

**POWERED GLIDER KNOWLEDGE: SYLLABUS OF TRAINING AND
EXAMINATION**

1. The candidate shall receive instruction in accordance with the following sections that form this appendix:
 - (a) Ground Training Syllabus
 - (b) Flight Training Syllabus
2. Completion of training is to be recorded on the appropriate sheets. Instructors shall initial in the “Brief” column when the item is first briefed, taught or demonstrated. The “Comp” column is initialled and dated when the pupil is considered competent.
3. The sequence of exercises is a guide only. A number of exercises may be covered during any given flight.
4. The attached sheets form the training record for each pilot and shall be retained for a period of 3 years after completion. They must be available for inspection by an officer of the CAA if required.
5. Candidates are required to be examined in, and to have a broad knowledge of, the following:
 - (a) The Civil Aviation Act, 1990, the Civil Aviation Rules, especially Parts 91 and 104, and the GNZ Manual of Approved Procedures relating to the operation of gliders and powered gliders, including pertinent air traffic service practices and procedures.
 - (b) The elementary principles of aeronautical charts.
 - (c) The elementary principles of aeronautical meteorology including factors affecting glider flying.
 - (d) The elementary principles of theory of flight and powered glider limitations.
 - (e) The basic principles of powered glider construction.
 - (f) Safety practices and emergency procedures relevant to powered gliding operations.
 - (g) Human Factors relating to the operation of powered gliders.

GROUND TRAINING SYLLABUS

Name: _____

Affiliate: _____

	Brief	Comp	Date		Brief	Comp	Date
Power Glider Operations				Principles of Flight			
Use of this Training Record				Forces (Lift, Drag, Thrust, Wt)			
Engine & Glider logbooks				S&L under power			
Maintenance schedules				Climbing with power			
Weight and balance				Descending with power			
Ground towing / handling				Turning under power			
Securing / picketing				Stalling			
Rigging and derigging				T/o performance			
Refuelling procedures				Landing performance			
Daily Inspection (DI)				Stability and control			
Use of airspace				Propellers			
Power Glider Systems							
2 stroke engine design / ops				Fuel systems			
4 stroke engine design / ops				Carburettor systems			
Propellers				Electrical systems			
Extension / retraction system				Engine instrumentation			
Ignition systems				Emergency equipment			

POWERED GLIDER FLIGHT TRAINING SYLLABUS

Name: _____

Affiliate: _____

	Brief	Comp	Date		Brief	Comp	Date
FLIGHT PREPARATION				CIRCUIT & LANDING			
- Glider famil				- Normal: engine stowed			
- Documentation				- Pre landing checks (SUFB)			
- Pre Flight DI				- Landing with engine at idle			
- Engine starting / warm-up				- Go around with power			
- Power check				- Landing in crosswind			
GROUND HANDLING							
- Use of power							
- Directional control							
- Use of brakes							
CONTROLS				ADVANCED EXERCISES			
- Effects of slipstream				- Short take off			
- Engine controls				- Short landing			
- Propeller controls				- Max rate climb			
TAKEOFF WITH POWER				- Max angle climb			
- Pre take off checks				- X/C cruising			
- Launch procedure							
- Ground roll / lift off				SITUATIONAL AWARENESS			
- Normal climb				- Lookout / scanning			
- Engine shutdown / retraction				- Right of way / etiquette			
- Launch in crosswinds				- Use of airspace			
				- Out landing decision making			
POWERED FLIGHT				- Safety around propellers			
- Straight and Level							
- Turning				NON-NORMAL SITUATIONS			
- Cruise				- Low acceleration on t/o			
- Climbing				- Low level launch failure			
- Descending				- Engine failure on approach			
- Effect of configuration				- Fire in flight			
STALLING				- Carburettor icing			
- HASELL checks				- Engine control failures			
- Stall recognition/recovery				- Engine limit exceedance			
- Stall – power on / power off				- No instrument circuit			
- Stall in take off configuration				- CO contamination /poisoning			
- Stall in approach config'ns							
- Incipient spin & recovery				SOLO OPERATIONS			
- Full spin & recovery				- Responsibilities as PiC			
- Spiral dive & recovery							
LOGBOOK SIGN-OFF							
- 3 Safe solo flights							
- Multi-choice exam							