

LAUNCH PROCEDURES

Aim: To learn how to safely and efficiently launch gliders as a *wing runner*.

The launching of gliders is a simple task which any able bodied person can be trained to do. We will look at what the wing runner does and how they can ensure the launch proceeds efficiently and safely. Once trained, you will be able to contribute to the smooth running of the launch operations at your club.

The wing runner's task:

While it is possible to launch a glider without a wing runner, it is highly desirable to have a trained person perform the task. Your Instructor will teach you the wing runner's task:

- Getting the rope and positioning it ready for hooking on to the glider
- Hooking the rope on when the pilot advises they are ready
- Looking to check the takeoff and approach paths are clear for the launch to proceed
- Signaling for the slack to be taken up
- Signaling for the launch to commence
- Signaling for the launch to stop if necessary
- Supporting and running with the wingtip until the glider is accelerating and under the control of the pilot

Getting the rope:

The rope will be trailing out behind the towplane. It can be picked up and pulled to draw the free end nearer to you. Caution against flicking it up in such a way that it might fling the rings into someone or something. As you draw the rope in, check for knots or damage like fraying. Always undo any knot as a knotted rope considerably weakens the rope. As you get to the rings, give them a rattle to check they gingle; this is a simple check for a cracked or broken ring. Rotate the ring through the rope to check for a hidden crack in the big ring.



Spot the crack in the big ring

Hooking the rope on:

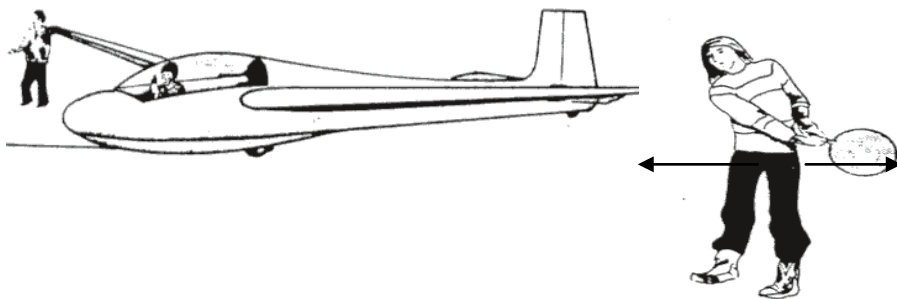
Stand or kneel in easy reach of the desired tow release mechanism, preferably remaining in view of the pilot so you can see and / or hear their instructions. When they are ready for the launch, they will call and / or signal you that they are opening the release to allow you to hook the rope on by inserting the small ring in the mechanism. Once in place, call and / or signal by clenching your fist for the release to be closed. Once closed, shake the rope to check the rings are free rather than jammed in the release, then gently put tension on the rope to check it is properly attached.

Lookout:

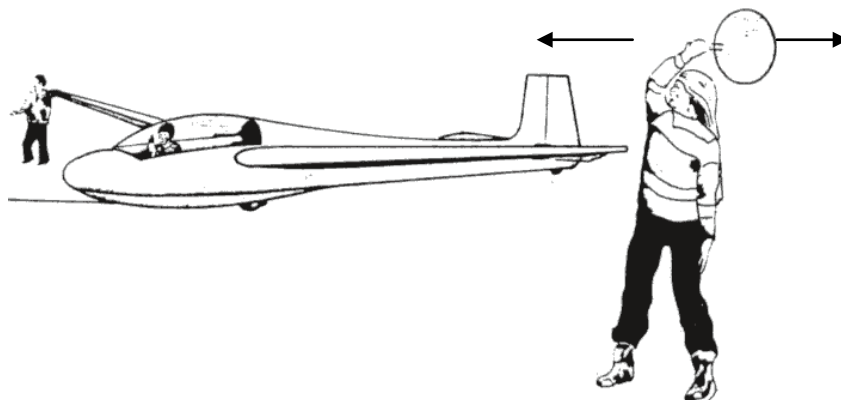
The launch must only proceed when the way is clear for it to safely do so. We must check the takeoff path and to the sides for aircraft or people moving toward the takeoff path. We also check the approach path to see we are not launching across the path of an approaching aircraft or reducing the landing options for an aircraft on final approach. While landing aircraft have priority / right of way, there can be time to launch and clear more space without compromising the safety of a glider on final approach. This requires some judgment and your Instructor will discuss and point out situations where it is not only safe but desirable to signal a launch to proceed when another aircraft is on approach.

Signaling “Take Up Slack”, “All Out” and “Stop” if required:

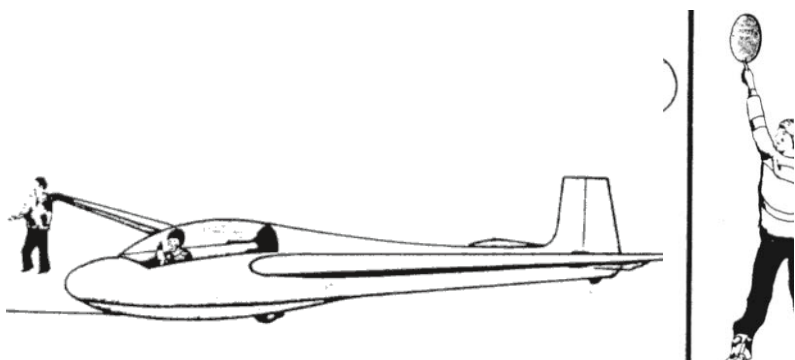
Once hooked on, proceed to the wingtip and lift it till the wings are level. As you do this, you can be looking at the approach area to check it is clear. If it is, signal the towplane to taxi forward to “**Take Up Slack**” by waving a straight arm side to side below the chest in front of you. As you do this, check the launch area is clear ahead.



When the rope is tight, signal “**All Out**” by waving a straight arm side to side above the head.



If there is any need to halt the launch, signal “**STOP**” by holding your arm straight above your head. Any person can call out to stop a launch.



Only place the wing down if the launch is delayed or stopped. Do not move back in front of the glider if the rope is attached.

Running the wing:

Hold the wingtip with one hand and as you run, aim to support it level but allow it to move up or down a little if it wants to. This allows the pilot to sense this movement and apply an appropriate amount of control to keep it level. Your pace will determine the tracking of the glider so hold it and run in such a way as to keep the glider tracking straight behind the towplane. Ensure you hold the wingtip in such a way that does not risk getting fingers caught in any wingtip fittings or control.

Efficiencies:

The towplane is expensive to run due to the cost of fuel and maintenance. The fuel cost is reduced if engine running time is kept to a minimum so efficiencies in turn-around time between tows will be of benefit. Similar applies to maintenance costs where engine start / stop cycles increase the engine wear. It is better if the towplane is kept running between tows rather than having it shut down to avoid prolonged idling while waiting for the next tow to be ready. Having a well organized ground team that ensures that as the towplane lands, a wing runner is ready to retrieve the rope and get the next glider launched without delay, not only helps minimize the towplane running costs but also ensures the maximum number of gliders get airborne each hour... so more people get to have fun!

Need To Know:

- How to carry out the task of wing runner for launching a glider.
- When it is safe to launch or more prudent to hold the launch if an aircraft is on final approach.

Further Reading:

- GNZ MOAP. Contains the approved launch procedures for use in NZ