



Gliding Landouts

Contributed by Jill McCaw

IN A GLIDER every landing is a forced landing. Gliders don't get to go around again and even motor gliders who sometimes fly long distances using sustainer motors don't land with engines running. Glider pilots therefore learn to make every landing precise and controlled.

A glider circuit is not like the wide square circuit used by powered planes. Our circuits are closer in to the airfield or landing site and we control our descent rate with spoilers or airbrakes on the wings. We aim to land at stall speed + half windspeed + 10kts and rather than follow our instruments we are taught to judge our descent by keeping a constant angle to our aiming point. In training we are taught that this is 45°, that being an easy angle to visualise, but in practise 45° is too steep for anything other than a high wind situation. About 30° is more realistic. The judgement of height and distance from the airfield becomes instinctive with training. This awareness, along with an instinctive judgement of airspeed are crucial for accurate landings. Generally, training gliders on a still day land at around 35 to 40 kts.

Another fact of life for gliders is landouts. Gliders can fly long distances cross country with distances over 1000km possible in a day. But gliders of course don't have an assured source of lift so landing away from the home airfield is always possible. Landing out on farm strips and farm paddocks is normal. If there is not enough lift, for instance at the end of a day when convection is shutting down, then a landout is inevitable.

Landouts contain an element of risk. Until your wheel is actually on the ground you can't be exactly sure what you are going to find. What looks like a nice firm strip may be pockmarked with rabbit holes, hide rocks in the grass, have a single electric fence wire across it or what looks like grass may actually be a crop that is several feet high. Choosing good landing areas is a learned skill. Obstacles, on the ground and on approach, slope, wind speed and direction are crucial things to note. While ensuring the safest possible landing site is the pilot's first priority, in the back of the pilot's mind are considerations such as whether the size of the paddock/strip allows the possibility of an aero-tow retrieve. Or if an aero-tow will not be possible then how close is a road for access with the trailer? There are many jokes too about farmer's daughters providing hospitality and beer for a stranded pilot awaiting his crew. Some of the stories are actually true. There is a frequently used strip near Lake Ohau in the Mackenzie Basin where the local family's teenage daughters and friends are excitedly waiting for the landed out pilot to be Richie McCaw. This hasn't happened yet.

Land out etiquette says that the pilot must contact the land owner as soon as possible to let them know they are on his property and check that they are happy with retrieve arrangements. Once retrieved, a follow up thank you and gift such as a bottle of wine should be sent. We want landowners to be as happy to have us, as we are grateful to have the use of their landing area.

Retrieving gliders can sometimes be an adventure. Gliders, like model aeroplanes, pull apart easily to fit neatly in their trailers with wings tucked in next to the fuselage. It is always fun and a good learning experience to go along on retrieve trips and see where other people have landed and how they coped with the site. Plus the pilot is supposed to shout his crew dinner at the very least.

For more information on gliding or to subscribe to SoaringNZ, visit the Gliding New Zealand website, www.gliding.co.nz



Gliders can land in some very scenic places. Piako Gliding Club's two seater on the surf beach at Raglan – the author was one of the pilots. Retrieving this glider was an epic 5 hour adventure.



A safe landout may still cause other problems. This glider landed in a ploughed paddock, filling the wheel well with dirt. David Hirst photos.



Landout retrievals often require the support of several friends. The pilot is expected to shout his crew dinner at the very least.