contributed by Jill McCaw

# Go Gliding! You'll be glad you tried it.

**THOUSANDS** of people have seen glider displays at airshows around the country in the last few years. They are graceful, beautiful and manoeuvrable aircraft, and hopefully those displays have inspired a few of you to think about having a go at flying gliders yourself. Many people who read this column already fly aircraft. You know how aircraft fly, you know that it is the airflow over the wings that keeps an aircraft in the air and that the fan at the front is simply a way of creating forward movement so that air will flow over your wings… and yet… the idea of flying in an aircraft without an engine freaks quite a few people out.

Would it help to know that glider pilots regularly enjoy flights of 50 to 500 kilometres or longer, even in the depths of winter? Average speeds in long flights in wave conditions along the Southern Alps can be up to 190 kph. Gliders get their forward propulsion by gravity. Like all aircraft, as long as it keeps moving forward it will fly. Glider wings are made to maximise the glide. The skill is in learning to use the energy available in the atmosphere, finding the elusive lift - air that is rising faster than the rate the aircraft is descending.


The student takes the front seat. The smile after landing should last for a week.

If you go out to your local gliding club for a trial instructional flight you will not be flying at 200 kph but it will still be interesting. Most clubs around the country have modern fibre-glass two-seater gliders for instructional flights. The Twin Astir, a common twin seater has an L/D of 38:1 which means that for every metre of height the glider can travel 38 metres forward. Or to translate that to practical terms, if a glider tows to 2,000 feet (609m) AGL it can travel 23,124 metres, or 23 kilometres before it lands. In reality we prefer to join the circuit between a thousand and 800 feet, but you get the idea. It will go a long way and it doesn't fall down 'if the wind stops'.

Your instructor will brief you on the aircraft and strap you into the front seat of the glider. Gliders have exactly the same controls as other aircraft but without the engine controls. As a power pilot you'll have a huge head start on people coming in cold. You already know what the controls do, and how to fly. Once you're airborne it won't take you much to learn how to control the craft. But first you have to get airborne.

After control checks, you'll be hooked onto the rope from the tow plane or winch. A winch launch works in the same way as launching a kite but with precise parameters on speed and load weights. It's very fast and to the uninitiated it feels a little like a bungy jump in reverse. A good winch, on a good day, can launch a glider to 2,000 feet in around thirty seconds.

Most clubs launch with tow planes. The glider formation flies behind the tug up to release height. The release is pulled, the glider turns right and the tow plane left and then you're alone in the sky. The instructor will try to get established in lift to gain height and extend your flight time.

Then he'll let you have the controls. Gliders are very responsive aircraft but they're also very stable. In still air they require virtually no control movements to fly straight and level. Power pilots notice that they need a lot more rudder action than they're used to. That's because they haven't got an engine in front, pulling them through their turns. You have to fly a glider very precisely, but it isn't hard to do. Hopefully though, you won't be just focusing on the effects of the controls. We hope you'll be discovering just how great it is to be in a non-powered aircraft high in the sky. People imagine that it will be quiet, and compared to a powered aircraft it is. One of the surprising things to discover is how much noise the air makes moving past the aircraft. Competent glider pilots become able to judge their speed by the sound.

Depending on the weather conditions you may be taken for a small cross country flight away from the airfield using thermals and ridge lift. The instructor will explain local conditions and you'll have quite a bit of control time if you want it. Thermalling, involving circling in lift can cause airsickness in some people, so be sure to warn your instructor if you're not feeling well and he can modify the flight accordingly. Some people just lap up the whole experience and ask for loops and aerobatics. That may or may not happen, but if you want to try aerobatics, a special flight can be arranged.

At some stage you're going to have to come back down to earth and the instructor will have you overhead the airfield at circuit height. Our circuits are smaller than power circuits and we don't have a go around option. Because a glider's wings are so effective, it can be hard to make them come down. We use airbrakes to break up that airflow and help us maintain our glide path. The landing will be smooth and precise and unlike power flying, you have to walk your aircraft back to the launch point. Most people land with a huge grin on their faces. A great flight just leaves you high.

We hope you'll come back and sign up to learn to fly.

I'm Jill McCaw and I'm editor and publisher of SoaringNZ. For information on gliding and to find your nearest club visit the Gliding NZ website, www.gliding.co.nz