

YSDCT  
OMARAMA WINCH



STANDARD  
OPERATING  
PROCEDURES

## **YSDCT OMARAMA WINCH SOPs**

### **1. General Requirements**

All winching operations are to be conducted in accordance with the GNZ MOAP and Omarama Airfield Limited SOPs and are to be under the supervision of the CFI of the Omarama Gliding Club (OGC).

Day to day supervision can be sub-delegated to a Duty Instructor who is suitably qualified for taking responsibility for overall winching operations.

A suitably qualified Launch Point Controller (LPC) shall be responsible to the Duty Instructor for ensuring safe and efficient winch launching in accordance with these SOPs. Terms of Reference for the LPC are contained in Appendix A and a Training Record is in Appendix A-2.

Note: When operating with a minimum number of personnel, the LPC and the wing runner can be the same person.

### **2. Pilot In Command (PIC) Requirements**

For winch operations a PIC must have;

- a) Completed the training detailed on the Winch Launch Rating Training Record attached as Appendix B.
- b) Demonstrated to a Winch Rated "A" or "B" Category Instructor a satisfactory standard of flying through all aspects of the launch with particular attention to:
  - i) Ground roll, takeoff and initial safety climb;
  - ii) Rotation to full climb;
  - iii) Speed control and understanding of signals;
  - iv) Release and cable clearance procedure;
  - v) Cable break procedure.
- c) Have a Logbook Endorsement stating they are rated for winch launching.
- d) Have signed a YSDCT Waiver and Release of Liability Form as detailed in Appendix C.
- e) Be a financial member of YGNZ.

The OGC shall maintain a register of pilots qualified on the YSDCT Omarama Winch.

### **3. PIC Currency Requirements**

A winch rated pilot shall not act as PIC unless they meet the above requirements and have completed a minimum of 3 safe winch launches at Omarama within the preceding 90 days.

### **4. Winch Driver Requirements**

All Winch Drivers must have completed the training as detailed on the Winch Driver Training Record as attached at Appendix D.

### **5. Tow Vehicle Driver Requirements**

All Tow Vehicle Drivers must have completed the training as detailed on the Tow Vehicle Driver Training Record as attached at Appendix E.

### **6. Weather Minima**

- a) Winch launching shall not take place when there is a possibility that the launch may result in an aircraft entering cloud.
- b) The following are the wind limits for commencing a winch launch
  - Max Crosswind Component of 10 kts; reduced to 5 kts for simulated launch failures
  - Max Tailwind Component of 3 kts

Individual glider pilots must be familiar with crosswind limits for the aircraft being flown, as detailed in the applicable flight manual. In addition it shall be the responsibility of the Duty Instructor to ensure that launching does not occur when the crosswind limitation for any particular aircraft is likely to be exceeded or cable drift is likely to compromise safe operations.

The pilot and the winch driver need to be pro-active to monitor cable drift to ensure adequate offset occurs during launching with cross winds.

### **7. Positioning of the Winch and the Launch Point Caravan**

The winch and LP Caravan will be positioned on the airfield as shown in the photo views of Omarama Airfield at Appendix F-2 and F-3. They are to be towed onto their locations using the airfield perimeter track.

### **8. Cable Tow Out**

It is of vital importance that the tow out from the winch with tandem cables is done in an absolute straight line to avoid cables from becoming crossed. The tow out vehicle must accelerate slowly when leaving the winch (max speed 25kph) and slow down gradually when nearing the glider to prevent wire over-run on the winch drums. The wing tip to which the cables are towed to is determined by the winch driver (& will normally be the upwind wing tip). After dropping the cables at the launch point, the two cables must be separated with the cable being closest to the centre of the glider always being used first. The remaining cable must be positioned clear of the takeoff path of the glider to be launched.

#### **a) Operations on RWY 09**

The winch is to be set up on the designated *winch-pad* located at the eastern end of the northern edge of runway 09.

The tow-out vehicle is to pull out the cables along the mown track just north of northern edge of strip. The tow-out vehicle will proceed back down to the winch on the southern (hangar) side perimeter track.

#### **b) Operations on RWY 27**

The winch is to be set up on the designated *winch-pad* at the western end of runway 27.

The tow-out vehicle is to pull out the cables along the track centred on the area that is annotated as *unlandable and rough* on the AIP landing chart. It is approximately 50 m north of the northern edge of the main grassed strips. The tow-out vehicle will proceed back down to the winch on the southern (hangar) side perimeter track.

### **9. Winch Launching**

Gliders are to winch launch as close as practicable to the northern edge of the strip. Pilots waiting to launch should line up behind the front glider on the grid, ensuring that wings are down nearest the centre of the strip. Note; to maximise the strip length available, a maximum of four astern is considered optimal in calm wind conditions. From a launch point efficiency perspective, the expectation is that the pilots to be launched should be strapped in, with all pre-flight checks completed ready to go prior to the wire/s arriving.

## **10. Landing Area**

Runway 09; Pilots are to use the northern side of the main grass vector, abeam the launch point for their landing. When gliders are positioned waiting to launch, the landing glider should use space to the south of the launch grid. If necessary after landing, pilots should immediately get out and pull the a/c to the side of the strip to ensure concurrent landings and launches can occur clear of the 45° Designated Winch Launch Hazard Zone. Gliders being retrieved are to be towed along the southern side of the grass strip to the threshold of the main vector before being towed across to the winch launch point.

Runway 27; Pilots are to use the area abeam and to the south of the launch area, short of the main grass vector. If necessary after landing, pilots should immediately get out and pull the a/c to the side of the strip to ensure concurrent landings and launches can occur clear of the 45° Designated Winch Launch Hazard Zone. Gliders being retrieved are to be towed along the southern side of the grass strip to the threshold of the main vector before being towed across to the winch launch point.

## **11. Co-ordination with Aero-tow Ops, other Power Traffic and Parachute Ops**

Winch launching operations will not be conducted when non-gliding related power traffic is in the immediate vicinity of the airfield.

During parachute operations, this will include the time when the jump plane is positioning for takeoff and until they have cleared the upwind end of the airfield after takeoff.

Prior to commencing parachute dropping, the jump plane will check that winch launching is stopped and will remain stopped until all parachutes have landed.

Otherwise, winching procedures as detailed above will occur without modification. The aero-tow operation will operate from the main 09/27 strips.

With winching operations in progress, tow planes and other traffic are expected to avoid overflying the airfield.

Co-ordination of simultaneous operations will occur via positive radio communication.

Back-tracking of tow planes and glider retrievals will occur along the aero-tow landing side and winch launches shall only take place when all gliders and aircraft are clear of the Designated Winch Launch Hazard Zone as depicted in Appendix F-4.

## **12. Radio Operations**

The use of standardised radio phraseologies and procedures is essential to safe winch launch operations. The potential for a miscommunication to lead to an unsafe situation is high so it is vitally important that radio communications are standardised and given correctly.

Due to other passing aircraft and busy aerotow operations at Omarama utilising 119.1, broken or crossed transmissions can occur. It is imperative that any transmission that is broken during launch procedures and that is not clearly received is repeated, with the station receiving asking the station calling to repeat the transmission.

Examples of the required standardised phrases to be utilised are given in Appendix G.

## **13. Weak Links**

It is the Pilot in Command's responsibility to ensure they use the correct weak link for the glider they are in. The Launch Point Controller is to verify the correct weak link is being used. Refer GNZ Advisory circular AC 3-04 and the Skylaunch Throttle Setting and Weak Link Tables as detailed in Appendix H.

#### **14. Checklists**

Checklists as detailed in Appendix I shall be used for the following phases of the winching operations:

- Winch Daily Inspection;
- Winch Set-up on Runway
- Cable Tow Out
- Winch Launch
- Winch End of the Day Check

#### **15. Landing Fees**

Each complete launch will incur a Landing Fee, payable to Omarama Airfield Limited, unless otherwise exempted.

Appendix A: Terms of Reference for Launch Point Controller

Appendix B: Winch Launch Rating Training Record

Appendix C: YSDCT Waiver and Release of Liability Form

Appendix D: Winch Driver Training Record

Appendix E: Tow Vehicle Driver Training Record

Appendix F: Omarama Airfield Landing Chart

Appendix G: Standard Radio Procedures

Appendix H: Skylaunch Throttle Setting and Weak Link Tables

Appendix I: Checklists