

1. AIM AND OBJECTIVE

- 1.1 The aim of this Standard Operating Procedure (SOP) is to ensure that ground/launching operations are carried out in a consistent and standardized manner.
- 1.2 The objective is that all club members and visiting pilots must be fully conversant with this procedure to ensure that club operations run safely and smoothly.
- 1.3 To fly solo at Nelson Lakes Gliding Club (NLGC) all solo pilots must have read this SOP and signed the SOP register to confirm that they have read and fully understood this SOP. If you have any doubts or concerns you must ask the Duty Instructor.
- 1.4 It is not expected that this SOP will prevail when any emergency dictates otherwise. In this case pilots must make whatever decision is necessary to preserve life, prevent injury and to avoid damage to aircraft.

2. SAFETY FIRST

- 2.1 Gliding club policy, underwritten by both the club president and committee is.

"We will do it safely or we will not do it at all"

- 2.2 Any safety concern, injury or damage shall be brought to the attention of the duty instructor, if you identify an issue then you own it.
- 2.3 Visitors and spectators on the airfield shall not be permitted beyond a notional line running from the club house to the hanger unless escorted by a club member or person familiar with launch point operations.
- 2.4 Children must be under strict control by an adult.
- 2.5 No dogs are allowed on the airfield.
- 2.6 Notwithstanding pilots walking towed gliders back to the launch point, nobody is permitted to walk on the airfield in front (west) of a line drawn from the clubhouse to the nose of a launching glider. This is the zone where the glider could veer off to during a launch and must be kept clear during launching.

3. DAILY BRIEFING

- 3.1 The club operates a daily briefing before the first launch on every day. To fly on any day you *must* have had a briefing from the Duty Instructor no matter how experienced you are.

- 3.2 If you cannot attend you must see the Duty Instructor or someone who has attended, to be briefed. No briefing no flying!
- 3.3 These procedures are to be adopted and followed for normal club operations.
- 3.4 Should the situation dictate on any day, they may, if warranted be over-ridden by the duty instructor. Should this occur, a full briefing of all personnel on the field shall take place prior to any deviation from the SOP occurring.
- 3.5 The briefing shall review potential hazards and identify those controls needed to eliminate or mitigate the risk of accident or injury.

4. LAKE STATION AIRFIELD: PRIVATE PROPERTY

- 4.1 The owner has generously made the airfield available for gliding operations.
- 4.2 Pilots and visitors are requested to respect the privilege afforded to them by the owner and keep the area tidy and not leave objects or obstructions e.g. pickets, on or about the air field.

5. THIRD PARTY/PUBLIC LIABILITY INSURANCE

- 5.1 All gliders operating at Lake Station (whether under the auspices of NLGC or a visiting glider) MUST carry third party and public liability insurance for a minimum coverage sum of \$250,000. Proof of such insurance coverage may be requested anytime by the CFI, Duty Instructor or Club Secretary.

6. WINCH LAUNCHING, RUNWAY 29

- 6.1 Winching gliders are to launch on the North (river) side of the strip. A launching mark is at RW29 end for positioning the front glider. Pilots waiting to launch should line up behind the front glider on the grid. Waiting gliders should not be allowed to stray to the South (road) side and block the landing area.
- 6.2 Gliders should only be put in the winch line if they are planning to launch without delay. If you are not launching you must be parked well clear of launching and landing operations .
- 6.3 On busy days, Pilots waiting to be launched on the next 2 cables should be ready to launch
- 6.4 with all pre-flight checks including their release checks completed ready to go prior to the wires arriving so there are no delays. (use a spare strop to do the release checks before the cables arrive saves time).
- 6.5 Launching pilots should where possible give a pre-warning on the radio (119.1MHz) to the winch to ensure the winch is also ready:

“WINCH, glider [rego] Launching 1 minute”

- 6.6 Pilots not ready when the cables arrive may be removed from the grid. Be ready!
- 6.7 NLGC uses the standard NZGA Glider pre-flight checks of CBSIFTCBE with the addition of the BGA "A,B,C,D" check *prior* to getting into the glider.
- 6.8 A sterile area, free of distractions (chatting pilots etc) must be observed around a cockpit where pre-flight checks are being made. If disturbed you must start your checks again.
- 6.9 Gliders fitted with removable tail dollies must never have their tail dolly on and done up unless being moved. Parking a glider with the dolly on and done up is not permitted.

7. LAUNCH CABLE ATTACHMENT PROCEDURE

- 7.1 NLGC uses the standard TOST weak link and cable system. Links available are Blue, Red and Brown. It is the pilot's responsibility to ensure the correct weak link for your glider is being attached.
- 7.2 The launch assistant is responsible for connecting the drogue parachute to the cable, and the weak link connection strop to the launch cable and verifying the condition of the weak link (a one person operation).
- 7.3 Second launch cable. Following the first launch the second winch cable must not be picked up or connected to the drogue/weak link/connection strop until the first cable has been fully retrieved by the winch.
- 7.4 After all the pre-flight checks are complete the pilot will confirm to the launch assistant in the following manner:-

"BELLY HOOK ON PLEASE, BLUE LINK" (or red or brown)

- 7.5 The launch assistant should verbally confirm the colour of requested weak link is clipped onto the parachute, and then using either verbal, hand or preferably both, signal to the pilot:-
 - ***"OPEN"*** (and or hold hand up with your palm open) *The pilot opens the cable release with the yellow knob. The launch assistant will then insert the connection ring into the centre of gravity (belly) hook and say or indicate:-*
 - ***"CLOSED"*** (and or close their hand like a fist) *The launch assistant then checks that the cable is secure by pulling hard on the cable strop in the direction of launch, and then says the words:-*
 - ***"CABLE ON AND SECURE"*** *and takes the gliders southern wingtip and holds it balanced correctly. Note ** It is the wing tip holders responsibility to ensure the wings are evenly balanced suitable. Care must be taken if water ballast is used so that it has been allowed to settle and the wings are balanced (this takes about 5-10 seconds so don't rush!). You do not allow the launch to proceed any further until you are happy the glider is ready to fly.*
 - *The pilot, when ready, will look at and ask the wingtip holder:-***ALL CLEAR ABOVE AND BEHIND?**

- *The wingtip holder after leveling the wings correctly will then check and confirm all clear above and behind, (and in front in case the pilot cannot see) and once confirmed says clearly whilst looking at the pilot - **"ALL CLEAR ABOVE AND BEHIND"** A thumbs up to the pilot as well is often a good signal.*
- 7.6 The pilot then using their glider radio on frequency 119.10MHz will give the take up slack and all out signals to the winch as per radio procedure. (Section 8)
 - 7.7 If at any time the launch needs to be stopped (glider landing, cable overrun etc) the wing tip holder will urgently attract the pilots attention (slap the wing tip you are holding with the palm of your hand) and tell them to **"STOP STOP STOP"**.
 - 7.8 The pilot on hearing the stop order should **without delay release the cable** then work with the observer/wingtip person to resolve the delay and restart the launch when safe to do so.

8. STANDARDISED GLIDER TO WINCH COMMUNICATIONS FOR WINCH LAUNCHING

- 8.1 The initial launching instruction by the pilot must state the glider registration, which cable is to be used, and the action required must be stated twice.
- 8.2 The winch driver should repeat the glider registration, confirm the wire being used and the action being taken. Like this :-
- 8.3 (Pilot) **"WINCH, MIKE ZULU, RIVER CABLE, TAKE UP SLACK, TAKE UP SLACK"**
- 8.4 (Winch) **"MIKE ZULU TAKING UP SLACK RIVER CABLE"** then once the cable slack has been all taken up.
- 8.5 (Pilot) **"ALL OUT ALL OUT"**. The pilot MUST launch with their hand **ON** the yellow release knob until over 500ft AGL, This is mandatory as per BGA and GNZ rules.
- 8.6 During the launch should there be any drift corrections required by the winch, the winch will say:- **"TO THE RIVER, TO THE RIVER"** (or road)
- 8.7 Any speed corrections required by the pilot due to being too fast or too slow are done in the following manner:-
- 8.8 Speed readouts are given to the nearest 5 knots and in separate digits and said twice (eg **"FIVE FIVE, FIVE FIVE"** or **"SEVEN ZERO, SEVEN ZERO"**) and ONLY if a variation is required faster or slower or if requested by the winch driver (eg the first launch or a new glider type.) If it is right shut up! It is also acceptable after the speed has been given to additionally say **"MORE POWER"** or **"LESS POWER"** but the speed readout is the primary radio call and method. At all times you must adhere within the safe flying envelope of the glider and the BGA safe winch launching booklet deals with all the problems that can occur and must be read as well as this SOP.

- 8.9 An over speed of 10-15 knots up to the full climb angle is acceptable (then it has to be within placarded limits) however, less than 1.3 x your stall speed (1.3 Vs) you must not attempt to climb, safely deal with this emergency situation.
- 8.10 It is also acceptable to use the standard NZGA procedure of yawing the glider using the rudder to indicate to the winch driver to slow down, radio is however preferred at NLGC

9. EMERGENCY STOPPING

- 9.1 If you need to stop the winch you must call out **"WINCH STOP STOP STOP"** (or for ground ops **"TOW CAR STOP STOP STOP"**) It is important that the word stop is prefixed by who you are talking to (e.g. winch or tow car) as per standard RTO procedure and stated three times. Repeating "Stop" 3 times will help differentiate between other two word commands (e.g take up slack, all out).
- 9.2 You must also release the cable as you must not wait in the glider with a live cable on unless you are 100% ready to and the all clear has been given. **RELEASE THE CABLE** and start from section 7 again.

10. LANDING

- 10.1 NLGC uses the NZGA standard pre landing checks (SUFb) and a radio call should be made when joining downwind alerting all traffic of your intentions as per standard RTO procedure **"LAKE STATION TRAFFIC, GLIDER MIKE ZULU, DOWN WIND, RIGHT/LEFT RUNWAY 29"**
- 10.2 Landing should be, provided it is safe and possible on the centre line of the airstrip followed by a straight ground roll.. When the glider has stopped and if necessary, pilots should immediately get out and pull the glider to the side of the strip to ensure landings and launchings can continue safely.

11. GLIDER RETRIEVAL USING A VEHICLE

- 11.1 The rope used must be longer than half a wingspan of the glider being towed.
- 11.2 Gliders being retrieved after landing are normally towed back up the southern side of the airstrip as close as possible to the fence with the wingtip holder next to the fence.
- 11.3 When it is safe and clear you can cross the airstrip as required, you may need to change wings so the wing tip holder can control the glider near the grid. Keep clear of parked gliders there are no prizes for precision parking.
- 11.4 If a glider is landing while you are being retrieved and it appears likely to pass very close to you. Stop, put the northern (riverside) wing down to indicate to the landing glider that you have seen them and are waiting until they have landed before continuing.

- 11.5 Gliders should generally avoid being towed over winch cables, if you need to then care must be taken not to pick up the cable, for example with a tail skid.
- 11.6 Cars should avoid driving over winch cables
- 11.7 Gliders should not be towed into the final grid position but stopped well clear of other gliders. The tow cable then released and manually turned and pulled forward the final few metres.

12. COMBINED AEROTOW AND WINCHING OPERATIONS ON RUNWAY 29

- 12.1 Winching operations detailed above will occur without modification.
- 12.2 The aero-tow operation will operate from the road side of the strip as close as practicable to the RWY 29 threshold. Co-ordination of simultaneous operation will occur via positive radio communication.
- 12.3 Back-tracking of the tow plane will occur along the road side of the runway, and winch launches shall only take place when the tow-plane is clear of the winch launch area.
- 12.4 During aerotow operations no vehicles or spectators shall be permitted to park or stand along the eastern perimeter of the air field (the airfield entrance way).
- 12.5 Launching must use manual hand signals and have a forward signal person.

13. WINCH LAUNCHING RUNWAY 11

- 13.1 This vector does not have the same width when operating as RWY 29 does.
- 13.2 Gliders are to be launched on the river (north) side of the strip, (the same side that the wire should be towed down), and landing gliders should land in the centre of the strip.
- 13.3 The tow-car is to return to the winch along the river side of the strip, and vehicles retrieving landed gliders will back track down the road side of the strip.
- 13.4 Due to narrowness of the strip when operating off RWY 11, launching of gliders may be delayed if necessary while ground handling of landed gliders is occurring. NO launches should take place if there is any danger of the launching glider veering off and colliding with any gliders on the field.

14. WEATHER MINIMAL

- 14.1 Winch launching shall not take place when there is a possibility that the launch may result in an aircraft entering cloud.

15. WINCHING WITH A NORTHERLY CROSS WIND COMPONENT

- 15.1 There will be no winch launching if there is any danger of the cable (especially a broken cable or winch engine failure) crossing the road. Launching will cease if the wind changes during the day could allow this situation to occur (Sea Breeze).
- 15.2 Aerotowing is permitted in any wind direction.

16. VEHICLES PARKED IN HANGAR

- 16.1 Fire hazard. Prior to parking the tow out and retrieve vehicles in the hangar at the end of a flying day, the underbody of each vehicle shall be checked to ensure that no grass has accumulated on chassis members near exhaust pipes and that all car and winch batteries have been electrically isolated by using their battery isolator switch.

17. AMMENDMENTS

- 17.1 Further refinement of these notes may occur and if so, amended notes will be issued. Should any club member wish to raise any points that he/she feels need changing, the matter should be put to the Committee in writing for consideration.