GLIDING INSTRUCTOR: SYLLABUS OF TRAINING

1. The Trainee Instructor shall receive instruction in accordance with the following sections that form this appendix:

   (a) Instructional Techniques Theory

   (b) Ground Instructional Techniques Training Syllabus

   (c) Airborne Instructional Techniques Training Syllabus

2. Completion of training is to be recorded on the appropriate sheets. Instructor Trainers shall initial in the "Brief" column when the item is first briefed, taught or demonstrated. The "Comp" column is initialled and dated by the Instructor Trainer when the trainee is considered competent. On completion of the relevant training, logbook endorsements are to be used by the Instructor Trainer to state what exercises the instructor is qualified to provide instruction in.

3. The attached sheets form the Instructor's training record and instructors under training are responsible for maintaining their own sheets until they are completed and handed to their CFI for record keeping purposes. (For more information on retention of training records, see paragraph 8 on page 19.)

4. Candidates are required to have a broad knowledge of, the following:

   (a) The Civil Aviation Act, 1990, the Civil Aviation Rules and the GNZ MOAP relating to the operation of gliders and powered gliders, including pertinent air traffic service practices and procedures.

   (b) The principles of aeronautical charts.

   (c) The principles of aeronautical meteorology including factors affecting glider flying.

   (d) The principles of theory of flight and glider limitations.

   (e) The principles of glider construction.

   (f) Safety practices and emergency procedures relevant to gliding operations.

   (g) Human Factors relating to the operation of gliders.

   (h) Theory of learning, ground instruction and airborne instructional techniques.

   (i) The role and responsibilities of gliding instructors.

INSTRUCTOR TRAINING SYLLABUS
INSTRUCTIONAL TECHNIQUES THEORY

Name: _____

Affiliate: _____

Trainers: Initial in "Brief" column when topic is first briefed, taught or demonstrated. Initial in "Comp" column and put date when Trainee Instructor has demonstrated a satisfactory understanding of the topic and can apply the skills in an effective manner.

	Brief	Comp	Date		Brief	Comp	Date
Administration				**Airborne Instructional Technique (IT)**			
Training requirements				Handover / takeover of control			
Use of this training record				Following through			
				Showing			
Learning Theory				Demonstration			
How people learn				Teaching			
Principles of instruction				Student practice			
Instructional techniques				Fault analysis			
Effective communication				**Remote Instruction Techniques**			
Barriers to communication				Pair flying			
Lesson planning				Lead / follow techniques			
Briefings				**Debriefings**			
Do's and Don'ts				Do's and Don'ts			
Pre-flight briefings				Post flight debriefings			
				Providing motivation			
Use of Training Aids (see Note 1 below)				**Instructor Responsibilities**			
- blackboard				Limits of rating held			
- whiteboard				Role model			
- magnetic board				Supervision			
- overhead projectors (OHP)				Making logbook entries			
- slides				Discipline			
- video				**Instructional Techniques for Check Flights**			
- notes / diagrams				Conduct and techniques			
- models				Assessing pilots			
- computers				Further training			

Note 1. It is not necessary for a new instructor to complete training in the use of all aids listed. They should be proficient with the use of sufficient training aids to complete the training exercises their Instructor Category allows

GROUND INSTRUCTIONAL TECHNIQUES
TRAINING SYLLABUS

Name: _____

Affiliate: _____

Trainers: Initial in "Brief" column when topic is first briefed, taught or demonstrated. Initial in "Comp" column and put date when Trainee Instructor has demonstrated a satisfactory understanding of the topic and can apply the skills in an effective manner.

	Brief	Comp	Date		Brief	Comp	Date
Teaching The Ground Training Exercises							
Use of Training Record				Airfield familiarisation			
Use of logbook				Timekeeping			
Daily club operations routine				Intro to use of radio			
Removal of gliders				Safety on the airfield			
Cleaning gliders				1st aid / Fire / Accident plan			
Ground towing / handling				Launch procedures			
Securing / picketing gliders				Refuelling procedures			
Rigging and de-rigging				Overview of GNZ			
Intro to Daily Inspection (DI)				Intro to Club Rules			
Local airspace				Intro to the MOAP			

AIRBORNE INSTRUCTIONAL TECHNIQUES TRAINING SYLLABUS

Name: _____

	Brief	Comp	Date
Teaching Air Experience / Familiarisation Flying			
- Glider familiarisation			
- Fitness for flight (I'M SAFE)			
- Strapping in and comfort			
- Local area famil/orientation			
- Pre t/o checks (CB SIFT BEC)			
- Lookout / scanning intro			
Teaching Use of Flying Controls			
- Handing/taking over control			
- Principles of flight			
- Effects of control (Primary)			
- Effects of control (Secondary)			
- Turns (up to 30° A o B)			
- Straight and Level			
- Use of trim			
- Use of airbrakes			
Teaching Aerotow Launch			
- Launch procedure			
- Ground roll			
- Lift off / initial position			
- Normal high tow position			
- Release			
- Out of position recovery			
- Launch in crosswinds			
- Launch failure demo			
Teaching Wire Launch			
- Launch procedures			
- Ground run & lift-off			
- Rotation and safety climb			
- Full climb			
- Top of climb / release			
- Signals / calls for speed			
- Launch in crosswinds			
- Launch failure recovery			
Sending Pupils Solo			
- Medical requirements			
- Responsibilities as PiC			
- Handling & performance			
- 3 safe solo flights			
-Oral question exam to Ac2-03			
- Filing syllabus forms			

	Brief	Comp	Date
Teaching Circuits			
- Wind assessment			
- Safe speed near the ground			
- Joining			
- Pre-landing checks (SUFB)			
- Downwind / base leg			
- Final approach / aim point			
- Flare / landing			
- Bounce recovery			
- Correcting if low			
- Correcting if high			
- Landing in crosswind			
- Baulked approach			
Teaching Situational Awareness			
- Lookout / scanning			
- Collision avoidance			
- Right of way / etiquette			
- Use of radio			
Teaching Stalling			
- HASELL checks			
- Reduced G famil			
- Slow speed handling			
- Stall recognition/recovery			
- Stall avoidance			
- Stall with brakes out			
- Stall in a turn			
- Incipient spin & recovery			
- Full spin & recovery (demo)			
- Spiral dive & recovery			
Teaching Non-Normal Situations			
- Low acceleration on takeoff			
- Brake out signal			
- Wave off signal			
- Release hang-up			
- Aerotow upset			
- No instrument circuit			

AIRBORNE INSTRUCTIONAL TECHNIQUES TRAINING SYLLABUS (CONTINUED)

Name: _____

	Brief	Comp	Date
Teaching Circuit Consolidation			
- Cross-wind circuits			
- High wind circuits			
- Wind gradient/turbulence			
- Joining variations			
- Steep / shallow approaches			
- Landing performance			
- Simulated out landing			
- Use of radio			
Teaching Stalling Consolidation			
- Review of symptoms			
- In turns			
- In approach configuration			
- Effect of slip / skid			
Teaching Spinning			
- Causes			
- Recognition			
- Recovery			
Teaching Spiral Dives			
- Recognition			
- Recovery			
Teaching Handling Exercises			
- Steep turns			
- Side slipping - straight			
- turning			
- brakes out			
- Manoeuvring up to V_R			
- Low aerotow position			
- Boxing tow slipstream			

	Brief	Comp	Date
Teaching Thermal Soaring			
- Lift sources / types			
- Entry / exit			
- Centering techniques			
- Min sink / max L/D			
- Rules / etiquette			
- Speed / AoB			
- Use of varios			
- “Safe gliding distance”			
Teaching Ridge Soaring			
- Mountain / ridge safety principles			
- Rules / etiquette			
- Optimum speed / height			
- Turbulence / gust stalling			
- Cloud formation / avoidance			
- Visual illusions			
Teaching Type Conversions			
- Flight manual review & DI			
- Aircraft & cockpit famil			
- Handling exercises			
- Rig / Derig			
Teaching Non-normal Situations			
- Brakes jammed open			
- Brakes jammed closed			
- Flight in rain			
Teaching Incident Reporting Procedures			
- Requirements for reporting			
- How to report			
- Follow-up action			

- 30 minute soaring flight			
- DI practical			
- Oral question exam to AC2-03			

AIRBORNE INSTRUCTIONAL TECHNIQUES
TRAINING SYLLABUS (CONTINUED)

Name: _____

	Brief	Comp	Date
Teaching Cross-country Soaring			
- Weather appreciation			
- Improving climb performance			
- Speed to fly			
- Glider preparation			
- Personal preparation			
- Maps / airspace			
- Airborne navigation			
- Use of GPS (as applicable)			
- Turnpoint turns			
- Flight in controlled airspace			
- Position reporting			
- Lost procedure			
Teaching Outlandings			
- Decision making			
- Field selection (6 S's)			
- Circuit planning			
- Correcting High / Low circuit			
- Landing on sloping ground			
- Outlanding dual / solo			
Teaching Retrieves			
- By road - trailer towing			
- Aerotow - rules			
- briefing			
- x/c towing			
- descent on tow			
Teaching Flying At High Speeds			
- Effects of controls			
- Rough air			
- Flight at V_{NE}			
- Use of airbrakes			

	Brief	Comp	Date
Teaching Rapid Descents			
- Controlled spiral			
- Use of brakes / flaps			
Teaching Final Glides To Circuit Height			
- Review of glide performance			
- Effect of lift / sink			
- Effect of wind			
- Action if low on glide			
- Action if high on glide			
- Ht loss / dist flown / 1000'			
- Radio procedures			
- Circuit joining			
Teaching Non-normal Situations			
- Loss of canopy			
- Mid air collision			
- Bale out / use of parachute			
- Inadvertent IMC			
- Flutter			
- Control malfunction			
- Ground looping			
Teaching Flying With Passengers			
- Rules / responsibilities			
- Briefing passengers			
- Orientation			
- Rapid descents			
- Front seat considerations			
- Back seat considerations			
- Air sickness			

QGP			
- Min requirements for XCP			

AIRBORNE INSTRUCTIONAL TECHNIQUES TRAINING SYLLABUS (CONTINUED)

Name: _____

	Brief	Comp	Date		Brief	Comp	Date
Teaching Badge Flying				**Teaching Aerobatics**			
- Sporting code				- Rules			
- Task selection				- Glider limitations			
- Planning & map preparation				- Human G tolerance			
- Declaration				- Glider preparation			
- Barographs & cameras				- Unusual attitudes / recovery			
- 2 hour flight				- Wingover			
- 3 hour flight				- Chandelle			
- 4 hour flight				- Loop			
- 50 km cross-country (x/c)				- Stall turn			
- 100 km x/c task				- Half roll			
- 200 km x/c task				- Barrel roll			
- Height gains				- Inverted flight			
Teaching Competition Flying				- Sequences			
- Crewing				**Teaching Display Flying**			
- Race tuning / ballasting				- Rules			
- Gridding and launch				- Fitness / attitude			
- Start procedures / tactics				- Site/sequence planning			
- Navigation / deviations				- Energy management			
- Turnpoints				- Low level clearance			
- Decision making / risks				**Teaching Instrument Flying**			
- Competition finishes				- Rules / airspace			
- Heat stress / dehydration				- Inst theory / limits / failures			
- Fatigue				- Scanning / S&L / turns			
Teaching High Altitude Soaring				- Human balance system			
- Conditions for wave				- Leans & disorientation			
- Launch in wave conditions				- Unusual attitude recovery			
- Soaring rotor				- Emergency descent			
- Crossing waves				- Spin / spiral dive			
- Cloud formations / gaps				- Icing / turbulence			
- IAS/TAS/flutter/turbulence							
- Airspace				**Teaching How To Perform Functional Check Flights**			
- Navigation				- Pre-flight preparation			
- Hypoxia / hyperventilation				- Flight manoeuvres			
- Oxygen systems				- Post flight reporting			
- Effects of reduced pressure				**Teaching Multiple Towing**			
- Cold stress / hunger stress				- Performance requirements			
- Vision				- Briefing / set up / signals			
- Cold soak considerations				- T/O initial tow position			
- Carriage of passengers				- High / low position on tow			
Teaching Formation Flying				- Release			
- Rules / briefings				- Non-normal situations			
- Station keeping				- Cleared for short rope			