The indications provided by the yaw-string.
6	1. Knowledge of Aerodynamics of Control Surfaces	Describe: <ul style="list-style-type: none"> How aileron drag is created. How aileron drag affects the aircraft. The proportional use of rudder and aileron to overcome aileron drag. Develop the ability to recognise uncoordinated flight by feel so that focus can be maintained outside the cockpit on lookout etc. The meaning of the yaw string indications. The risks associated with uncoordinated flight (either too little or too much application of rudder).
	2. Conduct coordinated flight	Describe: <ul style="list-style-type: none"> The difference between a slip and skid and how each can arise.
	3. Use of the secondary effect of rudder	Describe: <ul style="list-style-type: none"> How the secondary effect of rudder is created.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
7	3. Maintain straight flight to nominated track:	Describe: <ul style="list-style-type: none"> The heading and the achieved track.
8	1. Describes control usage in turns	Describe: <ul style="list-style-type: none"> How primary flight controls are used to turn the aircraft. The requirement for lookout and scan procedures whilst in a sustained turn. How coordination is maintained in the turn.
9	1. Effective lookout	Describe: <ul style="list-style-type: none"> The practice of alerted see and avoid. Visual scanning techniques and their applications. Focus of attention and time management in the cockpit.
	2. Lookout scan procedures	Describe: <ul style="list-style-type: none"> Risks and causes of mid-air collisions. Responsibility for collision avoidance. Aircraft appearance at various distances and time to impact if no avoidance action. Aircraft blind spots.
	3. Perform lookout during flight	Describe: <ul style="list-style-type: none"> The need for a clean canopy.
10	1. Airbrake controls	Describe: <ul style="list-style-type: none"> The purpose and limitations of the airbrakes on a sailplane.
	2. Flap controls	Describe: <ul style="list-style-type: none"> The purpose and limitations of the various flaps on a sailplane. The limitations on when flaps can be used. The threats that flaps can introduce.
	3. Undercarriage controls	Describe: <ul style="list-style-type: none"> The purpose and limitations of the undercarriage controls on a sailplane.
	4. Canopy latches	Describe: <ul style="list-style-type: none"> The way that the canopy latches work on the aircraft in both normal and emergency operations. How to avoid damage to the canopy. Why an unattended aircraft must always have its canopies secured.
11	1. Summarise soaring pathways and personal goals	Describe <ul style="list-style-type: none"> Pathways available in the sport Identify <ul style="list-style-type: none"> Soaring goals beyond solo
	3. Demonstrate basic Thermaling skills	Identify <ul style="list-style-type: none"> A thermal through feel or using the variometer

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
12	2. Safe flying practices	Describe: <ul style="list-style-type: none"> The individual sailplane's 'flight envelope' as indicated by the cockpit weight and speed placard and the use of ballast to ensure flight is within these limits. The significance of the yellow triangle on the airspeed instrument. The need for coordinated turns in the circuit. The need to avoid using excess rudder during a turn which may lead the sailplane to spin.
13W	1. Conduct of Winch launch from Initial Climb through Full Climb	Describe: <ul style="list-style-type: none"> The stages of a winch launch from Initial Climb upwards. The airspeed limitations on the aircraft during a winch launch. The actions of the pilot in each stage of the launch. The risks associated with winch launch during the stages of initial climb, full climb and release.
	2. Winch Launch Release	Describe: <ul style="list-style-type: none"> How to release the winch cable from the sailplane.
	3. React to airspeed changes during the Launch	Describe: <ul style="list-style-type: none"> When to provide a signal to the winch driver and what signals are permitted. The airspeed criteria for entry into full climb.
14A	1. Preparation for take-off.	Describe: <ul style="list-style-type: none"> Threats associated with an aerotow launch through the separation and initial climb.
14S	1. Preparation for take-off.	Describe: <ul style="list-style-type: none"> How to calculate the take-off distance required for the aircraft.
	2. Taxi to launch point.	Describe: <ul style="list-style-type: none"> The use of the controls whilst taxiing the aircraft (and how these are affected by the surface wind).
14W	1. Preparation for take-off.	Describe: <ul style="list-style-type: none"> The purpose of the weak link fitted to the winch cable. Threats associated with a winch launch through the separation and initial climb.
	2. Ground run and separation.	Describe: <ul style="list-style-type: none"> The stages of a winch launch up to the Initial Climb stage. The airspeed limitations on the aircraft during the early stages of a winch launch. The actions of the pilot in each stage of the launch.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
15	1. Make the decision to land.	Describe: <ul style="list-style-type: none"> Factors appropriate to the break-off decision that enable arrival at circuit joining with enough height for normal circuit entry. The factors to consider in the decision to commit to landing. NOTE: Full competence on this element may not be demonstrated till close to solo. Do not sign this off too early.
	2. Determine appropriate landing area, circuit pattern and associated circuit joining area.	<ul style="list-style-type: none"> Describe: Options of where to join the circuit.
16	1. Join circuit as planned.	Describe: <ul style="list-style-type: none"> Required aircraft configuration for landing phase. Threats associated with entering the circuit for an off-field landing.
	2. Fly circuit maintaining situational awareness.	Describe: <ul style="list-style-type: none"> Factors that can impact the execution of the circuit. How to work backwards from the end of ground roll, touchdown, flare, aiming point to determine circuit path. Options available should you require an emergency off-field landing inside the selected circuit area.
17	1. Plan for approach and landing.	Describe: <ul style="list-style-type: none"> Obstacle and runway clearance requirements. Threats from wind and other environmental factors. Threats due to turbulence and wind shear, and corrective actions.
	2. Conduct approach.	Describe: <ul style="list-style-type: none"> Illusions present when landing upslope or downslope.
	3. Conduct flare, hold-off and landing.	Describe: <ul style="list-style-type: none"> Recovery actions from incorrectly judged flares (late, bounce or balloon). Changes to flare technique when landing up slope, down slope and cross slope.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
18	1. Knowledge of spins & spiral dives.	Describe: <ul style="list-style-type: none"> The actions that a pilot can take to prevent an accidental spin. The phases of an aircraft spin noting the difference between the entry, incipient and fully developed phases. The difference between a spin and a spiral dive. The threats associated with: <ul style="list-style-type: none"> Spins and; Spiral dives. The process of recovery (clearly identifying emergency actions without reference to checklists) from: <ul style="list-style-type: none"> The entry phase of a spin; The incipient and fully developed phases of a spin; and A spiral dive.
19	1. Assess Cross wind conditions and sailplane limitations.	Describe: <ul style="list-style-type: none"> The crosswind limitations for sailplanes flown, referencing the Aircraft Flight Manual (AFM). Any crosswind limitations defined in the Club's Operations Manual (if any).
	2. Crosswind Take-offs.	Describe: <ul style="list-style-type: none"> The possible impacts of the crosswind on take-off and mitigators. The actions to take to abort a crosswind take-off.
	3. Crosswind Landings.	Describe: <ul style="list-style-type: none"> The possible impacts of the crosswind on landing and mitigators. The difference between a crabbing and wing-down approach.
20A	1. Describes the range of launch emergencies and immediate actions.	Describe: <ul style="list-style-type: none"> Possible launch emergencies that may occur with ground run, initial climb (to 500 feet AGL) and during full climb above 500 feet. Actions the pilot can take to reduce the risks of launch emergencies. Causes of towplane upset and the actions to prevent it.
	2. Ground roll emergencies.	Describe: <ul style="list-style-type: none"> Appropriate action if the towplane has engine failure during ground roll. Causes of Pilot Induced Oscillation (PIO). How to prevent loss of directional control. How to prevent a Wing drop.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	3. Initial climb emergencies	Describe: <ul style="list-style-type: none"> Causes of Tug upsets and actions to prevent these. Suitable landing areas off the airfield for emergency use. Appropriate actions to Towplane problems including low power issues. Options with Launch failure (rope break or engine failure) below 500 feet AGL.
	4. Full climb emergencies.	Describe: <ul style="list-style-type: none"> Required actions in the event of a double release failure.
20S	1. Describe the range of Launch emergencies.	Describe <ul style="list-style-type: none"> possible launch emergencies that may occur with ground run, initial climb (to 500 feet AGL) and during full climb above 500 feet; actions to reduce the chances of launch emergencies.
	3. Initial climb emergencies.	Describe: <ul style="list-style-type: none"> suitable landing areas off the airfield for emergency use; options with engine failure below 500 feet AGL.
20W	1. Describes the range of launch emergencies and immediate actions.	Describe: <ul style="list-style-type: none"> Common causes of launch failures and how these are identified. Actions the pilot can take to reduce the risks of launch emergencies. Actions the pilot must take in the event of a launch failure at different stages of the launch. The direction to turn if a modified circuit is to be performed in the presence of significant crosswind. The Non-Manoeuvring Area (NMA) and how a pilot can enter it and avoid it. The actions required if a cable hook up is suspected.
	2. Ground roll emergencies.	Describe: <ul style="list-style-type: none"> The dangers of allowing a wingtip to touch the ground in the early stages of a winch launch: The immediate actions to take during the ground stage of the winch launch when: <ul style="list-style-type: none"> A wingtip touches the ground. The aircraft overruns the cable. The pilot loses directional control. The aircraft balloons too high. Potential consequences of catching a wing tip on the ground.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	3. Initial climb emergencies	Describe: <ul style="list-style-type: none"> The immediate three actions to take during the separation through release stage of the winch/autotow launch when: <ul style="list-style-type: none"> There is an immediate loss of power in the launch. There is a gradual loss of power in the launch. The subsequent decisions to be made in handling a winch/autotow launch failure. Potential consequences of rotating too steeply in the initial climb phase of the launch.
	4. Full climb emergencies.	Describe: <ul style="list-style-type: none"> How allowing the aircraft into the NMA will increase the risks during the launch.
22	1. Knowledge of different situational awareness aids.	Describe: <ul style="list-style-type: none"> Different types of situational awareness aids available to sailplane pilots. The basic principles of how these situational awareness devices operate.
	2. Effectively use different situational awareness aids.	Describe: <ul style="list-style-type: none"> How these situational awareness aids must be used in conjunction with other situational awareness processes. The setup of situational awareness aids available to the pilot. How to interpret and respond to information provided by the situational awareness aids.
	3. Mitigate the limitations of situational awareness aids.	Describe: <ul style="list-style-type: none"> The limitations of electronic situational awareness aids, in particular the threats associated with: <ul style="list-style-type: none"> Incorrect configuration. Incorrect calibration or updates. Loss of electrical power. Readability of displays. Sterile cockpit operations. Distraction from the primacy of lookout.
23	1. Rules of the air.	Describe: <ul style="list-style-type: none"> Circuit operations and landing priorities.
	2. Visual flight rules.	Describe: <ul style="list-style-type: none"> The Visual Flight Rules (VFR); The Visual Meteorological Conditions (VMC).
	3. Local Procedures.	Describe: <ul style="list-style-type: none"> Club or locally agreed airfield procedures.
	4. Local Airspace Categories.	Describe: <ul style="list-style-type: none"> Categories of airspace in close proximity to local airfield.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	5. Rules of the Air Theory Test.	Complete: <ul style="list-style-type: none"> An oral exam on the above elements conducted by a GFA Level 1 or higher level Instructor prior to first solo. (See Appendix 1.) The pass is to be recorded in the student's Training Record/ Logbook.
24	2. Hazardous Attitudes (HAZATTS) and strategies to counter them.	Describe: <ul style="list-style-type: none"> the five HAZATTS. the strategies to counter the HAZATTS.
	3. Describe a Model of aviation decision making.	Describe: <ul style="list-style-type: none"> The difference between fast and slow decision thinking. The aviation decision making (ADM) model using the mnemonic of DECIDE.
	4. Additional factors that affect pilot performance.	Describe: <ul style="list-style-type: none"> Effects of: <ul style="list-style-type: none"> Eyesight limitations. Ear problems. "G" forces. Oxygen in flight operations.
	5. Factors of Airmanship.	Describe: <ul style="list-style-type: none"> Bedrock Principles: <ul style="list-style-type: none"> Discipline. Skills. Proficiency using currency barograph diagram. Pillars of Knowledge: <ul style="list-style-type: none"> Self. Aircraft. Team. Environment. Risk. Capstone Outcomes: <ul style="list-style-type: none"> Situational Awareness. Judgement.
25	1. TEM definitions.	Describe: <ul style="list-style-type: none"> Pristine flights, Threats, Errors, and Undesired Aircraft States (UAS).
	2. Conduct flight using TEM strategies.	Describe: <ul style="list-style-type: none"> How biological functions create threats and; Mitigation through effective nutrition, hydration and waste management strategies; How to recognise and mitigate fatigue.
27	1. Changing station on tow	Describe <ul style="list-style-type: none"> The correct high and low tow position.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	2. Boxing the slipstream	Describe: <ul style="list-style-type: none"> The steps involved in boxing the slipstream.
28	1. Knowledge regarding sideslips	Describe <ul style="list-style-type: none"> The effect of a sideslip. Situations when a sideslip can be beneficial. Risks associated with the use of a sideslip. The control movements required to commence and leave a sideslip. False airspeed indications in a sideslip.
29	1. Enter Steep Turn	Describe <ul style="list-style-type: none"> The higher stall speeds, lift vector, induced drag and aircraft operating limits for steep turns. Risks associated with steep turns.
30	2. Thermal centring	Describe <ul style="list-style-type: none"> Lag limitation of total energy vario and impact on centring The feel and vario techniques for thermal centring
32	2. Maintain separation	Describe <ul style="list-style-type: none"> The concept of a separation bubble How "separation priority" works
33	1. Describe thermal structure and lifecycle	Describe <ul style="list-style-type: none"> The difference between thermal sources and triggers The vertical thermal structure How thermals cycle and variations with terrain and time of day
35	1. Describe personal preparation	Describe <ul style="list-style-type: none"> Physical limitations that may affect a pilot's performance on the day of a flight Personal needs for cross-country flying
	3. Demonstrate retrieve readiness	List <ul style="list-style-type: none"> Common faults that would prevent or delay a retrieve
36	1. Airspace Classification	Identify: <ul style="list-style-type: none"> A, C, D, E and G airspace on charts and explain limitations on their use. Prohibited, Restricted and Danger areas on charts and explain rules re their use. Airspace categories encountered on a simulated flight using VNC and other relevant charts.
	2. Radio procedures in uncontrolled Airspace	Explain: <ul style="list-style-type: none"> Operation and application of ADS-B and Transponders Compatibility between Flarm and ADS-B/transponder

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	3. Altimetry	Describe: <ul style="list-style-type: none"> The use of cruising levels that would apply to a powered aircraft and Touring Motor Gliders
	4. Search and Rescue	Describe: <ul style="list-style-type: none"> Knowledge of SAR phases and pilot responsibilities. Knowledge of local club procedures regarding SAR. How to use an emergency beacon
37	1. Knowledge of conditions associated with carriage of passengers.	Describe <ul style="list-style-type: none"> The human factors that will be relevant to passenger carriage and what the PIC can do to address these; The rules regarding the carriage of passengers and how the flight costs are charged; The threats and errors that can be associated with flying passengers.
	3. Fly safely with a passenger on board.	Describe <ul style="list-style-type: none"> Situations where it is safer to not undertake the passenger flight. Predict <ul style="list-style-type: none"> Wind speed and direction at different times and heights Cloud layers Thermal heights, strengths and the soaring window
38	2. Plan flight	Describe <ul style="list-style-type: none"> Weather threats and mitigation strategies Predict <ul style="list-style-type: none"> Cross country speed Plan <ul style="list-style-type: none"> Suitable task distance Suitable task waypoints Review NOTAMS and radio frequencies.
39	2. Demonstrate practical use of a flight computer	Demonstrate <ul style="list-style-type: none"> Setting up a task and parameters on the ground Navigating a task and adjusting parameters (such as thermal strength) in the air Excellent lookout with minimum "screen time" Correct interpretation of the information displayed

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
40	1. Demonstrate Cruising - Track selection	Demonstrate <ul style="list-style-type: none"> Looking to the distance on track to identify several thermal sources and/or cumulus clouds and following a pathway through these to maximise the chance of finding thermals Identifying and following a pathway through areas of rising air to extend glide performance whilst making progress on task
	2. Identify Height Bands	Identify <ul style="list-style-type: none"> Appropriate height bands for the conditions
	3. Demonstrate appropriate cruise speeds	Demonstrate <ul style="list-style-type: none"> Consistently determining and adjusting cruise speed based on height band and expected conditions Maintaining the nominated speed throughout the flight +/- 5 knots
	4. Select thermals appropriately	Identify <ul style="list-style-type: none"> The thermal strength required appropriate to the height band and conditions
	5. Demonstrate final glide	Identify <ul style="list-style-type: none"> Sufficient height for final glide
41	1. Plan a cross country flight	Demonstrate satisfactory flight planning considering at least: <ul style="list-style-type: none"> personal preparation meteorology airspace and radio frequencies NOTAM safe outlanding options and trailer/crew arrangements task setting, task declaration and official observer awareness flight computer programming
42	1. Describe the key elements of the GFA Sailplane Airworthiness System.	Describe: <ul style="list-style-type: none"> the principle of Airworthiness. the purpose of GFA Certificate of Registration. the purpose of a Certificate of Airworthiness. the purpose of a Sailplane Maintenance Release and Daily Inspection Record.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	2. Conduct a Daily Inspection under supervision.	Observe, Participate in, and conduct: <ul style="list-style-type: none"> • Daily Inspections under direct supervision of Instructors and DI Examiners. Describe: <ul style="list-style-type: none"> • The implications of entries made, or missing, in the Sailplane Maintenance Release and Daily Inspection Record; • The airworthiness implications of defects, disconnections, obstructions, incorrect functionality, incorrect adjustments discovered during DIs that require judgement of potential non-airworthy conditions. • Appropriate actions that are undertaken to rectify discrepancies.
	3. Recognise non-airworthy conditions.	Recognise Non-airworthiness due to: <ul style="list-style-type: none"> • Missing or expired Sailplane Maintenance Release and Daily Inspection Record; • Outstanding Recurring Maintenance items (Due date or Time in service or Launches); • Outstanding non-cleared Major Defects; • Incorrect rigging of control connections, and failure to conduct and sign independent control checks after disconnection and reconnection; • Obstruction or incorrect functionality of primary and ancillary controls; • Physical or electrical defects or other incorrect functionality. Describe: <ul style="list-style-type: none"> • Airworthiness implications of outstanding non-cleared minor defects; • Actions to be taken upon recognition of non-airworthy conditions.
	4. Recognise limits of allowed pilot maintenance.	Describe: <ul style="list-style-type: none"> • Maintenance actions that are permitted to be conducted by a sailplane pilot in command who does not hold sailplane maintenance qualifications; • Actions to be taken on identifying maintenance requirements and airworthiness limitations beyond PIC authorisation or ability;
43	Assessment of conditions and factors for safe operations.	Describe: <ul style="list-style-type: none"> • The environmental factors that would be taken into consideration when operating independently • The human factors that would be taken into consideration when operating independently.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	Knowledge of SAR processes.	Describe: <ul style="list-style-type: none"> The entities that can be used for monitoring SAR time. The process the PIC can use to cancel SAR
	Knowledge of the accident reporting process.	Describe: <ul style="list-style-type: none"> The types of aviation occurrences that must be reported. The timeframes required to lodge reports on occurrences. The mechanisms that are used for reporting aviation occurrences. The information that needs to be included in an occurrence report.
	Knowledge of rating and site limitations.	Describe: <ul style="list-style-type: none"> The limitations and responsibilities of a pilot operating independently. The processes and limitations associated with the site used by the pilot.
44	Completion of all prerequisite GPC elements	Demonstrate: <ul style="list-style-type: none"> Completion of all previous GPC elements by examination of the student's training record.

6.2.3. Theoretical knowledge assessment

Theoretical knowledge will be assessed by gliding instructors using the following methods:

- (a) Oral question/answer:
- (b) Self-paced learning with embedded questions; or
- (c) Online multiple-choice question banks.

6.3. Flight instruction for the GPC

6.3.1. Flight instruction — General

- (a) The GPC flight instruction syllabus should take into account the principles of threat and error management (TEM) and also cover:

- (i) pre-flight operations, including verifying mass and balance, aircraft inspection and servicing, airspace and weather briefing;
 - (ii) rigging of sailplanes, including control surface connections;
 - (iii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
 - (iv) control of the aircraft by external visual reference;
 - (v) flight at high angle of attack (critically low air speeds), recognition of, and recovery from, stalls and spins;
 - (vi) flight at critically high air speeds, recognition of, and recovery from spiral dive;
 - (vii) normal and crosswind take-offs in respect of the different launch methods;
 - (viii) normal and crosswind landings;
 - (ix) short field landings and outlandings: field selection, circuit and landing hazards and precautions;
 - (x) emergency actions;
 - (xi) soaring techniques as appropriate to site conditions;
 - (xii) cross-country flying using visual reference, dead reckoning and available navigation aids; and
 - (xiii) considerations for soaring at high altitudes.
- (b) Before allowing applicants to undertake their first solo flight, the flight instructor should ensure that they can operate the required systems and equipment.

6.3.2. Syllabus of flight instruction

- (a) The numbering of exercises should be used primarily as an exercise reference list and as a broad instructional sequencing guide; therefore, 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:
- (i) the applicant's progress and ability;
 - (ii) the weather conditions affecting the flight;
 - (iii) the flight time available;
 - (iv) the instructional technique considerations;
 - (v) the local operating environment; and
 - (vi) the applicability of the exercises to the sailplane type.
- (b) At the discretion of the instructors, some of the exercises may be combined and some other exercises may be done in several flights.
- (c) The following GPC Units must be assessed as competent before the first solo flight:
- (i) Units 1-10,
 - (ii) Unit 12,

- (iii) Units 13, 14 and 20 A, W or S,
- (iv) Units 15-18, and
- (v) Unit 23.
- (d) GPC Units 1-43 must be assessed as competent prior to award of the GPC.
- (e) Each of the exercises requires the applicant to be aware of the need for as well as the principles of good airmanship and look-out, which should be always emphasised.
- (f) Flight exercises for the GPC are as follows:

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
1	2. Application of Lookout	Demonstrate: <ul style="list-style-type: none"> the limits of vision and how to look in difficult to see airspace (above, below, behind), when turning; the use the clock code to report other aircraft and identify prominent landmarks.
	3. Collision Avoidance	Demonstrate: <ul style="list-style-type: none"> radio listening watch and provide an interpretation of traffic location and intentions.
2	1. Control, move and secure the aircraft on the ground.	Demonstrate: <ul style="list-style-type: none"> The safe areas to push sailplanes and not to push. How to steer the sailplane from the wing tip. The correct use of tow ropes, tow bars, rudder chocks, fuselage dollies and wing walkers. The correct process for rotating sailplane in stronger wind conditions. How to secure controls and the correct tie-down technique.
	2. Use the standard ground signals.	Demonstrate: <ul style="list-style-type: none"> The "Take up slack" signal. The "All out" or "Full power" signal. The STOP signal.
	3. Correctly perform wing tip runner and hook-on duties.	Demonstrate: <ul style="list-style-type: none"> Correct sailplane hook-on procedure. A satisfactory "airspace clear for launch" check. Correct wing-tip runner techniques.
3	2. Use the aircraft documentation.	Demonstrate: <ul style="list-style-type: none"> application of ballast as required for the current aircrew configuration for a safe flight. This will be different in most types.
	3. Inspect the aircraft	Demonstrate: <ul style="list-style-type: none"> a pre-flight inspection, explaining key observations.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	4. Identify and operate basic instruments	Demonstrate: <ul style="list-style-type: none"> Switching on and off the sailplane's electrical system. Setting the altimeter. Switching on the radio and setting volume / squelch. Operating / avoiding the Press-to Transmit (PTT) switch.
	5. Confirm Cockpit Safety	Demonstrate: <ul style="list-style-type: none"> Entering and exiting the cockpit safely. Adjusting the seating position to give adequate lookout and easy access to all controls. Fitting, adjusting and unfastening the seat harness. How to hold the control column avoiding the PTT. Handover/Takeover of control procedures.
	6. Conduct Pre-Flight Checks	Demonstrate: <ul style="list-style-type: none"> Completion of pre-flight checks accurately, audibly and in a timely manner. Conduct of the pre-boarding checklist using the approved GFA checklist. Application of a sterile launch point environment. Calculation and fitting of ballast and adjustment of seating. Conduct of the in-cockpit Pre-Flight Check using the approved GFA checklist. Required in-cockpit adjustments. Prioritisation of critical safety tasks including airspace cleared for launch.
	7. Prepare and fit the Parachute (when required)	Demonstrate: <ul style="list-style-type: none"> How to confirm serviceability of the parachute. Identification and adjustment of all straps to fit the parachute securely. Adjustment of straps to correct tension.
5	1. Effects of controls – general	Demonstrate: <ul style="list-style-type: none"> The correct way to hold the control column. The correct application of force to use flight controls.
	2. Effect of controls – elevator	Demonstrate: <ul style="list-style-type: none"> Use of elevator to control aircraft attitude through reference to the horizon. The attitude required to achieve a nominated airspeed (between 50-70 knots). The use of elevator to control aircraft pitch through a range of at least +/- 10 knots, changing pitch and holding, and returning to a stable platform.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	3. Effect of controls – aileron.	Demonstrate: <ul style="list-style-type: none"> The use of aileron to control aircraft roll from wings level to +/- 20 degrees of bank from horizontal in each direction and returning to wings level. The use of aileron to maintain a desired angle of bank.
	4. Effect of controls – rudder.	Demonstrate: <ul style="list-style-type: none"> The use of rudder to control aircraft yaw to the left and right, returning to coordinated flight.
6	2. Conduct coordinated flight	Demonstrate: <ul style="list-style-type: none"> The effect of aileron drag/adverse yaw. Achievement of coordinated flight through coordination of rudder and aileron at different rates of roll in both directions. Centralising rudder when ailerons are neutral. Rolling the sailplane on a point.
	3. Use of the secondary effect of rudder	Demonstrate: <ul style="list-style-type: none"> Secondary effect of rudder in flight.
7	1. Straight flight is conducted at various speeds:	Demonstrate: <ul style="list-style-type: none"> Selection of an appropriate attitude to produce a nominated airspeed within a range from minimum sink speed to 80 Knots, with accuracy of +/- 5 knots; Maintaining a constant airspeed with the Airspeed Indicator covered; Maintaining straight flight with wings level and balanced (as per yaw string).
	2. Trim aircraft:	Demonstrate: <ul style="list-style-type: none"> Maintaining nominated attitude whilst aircraft is trimmed; Confirmation of correct trim; Adjustment of trim whenever speed is varied.
	3. Maintain straight flight to nominated track:	Demonstrate: <ul style="list-style-type: none"> Flight towards a nominated distant point on the horizon; The nominated track is maintained, with correction for drift; Attitude remains stable, with coordinated control movements to maintain wings level without slip or skid; Appropriate look-out –cruising and targeted scan.
8	2. Enters a coordinated turn	Demonstrate: <ul style="list-style-type: none"> Targeted and full scan to maintain situational awareness. Use of aircraft controls to enter a coordinated turn in both directions to various angles of bank up to 40 degrees. Coordinated turn at various speeds from Minimum sink through to 70 knots. Centralised aileron and rudder once desired bank angle is achieved.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	3. Maintains coordinated turn with varying bank and speed	Demonstrate: <ul style="list-style-type: none"> • Constant angle of bank for 2 complete circles. • Coordinated flight for 2 complete circles in both directions. • Aircraft airspeed by reference to attitude for two complete circles. (Minimum sink speed through to 70 knots). • Targeted and full scan appropriately during turn. • Different turn rates at different angles of bank. • Application of controls to return aircraft to coordinated turns from an uncoordinated state.
	4. Exits sustained turn on desired heading	Demonstrate: <ul style="list-style-type: none"> • Targeted and full scan when exiting the turn. • Roll out to heading on horizon. • Use of aircraft controls to return the aircraft to wings level in a coordinated manner whilst maintaining aircraft attitude. • Return to wings level on roll out heading +/- 10 degrees.
9	1. Effective lookout	Demonstrate: <ul style="list-style-type: none"> • Use of the clock code in communication of traffic.
	2. Lookout scan procedures	Demonstrate: <ul style="list-style-type: none"> • Cruising scan technique. • Full scan technique. • Targeted scan techniques (Turning, Circuit, Thermalling).
	3. Perform lookout during flight	Demonstrate: <ul style="list-style-type: none"> • Appropriate combinations of scanning techniques for various manoeuvres including cruising, turning, pull-ups and pushing forward. • Scan rate is adjusted as required for various manoeuvres and hazardous situations. • Identification of blind arcs of other aircraft. • Safely combining cockpit instrument scan, FLARM and visual scanning techniques to ensure situational awareness.
10	1. Airbrake controls	Demonstrate: <ul style="list-style-type: none"> • Identification and correct operation of the airbrake to control the rate of descent of the sailplane.
	2. Flap controls	Demonstrate: <ul style="list-style-type: none"> • Identification and correct operation of the different types of flap on the sailplane.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	3. Undercarriage controls	Demonstrate: <ul style="list-style-type: none"> • Identification of the undercarriage lever and its action. • Raising and lowering the undercarriage in accordance with Flight Manual limits. • Confirming how the undercarriage is down and locked.
	4. Canopy latches	Demonstrate: <ul style="list-style-type: none"> • Appropriate care when handling the canopy. • Operation of the canopy in both normal and emergency operations.
11	2. Demonstrate basic aircraft control	Demonstrate <ul style="list-style-type: none"> • Cruising at a constant attitude and heading in the direction of a geographic feature • Constant attitude while rolling to 35-45 degree angle of bank • Constant angle of bank and attitude in a sustained turn
	3. Demonstrate basic Thermaling skills	Identify <ul style="list-style-type: none"> • A thermal through feel or using the variometer Demonstrate <ul style="list-style-type: none"> • Basic thermal centring using minor corrections
12	1. Demonstrate slow flight techniques	Demonstrate: <ul style="list-style-type: none"> • Monitoring of attitude and air sounds together with the 'feel' of the stick to maintain flight above the stall without reference to instruments. • Moving the stick forward when a wing drop is experienced, to lower the angle of attack with sufficient rudder away from the wing drop direction to counter any yaw.
	2. Safe flying practices	Demonstrate: <ul style="list-style-type: none"> • Use of the GFA Pre-aerobatic checklist HAS(E)LL. • Identification of the near onset of a stall and counter by easing the stick forward to decrease the angle of attack. • Selection and maintenance of a suitable safety margin above stall speed (1.5 Vs) habitually when flying below 1000 ft AGL.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
13A	1. Conduct an aerotow sailplane launch above 300 feet AGL in the low & high tow position	Demonstrate: <ul style="list-style-type: none"> • Identification of tug slipstream with sailplane held below slipstream for low tow and above slipstream for high tow (using elevator). • Maintaining sailplane bank angle parallel to towplane bank angle at all times (through use of coordinated aileron/rudder). • Maintaining line astern position behind towplane (through use of rudder). • Recovery from out of station position using coordinated controls. • Maintenance of situational awareness during the launch with respect of traffic, location and emergency options. • Correct procedure to correct bow in tow rope. • Correct transition between low and high tow.
	2. Conduct the release from aero-tow	Demonstrate: <ul style="list-style-type: none"> • Pre-release lookout for tug and sailplane. • Locate-Identify-Operate tow release. • 'Rope Gone!' verified visually. • Clearing right turn and confirming tug separation. • Post release actions if appropriate. • Transition from launching pilot to soaring or landing pilot.
13S	1. Self-launch is conducted above 300' AGL.	Demonstrate: <ul style="list-style-type: none"> • Transition to Vy (best climb rate speed) if climbing at Vx (best angle of climb speed) for obstacle clearance purposes. • Full scan lookout, lowering nose momentarily if necessary to clear ahead. • Climbing turns no steeper than 15° unless using thermal assistance. • Engine parameter check with close monitoring of any tendency to overheat.
	2. Use of appropriate launch pattern.	Demonstrate: <ul style="list-style-type: none"> • Maintaining runway heading until 500' AGL unless keeping within gliding range of the airfield. • Situational awareness of and provide separation between the launch and any other powered traffic (especially towing combinations). • Remaining clear of any winch launch area. • Good airmanship by avoiding climbs using thermal assistance in the normal circuit area. • Regular engine parameter checks until top of launch height.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	3. Engine management in accordance with the Flight Manual and transition to soaring flight.	Demonstrate: <ul style="list-style-type: none"> Shut down procedure in accordance with the Flight Manual. Appropriate level of lookout while shutting down the engine. Smooth transition to soaring pilot (or landing pilot if conducting circuits). Restart procedure in accordance with the Flight Manual above a safe restart height. Safety procedures after engine failure to start.
13W	1. Conduct of Winch launch from Initial Climb through Full Climb	Demonstrate: <ul style="list-style-type: none"> Correct handling of the aircraft in the initial and full climb stages of the launch. The actions to take when there is a significant crosswind during the launch.
	2. Winch Launch Release	Demonstrate: <ul style="list-style-type: none"> The release of the cable without significant tension. The required post release actions.
	3. React to airspeed changes during the Launch	Demonstrate: <ul style="list-style-type: none"> Clearly recognisable too fast signals at initial and full climb stages. Regaining safe airspeed in full climb stage.
14A	1. Preparation for takeoff.	Demonstrate: <ul style="list-style-type: none"> Pre Boarding and Pre Take off checks with options for launch emergencies identified (ABCD-CHAOTIC). Connection of aerotow rope to aircraft. Obtaining airspace clearance for launch confirmation from the ground crew. Locate and identify yellow release handle and hand in close proximity to it. "Ready for tak-eoff" signal to the wing runner.
	2. Ground run and separation.	Demonstrate: <ul style="list-style-type: none"> Independent non coordinated control inputs whilst on the ground: <ul style="list-style-type: none"> Sailplane is kept straight behind the tug using rudder; Wings are kept level using aileron; Elevator is used to balance the sailplane on the mainwheel in the correct take-off attitude. Aircraft is allowed to separate from the ground, held in position no higher than the height of the tug's fin. Use of coordinated control movements once off the ground. Controlled transition to low tow when the tug is positively established in the climb at a safe height.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	3. Initial climb.	Demonstrate: <ul style="list-style-type: none"> • Position just below the slipstream of the tug. • Wings parallel to the tug wings. • Lookout for conflicting traffic. • Situational awareness. • Call out options for launch failure actions as each option becomes available (GPC Unit 20 refers).
14S	1. Preparation for take-off.	Demonstrate: <ul style="list-style-type: none"> • Pre-Take Off checks with options for launch emergencies briefed in accordance with the Aircraft Flight Manual. • Nomination of an Abort point on the take-off run in the event of expected performance not achieved. • Aircraft engine checks. • Transmission of appropriate radio calls. • Confirmation of airspace clearance for launch.
	2. Taxi to launch point.	Demonstrate: <ul style="list-style-type: none"> • Planning of taxi route allowing for wingtip clearance. • Manoeuvring aircraft safely to take off point using appropriate controls for conditions.
	3. Conduct ground run and Separation.	Demonstrate: <ul style="list-style-type: none"> • Application of independent non-coordinated control inputs. • Keeping the aircraft straight on the centre line. • Keeping the wings level using aileron. • Using elevator to balance the sailplane on the mainwheel(s) in the correct take-off attitude. • Allowing the aircraft to separate from ground and held in ground effect until the Take Off Safety Speed (TOSS) is established. • Pitching the aircraft to the appropriate climb speed (V_x or V_y).
14W	1. Preparation for take-off.	Demonstrate: <ul style="list-style-type: none"> • Pre-take off checks with options for launch emergencies identified (ABCD-CHAOTIC). • Winch cable hook-on procedure. • Confirmation of correct weak link used.
	2. Ground run and separation.	Demonstrate: <ul style="list-style-type: none"> • Positive control of aircraft during ground run. • Holding the correct attitude for separation. • Ability to maintain wings-level in a variety of wind conditions. • Smooth transition to take-off attitude. • Separation and appropriate initial climb attitude. • Monitoring speed and direction and correcting accordingly.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
15	2. Determine appropriate landing area, circuit pattern and associated circuit joining area.	Demonstrate: <ul style="list-style-type: none"> • Identification of a clear landing area on airfield or suitable alternate if insufficient height to reach the airfield. • When to return to the landing area with sufficient height to join circuit on arrival. • Appropriate circuit direction and circuit joining area in accordance with airfield procedures, weather conditions and aircraft performance.
	3. Transit to Circuit Joining Area.	Demonstrate: <ul style="list-style-type: none"> • Configuration of the aircraft for landing. • Positioning of the aircraft in circuit joining area at appropriate height. • Maintenance of situational awareness of traffic & environment. • Assessment of feasibility of original landing plan. • Safe speed below 1000ft AGL
	4. Clearance and traffic separation during transit to circuit.	Demonstrate: <ul style="list-style-type: none"> • Clearance of obstacles and restricted airspace. • Adjustment of flight path to maintain separation with other traffic. • Ability to communicate with other traffic as required.
16	1. Join circuit as planned.	Demonstrate: <ul style="list-style-type: none"> • Arrival at the planned circuit area with aircraft correctly configured. • Correct joining circuit radio broadcast. • A range of non-standard circuit entries.
	2. Fly circuit maintaining situational awareness.	Demonstrate: <ul style="list-style-type: none"> • Flight path through to final turn. • Maintaining required speed and track and angle relative to the aiming point. • Completion of pre-landing checks. • Judgement as to when to turn to base leg and when to turn final. • Arrival at a stabilised final approach no lower than 300ft AGL. • Adjustment to the circuit path in response to changes in conditions and other factors. • Safe speed near the ground at all times.
	3. Modify circuit as required.	Demonstrate: <ul style="list-style-type: none"> • Correct procedure for modifying the circuit.
	4. Maintain clearance and traffic separation.	Demonstrate: <ul style="list-style-type: none"> • Clearance of obstacles and restricted airspace. • Ability to communicate with other traffic as required to achieve self-separation.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
17	2. Conduct approach.	Demonstrate: <ul style="list-style-type: none"> • Rollout from final turn to line up with intended landing path. • Identification of the landing area and aiming point. • Identification of overshoot and undershoot situations. • Establishing overshoot on the glide path before extending airbrakes. • Stabilised approaches with half airbrake clearing all obstacles by at least 50 feet. • Maintains constant airspeed • Use of elevator to control attitude to achieve and maintain safe approach airspeed. • Use of airbrakes to correct for undershoot or overshoot. • Adjusting heading to account for drift during approach, to achieve a flight path aligned with intended landing track. • Monitoring and adjusting approach for wind shear.
	3. Conduct flare, hold-off and landing.	Demonstrate: <ul style="list-style-type: none"> • Hold off height is sustained to a minimum energy touchdown at the correct landing attitude. • Movement of gaze away from the aiming point towards the far end of the runway, to assist judgement of the correct flare attitude and height. • Commencement of flare at a correct height to arrest the rate of descent and achieve the hold off height, using elevator as the primary flight control. • Positive control of the aircraft during the ground roll. • Using elevator, rudder and ailerons to keep aircraft moving in a straight line until stationary. • Correct application of airbrake and wheel brakes as required to slow and stop the sailplane. • Achievement of planned end of roll within 10 metres.
18	2. Ability to demonstrate recovery from spins & spiral dives.	Demonstrate: <ul style="list-style-type: none"> • The use of internal and external references during recovery from spins and spiral dives. • The process of recovery (clearly identifying emergency actions) from: <ul style="list-style-type: none"> ○ The entry phase of a spin; ○ The incipient and fully developed phases of a spin; • Recovery from a spiral dive.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
19	1. Assess Cross wind conditions and sailplane limitations.	Demonstrate: <ul style="list-style-type: none"> Assessment of the crosswind component for a particular runway direction using: <ul style="list-style-type: none"> Weather forecasted winds. Wind socks. The GFA cross-wind chart.
	2. Crosswind Take-offs.	Demonstrate: <ul style="list-style-type: none"> Safe conduct of a crosswind take-off unaided at least three times.
	3. Crosswind Landings.	Demonstrate: <ul style="list-style-type: none"> Selection of safe approach speeds countering turbulence and/or wind shear. Safe conduct of a crosswind landing unaided at least three times using a crabbing approach.
20A	2. Ground roll emergencies.	Demonstrate: <ul style="list-style-type: none"> Correct reactions to launch failures hand, visual and verbal signals on the ground. Appropriate actions to take on: <ul style="list-style-type: none"> Loss of directional control. Occurrence of Pilot Induced Oscillation (PIO). Wing drop, possibly due to cross wind.
	3. Initial climb emergencies	Demonstrate: <ul style="list-style-type: none"> Responding quickly and assertively to tow plane signals. Calling out options on climb out on all flights. Taking appropriate action with simulated launch failure below 500 feet AGL, including landing on airfield or turnback.
	4. Full climb emergencies.	Demonstrate: <ul style="list-style-type: none"> Taking appropriate actions to simulated launch failure above 500 ft AGL. Recognition and correct response to release failure during launch (hook up).
20S	2. Ground roll emergencies	Demonstrate: <ul style="list-style-type: none"> Prevention of loss of directional control and taking appropriate actions; Appropriate action with a wing drop, possibly due to crosswind; Appropriate action with engine failure during ground roll.
	3. Initial climb emergencies.	Demonstrate: <ul style="list-style-type: none"> Appropriate response to engine problems and low climb rate issues. Briefing and calling out options on climb out on all flights; Taking appropriate action with simulated engine failure, including landing on airfield, 180 turn, and explains options re: outlanding.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	4. Full climb emergencies.	Demonstrate: <ul style="list-style-type: none"> Taking appropriate actions to simulated engine failure above 500 ft AGL.
20W	2. Ground roll emergencies.	Demonstrate: <ul style="list-style-type: none"> The correct immediate actions for a launch failure that occurs on the ground.
	3. Initial climb emergencies	Demonstrate: <ul style="list-style-type: none"> The correct immediate actions for a launch failure that occurs just after separation. The correct three actions and return for safe landing from an abrupt launch failure at a low level and intermediate level (initial climb or early full climb).
	4. Full climb emergencies.	Demonstrate: <ul style="list-style-type: none"> The correct immediate actions for a launch failure that occurs just after separation. The correct immediate actions and return for safe landing from a both an abrupt and gradual winch/autotow launch failure at an intermediate level (mid full climb or higher). Potential consequences of climbing too shallow or steep in the full climb phase of the launch.
21	1. Practical standards	Demonstrate: <ul style="list-style-type: none"> Operation of a VHF radio controls to: <ul style="list-style-type: none"> Select and change frequencies. Set volume & squelch levels. Press to transmit and use microphone. How to communicate using standard phraseologies, with correct enunciation and articulation on a VHF radio. Achievement of a pass grade on a practical examination on the above conducted by a GFA Level 1 or higher instructor (see Appendix 1 for Practical Exam Performance Standard). Achievement of a pass grade on the Radio Telephone endorsement online theory examination.
	2. English language proficiency.	Demonstrate: <ul style="list-style-type: none"> A general English Language Proficiency assessment where English is a second language of an applicant to be conducted in accordance with the requirements of GFA MOSP2, Section 7.10.
23	1. Rules of the air.	Demonstrate: <ul style="list-style-type: none"> Application of the Rules of Air Regulations in the flying environment commensurate with skill level, rating and experience. Application of the Rules concerning separation, converging, overtaking and thermalling with other traffic.,

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
24	1. Self-assessment of fitness to fly.	emonstrate: <ul style="list-style-type: none"> An assessment of daily medical fitness using the IMSAFE mnemonic.
	3. Describe a Model of aviation decision making.	Demonstrate: <ul style="list-style-type: none"> The use of an ADM model in aviation activities.
26	1. Prepare for flight using TEM strategies.	Demonstrate: <ul style="list-style-type: none"> A briefing for flight using TEM strategies; Daily self-assessment (IMSAFE); Assessment of the weather; Identifies if there are any NOTAMed Threats; Assessing what tasks are achievable; Identification of any other threats (e.g. Airspace, bush fire risk, landable terrain, known traffic etc.).
	2. Conduct flight using TEM strategies.	Describe: <ul style="list-style-type: none"> How biological functions create threats and; Mitigation through effective nutrition, hydration and waste management strategies; How to recognise and mitigate fatigue. Demonstrate: <ul style="list-style-type: none"> Monitoring and positive strategies to identify and manage in-flight threats and aircraft handling, procedural communication or committed errors before an UAS occurs; Diligently using Standard Operating Practices (SOPs) / Procedures / Checks; Not succumbing to time or other perceived pressure; Conducting a Situation Awareness review after a period of high workload or interruption; Observing personal limits: <ul style="list-style-type: none"> Particularly with respect to transition from Soaring Pilot to Landing Pilot or; In cross wind conditions or; When feeling fatigued. Performing post-flight evaluations and describing: <ul style="list-style-type: none"> What threats were mitigated? What errors were exhibited but managed? What was learned? What can be improved on in future flights?

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
26	1. Pre-solo flight review and briefing.	Demonstrate: <ul style="list-style-type: none"> • Meeting the experience and training criteria through inspection of the student's training record and logbook to ensure Units 1-25 are signed as competent - particularly GPC Unit 22 (Rules of the Air). • Units 11 and 19 only if conditions allow, Units 21 and 22 if aircraft equipment allows. Units 24 and 25 rated 4 or 5. • That the Student's logbook includes the GFA Flight Radiotelephone Operator's Logbook Endorsement. • Consistently safe take-offs, circuits and landings. • Application of lookout scanning techniques • Recent successful practice in abnormal and emergency procedures. • Assessment of weather and traffic conditions as suitable for the flight. • Identification of and briefing on possible threats and errors. • Assessment of the student's medical, attitude and physical suitability for solo flight. • Acknowledgement of the solo flight approval, parameters, limitations & instructions set by the authorising Trainer.
	2. Solo sailplane flight.	Demonstrate: <ul style="list-style-type: none"> • Solo flight conducted in accordance with: • CASA/GFA Regulations, airframe operational procedures & limitations and local aerodrome procedures. • Briefed procedures with a normal aircraft landing.
	3. Post solo flight review and briefing.	Demonstrate: <ul style="list-style-type: none"> • Self-evaluation in debriefing on the solo flight performance with the authorising Trainer. • Recording of solo flight details in the student's training record and logbook. • Knowledge of the specific limitations and requirements for further solo flight set by the authorising Trainer.
27	1. Changing station on tow	Demonstrate <ul style="list-style-type: none"> • Advising the tow pilot prior to commencing such manoeuvres. • Transition from low tow to high tow. • Transition from high tow to low tow. • Correct pace to avoid getting caught in the slipstream and to avoid kiting manoeuvres.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	2. Boxing the slipstream	Demonstrate: <ul style="list-style-type: none"> The correct pace to complete the manoeuvre. The five steps in a clear & distinct manner. That airspeed is maintained through the manoeuvre.
	3. Cruising and descending on tow	Demonstrate: <ul style="list-style-type: none"> Level flight on tow in both high and low tow position. Descent on tow, with use of airbrake where required. That airspeed is monitored and adjusted. That bows in the tow rope are corrected. Appropriate lookout. Maintaining situational awareness to avoid unsafe terrain. Knowledge of last light and weather issues that may impact the flight.
28	2. Conduct sideslips	Demonstrate <ul style="list-style-type: none"> A controlled sideslip at height. Maintaining a constant track across ground whilst in the sideslip. Recovery from sideslip at the same speed as the entry. A controlled sideslip on final approach (subject to local restrictions). A sideslip and return to normal coordinated flight. Both to the left and right
29	1. Enter Steep Turn	Demonstrate <ul style="list-style-type: none"> Targeted scan prior to commencement of turn. Selection of attitude to achieve required airspeed. Use of coordinated controls when rolling into the turn. Judgement of required bank angle.
	2. Maintain Steep Turn	Demonstrate <ul style="list-style-type: none"> Maintenance of attitude, airspeed and G loading. Maintenance of nominated angle of bank. Flying by attitude as opposed to speed. Alternating between lookout and monitoring of attitude and angle of bank/rudder coordination.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	3. Conduct Roll Out from Steep Turn	Demonstrate <ul style="list-style-type: none"> Lookout prior to rollout. Identification of roll-out heading. Wings rolled level with coordinated controls. Return to normal flight attitude. Emergency actions and anomalies are identified and rectified during steep turn regime.
30	1. Demonstrate sailplane control and awareness	Demonstrate <ul style="list-style-type: none"> Good lookout Consistent bank and attitude in Thermaling turns Use of coordinated controls in Thermaling turns
	2. Thermal centring	Predict <ul style="list-style-type: none"> Where the core is relative to the sailplane Demonstrate <ul style="list-style-type: none"> Centring to achieve positive climb at all points for two Thermaling turns Effective Thermaling in both directions
31	1. Identify a thermal	Identify <ul style="list-style-type: none"> A thermal (as opposed to a gust)
	2. Enter a thermal	Demonstrate <ul style="list-style-type: none"> Appropriate lookout Appropriate nose attitude Waiting for the peak before turning Identifying if the turn is away from the core and correcting
32	1. Demonstrate situation awareness	Demonstrate <ul style="list-style-type: none"> Consistent lookout locating other sailplanes Recognise <ul style="list-style-type: none"> Potential conflicts such as converging headings or converging height changes Double-blind situations Predict <ul style="list-style-type: none"> Intentions of other pilots
	2. Maintain separation	Demonstrate <ul style="list-style-type: none"> Appropriate separation from other sailplanes when: <ul style="list-style-type: none"> Cruising, allowing adequate space for other sailplanes to turn quickly without conflict Entering a thermal Thermaling
	3. Fly predictability	Demonstrate <ul style="list-style-type: none"> Predictable behaviour when: <ul style="list-style-type: none"> Cruising Entering a thermal Thermaling

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
33	2. Identify and navigate to sources and triggers	Identify <ul style="list-style-type: none"> Potential thermal sources and triggers taking into consideration sun, wind, terrain, vegetation, time of day, cloud cover Demonstrate <ul style="list-style-type: none"> Navigation to relevant thermal sources and triggers in a search for thermals
34	1. Select a suitable landing area	Demonstrate <ul style="list-style-type: none"> Commits to outland Identify suitable landing area (W6S)
	2. Prepare and Plan for outlanding	Demonstrate <ul style="list-style-type: none"> Determine landing direction and aiming point Plan circuit Configure sailplane Communicate intentions
	3. Perform safe circuit to a field	Demonstrate <ul style="list-style-type: none"> Standard circuit, not too high Monitor suitability of field and approach path throughout the circuit Prelanding check Monitor angle to aiming point Maintain safe speed Final turn above 300 feet AGL
35	1. Describe personal preparation	Describe <ul style="list-style-type: none"> Physical limitations that may affect a pilot's performance on the day of a flight Personal needs for cross-country flying
	2. Demonstrate sailplane preparation	Demonstrate <ul style="list-style-type: none"> Sailplane preparation to ensure the sailplane is ready to go
	3. Demonstrate retrieve readiness	Demonstrate <ul style="list-style-type: none"> Trailer inspection to ensure the trailer is ready for go
36	2. Radio procedures in uncontrolled Airspace	Demonstrate: <ul style="list-style-type: none"> Required radio monitoring and radio calls within E class airspace and CTAF. Compliance with CTAF procedures. Obtaining and applying information from ATIS.
	3. Altimetry	Demonstrate: <ul style="list-style-type: none"> Altimeter settings to be used above and below 10,000 feet.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	5. Basic Navigation	<p>Demonstrate (pre-flight):</p> <ul style="list-style-type: none"> Obtain and interpret NOTAMs and determine if the NOTAMs will impact on the flight. Discuss conversion of UTC time/date to local time/date. Draw a proposed flight path onto WAC and VNC/VTC. Identify key landmarks that should assist with navigation decisions. Identify any areas of unsuitable terrain given expected weather conditions and amend track accordingly. Measure distances (km) and track (true and magnetic) for each leg. <p>Demonstrate (in flight):</p> <ul style="list-style-type: none"> Recognise major landmarks and identify current location on map. Adjust track and heading to account for wind and deviation to thermal sources. Navigate by map and compass and describe the limitation of the compass when turning.
37	2. Provide an effective safety briefing and conduct pre-flight checks.	<p>Demonstrate</p> <ul style="list-style-type: none"> An effective pre-flight safety briefing to the passenger that covers at a minimum: <ul style="list-style-type: none"> cockpit ingress, harness use, use of controls and instruments, FOD, location of and use of sick bags and emergency procedures and egress from the aircraft. An effective briefing of the passenger where they are required to assist with manoeuvring the aircraft at any time on the ground.
	3. Fly safely with a passenger on board.	<p>Demonstrate</p> <ul style="list-style-type: none"> The ability to fly accurately whilst talking with a simulated passenger. A simulated passenger flight from initial briefing to return to launch point.
38	1. Predict soaring conditions	<p>Demonstrate</p> <ul style="list-style-type: none"> Accessing relevant weather information for the local area <p>Predict</p> <ul style="list-style-type: none"> Wind speed and direction at different times and heights Cloud layers Thermal heights, strengths and the soaring window

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	2. Plan flight	Describe <ul style="list-style-type: none"> Weather threats and mitigation strategies Predict <ul style="list-style-type: none"> Cross country speed Plan <ul style="list-style-type: none"> Suitable task distance Suitable task waypoints Review NOTAMS and radio frequencies.
39	2. Demonstrate practical use of a flight computer	Demonstrate <ul style="list-style-type: none"> Setting up a task and parameters on the ground Navigating a task and adjusting parameters (such as thermal strength) in the air Excellent lookout with minimum "screen time" Correct interpretation of the information displayed
40	1. Demonstrate Cruising - Track selection	Demonstrate <ul style="list-style-type: none"> Looking to the distance on track to identify several thermal sources and/or cumulus clouds and following a pathway through these to maximise the chance of finding thermals Identifying and following a pathway through areas of rising air to extend glide performance whilst making progress on task
	2. Identify Height Bands	Identify <ul style="list-style-type: none"> Appropriate height bands for the conditions
	3. Demonstrate appropriate cruise speeds	Demonstrate <ul style="list-style-type: none"> Consistently determining and adjusting cruise speed based on height band and expected conditions Maintaining the nominated speed throughout the flight +/- 5 knots
	4. Select thermals appropriately	Identify <ul style="list-style-type: none"> The thermal strength required appropriate to the height band and conditions Demonstrate <ul style="list-style-type: none"> Selecting only thermals that meet criteria
	5. Demonstrate final glide	<ul style="list-style-type: none"> Identify <ul style="list-style-type: none"> Sufficient height for final glide Demonstrate <ul style="list-style-type: none"> Monitoring glide and taking appropriate actions

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
41	1. Plan a cross country flight	<ul style="list-style-type: none"> • Demonstrate satisfactory flight planning considering at least: <ul style="list-style-type: none"> o personal preparation o meteorology o airspace and radio frequencies o NOTAM o safe outlanding options and trailer/crew arrangements o task setting, task declaration and official observer awareness o flight computer programming
	2. Demonstrated cross country flight	<ul style="list-style-type: none"> • Demonstrate <ul style="list-style-type: none"> • Effective lookout throughout all stages of the flight • Proficient navigation and choice of route considering thermal sources, weather and airspace • Safe consideration of outlanding options • Appropriate decisions on when to take thermals and when to leave • Safe entry to thermals and centring within 2-3 turns • An appropriate cruise speed relative to anticipated climb rate and height • Competent use of a flight computer
42	1. Describe the key elements of the GFA Sailplane Airworthiness System.	<ul style="list-style-type: none"> • Describe: <ul style="list-style-type: none"> • the principle of Airworthiness. • the purpose of GFA Certificate of Registration. • the purpose of a Certificate of Airworthiness. • the purpose of a Sailplane Maintenance Release and Daily Inspection Record.
	2. Conduct a Daily Inspection under supervision.	<ul style="list-style-type: none"> • Observe, Participate in, and conduct: <ul style="list-style-type: none"> • Daily Inspections under direct supervision of Instructors and DI Examiners. • Conduct under supervision: <ul style="list-style-type: none"> • Allowed pilot maintenance actions on minor defects; • Daily inspection certified in accordance with regulatory requirements.

GPC Unit	ELEMENT	PERFORMANCE STANDARDS
	3. Recognise non-airworthy conditions.	Recognise Non-airworthiness due to: <ul style="list-style-type: none"> • Missing or expired Sailplane Maintenance Release and Daily Inspection Record; • Outstanding Recurring Maintenance items (Due date or Time in service or Launches); • Outstanding non-cleared Major Defects; • Incorrect rigging of control connections, and failure to conduct and sign independent control checks after disconnection and reconnection; • Obstruction or incorrect functionality of primary and ancillary controls; • Physical or electrical defects or other incorrect functionality.
	5. Complete a Daily Inspector Examination.	Successfully complete: <ul style="list-style-type: none"> • A Daily Inspection Examination under the supervision of an authorised Daily Inspection Examiner.
43	Assessment of conditions and factors for safe operations.	Describe: <ul style="list-style-type: none"> • The environmental factors that would be taken into consideration when operating independently • The human factors that would be taken into consideration when operating independently.
	Knowledge of SAR processes.	Describe: <ul style="list-style-type: none"> • The entities that can be used for monitoring SAR time. • The process the PIC can use to cancel SAR
	Knowledge of the accident reporting process.	Describe: <ul style="list-style-type: none"> • The limitations and responsibilities of a pilot operating independently. • The processes and limitations associated with the site used by the pilot.
	Knowledge of rating and site limitations.	Describe: <ul style="list-style-type: none"> • The limitations and responsibilities of a pilot operating independently. • The processes and limitations associated with the site used by the pilot.
44	1. Completion of all pre-requisite GPC Elements.	Demonstrate <ul style="list-style-type: none"> • Completion of all previous GPC elements by examination of the student's training record.

7 SELF-LAUNCHING SAILPLANE TRAINING

7.1. Self-launching endorsement

7.1.1. Theoretical knowledge

In preparation for the demonstration of additional theoretical knowledge, the training course at an ATO should include theoretical knowledge instruction that should at least cover the revision or explanation of:

- (a) Aircraft ground handling-propeller/magneto safety and awareness.
- (b) Fuel and oil handling; safety precautions; refuel procedure; bonding/electrical potential; fuel and oil types used in powered sailplanes; correct fuel and oil grade for specific type as per AFM; mixing two stroke fuel; fuel water contamination check.
- (c) Daily inspection of engine, propeller and systems.
- (d) Engine instruments; interpretation of instrument indications and limitations.
- (e) Effect of density altitude on performance.
- (f) Aircraft limitations as per the AFM.
- (g) Daily Inspector (DI) authorisation on type.
- (h) Calculate Weight & Balance.
- (i) Visual Flight Rules.
- (j) Airspace Classifications and requirements.
- (k) Prohibited/Restricted/Danger areas.
- (l) Knowledge of required charts and publications (WAC, VNC, VTC, ERC, PCA, ERSA, etc.).
- (m) Magnetic Track/Altitude requirements.
- (n) Radio and operational procedures on or in the vicinity of certified, military, registered or designated non-controlled aerodromes.
- (o) Air Legislation.
- (p) Principles of flight
 - (i) operating limitations (addition: TMG);
 - (ii) propellers; and
 - (iii) flight mechanics.
- (q) Operational procedures for TMGs
 - (i) special operational procedures and hazards; and
 - (ii) emergency procedures.
- (r) Flight performance and planning
 - (i) mass and balance considerations;
 - (ii) loading;
 - (iii) CG calculation;

- (iv) load and trim sheet;
 - (v) performance of TMGs;
 - (vi) flight planning for VFR flights;
 - (vii) fuel planning;
 - (viii) pre-flight preparation;
 - (ix) flight plan; and
 - (x) flight monitoring and in-flight re-planning.
- (s) Aircraft general knowledge
- (i) system designs, loads, stresses, maintenance;
 - (ii) airframe;
 - (iii) landing gear, wheels, tyres, brakes;
 - (iv) fuel system;
 - (v) electrics;
 - (vi) piston engines;
 - (vii) propellers; and
 - (viii) instrument and indication systems.
- (t) Navigation
- (i) dead reckoning navigation (addition: powered flying elements);
 - (ii) in-flight navigation (addition: powered flying elements);
 - (iii) basic radio propagation theory;
 - (iv) radio aids (basics);
 - (v) radar (basics); and
 - (vi) GNSS.

7.1.2. Flight instruction

7.1.3. Self-Launching Sailplane Training syllabus is in Appendix 10

7.1.4. The numbering of exercises should be used primarily as an exercise reference list and as a broad instructional sequencing guide; therefore, the demonstrations and practices need not necessarily be given in the order listed.

7.1.5. The training elements should cover the revision or explanation of the following exercises:

- (a) Start procedure, including safety precautions.
- (b) Cockpit checks: Pre boarding (ABCDEF); Pre take-off (CHAOTIC IFPCRB - or pre take off checks as per the AFM); Pre landing (FUST IFPCRB); Pre aerobatic (HASELL); Vital Action Checks (CFMOST/CFM).
- (c) Engine handling and warm up.

- (d) Taxiing.
- (e) Additional checklist items (refer AFM).
- (f) Propeller and propeller system operation.
- (g) Effect of engine/propeller on take-off.
- (h) Effects of cross wind on take-off/possible loss of rudder control on tractor engine types.
- (i) Engine monitoring/limitations.
- (j) Level flight at various power settings.
- (k) Maintaining a heading/altitude.
- (l) Compass errors - Overshoot North/Undershoot South (ONUS).
- (m) Climbing and descending turns.
- (n) Steep turns while maintaining altitude.
- (o) Steep turns with engine off/engine retracted/propeller feathered.
- (p) Stalls; engine on and torque effect, and engine off.
- (q) Stalls; using power to minimise height loss.
- (r) Incipient spin (if approved); engine torque effects, and direction of engine/propeller rotation considerations.
- (s) Sideslipping (refer AFM); consider idiosyncrasies of type.
- (t) In-flight engine shut down procedures; propeller feathering; Engine cooling and retraction.
- (u) Instrument systems management; shut down, start up; Static/total energy switching.
- (v) Glide performance considerations; engine extended, propeller feathered/unfeathered.
- (w) In-flight engine start procedures; warm up.
- (x) Circuit joining; engine off and on.
- (y) Circuit joining with other traffic.
- (z) Engine-on landings, float effects and use of throttle.
- (aa) Engine-off landings.
- (bb) Thermal joining engine-on/engine-off.
- (cc) Outlanding; engine management and pop up disciplines, managing the workload.
- (dd) Icing conditions including carburettor icing
- (ee) Emergency Procedures.
- (ff) Engine failure after take-off.

- (gg) Engine restart with discharged battery. Air start procedure; use of G force assistance.
- (hh) Engine/electrical fires.
- (ii) Carbon Monoxide (CO); detection and effects.

7.1.6. List of exercises

Exercise 1: Familiarisation with the TMG

- (i) characteristics of the TMG;
- (ii) cockpit layout;
- (iii) systems; and
- (iv) checklists, drills and controls.

Exercise 1e: Emergency drills

- (i) action if fire on the ground and in the air;
- (ii) engine cabin and electrical system fire;
- (iii) systems failure; and
- (iv) escape drills, location and use of emergency equipment and exits.

Exercise 2: Preparation for and action after flight

- (i) serviceability documents;
- (ii) equipment required, maps, etc.;
- (iii) external checks;
- (iv) internal checks;
- (v) harness and seat or rudder panel adjustments;
- (vi) starting and warm-up checks;
- (vii) power checks;
- (viii) running down system checks and switching off the engine;
- (ix) parking, security and picketing (for example, tie down); and
- (x) completion of authorisation sheet and serviceability documents.

Exercise 3: Taxiing

- (i) pre-taxi checks;
- (ii) starting, control of speed and stopping;
- (iii) engine handling;
- (iv) control of direction and turning;
- (v) turning in confined spaces;
- (vi) parking area procedure and precautions;
- (vii) effects of wind and use of flying controls;
- (viii) effects of ground surface;
- (ix) freedom of rudder movement;
- (x) marshalling signals;
- (xi) instrument checks;
- (xii) air traffic control procedures (if applicable).

Exercise 3e: Emergencies: brake and steering failure**Exercise 4: Straight and level**

- (i) at normal cruising power, attaining and maintaining straight and level flight;
- (ii) flight at critically high air speeds;
- (iii) demonstration of inherent stability;
- (iv) control of pitch, including use of trim;
- (v) lateral level, direction and balance and trim;
- (vi) at selected air speeds (use of power);

- (vii) during speed and configuration changes; and
- (viii) use of instruments for precision.

Exercise 5: Climbing

- (i) entry, maintaining the normal and max rate climb and levelling off;
- (ii) levelling off at selected altitudes;
- (iii) en-route climb (cruise climb);
- (iv) climbing with flap down (if available);
- (v) recovery to normal climb;
- (vi) maximum angle of climb; and
- (i) (vii) use of instruments for precision.

Exercise 6: Descending

- (i) entry, maintaining and levelling off;
- (ii) levelling off at selected altitudes;
- (iii) glide, powered and cruise descent (including effect of power and air speed);
- (iv) side slipping (on suitable types);
- (v) use of instruments for precision flight; and
- (vi) descending with engine inoperative.

Exercise 7: Turning

- (i) entry and maintaining medium level turns;
- (ii) resuming straight flight;
- (iii) faults in the turn (incorrect pitch, bank and balance);
- (iv) climbing turns;
- (v) descending turns;
- (vi) slipping turns (on suitable types);
- (vii) turns onto selected headings, use of gyro heading indicator or compass; and
- (viii) use of instruments for precision.

Exercise 8a: Slow flight

Note: The objective is to improve the pilot's ability to recognise inadvertent flight at critically low speeds and provide practice in maintaining the TMG in balance while returning to normal air speed.

- (i) safety checks;
- (ii) introduction to slow flight;
- (iii) controlled flight down to critically slow air speed; and

- (iv) application of full power with correct attitude and balance to achieve normal climb speed.

Exercise 8b: Stalling

- (i) airmanship;
- (ii) safety checks;
- (iii) symptoms;
- (iv) recognition;
- (v) clean stall and recovery without power and with power;
- (vi) recovery when a wing drops; and
- (vii) approach to stall in the approach and in the landing configurations, with and without power, recovery at the incipient stage.

Exercise 9: Take-off and climb to downwind position

- (i) pre-take-off checks;
- (ii) into wind take-off;
- (iii) safeguarding the nose wheel (if applicable);
- (iv) crosswind take-off;
- (v) drills during and after take-off;
- (vi) short take-off and soft field procedure or techniques including performance calculations; and
- (vii) noise abatement procedures.

Exercise 10: Circuit, approach and landing

- (i) circuit procedures, downwind and base leg;
- (ii) approach and landing with and without (idle) engine power;
- (iii) safeguarding the nose wheel (if applicable);
- (iv) effect of wind and wind shear on approach and touchdown speeds;
- (v) use of airbrakes, flaps, slats or spoilers (if available);
- (vi) crosswind approach and landing;
- (vii) glide approach and landing (engine stopped);
- (viii) short landing and soft field procedures or techniques;
- (ix) flapless approach and landing (if applicable);
- (x) wheel landing;
- (xi) missed approach and go-around; and
- (xii) noise abatement procedures.

Note: In the interests of safety, it will be necessary for pilots who are trained on nose wheel TMGs to undergo dual conversion training before flying tail wheel TMGs, and vice versa.

Exercise 9/10e: Emergencies

- (i) abandoned take-off;
- (ii) engine failure after take-off;
- (iii) mislanding and go-around; and
- (iv) missed approach.

Exercise 11: Advanced turning

- (i) steep turns (45°), level and descending;
- (ii) stalling in the turn and recovery; and
- (iii) recoveries from unusual attitudes, including spiral dives.

Exercise 12: Stopping and restarting the engine

- (i) engine cooling procedures;
- (ii) switching off procedure in-flight;
- (iii) sailplane operating procedures;
- (iv) restarting procedure; and
- (v) decision process to start or not start the engine.

Exercise 13: Forced landing without power

- (i) forced landing procedure;
- (ii) choice of landing area, provision for change of plan;
- (iii) gliding distance;
- (iv) descent plan;
- (v) key positions;
- (vi) engine failure checks;
- (vii) use of radio;
- (viii) base leg;
- (ix) final approach;
- (x) landing; and
- (xi) actions after landing.

Exercise 14: Precautionary landing

- (i) full procedure away from aerodrome to break-off height;
- (ii) occasions necessitating;

- (iii) in-flight conditions;
- (iv) landing area selection:
 - (A) normal aerodrome;
 - (B) disused aerodrome; and
 - (C) ordinary field;
- (v) circuit and approach; and
- (vi) actions after landing.

Exercise 15a: Navigation

- (i) Flight planning
 - (A) weather forecast and actuals;
 - (B) map selection and preparation:
 - (1) choice of route;
 - (2) airspace structure; and
 - (3) safety altitudes;
 - (C) calculations:
 - (1) magnetic heading(s) and time(s) en-route;
 - (2) fuel consumption;
 - (3) mass and balance; and
 - (4) mass and performance;
 - (D) flight information:
 - (1) NOTAMs, etc.;
 - (2) radio frequencies; and
 - (3) selection of alternate aerodromes;
 - (E) TMG documentation;
 - (F) notification of the flight:
 - (1) pre-flight administrative procedures; and
 - (2) CASA flight plan form;
- (ii) Departure:
 - (A) organisation of cockpit workload;
 - (B) departure procedures:
 - (1) altimeter settings;
 - (2) ATC liaison in controlled airspace (may be simulated in case of unavailability of controlled airspace);

- (3) setting heading procedure; and
 - (4) noting of ETAs;
- (iii) En-route:
 - (A) maintenance of altitude and heading;
 - (B) revisions of ETAs and heading;
 - (C) log keeping;
 - (D) use of radio or compliance with ATC procedures;
 - (E) minimum weather conditions for continuation of flight;
 - (F) in-flight decisions;
 - (G) transiting controlled airspace;
 - (H) diversion procedures;
 - (I) uncertainty of position procedure; and
 - (J) lost procedure; and
- (iv) Arrival, aerodrome joining procedure:
 - (A) ATC liaison in controlled airspace (may be simulated in case of unavailability of controlled airspace);
 - (B) altimeter setting;
 - (C) entering the traffic pattern;
 - (D) circuit procedures;
 - (E) parking;
 - (F) security of TMG;
 - (G) refuelling;
 - (H) closing of flight plan, if appropriate; and
 - (I) post-flight administrative procedures.

Exercise 15b: Navigation problems at lower levels and in reduced visibility

- (i) actions before descending;
- (ii) hazards (for example, obstacles and terrain);
- (iii) difficulties of map reading;
- (iv) effects of wind and turbulence;
- (v) vertical situational awareness (avoidance of controlled flight into terrain);
- (vi) avoidance of noise sensitive areas;
- (vii) joining the circuit; and
- (viii) bad weather circuit and landing.

Exercise 15c: Radio navigation (basics)

- (i) Use of GNSS:
 - (A) selection of waypoints;
 - (B) to or from indications or orientation; and
 - (C) error messages;
- (ii) Use of VHF and other radio facilities, as available:
 - (A) availability, AIP and frequencies;
 - (B) R/T procedures and ATC liaison; and
 - (C) obtaining a QDM and homing; and
- (iii) Use of en-route or terminal radar:
 - (A) availability and AIP;
 - (B) procedures and ATC liaison;
 - (C) pilot's responsibilities; and
 - (D) secondary surveillance radar;
 - (1) transponders;
 - (2) code selection; and
 - (3) interrogation and reply.

7.2. Self-Launching Sailplane Cross-country/touring endorsement**7.2.1. Theoretical knowledge**

In preparation for the demonstration of additional theoretical knowledge, the training course at an ATO should include theoretical knowledge instruction that should at least cover the revision or explanation of:

- (a) Access the following information:
 - (i) NOTAMS.
 - (ii) Aviation Meteorological Forecasts.
 - (iii) Calculate Time of Last Light; Daylight/ Darkness graphs.
- (b) Interpretation of meteorological information:
 - (i) ARFOR (Area Forecasts).
 - (ii) TAF (Aerodrome Forecasts).
 - (iii) TTF (Trend Forecast).
 - (iv) Aerodrome Warnings and SIGMET (Significant Meteorological Information).
 - (v) Area QNH.
- (c) Route Selection. Use of aeronautical charts to plan the route in relation to:

- (i) Weather.
 - (ii) Terrain.
 - (iii) Airspace.
- (d) Navigation. Calculation of:
 - (i) Track.
 - (ii) Track correction
 - (iii) Distance.
 - (iv) Heading.
 - (v) Magnetic variation.
 - (vi) Ground speed.
 - (vii) Elapsed Times.
 - (viii) Fuel Requirements.
- (e) Flight Notification.
 - (i) Methods of notification of intended flight details, including Flight Plans, Flight Notes, and SAR time and cancellation.
 - (ii) Use of GPS and manual flight computers (protractor/slide rule type).
- (f) Principles of flight
Operating limitations
- (g) Operational procedures
 - (i) special operational procedures and hazards; and
 - (ii) emergency procedures.
- (h) Flight performance and planning
 - (i) mass and balance considerations;
 - (ii) loading;
 - (iii) CG calculation;
 - (iv) load and trim sheet; and
 - (v) performance of sailplanes.
- (i) Aircraft general knowledge
 - (i) system designs, loads, stresses, maintenance;
 - (ii) airframe;
 - (iii) landing gear, wheels, tyres, brakes; and
 - (iv) instrument and indication systems.

- (j) Navigation
 - (i) dead reckoning navigation (addition: powered flying elements);
 - (ii) in-flight navigation; and
 - (iii) GNSS.

7.2.2. Self-Launching Sailplane Cross Country Flight instruction.

- (a) Self-Launching Sailplane Cross-Country/Touring syllabus is in Appendix 11
- (b) The flight instruction should include at least the training syllabus specified in paragraph 6.3.2. However, credit may be given for exercises 4 to 8, 10 and 14.
- (c) A minimum of two dual multi-leg cross country flights totalling at least 5hr.
- (d) For pilots who have completed at least one 300km cross-country soaring flight as pilot in command in a non-powered sailplane, a minimum of one multi-leg cross-country flight totalling at least 2hrs.
- (e) The student shall receive training in:
 - (i) Map Reading.
 - (ii) Compass use and errors, including ONUS (overshoot north/undershoot south) and magnetic deviation.
 - (iii) Flight Log management.
 - (iv) Diversion procedures.
 - (v) Flight Rules and Procedures applicable to route.
 - (vi) Precautionary search and landing.
 - (vii) Requirements and use of EPIRB or PLB.
 - (viii) Transponder use and codes.
- (a)

7.2.3. Flight instruction.

- (b) Departure Procedures
- (c) Circuit Operations
- (d) Arrival Procedures
- (e) Transit Procedures

7.3. Self-Launching Sailplane Controlled airspace endorsement**7.3.1. Theoretical knowledge**

- (f) Use of Transponder.
- (g) Standard words and phrases.
- (h) Standard Radio Calls applicable to:
 - (i) Class D aerodromes,
 - (ii) Class C aerodromes.
- (i) ATC Readback requirements.
- (j) Interpretation of ERSA, VTC, VNC, ENC, and PCA.
- (k) Maintaining Track
- (l) Responsibilities operating in Class E airspace.

7.3.2. Flight instruction.

- (m) Self Launching Sailplane Controlled Airspace Endorsement Syllabus in in Appendix 12
- (n) Departure Procedures
- (o) Circuit Operations
- (p) Arrival Procedures
- (q) Transit Procedures

8 LOW-LEVEL FINISH TRAINING

- 8.1. The aim of the Low-level finish training is to qualify GPC holders to perform the manoeuvre specified in MOSP 2 paragraph 8.9.

8.2. Theoretical knowledge

The syllabus for the theoretical knowledge instruction should cover at least all of the following:

- (a) human factors
 - (i) workload Management;
 - (ii) cognitive tunnelling;
- (b) technical subjects
 - (i) energy management; and
 - (ii) general airframe and engine limitations (if applicable).

8.3. Flying training

Applicants for a GPC shall demonstrate to an instructor through the completion of a skill test the ability to perform, as PIC on sailplanes, the relevant procedures and manoeuvre with competency.

- 8.4. The completion of the training as specified in paragraph 8.3 shall be entered in the logbook of the pilot and signed by the head of training of the ATO or the instructor that is responsible for the training, as applicable.

9 CHARTER PILOT TRAINING

- 9.1. Training for the charter authorisation shall be carried out at an ATO and the pilot must demonstrate competence in the following flight sequences to a Level 3 Instructor:

- (a) a normal launch and release or, in the case of a powered sailplane, normal take-off;
- (b) recognising, and recovering from stalls and spins induced by the Level 3 Instructor;
- (c) the practical application of flight rules and procedures;
- (d) flying a normal circuit without reference to both an altimeter and an airspeed indicator;
- (e) emergency procedures during launch or take-off, and in flight.

- 9.2. When carrying out the sequences required under paragraph 9, the pilot may be required to sit in either seat of the sailplane and must complete all sequences without fault in lookout or handling technique, or harsh use of the controls.

- 9.3. The completion of the training shall be entered in the logbook of the pilot and signed by the head of training of the ATO that is responsible for the training.

10 LAUNCHING METHODS

- 10.1. GPC holders shall exercise their privileges only by using those launching methods for which they have completed specific training either during the training course in accordance with Section 2 or during additional training provided by an instructor after the issue of the GPC. Additional specific training on as new launch method shall cover GPC units 13, 14 and 20 relevant to the launching method.
- 10.2. The completion of the training as specified in paragraph (a) shall be entered in the logbook of the pilot and signed by the head of training of the ATO or the instructor that is responsible for the training, as applicable.

10.3. Instruction for self-launch

- 10.3.1. The training for the self-launch method should include the syllabus for self-launch set out in paragraph 6.3.2(f) (Units 13S, 14S and 20S).
- 10.3.2. At the end of the training, the applicant should demonstrate to the instructor the ability to perform all of the following:
- (i) a self-launch;
 - (ii) appropriate actions in the event of engine failures; and
 - (iii) exercise appropriate TEM strategies.

11 AEROBATIC TRAINING

- 11.1. The aim of the advanced aerobatic training is to qualify pilots to perform aerobatic manoeuvres and includes:
- (a) theoretical knowledge instruction appropriate for the rating sought; and
 - (b) aerobatic flight instruction for the manoeuvres to be flown.
- 11.2. The completion of the training course as specified in the following sections. Successful completion of training shall be entered in the logbook and signed by the head of training of the ATO that is responsible for the training.

11.3. Training For the Basic Aerobatic Rating

11.3.1. Theoretical knowledge

The syllabus for the theoretical knowledge instruction should cover at least all of the following:

- (a) human factors and body limitations
 - (i) spatial disorientation;
 - (ii) airsickness;
 - (iii) body stress and G-forces, positive and negative; and
 - (iv) effects of greyouts and blackouts.
- (b) technical subjects
 - (i) legislation affecting aerobatic flying to include environmental and noise subjects;

- (ii) principles of aerodynamics to include slow flight, stalls and spins, flat and inverted; and
 - (iii) general airframe and engine limitations (if applicable).
- (c) limitations applicable to the specific aircraft category (and type)
 - (i) air speed limitations;
 - (ii) symmetric load factors (type-related, as applicable); and
 - (iii) rolling Gs (type-related, as applicable).
- (d) aerobatic manoeuvres and recovery
 - (i) entry parameters;
 - (ii) planning systems and sequencing of manoeuvres;
 - (iii) rolling manoeuvres;
 - (iv) looping manoeuvres;
 - (v) combination manoeuvres; and
 - (vi) entry and recovery from spins, flat, accelerated and inverted.
- (e) emergency procedures
 - (i) recovery from unusual attitudes; and
 - (ii) drills to include the use of parachutes (if worn) and aircraft abandonment.

11.3.2. Aerobatic Flying training

The exercises of the basic aerobatic flying training syllabus should be repeated as necessary until the applicant achieves a safe and competent standard. Having completed the flight training, the student pilot should be able to perform a solo flight containing the manoeuvres specified in paragraph 11.3.2 (d). The dual training and the supervised solo training flights should be limited to the permitted manoeuvres of the type of sailplane used. The exercises should comprise at least the following practical training items:

- (c) confidence manoeuvres and recoveries
 - (i) slow flights and stalls;
 - (ii) steep turns;
 - (iii) side slips;
 - (iv) spins and recovery;
 - (v) recovery from spiral dives; and
 - (vi) recovery from unusual attitudes.
- (d) aerobatic manoeuvres as follows:
 - (vii) 45-degree climbing and diving lines performed as aerobatic manoeuvres;
 - (viii) inside loops;
 - (ix) wingover;

- (x) stall turns;
- (xi) lazy eight;
- (xii) spins;

11.4. Training For the Advanced Aerobatic Rating

11.4.1. Advanced Aerobatic Flying training

The exercises of the advanced aerobatic flying training syllabus should be repeated as necessary until the applicant achieves a safe and competent standard. Having completed the flight training, the student pilot should be able to perform a solo flight containing a sequence of aerobatic manoeuvres. The dual training and the supervised solo training flights should be limited to the permitted manoeuvres of the type of sailplane used. The exercises should comprise at least the following practical training items:

- (a) confidence manoeuvres and recoveries as specified in paragraph 11.3.2(c);
- (b) aerobatic manoeuvres:
 - (i) Chandelle;
 - (ii) Lazy Eight;
 - (iii) rolls;
 - (iv) loops;
 - (v) inverted flight;
 - (vi) Hammerhead turn; and
 - (vii) Immelmann.

11.5. For applicants who already hold basic aerobatic Rating as per section 11, the theoretical knowledge instruction as per point (b) may consist of a repetition of the elements specified in paragraph 11.3.1, and the flying training as per point 11.4.1 may focus on the aerobatic manoeuvres that are outside the scope of the basic aerobatic Rating.

11.6. Aerobatic Training Syllabus

11.6.1. Aerobatic training syllabus is in Appendix 13

12 RIDGE SOARING TRAINING

13.1. Ridge soaring can be trained by Approved Training Organisations with appropriate topography and weather conditions. Ridge soaring training contains the following elements:

- (a) look-out procedures;
- (b) practical application of ridge flying rules;
- (c) optimisation of flight path;
- (d) energy and speed control;
- (e) wind shear; and
- (f) considerations for change of turning radius at same indicated airspeed at different altitudes.

13 WAVE SOARING TRAINING

14.1. Ridge soaring can be trained by Approved Training Organisations with appropriate topography and weather conditions. Wave soaring training contains the following elements:

- (a) advanced oxygen systems training;
- (b) human factors and high altitude flight;
- (c) look-out procedures;
- (d) considerations and techniques for wave access and exit;
- (e) speed limitations with increasing height;
- (f) flight planning considerations; and
- (g) emergency procedures (eg radio fail, oxygen system malfunction, cloud, turbulence).

14 AEROTOW PILOT TRAINING

- 15.1. Aerotow pilots shall be trained and assessed for the issue of a tow pilot certificate in accordance with the requirements and syllabus detailed in the Gliding Australia Aerotowing Manual.
- 15.2. Aerotow pilot Examiners shall be trained and assessed for the issue of a tow pilot Examiner certificate in accordance with the requirements and syllabus detailed in the Gliding Australia [Aerotowing Manual](#).

15 GLIDING INSTRUCTOR TRAINING

16.1. Training of AElS, Level 1 and 2 instructors is carried out by instructors who hold a Level 3 Instructor Rating. Such training is carried out on a course normally convened by the Regional Association, using sufficient training staff with the necessary number of sailplanes and tugs to satisfactorily cover the syllabus.

16.2. Evaluation of the relevant background of an applicant

- (a) When evaluating the applicant's background, the competent authority should evaluate the personality and character of the applicant, and their cooperation with the competent authority.
 - (b) The competent authority may also take into account whether the applicant has been convicted of any relevant criminal or other offenses, taking into account Federal and State laws and principles of non-discrimination.
- 16.3. Applicants for an Instructor rating shall first pass a specific pre-entry assessment at an ATO, which shall take place within the 12 months preceding the start of the training course, to assess their ability to undertake the course.

16.4. Pre-entry assessment

The content of the pre-entry assessment should be determined by the ATO, taking into account the experience of a particular candidate. It may include interviews and/or an assessment during a simulated training session with the candidate being in the role of the instructor.

16.5. General Instructor Training Considerations

- 16.5.1. The aim of the training course is to train GPC holders to the level of instructor competence pertaining to the relevant Grades.
- 16.5.2. Throughout the training course, its content and structure should allow the student instructor to develop safety awareness by teaching the knowledge, skills and attitudes relevant to the

gliding instructor task including at least the following:

- (i) refresh the technical knowledge of the student instructor;
- (ii) train the student instructor to teach:
 - (A) the ground subjects and air exercises; and
 - (B) how to access all related sources of information;
- (iii) ensure that the student instructor's flying is of a sufficiently high standard; and
- (iv) teach the student instructor the principles of basic instruction and to apply them at all training levels.

16.5.3. With the exception of the section on Training Principles and Techniques, including adult teaching and learning, all the subject details contained in the ground and flight training syllabus is complementary to the GPC course syllabus.

16.5.4. The gliding instructor training course should give particular stress to the role of the individual in relation to the importance of human factors in the man-machine interface as well as in the instructor-student interaction, communications and leadership during theoretical knowledge instruction. Special attention should be paid to the applicant's maturity and judgement including an understanding of adults, their learning styles, behavioural attitudes and variable levels of education.

16.5.5. During the training course, the applicants should be made aware that their own attitudes are key to flight safety. Identifying and avoiding complacency and improving safety awareness should be a fundamental objective throughout the training course. It is of major importance for the training course to aim at giving applicants the knowledge, skills and attitudes relevant to a flight instructor's task.

16.6. Gliding Instructor Competencies and Assessment

16.7. Applicants for an Instructor rating shall be trained to achieve the following competencies:

- (a) prepare resources;
- (b) create a climate conducive to learning;
- (c) present knowledge;
- (d) integrate threat and error management (TEM) and crew resource management (CRM);
- (e) plan flights within safe risk limits and thresholds of intervention;
- (f) manage time to achieve training objectives;
- (g) facilitate learning;
- (h) assess trainee performance;
- (i) monitor and review progress;
- (j) evaluate training sessions; and
- (k) report outcome.

16.8. Training should be both theoretical and practical. Practical elements should include the development of specific instructor skills, particularly in the area of teaching and assessing TEM.

16.9. The training and assessment of instructors should be made against the following performance standards:

Competency	Performance	Knowledge/understanding of
Prepare resources	ensures adequate facilities; prepares briefing material; manages available tools;	objectives; available tools; competency-based training methods;
Create a climate conducive to learning	establishes credentials, role models appropriate behaviour; clarifies roles; states objectives; ascertains and supports student pilot's needs.	barriers to learning; learning styles.
Present knowledge	communicates clearly; creates and sustains realism; looks for training opportunities.	teaching methods
Integrate Human Factors and TEM	makes Human Factors and TEM links with technical training;	Human Factors and TEM; Causes and countermeasures against undesired aircraft states
Manage time to achieve training objectives	Allocates the appropriate time to achieve competency objective.	syllabus time allocation
Plan flights within safe risk limits and thresholds of intervention	Assesses possible risks and human errors, Plans flights with appropriate margins and options to allow safe learning and contingency interventions	Risk management principles, human error, human responses to stress, graduated levels of verbal and physical interventions
Facilitate learning	encourages trainee participation; shows motivating, patient, confident and assertive manner; conducts one-to-one coaching; encourages mutual support.	facilitation; how to give constructive feedback; how to encourage trainees to ask questions and seek advice.
Assesses trainee performance	assesses and encourages trainee self-assessment of performance against competency standards; makes assessment decision and provides clear feedback;	observation techniques; methods for recording observations.
Monitor and review progress	compares individual outcomes to defined objectives; identifies individual differences in learning rates; applies appropriate corrective action.	learning styles; strategies for training adaptation to meet individual needs.
Evaluate training sessions	elicits feedback from student pilots; tracks training session processes against competency criteria; keeps appropriate records.	competency unit and associated elements; performance criteria.
Report outcome	Reports accurately using only observed actions and events.	training phase objectives; individual versus systemic weaknesses.

16.10.Content

The training course consists of two parts:

16.10.1. Part 1 — Theoretical knowledge instruction

The content of the teaching and learning part of the gliding instructor course, as established in this section should be used as guidance to develop the syllabus for the training specified in paragraph 16.9.

The following Training Principles and Techniques (TPT) modules will be taught to all AEIs

Module 1 – Principles of Learning

Module 2 – Characteristics of the Trainer

Module 3 – Effective Communications

Module 4 – Standard Instructional Format

Module 5 – Flight and Risk Management

Module 6 – Trainer-Trainee Relationships

Module 7 – Human Factors

Module 8 – Training Tools and Systems

Module 9 – Safety Leadership and Just Culture

Module 10 – Incident Causation

16.10.2. Part 2 — Flight instruction

Part 2 includes the following training appropriate to the instructor rating sought.

(a) General

- (i) The air exercises are similar to those of the GPC training course but with additional items designed to cover the needs of a flight instructor.
- (ii) The numbering of exercises should be used primarily as an exercise reference list and as a broad instructional sequencing guide. Therefore, 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:
 - (A) the applicant's progress and ability;
 - (B) the weather conditions affecting the flight;
 - (C) the flight time available;
 - (D) the instructional technique considerations;
 - (E) the local operating environment; and
 - (F) the applicability of the exercises to the aircraft type.
- (iii) At the discretion of the instructors, some of the exercises may be combined whereas some other exercises may be done in several flights.
- (iv) It follows that student instructors will eventually be faced with similar inter-related factors. They should be shown and taught how to develop flight lesson plans, taking these factors into account, so as to make the best use of each flight lesson, combining parts of the set exercises as necessary.

(b) Briefings and debriefings

- (i) The briefing normally includes a statement of the aim and a brief allusion to principles of flight only if relevant. An explanation is to be given of exactly which air exercises are to be taught by the instructor and practised by the student during the flight. It should include how the flight will be conducted with regard to who is to fly the aircraft

and what airmanship, weather and flight safety aspects currently apply. The nature of the lesson will govern the order in which the constituent parts are to be taught.

- (ii) The five basic components of the briefing will be:
 - (A) the aim;
 - (B) the air exercise(s) (what, and how and by whom);
 - (C) flight briefing;
 - (D) check of understanding; and
 - (E) airmanship.
- (iii) After each exercise, the student instructor will debrief the staff instructor in the role of the student pilot. The debriefing is to evaluate:
 - (A) whether the objectives have been fulfilled;
 - (B) whether the errors are minor or major;
 - (C) what can be corrected or improved; and
 - (D) whether the student pilot has reached the required level of competence or the exercise must be done again.

The staff instructor will validate the debriefing.

(c) Planning of flight lessons

The development of lesson plans is an essential prerequisite of good instruction and the student instructor is to be given supervised practice in the development and practical application of flight lesson plans.

(d) General considerations

- (i) The student instructor should complete flight training in order to practise the principles of basic instruction at the GPC level. During this training, the student instructor occupies the seat normally occupied by the gliding instructor.
- (ii) The instructor providing this instructor training is normally taking over the role of the student pilot.
- (iii) It is to be noted that airmanship is a vital ingredient of all flight operations. Therefore, in the following air exercises, the relevant aspects of airmanship are to be stressed at the appropriate times during each flight.
- (iv) The student instructor should learn how to identify common errors and how to correct them properly, which should be emphasised at all times.

(e) Classroom briefings and air exercises

Exercise 1: Familiarisation with the sailplane

(i) Objective

To advise the student instructor on how to familiarise the student with the sailplane which will be used for the training and to test the student's position in the sailplane for comfort, visibility, and ability to use all controls and equipment. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing and exercise

The student instructor has to:

- (A) present the type of sailplane which will be used;
- (B) explain the cockpit layout: instruments and equipment;
- (C) explain the flight controls: stick, pedals, airbrakes, flaps (if available), cable release, undercarriage (if available);
- (D) check the position of the student on the seat for comfort, visibility, ability to use all controls;
- (E) explain the use of the harness;
- (F) demonstrate how to adjust the rudder pedal;
- (G) explain the differences when occupying the instructor's position; and
- (H) explain all checklists, drills, and controls.

(iii) Debriefing

Exercise 2: Procedure in the event of emergencies

(i) Objective

To advise the student instructor on how to familiarise the student with the use of the parachute and how to explain the bail-out procedure in case of emergency. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing and exercise

The student instructor has to:

- (A) explain how to handle the parachute with care (transport, storage and drying after use);
- (B) demonstrate the adjustment of the parachute harness;
- (C) aid the student to perform the adjustment of the parachute harness;
- (D) demonstrate the attachment of the static line of the parachute (may be simulated);
- (E) explain the bail-out procedure (especially from a sailplane in unusual attitude);
- (F) practise the bail-out procedure;
- (G) explain the procedure for landing with a parachute in normal conditions and with a strong wind; and
- (H) demonstrate and practise parachute landing fall drills.

(iii) Debriefing

Exercise 3: Preparation for flight

(i) Objective

To advise the student instructor on how to explain all the operations to be completed prior to flight. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) the need for a pre-flight briefing;
- (B) the structure and the content of this briefing;
- (C) which documents are required on board;
- (D) which equipment is required for a flight;
- (E) how to handle the sailplane on the ground, how to move it, how to tow it out and how to park it;
- (F) how to do the pre-flight external and internal checks;
- (G) the procedure for verifying in-limits mass and balance; and
- (H) the pre-launch checks (checklist).

(iii) Air exercise

The student instructor has to demonstrate:

- (A) the need for a pre-flight briefing;
- (B) that the required documents are on board;
- (C) that the equipment required for the intended flight is on board;
- (D) how to handle the sailplane on the ground, move it to the start position, tow it out and park it;
- (E) how to perform a pre-flight external and internal check;
- (F) how to verify in-limits mass and balance;
- (G) how to adjust harness as well as seat or rudder pedals;
- (H) the pre-launch checks;
- (I) how to advise the student pilot in performing the pre-flight preparation; and
- (J) how to analyse and correct pre-flight preparation errors as necessary.

(iv) Debriefing

Exercise 4: Initial experience

(i) Objective

To advise the student instructor on how to familiarise the student with being in the air, with the area around the airfield, to note the student's reactions in this situation, and to draw the student's attention to safety and look-out procedures. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) the area around the airfield;
- (B) the need for looking out; and
- (C) the change of aircraft control.

(iii) Air exercise

The student instructor has to:

- (A) show the noteworthy references on the ground;
- (B) analyse the reactions of the student; and
- (C) check that the student looks out (safety).

(iv) Debriefing

Exercise 5: Primary effects of controls

(i) Objective

To advise the student instructor on how to:

- (A) demonstrate the primary effects of each control with the help of visual references;
- (B) train the student pilot to recognise when the sailplane is no longer in a normal attitude along one of the axes and to return to the normal attitude;
- (C) train continuous and efficient look-out during these exercises; and
- (D) analyse and correct errors and student pilot mistakes as necessary.

(ii) Briefing

The student instructor has to explain:

- (A) the definitions of the axes of a sailplane;
- (B) the look-out procedures;
- (C) the visual references along each axis;
- (D) the primary effects of controls when laterally level;
- (E) the relationship between attitude and speed;
- (F) the use of flaps; and
- (G) the use of airbrakes.

(iii) (c) Air exercise

The student instructor has to demonstrate:

- (A) the visual references in flight;
- (B) the primary effect of the elevator;

- (C) the relationship between attitude and speed (inertia);
- (D) the primary effect of rudder on the rotation of the sailplane around the vertical axis;
- (E) the primary effect of ailerons on banking;
- (F) the effect of airbrakes (including changes in pitch when airbrakes are extended or retracted);
- (G) the effects of flaps (provided the sailplane has flaps);
- (H) the look-out procedures during all the exercises;
- (I) how to advise the student pilot to recognise the primary effects of each control; and
- (J) how to analyse and correct errors as necessary.

(iv) Debriefing

Exercise 6: Co-ordinated rolling to and from moderate angles of bank

(i) Objective

To advise the student instructor on secondary effects of controls and on how to teach the student to coordinate ailerons and rudder in order to compensate for the adverse yaw effect. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) the secondary effects of controls;
- (B) the adverse yaw effect;
- (C) how to compensate for the adverse yaw; and
- (D) the further effect of the rudder (roll).

(iii) Air exercise

The student instructor has to demonstrate:

- (A) the adverse yaw effect with a reference on ground;
- (B) the further effect of the rudder (roll);
- (C) the coordination of ruder and aileron controls to compensate for the adverse yaw effects;
- (D) rolling to and from moderate angles of bank (20 to 30 °) and returning to the straight flight;
- (E) how to advise the student pilot to coordinate ailerons and rudder; and
- (F) how to analyse and correct errors as necessary.

(iv) Debriefing

Exercise 7: Straight flight**(i) Objective**

To advise the student instructor on how to train the student to maintain straight flight with a constant heading without slipping and skidding. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) how to maintain straight flight;
- (B) the different air speed limitations;
- (C) the pitch stability of the sailplane; and
- (D) the effect of trimming.

(iii) Air exercise

The instructor student has to demonstrate:

- (A) maintaining straight flight;
- (B) inherent pitch stability;
- (C) the control of the sailplane in pitch, including use of trim with visual references and speed;
- (D) how to perform the instrument monitoring;
- (E) the control of level attitude with visual references;
- (F) the control of the heading with a visual reference on the ground;
- (G) the look-out procedures during all the exercises;
- (H) how to advise the student pilot to maintain straight flight; and
- (I) how to analyse and correct errors as necessary.

(iv) Debriefing**Exercise 8: Turning****(i) Objective**

To advise the student instructor on how to teach students to fly turns and circles with a moderate constant bank of about 30 ° with constant attitude (speed) and coordinated flight. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) the forces on the sailplane during a turn;
- (B) the need to look out before turning;

- (C) the sequences of a turn (entry, stabilising and exiting);
 - (D) the common faults during a turn;
 - (E) how to turn on to selected headings, use of compass; and
 - (F) the use of instruments (ball indicator or slip string) for precision.
- (iii) Air exercise
- The student instructor has to demonstrate:
- (A) the look-out procedure before turning;
 - (B) entering a turn (correction of adverse yaw);
 - (C) the stabilisation of a turn (keeping the attitude and compensating the induced roll);
 - (D) the exit from a turn;
 - (E) the most common faults in a turn;
 - (F) turns on to selected headings (use landmarks as reference);
 - (G) the use of instruments (ball indicator or slip string) for precision;
 - (H) how to advise the student pilot to fly a turn or circle with a moderate bank; and
 - (I) how to analyse and correct errors as necessary.
- (iv) Debriefing

Exercise 9a: Slow flight

- (i) Objective
- To advise the student instructor on how 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 in balance while returning to normal attitude (speed). Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.
- (ii) Briefing
- The student instructor has to explain:
- (A) the characteristics of slow flight; and
 - (B) the risks of stalling.
- (iii) Air exercise
- The student instructor has to check that the airspace below the sailplane is free of other aircraft before starting the exercise.
- The student instructor has to demonstrate:
- (A) a controlled flight down to critically high angle of attack (slow air speed), and draw the attention of the student to the nose up attitude, reduction of noise, reduction of speed;
 - (B) a return to the normal attitude (speed);

- (C) how to advise the student pilot to recognise inadvertent flight at critically low speeds;
 - (D) how to provide practice in maintaining the sailplane in balance while returning to normal attitude; and
 - (E) how to analyse and correct errors as necessary.
- (iv) Debriefing

Exercise 9b: Stalling

(i) Objective

To advise the student Instructor on how to improve the student's ability to recognise a stall and to recover from it. This includes stall from a level flight and stalls when a wing drops. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) the mechanism of a stall;
- (B) the effectiveness of the controls at the stall;
- (C) pre-stall symptoms, recognition and recovery;
- (D) factors affecting the stall (importance of the angle of attack and high speed stall);
- (E) effect of flaps if any on the sailplane;
- (F) the effects of unbalance at the stall safety checks;
- (G) stall symptoms, recognition and recovery;
- (H) recovery when a wing drops; and
- (I) approach to stall in the approach and in the landing configurations;
- (J) recognition and recovery from accelerated stalls.

(iii) Air exercise

The student instructor has to check that the airspace below the sailplane is free of other aircraft or traffic before starting the exercise.

The student instructor has to demonstrate:

- (A) stall from straight flight;
- (B) pre-stall symptoms, recognition and recovery;
- (C) stall symptoms, recognition and recovery;
- (D) recovery when a wing drops;
- (E) approach to stall in the approach and in the landing configurations;
- (F) recognition and recovery from accelerated stalls;
- (G) stalling and recovery at the incipient stage with 'instructor induced' distractions;

(H) how to improve the student pilot's ability to recognise a stall and to recover from it; and

(I) how to analyse and correct errors as necessary.

Note: Consideration is to be given to manoeuvre limitations and references to the flight manual or equivalent document (for example, owner's manual or pilot's operating handbook) in relation to mass and balance limitations. The safety checks should take into account the minimum safe altitude for initiating such exercises in order to ensure an adequate margin of safety for the recovery. If specific procedures for stalling or spinning exercises and for the recovery techniques are provided by the flight manual or equivalent document (for example, owner's manual or pilot's operating handbook), they have to be taken into consideration. These factors are also covered in the next exercise.

(iv) Debriefing

Exercise 10a: Spin recognition and avoidance

(i) Objective

To advise the student instructor on how to improve the student's ability to recognise a spin at the entry and incipient stages and to recover from it. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

(A) why a sailplane spins;

(B) how to recognise the symptoms of a spin (not to be confused with spiral dive);

(C) what are the parameters influencing the spin; and

(D) how to recover from a spin.

(iii) Air exercise

The student instructor has to check that the airspace below the sailplane is free of other aircraft or traffic before starting the exercise.

The student instructor has to:

(A) demonstrate stalling and recovery at the spin entry stage (stall with excessive wing drop, about 45°);

(B) make sure that the student recognises the spin entry;

(C) make sure that the student pilot is able to recover from the spin;

(D) check whether the student still reacts properly if the instructor induces distractions during the spin entry;

(E) demonstrate how to analyse and correct errors as necessary.

Note: Consideration of manoeuvre limitations and the need to refer to the sailplane manual and mass and balance calculations.

(iv) Debriefing

Exercise 10b: spins: entry and recovery**(i) Objective**

To advise the student instructor on how to recognise a spin and to recover from it. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) the spin entry;
- (B) the symptoms of a real spin and the recognition and identification of spin direction;
- (C) the spin recovery;
- (D) use of controls;
- (E) effects of flaps (flap restriction applicable to type);
- (F) the effect of the CG upon spinning characteristics;
- (G) the spinning from various flight attitudes;
- (H) the sailplane limitations;
- (I) safety checks; and
- (J) common errors during recovery.

(iii) Air exercise

The student instructor has to check that the airspace below the sailplane is free of other aircraft or traffic before starting the exercise.

The student instructor has to demonstrate:

- (A) safety checks;
- (B) the spin entry;
- (C) the recognition and identification of the spin direction;
- (D) the spin recovery (reference to flight manual);
- (E) the use of controls;
- (F) the effects of flaps (restrictions applicable to sailplane type);
- (G) spinning and recovery from various flight attitudes;
- (H) how to improve the student pilot's ability to recognise a spin and how to recover from it; and
- (I) how to analyse and correct errors as necessary.

(iv) Debriefing

Note (exercises 11a to 11c): The student instructor has to teach at least one of the following launch methods: winch launch, aero tow, and self-launch. At least three launch failure exercises should be completed. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

Exercise 11a: Winch launch

(i) Objective

To advise the student instructor on how to teach winch launches and on how to make sure that their student will manage an aborted launch. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) the signals or communication before and during launch;
- (B) the use of the launching equipment;
- (C) the pre-take-off checks;
- (D) the procedure for into wind take-off;
- (E) the procedure for crosswind take-off;
- (F) the safe and adequate profile of winch launch and limitations; and
- (G) the launch failure procedures.

(iii) Air exercise

The student instructor has to demonstrate:

- (A) the use of the launching equipment;
- (B) the pre-take-off checks;
- (C) the into wind take-off;
- (D) the crosswind take-off;
- (E) the safe and adequate profile of winch launch and limitations;
- (F) the procedure in case of cable break or aborted launch, launch failure procedures simulated during the winch launch;
- (G) how to teach the student pilot to perform safe winch launches;
- (H) how to teach the student pilot to manage an aborted launch (different altitudes and speeds); and
- (I) how to analyse and correct errors as necessary.

(iv) Debriefing

Exercise 11b: Aero tow

(i) Objective

To advise the student instructor on how to teach aero towing and on how to make sure that their student will manage an aborted launch. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) the signals or communication before and during launch;
- (B) the use of the launch equipment;
- (C) the pre-take-off checks;
- (D) the procedure for into wind take-off;
- (E) the procedure for crosswind take-off;
- (F) the procedure on tow: straight flight, turning and slip stream;
- (G) the recovery from out-of-position on tow;
- (H) the procedures in case of launch failure and abandonment;
- (I) the descending procedure on tow (towing aircraft and sailplane); and
- (J) the reasons for launch failures and abandonment or procedures.

(iii) Air exercise

The student instructor has to demonstrate:

- (A) the signals before and during launch;
- (B) the use of the launch equipment;
- (C) the pre-take-off checks;
- (D) the procedure for into wind take-off;
- (E) the procedure for a crosswind take-off;
- (F) the procedures on tow: straight flight, turning and slip stream;
- (G) the recovery from out-of-position on tow;
- (H) the procedure in case of launch failure and abandonment simulated by releasing the cable at a suitable height, with and without response to a signal from the tow plane;
- (I) the descending procedure on tow;
- (J) how to teach the student pilot to perform safe aero tow launches;
- (K) how to teach the student pilot to manage an aborted launch; and
- (L) how to analyse and correct errors as necessary.

(iv) Debriefing

Exercise 11c: Self launch**(i) Objective**

To advise the student instructor on how to teach launching with a self-launching sailplane and on how to make sure that the student will manage an aborted launch. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) the engine extending and retraction procedures;
- (B) the engine starting and safety precautions;
- (C) the pre-take-off checks;
- (D) the noise abatement procedures;
- (E) the checks during and after take-off;
- (F) the into wind take-off;
- (G) the crosswind take-off;
- (H) the procedure in case of power failure;
- (I) the procedure in case of abandoned take-off;
- (J) the maximum performance (short field and obstacle clearance) take-off; and
- (K) the short take-off and soft field procedure or techniques and performance calculations.

(iii) Air exercise

The student instructor has to demonstrate:

- (A) the engine extending and retraction procedures;
- (B) the engine starting and safety precautions;
- (C) the pre-take-off checks;
- (D) the noise abatement procedures;
- (E) the checks during and after take-off;
- (F) the into wind take-off;
- (G) the crosswind take-off;
- (H) the power failures and procedures;
- (I) the procedure in case of abandoned take-off;
- (J) the maximum performance (short field and obstacle clearance) take-off;
- (K) the short take-off and soft field procedure or techniques and performance calculations;

- (L) how to teach the student pilot to perform safe self-launches;
 - (M) how to teach the student pilot to manage an aborted launch (different altitudes);
and
 - (N) how to analyse and correct errors as necessary.
- (iv) Debriefing

Exercise 12: Circuit approach and landing

(i) Objective

To advise the student instructor on how to teach the student to fly a safe circuit approach and to land the sailplane. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) the procedures for rejoining the circuit;
- (B) the procedures for collision avoidance and the look-out techniques;
- (C) the pre-landing check;
- (D) the normal circuit procedures, downwind, base leg;
- (E) the effect of wind on approach and touchdown speeds ;
- (F) the visualisation of a reference point;
- (G) the approach control and use of airbrakes;
- (H) the use of flaps (if applicable); and
- (I) the procedures for normal and crosswind approach and landing.

(iii) Air exercise

The student instructor has to demonstrate:

- (A) the procedures for rejoining the circuit;
- (B) the procedures for collision avoidance and the look-out techniques;
- (C) the pre-landing check;
- (D) the standard circuit and contingency planning (for example, running out of height);
- (E) the effect of wind on approach and touchdown speeds;
- (F) the visualisation of an aiming point;
- (G) the approach control and use of airbrakes;
- (H) the use of flaps (if applicable);
- (I) the procedures for normal and crosswind approaches and landings;
- (J) how to teach the student pilot to fly a safe circuit approach;

- (K) how to improve the student pilot's ability to perform a safe landing; and
- (L) how to analyse and correct errors as necessary.

(iv) Debriefing

Exercise 13: First solo flight

(i) Objective

To advise the student instructor on how to prepare their students for the first solo flight.

(ii) Briefing

The student instructor has to explain:

- (A) the limitations of the flight (awareness of local area and restrictions);
- (B) the use of required equipment; and
- (C) the effect of the CG on the longitudinal stability of the sailplane.

(iii) Air exercise

The student instructor has to:

- (A) check with another or more senior instructor if the student can fly solo;
- (B) monitor the flight; and
- (C) debrief the flight with the student.

(iv) Debriefing

Exercise 14: Advanced turning

(i) Objective

To advise the student instructor on how to teach steep turns or circles (45 ° banking) at constant attitude (speed) and with the yaw string centred. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) the relationship between banking and speed;
- (B) how to master steep turns or circles;
- (C) the unusual attitudes which can occur (stalling or spinning and spiral dive); and
- (D) how to recover from these unusual attitudes.

(iii) Air exercise

The student has to demonstrate:

- (A) steep turns (45°) at constant speed and with the yaw string centred;
- (B) common errors (slipping and skidding);

- (C) unusual attitudes and how to recover from them;
 - (D) how to teach the student pilot to fly steep turns or circles; and
 - (E) how to analyse and correct errors as necessary.
- (iv) Debriefing

Note (exercises 15a to 15c): If the weather conditions during the instructor training course do not allow the practical training of soaring techniques, all items of the air exercises have to be discussed and explained during a long briefing exercise only.

Exercise 15a: Soaring techniques: thermalling

(i) Objective

To advise the student instructor on how to teach the student to recognise and detect thermals, on how to join a thermal and on how to look out, in order to avoid mid-air collisions. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) the look-out procedures;
- (B) the detection and recognition of thermals;
- (C) the use of audio soaring instruments;
- (D) the procedure for joining a thermal and giving way;
- (E) how to fly in close proximity to other sailplanes;
- (F) how to centre in thermals; and
- (G) how to leave thermals.

(iii) Air exercise

The student instructor has to demonstrate:

- (A) the look-out procedures;
- (B) the detection and recognition of thermals;
- (C) the use of audio soaring instruments;
- (D) the procedure for joining a thermal and giving way;
- (E) the procedure for flying in close proximity to other sailplanes;
- (F) the centring in thermals;
- (G) the procedure for leaving thermals;
- (H) how to improve the student pilot's ability to recognise and detect thermals;
- (I) how to improve the student pilot's ability to join a thermal and how to look out; and
- (J) how to analyse and correct errors as necessary.

- (iv) Debriefing

Exercise 15b: Soaring techniques: ridge flying

- (i) Objective

To advise the student instructor on how to teach the student to fly safely on ridges, to control their speed, and to apply the rules in order to avoid mid-air collisions. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

- (ii) Briefing

The student instructor has to explain:

- (A) the look-out procedures;
- (B) the ridge flying rules;
- (C) the recognition of safe and adequate flight path; and
- (D) speed control.

- (iii) Air exercise (if applicable during training and, if possible, at training site)

The student instructor has to demonstrate:

- (A) the look-out procedures;
- (B) the practical application of ridge flying rules;
- (C) the recognition of safe and adequate flight path;
- (D) speed control;
- (E) how to teach the student pilot to fly safely on ridges; and
- (F) how to analyse and correct errors as necessary.

- (iv) Debriefing

Exercise 15c: Soaring techniques: wave flying

- (i) Objective

To advise the student instructor on how to introduce students to wave flying and to teach them to fly safely at high altitude. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

- (ii) Briefing

The student instructor has to explain:

- (A) the look-out procedures;
- (B) the techniques to be used to access a wave;
- (C) the speed limitations with increasing height; and
- (D) the risks of hypoxia and the use of oxygen.

- (iii) Air exercise (if applicable during training and if possible at training site)

The student instructor has to demonstrate:

- (A) the look-out procedures;
- (B) the wave access techniques;
- (C) the speed limitations with increasing height;
- (D) the use of oxygen (if available);
- (E) how to improve the student pilot's ability to recognise and detect waves;
- (F) how to teach the student pilot to fly safely in a wave; and
- (G) how to analyse and correct errors as necessary.

(iv) Debriefing

Exercise 16: Out-landings

Note: If the weather conditions during the instructor training do not allow the practical training of out-landing procedures (a TMG may be used), all items of the air exercise have to be discussed and explained during a long briefing exercise only. Instructors may only teach the safe out-landing exercise after they have demonstrated the practical ability to do so.

(i) Objective

To advise the student instructor on how to teach students to select an out-landing field, to fly the circuit and how to master the unusual landing situation. Furthermore, the student instructor should learn how to identify student errors and how to correct them properly.

(ii) Briefing

The student instructor has to explain:

- (A) the gliding range at max glide ratio;
- (B) the engine re-start procedures (only for self-launching and self-sustaining sailplanes);
- (C) the selection of a landing area;
- (D) the circuit judgement and key positions;
- (E) the circuit and approach procedures; and
- (F) the actions to be performed after landing.

(iii) Air exercise

The student instructor has to demonstrate:

- (A) precision landings on the airfield;
- (B) the gliding range;
- (C) the procedures for joining, arrival and circuit at a remote aerodrome;
- (D) the selection of an out-landing area;
- (E) the procedures for circuit and approach on an out-landing field;

(F) the actions to be performed after landing.

The student instructor also has to be trained on:

(G) how to advise the student pilot to do perform a safe out-landing;

(H) how to master an unusual landing situation; and

(I) how to analyse and correct errors as necessary.

(iv) Debriefing

Note (Exercises 17a to 17c): If the weather conditions during the instructor training do not allow a cross-country training flight, the items of the air exercise have to be discussed and explained during a long briefing exercise only.

Exercise 17a: Flight planning

(i) Objective

To advise the student instructor on how to plan and prepare a cross-country flight.

(ii) Briefing

The student instructor has to explain:

(A) the weather forecast and current situation;

(B) the selection of the amount of water to be carried as a function of the weather forecast;

(C) the method for selecting a task, taking into account the average speed to be expected;

(D) the map selection and preparation;

(E) the NOTAMs and airspace considerations;

(F) the radio frequencies (if applicable);

(G) the pre-flight administrative procedures;

(H) the procedure for filing a flight plan where required; and

(I) alternate aerodromes and landing areas.

(iii) Debriefing

Exercise 17b: In-flight navigation

(i) Objective

To advise the student instructor on how to teach performing a cross-country flight.

(ii) Briefing

The student instructor has to explain:

(A) how to maintain track and re-route if necessary;

(B) the altimeter settings;

(C) the use of radio and phraseology;

- (D) the in-flight planning;
 - (E) the procedures for transiting controlled airspace or ATC liaison where required;
 - (F) the procedure in case of uncertainty of position; and
 - (G) the procedure in case of becoming lost;
- (iii) Air exercise
- The student instructor has to demonstrate:
- (A) maintaining track and re-routing if necessary;
 - (B) altimeter settings;
 - (C) the use of radio and phraseology;
 - (D) in-flight planning;
 - (E) procedures for transiting controlled airspace or ATC liaison where required;
 - (F) uncertainty of position procedure;
 - (G) lost procedure;
 - (H) use of additional equipment where required;
 - (I) joining, arrival and circuit procedures at remote aerodrome;
 - (J) how to teach the student pilot to perform a cross-country flight; and
 - (K) how to analyse and correct errors as necessary.
- (iv) Debriefing

Exercise 17c: Cross-country soaring techniques

- (i) Objective
- To advise the student instructor on the techniques for an efficient cross-country flight.
- (ii) Briefing
- The student instructor has to explain:
- (A) the speed to fly at maximal glide ratio;
 - (B) the speed to fly to maximise the cruise speed (MacCready theory);
 - (C) how to select the optimal track (efficient use of cloud streets, etc.);
 - (D) how to calculate the final glide; and
 - (E) how to perform a safe out-landing.
- (iii) Air exercise
- The student instructor has to demonstrate:
- (A) a cross-country flight;
 - (B) the selection of the optimal track (efficient use of cloud streets, etc.);

- (C) methods for determining optimal speed to fly;
- (D) use of final glide computers;
- (E) how to reduce risk and to react to potential dangers;
- (F) how to plan and perform an out-landing;
- (G) how to teach the student pilot techniques for an efficient cross-country flight; and
- (H) how to analyse and correct errors as necessary.

(iv) Debriefing

(f) Additional training elements for TMG instructional privileges

Additional training for TMG instructional privileges should include, following the principles of briefing, exercise and debriefing as established in paragraphs 16.10.2(b) and 16.10.2(e), the training syllabus set out in paragraph 7.1.2.

16.11. Standardisation arrangements for assessment and check flights

(a) General

- (i) An examiner / Level 2 or Level 3 instructor should allow an applicant adequate time to prepare for a test or check.
- (ii) An examiner should plan a test or check flight so that all required exercises can be performed while allowing sufficient time for each of the exercises and with due regard to the weather conditions, traffic situation, ATC requirements and local procedures.

(b) Purpose of a test or check

- (i) Determination through practical demonstration during a test or check that an applicant has acquired or maintained the required level of knowledge and skill or proficiency.
- (ii) Improvement of training and flight instruction in ATOs through feedback from examiners about items or sections of tests or checks that are most frequently failed.
- (iii) Assistance in maintaining and, where possible, improving air safety standards by having examiners display good airmanship and flight discipline during tests or checks.

(c) Conduct of a test or check

- (i) An examiner will ensure that an applicant completes a test or check in accordance with the relevant requirements in this MOSP and is assessed against the required test or check standards.
- (ii) Each item within a test or check section should be completed and assessed separately. The test or check schedule, as briefed, should normally not be altered by an examiner.
- (iii) A marginal or questionable performance of a test or check item should not influence an examiner's assessment of any subsequent items.
- (iv) An examiner should verify the requirements and limitations of a test or check with an applicant during the pre-flight briefing.
- (v) When a test or check is completed or discontinued, an examiner should debrief the applicant and give reasons for items or sections failed. In case of a failed or

discontinued skill test and proficiency check, the examiner should provide appropriate advice to assist the applicant in retests or rechecks.

- (vi) Any comment on, or disagreement with, an examiner's test or check evaluation or assessment made during a debriefing will be recorded by the examiner on the test or check report and will be signed by the examiner and countersigned by the applicant.
- (d) Examiner preparation
 - (i) An examiner should supervise all aspects of the test or check flight preparation, including, where necessary, obtaining or assuring an ATC clearance/liaison.
 - (ii) An examiner will plan a test or check in accordance the relevant requirements in this MOSP. Only the manoeuvres and procedures set out in the appropriate test or check form will be undertaken. The same examiner should not re-examine a failed applicant without the agreement of the applicant.

(e) Examiner approach

An examiner should encourage a friendly and relaxed atmosphere both before and during a test or check flight. A negative or hostile approach should not be used. During the test or check flight, the examiner should avoid negative comments or criticisms and all assessments should be reserved for the debriefing.

(f) Assessment system

Although test or checks may specify flight test tolerances, an applicant should not be expected to achieve these at the expense of smoothness or stable flight. An examiner should make due allowance for unavoidable deviations due to turbulence, ATC instructions, etc. An examiner should terminate a test or check only either when it is clear that the applicant has not been able to demonstrate the required level of knowledge, skill or proficiency and that a full retest will be necessary or for safety reasons. An examiner will use one of the following terms for assessment:

- (i) a 'pass' provided that the applicant demonstrates the required level of knowledge, skill or proficiency and, where applicable, remains within the flight test tolerances for the certificate or rating;
- (ii) a 'fail' provided that any of the following apply:
 - (A) the flight test tolerances have been exceeded after the examiner has made due allowance for turbulence or ATC instructions;
 - (B) the aim of the test or check is not met;
 - (C) the aim of exercise is met but at the expense of safe flight, violation of a rule or regulation, poor airmanship or rough handling;
 - (D) an acceptable level of knowledge is not demonstrated;
 - (E) an acceptable level of flight management is not demonstrated; and
 - (F) the intervention of the examiner is required in the interest of safety; and
 - (G) a 'partial pass' in accordance with the criteria shown in the relevant skill test.
- (g) Method and contents of the test or check
 - (i) Before undertaking a test or check, an examiner will verify that the sailplane intended to be used is suitable and appropriately equipped for the test or check.
 - (ii) A test or check flight will be conducted in accordance with the AFM.

- (iii) A test or check flight will be conducted within the limitations contained in the operations manual of an ATO.
- (iv) Contents
 - A test or check is comprised of:
 - (A) oral examination on the ground (where applicable) which should include:
 - (1) sailplane general knowledge and performance;
 - (2) planning and operational procedures;
 - (3) other relevant items or sections of the test or check;
 - (B) pre-flight briefing which should include:
 - (1) test or check sequence;
 - (2) safety considerations.
 - (C) in-flight exercises which should include each relevant item or section of the test or check; and
 - (D) post-flight debriefing which should include:
 - (1) assessment or evaluation of the applicant;
 - (2) documentation of the test or check with the applicant's instructor present, if possible.
- (v) A test or check is intended to simulate a practical flight. Thus, an examiner may set practical scenarios for an applicant while ensuring that the applicant is not confused and air safety is not compromised.
- (vi) An examiner should maintain a flight log and assessment record during the test or check for reference during the post-flight debriefing.
- (vii) An examiner should be flexible with regard to the possibility of changes arising to pre-flight briefings due to ATC instructions, or other circumstances affecting the test or check.
- (viii) Where changes arise to a planned test or check, an examiner should be satisfied that the applicant understands and accepts the changes. Otherwise, the test or check flight should be terminated.
- (ix) Should an applicant choose not to continue a test or check for reasons considered inadequate by an examiner, the applicant will be assessed as having failed those items or sections not attempted. If the test or check is terminated for reasons considered adequate by the examiner, only these items or sections not completed will be tested during a subsequent test or check.
- (x) An examiner may terminate a test or check at any stage, if it is considered that the applicant's competency requires a complete retest or recheck.

16.12. Assessment Of Competence

16.13. Applicants for the issue of an instructor rating shall pass an assessment of competence to demonstrate the ability to instruct a student pilot to the level required for the issue of an GPC.

16.14. The assessment shall include:

- (a) the demonstration of the competencies, during pre-flight, post-flight and theoretical knowledge instruction appropriate to the rating sought;
- (b) oral theoretical examinations on the ground, pre-flight and post-flight briefings, and in-flight demonstrations in sailplanes;
- (c) exercises adequate to evaluate the instructor's competencies.

16.15. The assessment of competence for the initial issue of an Instructor rating shall be conducted in sailplanes, excluding TMGs.

16.16. General

- (a) The format and application form for the assessment of competence are determined by the competent authority.
- (b) The sailplane that is used for the assessment should meet the requirements for training aircraft.
- (c) The Level 3 Instructor acts as the PIC.
- (d) During the skill test the applicant occupies the seat normally occupied by the instructor. The Level 3 Instructor functions as the 'student'. The applicant is required to explain the relevant exercises and to demonstrate their conduct to the 'student', where appropriate. Thereafter, the 'student' executes the same manoeuvres which can include typical mistakes of inexperienced students. The applicant is expected to correct mistakes orally or, if necessary, by intervening physically.
- (e) All relevant exercises should be completed within a period of 6 months. However, all exercises should, where possible, be completed on the same day. In principle, failure in any exercise requires a retest covering all exercises, with the exception of those that may be retaken separately. The Level 3 Instructor may terminate the assessment at any stage if they consider that a retest is required.

16.17. Content of the assessment of competence

- (a) The content of the assessment of competence for the Instructor Rating should be the following:

SECTION 1: ORAL THEORETICAL KNOWLEDGE EXAMINATION	
1.1	Air law
1.2	Aircraft general knowledge
1.3	Flight performance and planning
1.4	Human performance and limitations
1.5	Meteorology
1.6	Navigation
1.7	Operational procedures
1.8	Principles of flight
1.9	Training administration
SECTION 2: PRE-FLIGHT BRIEFING	
2.1	Visual presentation
2.3	Technical accuracy
2.4	Clarity of explanation
2.5	Clarity of speech
2.6	Instructional technique
2.7	Use of models and aids

2.8	Student participation
SECTION 3: FLIGHT	
3.1	Arrangement of demonstration
3.2	Synchronisation of speech with demonstration
3.3	Correction of faults
3.4	Aircraft handling
3.5	Instructional technique
3.6	General airmanship, risk management and safety
3.7	Positioning and use of airspace
SECTION 4: POST-FLIGHT DE-BRIEFING	
4.1	Visual presentation
4.2	Technical accuracy
4.3	Clarity of explanation
4.4	Clarity of speech
4.5	Instructional technique
4.6	Use of models and aids
4.7	Student participation

- (b) Section 1, the oral theoretical knowledge examination part of the assessment of competence, is divided into two parts:
- (i) The applicant is required to give a lecture under test conditions to other 'student(s)', one of whom will be the Level 3 Instructor. The test lecture is to be selected from items of Section 1. The amount of time for preparation of the test lecture is agreed upon beforehand with the Level 3 Instructor. Appropriate literature may be used by the applicant. The test lecture should not exceed 45 minutes.
 - (ii) The applicant is tested orally by a Level 3 Instructor for knowledge of items of Section 1 and the core instructor competencies (teaching and learning content given in the gliding instructor training course).
- (c) Sections 2, 3 and 4 comprise exercises to demonstrate the ability to be a gliding instructor (for example, instructor demonstration exercises) chosen by the Level 3 Instructor from the flight syllabus of the gliding instructor training course. The applicant is required to demonstrate instructional abilities, including briefing, flight instruction and de-briefing.

16.18. Demonstration of theoretical knowledge

The examiner applicant should demonstrate to the inspector a satisfactory knowledge of the regulatory requirements associated with the function of an examiner.

16.19. Conduct of the assessment

A Level 3 instructor will observe all examiner applicants conducting a test on a 'candidate' in a sailplane for which examiner certificate is sought. Items from the related training course and test or check schedule will be selected by the Level 3 instructor for examination of the 'candidate' by the examiner applicant. Having agreed with the Level 1 instructor the content of the test, the examiner applicant will be expected to manage the entire test. This will include briefing, the conduct of the flight, assessment and debriefing of the 'candidate'. The Level 3 instructor will discuss the assessment with the examiner applicant before the 'candidate' is debriefed and informed of the result.

The examiner applicant should refer to the flight test tolerances given in the relevant skill test. Attention should be paid to the following points:

- (a) questions from the 'candidate';
- (b) giving the results of the test and any sections failed; and
- (c) giving the reasons for failure.

16.20. Briefing the 'candidate'

- (a) The 'candidate' should be given time and facilities to prepare for the test flight. The briefing should cover the following:
 - (i) the objective of the flight;
 - (ii) licensing checks, as necessary;
 - (iii) freedom for the 'candidate' to ask questions;
 - (iv) operating procedures to be followed;
 - (v) weather assessment;
 - (vi) operating capacity of 'candidate' and examiner;
 - (vii) aims to be identified by 'candidate';
 - (viii) simulated weather assumptions (for example, wind speed and visibility cloud base);
 - (ix) use of screens (if applicable);
 - (x) contents of the exercise to be performed;
 - (xi) agreed speed and handling parameters (e.g. maximum launch speeds);
 - (xii) use of R/T;
 - (xiii) respective roles of 'candidate' and examiner (for example, during emergency); and
 - (xiv) administrative procedures (for example, submission of a flight plan).
- (b) The examiner applicant should maintain the necessary level of communication with the 'candidate'. The following check details should be followed by the examiner applicant:
 - (i) the need to give the 'candidate' precise instructions;
 - (ii) responsibility for the safe conduct of the flight;
 - (iii) intervention by the examiner, when necessary;
 - (iv) use of screens;
 - (v) liaison with ATC (where required) and the need for concise, easily understood intentions;
 - (vi) prompting the 'candidate' about required sequence of events (for example, following a launch failure); and
 - (vii) keeping brief, factual and unobtrusive notes.

16.21. Debriefing

The examiner applicant should demonstrate to the inspector the ability to conduct a fair, unbiased debriefing of the 'candidate' based on identifiable factual items. A balance between friendliness and firmness should be evident. The following points should be discussed with the 'candidate', at the applicant's discretion:

- (a) advising the candidate on how to avoid or correct mistakes;
- (b) mentioning any other points of criticism noted;
- (c) giving any advice considered helpful.

16.22. Recording or documentation

The examiner applicant should demonstrate to the inspector the ability to complete the relevant records correctly. These records may be:

- (a) the relevant test or check form;
- (b) the certificate entry; and
- (c) the notification of failure form.

16.23. AEI Training

16.24. Applicants for a AEI Rating shall be trained on a standardised course which is provided either by the competent authority or by an ATO approved by that competent authority. AEI training candidates are nominated using the form at Appendix 1 and assessed as competent using the form at Appendix 4.

16.25. Level 1 Instructor Training

16.26. Applicants for a Level 1 Instructor Rating will have completed a AEI training course and shall complete a course which is provided either by the competent authority or by an ATO approved by that competent authority. Level 1 instructor training candidates are nominated using the form at Appendix 2 and assessed as competent using the form at Appendix 5.

16.27. Level 2 Instructor Training

16.28. Applicants for a Level 2 Instructor Rating will have completed a Level 1 instructor training course and shall complete a course which is provided either by the competent authority or by an ATO approved by that competent authority. Level 2 instructor training candidates are nominated using the form at Appendix 3 and assessed as competent using the form at Appendix 6.

16.29. Level 3 Instructor Training

16.30. Applicants for a Level 3 Instructor Rating will normally participate as staff instructors under training on a AEI4, Level 1 or Level 2 instructor training course which is provided either by the competent authority or by an ATO approved by that competent authority. Level 3 instructor training candidates are nominated using the form at Appendix 4 and assessed as competent using the form at Appendix 7.

16.31. The standardisation course shall be tailored to the gliding instructor privileges sought and shall consist of theoretical and practical instruction, including, at least:

- (a) the conduct of two skill tests, proficiency checks or assessments of competence for the GPC or associated ratings or certificates;
- (b) instruction on the applicable requirements for a GPC and the applicable air operations requirements, the conduct of skill tests, proficiency checks and assessments of competence, and their documentation and reporting;

- (c) a briefing on the following:
 - (i) national administrative procedures;
 - (ii) requirements for the protection of personal data;
 - (iii) national fees; and
 - (iv) information on how to access the information contained in points (i) to (v) when conducting skill tests, proficiency checks or assessments of competence of an applicant whose competent authority is not the one that issued the Level 3 rating.

16.32. When issuing an approval for the conduct of Level 3 Instructor standardisation courses to an ATO, the competent authority should monitor the execution of these courses through appropriate oversight measures.

16.33. A Level 3 Instructor standardisation course should last at least 1 day, including theoretical and practical training.

16.34. The competent authority or the ATO should determine any further training required before presenting the candidate for the examiner assessment of competence.

Appendix 1 – Application form for AEI Training

APPLICATION FOR AIR EXPERIENCE INSTRUCTOR TRAINING

This form is only to be used for candidates attending a Regional Training Course.

DETAILS OF FLYING EXPERIENCE

Name	Date of birth
GFA Number	Nationality
Address	
Phone (home and work)	Email:
Club	
Gliding hours (total)	(Last 12 Months)
Launches (total)	(Last 12 Months)
GPC held – YES / NO <i>(if no, member is ineligible to attend an instructor training course)</i>	
Power flying experience (hrs)	Tug-pilot?
Powered sailplane experience	

CLUB PREPARATION

CFI to sign that the candidate is familiar with Operations Directive (OD) 01/16 'The Air Experience Instructor', meets the minimum requirements¹, and has attained a satisfactory standard in the following areas:

- Airmanship
- Flying accuracy
- Soaring ability
- Circuit planning without use of altimeter
- Approach control
- Consistently good two-point landings
- Stalling
- Spinning
- Threat and Error Management

The candidate should also be conversant with "Basic Gliding Knowledge" and current in all applicable launch emergencies.

Name of CFI	GFA No.
Club	
Signature	Date

FORWARD THIS APPLICATION FORM TO YOUR REGIONAL MANAGER, OPERATIONS

¹ Refer Operations Directive (OD) 01/16(4).

Appendix 2 – Application form for Level 1 Instructor Training

APPLICATION FOR LEVEL 1 INSTRUCTOR TRAINING

DETAILS OF FLYING EXPERIENCE

Name	Date of birth
GFA Number	Nationality
Address	
Phone (home and work)	Email:
Club	
Gliding hours (total)	(Last 12 Months)
Launches (total)	(Last 12 Months)
GPC held – YES / NO (if no, member is ineligible to attend an instructor training course)	
Power flying experience (hrs)	Tug-pilot?
Powered sailplane experience	
Powered sailplane experience	
No of flights in back seat of glider	
AEI or Charter rating? If so, experience (hrs)	

CLUB PREPARATION

I confirm the candidate has been prepared for instructor training, has completed the Integrated Training Program (ITP) Course, and has read and understands the Training Principles and Techniques (TPT) manual and the GPC Trainer guide modules.

I have flown with the candidate and confirm that a satisfactory standard has been attained in the following areas:

- Airmanship,
- Flying accuracy,
- Soaring ability,
- Circuit planning without use of altimeter,
- Approach control,
- Consistently good two-point landings,
- Stalling,
- Spinning, and
- launch emergencies.

Name of CFI	GFA No.
Club	
Signature	Date

CFI TO FORWARD THIS APPLICATION FORM TO THE RMO.

Appendix 3 – Application form for Level 2 Instructor Training

APPLICATION FOR INSTRUCTOR UPGRADING - LEVEL 1 TO LEVEL 2

DETAILS OF FLYING EXPERIENCE

Name:	GFA No.	Date of birth:
Address:		
Email:		
Phone (home, work and mobile):		
Club:		
Gliding hours (total):	(Last 12 Months):	
Launches (total):	(Last 12 Months)	
Level 1 Instructor rating issued (date):		
Instructing hours(total):	(Last 12 Months):	
Instructing Launches (total):	(Last 12 Months)	
Badges (or part badges) held:		
Power flying experience (hrs):	Tug-pilot?	
Powered sailplane experience:		

CLUB CERTIFICATION

CFI to certify that the candidate has performed satisfactorily as a Level 1 instructor in all pre- and post-solo instructional sequences.

In addition, at least one check flight shall be carried out by the CFI prior to the upgrading work being carried out by a Level 3 Instructor. The check flight shall ensure that the candidate is free from basic flying faults and is considered satisfactory for upgrading.

Finally, the CFI is to certify that candidate has at least 100 hours total gliding, of which at least 25 hours or 100 launches shall be as a Level 1 Instructor and has completed at least 12 month's service as a Level 1 instructor. [**Note:** the 12-month period may be lowered in exceptional cases at RM/O discretion (e.g. previous experience as a flight instructor in another discipline), but the hours/launches requirement must be met.]

Name of CFI	GFA No.
Club	
Signature	Date

FORWARD THIS APPLICATION FORM TO THE REGIONAL MANAGER, OPERATIONS

Appendix 4 – Application form for Level 3 Instructor Training

To be written – there is no form in use at present.

Appendix 5 – Assessment of competence for AEI Training

AIR EXPERIENCE INSTRUCTOR TRAINING SYLLABUS

DETAILS OF FLYING EXPERIENCE

Name	Date of birth
GFA Number	Nationality
Address	
Phone (home and work)	Email:
Club	
Gliding hours (total)	(Last 12 Months)
Launches (total)	(Last 12 Months)
GPC held – YES / NO <i>(If no, member is ineligible to be issued with an AEI rating)</i>	
Power flying experience (hrs)	Tug-pilot?
Powered sailplane experience	

Chief Flying Instructors: When a topic is first briefed taught or demonstrated, initial the 'Brief' column. Once the trainee has demonstrated proficiency in a topic you may initial the Competent (Comp) column and record the date.

Exercise	Brief	Comp	Date
TRAINING PRINCIPLES & TECHNIQUES			
<i>General teaching principles</i>			
<i>Flight and Risk Management</i>			
<i>Pre- & post-flight briefing</i>			
<i>Flying demonstration</i>			
<i>Trainee practice</i>			
<i>Has completed the ITP Course</i>			
CHECK LISTS			
<i>Pre Take-off Checks</i>			
<i>Pre landing Checks</i>			
LOOKOUT			
<i>How to lookout</i>			

Exercise	Brief	Comp	Date
AIRBORNE TRAINING (In accordance with GPC Syllabus)			
<i>Trainee 'follow through'</i>			
<i>Who has control?</i>			
<i>Keeping in range</i>			
<i>Lookout awareness</i>			
<i>Ground handling, signals</i>			
<i>Pre-flight preparation</i>			
<i>Orientation, sailplane stability</i>			
<i>Primary effects of controls</i>			
<i>Aileron drag, rudder co-ordination</i>			
<i>Straight flight, various speeds, trim</i>			
<i>Sustained turns, all controls</i>			

Overall Assessment (In the space below, add any comments you feel are appropriate).

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I hereby certify that the candidate has been trained as an Air Experience Instructor in accordance with the guidelines and a rating issued.

Signature Date:

Name CFI

NOTE: A duly signed copy of this completed Air Experience Instructor Training Syllabus must be added to an 'Instructor AEI' credential in the member's 'JustGo' profile.

Appendix 6 –Assessment of competence for Level 1 Instructor Training

Candidate's Name: GFA No.....

Club:

Level 3 Instructors: When a topic is first briefed taught or demonstrated, initial the 'Brief' column. Once the trainee has demonstrated proficiency in a topic you may initial the Competent (Comp) column and record the date.

Exercise	Brief	Comp	Date
PRINCIPLES & METHOD OF FLYING INSTRUCTION			
General teaching principles			
Flight and Risk Management			
Subject briefings			
Pre- & post-flight briefing			
Flying demonstration			
Trainee practice			
GROUND BRIEFING			
Aerodrome discipline			
Glider and Tug handling			
PILOT'S LOGBOOK			
What to look for			
What to write			
CHECK LISTS			
Pre Takeoff Checks			
Cable Checks			
Pre aerobatic Check			
Pre landing Checks			
LOOKOUT			
Limitations of eye & brain			
How to lookout			
AIRMANSHIP			
Physical & Psychological issues			
EFFECTS & USE OF CONTROLS			
Trainee 'follow through'			
Who has control?			
Keeping in range			
Elevator			
Airspeed Indicator & Speed Monitoring			
Ailerons			
Rudder			
Co-ordination of controls			
Use of the trim			
Airbrakes and spoilers			
FLYING STRAIGHT			

Exercise	Brief	Comp	Date
TURNING			
Basic turning			
Slip and skid			
Varying angles of bank			
Varying rates of roll			
Turn reversals			
Steep turns			
'Climbing' turns			
APPROACH CONTROL			
Approach			
Round out			
Float or hold off			
After touch down			
Use of the wheel brake			
Crosswind landings			
Recognition of over/under-shoot			
CIRCUIT PLANNING			
Aiming Point selection			
Approach path			
Approach speed			
Final turn			
Base leg			
Downwind leg			
Effects of wind & wind gradient			
Judging height			
Taking control			
WIRE LAUNCHING			
The Full Climb			
Crosswinds			
The Ground Run			
Launch failures			
The release			
Hand positions			
Launch equipment			
Conversions to wire launching			

<i>Drift, Track and Heading</i>			
Exercise	Brief	Comp	Date
AEROTOW LAUNCH			
<i>Vertical positioning behind the tug</i>			
<i>Lateral positioning behind the tug</i>			
<i>Slack in the rope</i>			
<i>Releasing from tow</i>			
<i>Ground operations</i>			
<i>Take off and initial climb</i>			
<i>Launch Failures</i>			
<i>Emergency Signals</i>			
<i>Boxing the slipstream</i>			
<i>Demonstrating divergent oscillation</i>			
STALLING			
<i>Stall with a nose drop</i>			
<i>Stall with a wing drop</i>			
<i>Slow flying exercises</i>			
<i>Stall with airbrakes or spoilers open</i>			

Exercise	Brief	Comp	Date
<i>Stall in a turn</i>			
<i>Stall in a steep turn</i>			
SPINNING AND SPIRAL DIVES			
<i>Under banked over ruddered turn</i>			
<i>Spiral dives</i>			
<i>Recovery problems</i>			
<i>Lack of effect of elevator at the stall</i>			
<i>High speed stall</i>			
<i>Changing effect of the rudder at the stall</i>			
FLAPS			
<i>Cruise/Climb Flaps</i>			
<i>Use of thermal flap</i>			
<i>Use of negative flap — to increase high speed performance</i>			
<i>Use of landing flap</i>			
TYPE CONVERSION			
<i>common difficulties</i>			

Overall Assessment (In the space below, add any comments you feel are appropriate and which may be of assistance to the person carrying out the rating test).

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I hereby certify that the candidate has been trained as an instructor in accordance with the guidelines and recommend that a rating test be carried out.

Signature Date:

Name GFA No. Level 3 Instructor

This completed document should be forwarded to the RTO/O, who will make it available to the independent Level 3 Instructor assigned to the task of carrying out a rating test.

NOTE: RM/O to retain 1 copy, forward 1 copy to club CFI. A copy of this form is also to be forwarded to the Executive Manager, Operations at emo@glidingaustralia.org with a copy of the completed 'Application for Level 1 Instructor Training form'.

Appendix 7 – Assessment of competence for Level 2 Instructor Training

Candidate's Name: GFA No.

Club:

Level 3 Instructors: When a topic is completed, initial the Completed (Comp) column and record the date.

Exercise	Comp	Date
OPERATIONS SUPERVISION		
<i>Risk drivers awareness</i>		
<i>Pitfalls</i>		
HUMAN RELATIONS		
<i>Leadership</i>		
<i>Supervision</i>		
<i>Skill Assessment</i>		
AIRMANSHIP		
<i>Thresholds of Intervention</i>		
<i>Remediation and reinforcement</i>		
<i>Personal example</i>		
SAFETY		
<i>Responses to incidents, accidents, near misses</i>		
<i>Reporting obligations</i>		
<i>Support of club Safety Management Systems</i>		
<i>Safety awareness, culture and improvement</i>		
DISCIPLINARY SITUATIONS		
<i>Getting the facts</i>		
<i>Disciplinary measures</i>		
FIRST SOLO		
<i>Considerations</i>		

Exercise	Comp	Date
SUPERVISION OF EARLY SOLO FLYING		
<i>From solo to 'off daily check flights'</i>		
<i>Solo flight considerations</i>		
<i>Mutual flying considerations</i>		
MEMBER PROTECTION POLICY		
<i>Code Of Conduct</i>		
<i>Organisational Responsibilities</i>		
<i>Individual Responsibilities</i>		
<i>Child Protection</i>		
<i>Anti-Discrimination and Harassment</i>		
<i>Sexual Relationships</i>		
<i>Complaints Procedures</i>		
CHIEF FLYING INSTRUCTOR		
<i>CFI responsibility</i>		
<i>Training Panel management</i>		
<i>Relationship of panel to committee</i>		
ANNUAL FLIGHT REVIEWS		
<i>Purpose</i>		
<i>Exercises</i>		

Flight Test: Patter and Demonstrations Satisfactory/Unsatisfactory (Delete as appropriate).

Overall Assessment

Level 2 Instructor rating recommended/not recommended (Delete as appropriate).

Note: If a Level 2 instructor rating is not recommended, specify work required to bring candidate up to standard overleaf.

Appendix 8 – Assessment of competence for Level 3 Instructor Training

To be written – this has not been written yet.

Appendix 9 – Progressive competency

(Refer to Glider Pilot Pilot Certificate – Pilot's Logbook)

The Training Card in this book lists all the competency units and sub-elements. Each day you fly, the Trainer will complete the date and number of flights on that date. In the column below the date, the trainer will evaluate your progress for that day. The Trainer will indicate your level of progress for each element by assigning 1 to 5 from the definitions in the following table.

1	The Trainer has briefed and demonstrated the exercise or sub element to the Student
2	The Student is practising the exercise or sub element
3	The Student is doing the flying with frequent prompting
4	The Student is flying and requires occasional prompting
5	The student is Competent at that exercise or sub element

Competency is achieved when you can reliably demonstrate that you meet the standard for the competency unit:

- under a broad range of conditions,
- by amending your actions and decisions to cater for a range of threats and errors
- by clearly explaining your options and decisions
- by planning for a range of eventualities.

When your trainer assesses you as competent at all Elements of Competency that comprise a Unit of Competency, the Trainer and you will each sign to indicate that you agree that you believe you meet all requirements of the unit.

Appendix 10 Powered Sailplane Training and Endorsement Syllabus: Self launching

Following satisfactory completion of this syllabus the pilot may be issued with a logbook endorsement by a	Pilot:	GFA No:		
	Description of Exercise	Briefed by	Competent	Date
	1. Aircraft Technical Knowledge <u>References:</u> Power Sailplane Manual; Aircraft Flight Manual (AFM). (a) Aircraft ground handling-propeller/magneto safety and awareness. (b) Fuel and oil handling; safety precautions; refuel procedure; bonding/electrical potential; fuel and oil types used in powered sailplanes; correct fuel and oil grade for specific type as per AFM; mixing two stroke fuel; fuel water contamination check.			

	<ul style="list-style-type: none"> (c) Daily inspection of engine, propeller and systems. (d) Engine instruments; interpretation of instrument indications and limitations. (e) Effect of density altitude on performance. (f) Aircraft limitations as per the AFM. (g) Daily Inspector (DI) authorisation on type. (h) Calculate Weight & Balance. 			
	<p>2. Flight Rules and Procedures applicable to power operations</p> <p><u>References:</u> Visual Flight Guide; Operations in the vicinity of non-towered (non-controlled) aerodromes (CAAP 166-1); Aeronautical Information Package (AIP) books.</p> <ul style="list-style-type: none"> (a) Visual Flight Rules. (b) Airspace Classifications and requirements. (c) Prohibited/Restricted/Danger areas. (d) Knowledge of required charts and publications (WAC, VNC, VTC, ERC, PCA, ERSA, etc.). (e) Magnetic Track/Altitude requirements. (f) Radio and operational procedures on or in the vicinity of certified, military, registered or designated non-controlled aerodromes. (g) Air Legislation. 			
	<p>3. Flight Training</p> <p><u>References:</u> Power Sailplane Manual; Aircraft Flight Manual (AFM).</p> <ul style="list-style-type: none"> (a) Start procedure, including safety precautions. (b) Cockpit checks: Pre boarding (ABCDEF); Pre take-off (CHAOTIC IFPCRB - or pre take off checks as per the AFM); Pre landing (FUST IFPCRB); Pre aerobatic (HASELL); Vital Action Checks (CFMOST/CFM). (c) Engine handling and warm up. (d) Taxiing. (e) Additional checklist items (refer AFM). (f) Propeller and propeller system operation. (g) Effect of engine/propeller on take-off. (h) Effects of cross wind on take-off/possible loss of rudder control on tractor engine types. (i) Engine monitoring/limitations. (j) Level flight at various power settings. (k) Maintaining a heading/altitude. (l) Compass errors - Overshoot North/Undershoot South (ONUS). (m) Climbing and descending turns. (n) Steep turns while maintaining altitude. (o) Steep turns with engine off/engine retracted/propeller feathered. (p) Stalls; engine on and torque effect, and engine off. (q) Stalls; using power to minimise height loss. (r) Incipient spin (if approved); engine torque effects, and direction of engine/propeller rotation considerations. (s) Sideslipping (refer AFM); consider idiosyncrasies of type. 			

	<ul style="list-style-type: none"> (t) In-flight engine shut down procedures; propeller feathering; Engine cooling and retraction. (u) Instrument systems management; shut down, start up; Static/total energy switching. (v) Glide performance considerations; engine extended, propeller feathered/unfeathered. (w) In-flight engine start procedures; warm up. (x) Circuit joining; engine off and on. (y) Circuit joining with other traffic. (z) Engine-on landings, float effects and use of throttle. (aa) Engine-off landings. (bb) Thermal joining engine-on/engine-off. (cc) Outlanding; engine management and pop up disciplines, managing the workload. (dd) Icing conditions including carburettor icing (ee) Emergency Procedures. (ff) Engine failure after take-off. (gg) Engine restart with discharged battery. Air start procedure; use of G force assistance. (hh) Engine/electrical fires. (ii) Carbon Monoxide (CO); detection and effects. 			
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Appendix 11 – Powered Sailplane Training and Endorsement Syllabus: Cross-Country/Touring

Following satisfactory completion of this syllabus the pilot may be issued with a logbook endorsement by a GFA Level 2 or higher rated Instructor. NOTE: A duly signed copy of the completed Powered Sailplane Training and Endorsement	Pilot:	GFA No:		
	Description of Exercise	Briefed by	Competent	Date
	1. Flight Planning <u>References:</u> Aircraft Operation, Performance and Planning (Aviation Theory Centre), GFA Airways & Radio Procedures for Glider Pilots manual, Aeronautical Information Package (AIP) books. <ul style="list-style-type: none"> (a) Access the following information: <ul style="list-style-type: none"> • NOTAMS. • Aviation Meteorological Forecasts. • Calculate Time of Last Light; Daylight/ Darkness graphs. (b) Interpretation of meteorological information: <ul style="list-style-type: none"> • ARFOR (Area Forecasts). • TAF (Aerodrome Forecasts). • TTF (Trend Forecast). • Aerodrome Warnings and SIGMET (Significant Meteorological Information). • Area QNH. (c) Route Selection. Use of aeronautical charts to plan the route in relation to: <ul style="list-style-type: none"> • Weather. • Terrain. • Airspace. (d) Navigation. Calculation of: <ul style="list-style-type: none"> • Track. 			

	<ul style="list-style-type: none"> • Track correction • Distance. • Heading. • Magnetic variation. • Ground speed. • Elapsed Times. • Fuel Requirements. <p>(e) Flight Notification.</p> <ul style="list-style-type: none"> • Methods of notification of intended flight details, including Flight Plans, Flight Notes, and SAR time and cancellation. • Use of GPS and manual flight computers (protractor/slide rule type). 			
	<p>2. Flight Training</p> <p>(a) A minimum of two dual multi-leg cross country flights totalling at least 5hr.</p> <p><i>For pilots who have completed at least one 300km cross-country soaring flight as pilot in command in a non-powered sailplane. A minimum of one multi-leg cross-country flight totalling at least 2hrs.</i></p> <p>(b) The student to receive training in:-</p> <ul style="list-style-type: none"> • Map Reading. • Compass use and errors, including ONUS (overshoot north/undershoot south) and magnetic deviation. • Flight Log management. • Diversion procedures. • Flight Rules and Procedures applicable to route. • Precautionary search and landing. • Requirements and use of EPIRB or PLB. • Transponder use and codes. 			

Appendix 12: Powered Sailplane Training and Endorsement Syllabus: Controlled Airspace

<p>Following satisfactory completion of this syllabus the pilot may be issued with a logbook endorsement by a GFA Level 2 or higher rated Instructor.</p> <p>NOTE: A duly signed copy of the completed Powered Sailplane Training and Endorsement Syllabus must be returned to the GFA office</p>	Pilot:	GFA No:		
	Description of Exercise	Briefed by	Competent	Date
	<p>1. Technical Knowledge</p> <p><u>References:</u> Visual Flight Guide, GFA Airways & Radio Procedures for Glider Pilots manual, Aeronautical Information Package (AIP) books, En Route Supplement Australia (ERSA).</p> <p>(a) Use of Transponder.</p> <p>(b) Standard words and phrases.</p> <p>(c) Standard Radio Calls applicable to:-</p> <ul style="list-style-type: none"> • Class D aerodromes, • Class C aerodromes. <p>(d) ATC Readback requirements.</p> <p>(e) Interpretation of ERSA, VTC, VNC, ENC, and PCA.</p> <p>(f) Maintaining Track</p> <p>(g) Responsibilities operating in Class E airspace.</p>			

	2. Flight training and Radio Requirements (Circle applicable class of airspace) (a) Departure Procedures D / C (b) Circuit Operations D / C (c) Arrival Procedures D / C (d) Transit Procedures D / C			

Appendix 13: Aerobatics Syllabus

Gliding Australia Aerobic Achievement Record Form					
Student:	GFA No.		Date:		
Trainer:	GFA No.				
Club:	Aircraft:				
Competencies (Describe)	1	2	3	4	5
The Gliding Australia and Civil Aviation Safety Authority Rules and Regulations associated with aerobatics					
Threats associated with aerobatics;					
Lookout considerations					
Physiology of aerobatics on the pilot					
Effect of weather in conducting aerobatics					
Preparation of the aircraft for aerobatic flight					
Airspace volume for aerobatics					
Local airport policy on the conduct of aerobatics					
List the basic aerobatics					
Preparing and wearing a parachute					
Explain the Manoeuvre Flight Envelope of the aircraft used in the flight exercises					

State key aircraft "V" speeds and "G" loads for the subject manoeuvres					
State the emergency situations are possible in the event of mishandling manoeuvres and how to recover from them					
Draw an Aresti Diagram for sequences					
Plan the sequences					
Draw the Aresti Diagram for Sortie					
Brief Airfield personnel on intended sequence					
Prepare the aircraft					
Brief the tow pilot					
Conduct the aerotow					
Conduct the HASLL check post release					
Broadcast intentions on the appropriate frequency					
Conduct the planned sequence within the designated airspace box					
45o Up-Line					
45o Down-Line					
Inside Loop					
Humpty-Bump – Canopy Down					
Chandelle					
Spin exiting onto a heading					
Maintain lookout and orientation					
Transition from aerobatic pilot to landing pilot safely					
Debrief and critique the sortie					
Logbook Endorsement Issued	Instructor	GFA No.	Date:		
1 The Trainer has briefed and demonstrated the exercise or sub element to the Student 2 The Student is practising the exercise or sub element 3 The Student is doing the flying with frequent prompting					

- | |
|--|
| <ul style="list-style-type: none">4 The Student is flying and requires occasional prompting5 The student is Competent at that exercise or sub element |
|--|