

SECURING / PICKETING GLIDERS

Aim: To learn how to safely secure a glider when it is not in use.

Gliders are built strong enough for the rigours of flight...yet, on the ground, they easily fall prey to the elements if not secured and picketed correctly. Therefore, it is important that we learn how to ensure the safe keeping of our gliders when out of the protective environment of the hangar and not being flown or readied for flight.

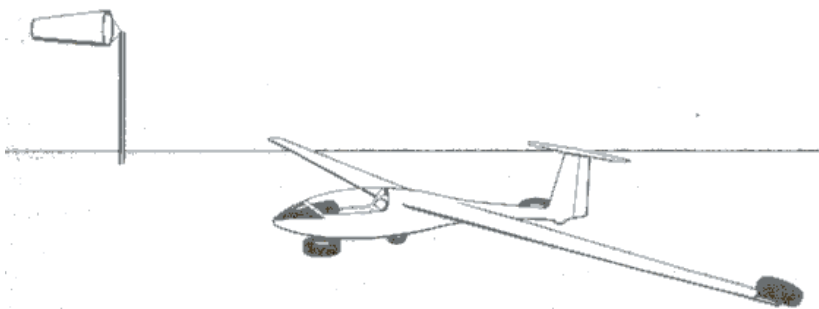
Short term picketing considerations:

Your instructor will discuss things to do when the glider is out of the hangar and not about to be flown:

- Turn the electrics off to save battery power
- Leave the cockpit tidy
- Tie the controls to stop them moving in any wind... use the lap straps
- Extend the airbrakes and hold them open using a shoulder strap
- Cover the parachute to protect it from UV... use the canopy cover
- Cover the instruments and straps from the sun...use the canopy cover
- Close and lock the canopy but leave a vent open if it is hot
- Put a suitable weight (not a parachute) on the wingtip or picket and tie the wingtip down
- Chock the tail or remove the tail dolly



This photo shows how the lap straps have been looped around the stick and drawn tight to hold the controls



This diagram shows tyres used to secure the glider in light wind conditions. The brakes should also be extended

Picketing a glider:

If the glider is not going to be used for some time, it is advisable to fully secure it using pickets. The aim is to tie the glider to the ground so it can not move and damage itself. Picketing needs to be done correctly or we risk damaging its structure. Pickets come in many forms from tent pegs (metal or plastic), to screw stakes, to “waratah” fence stakes. More permanent tiedown anchor points are sometimes available like those concreted into the ground or heavy cables secured on the surface.

Your instructor will show you around your glider and point out where it is designed to be picketed from...what hooks, holes and attachment points are available for attaching ropes.

You can secure the glider in the following ways:

- A rope or strap over the wing tips, pegged to the ground with the wings level
- A rope through each wingtip picket hole / hook and pegged with the wing level
- A rope or strap around the fuselage near the tail and pegged from both sides
- A rope to the nose or belly towhook and pegged to the ground
- Chocks around the main wheel
- In strong winds, you can dig a hole with a ramp to run the glider main wheel into so the glider sits with a lower angle of attack which reduces the chance of it “flying on the pickets”
- Picket in an area that offers the best protection / shelter from the wind eg behind a building or trees
- Fit external control locks if you have them
- Always place pegs sufficiently clear of the glider so a wing can not fall and be damaged by them
- Your instructor will show you how to cross 2 pickets for extra security

Glider should always carry a basic picketing kit including pegs and rope and your instructor will show you where this is kept, what is in it and how to stow it correctly so it is not a potential hazard in the event of an accident. They will also show you what other equipment the club has for more substantial picketing... like when picketing a glider outside overnight. Your instructor will have you practice picketing the glider out on the airfield.

Never leave a glider unattended if unsecured

Gusts of 35 knots have flipped gliders over in NZ.

Such gusts can occur in Nor'west conditions, in thermal induced twisters and as fronts approach.

Need To Know:

- When to secure a glider.
- How to secure a glider in prevailing and anticipated weather conditions.

Further Reading:

- Glider Flight Manuals. Provides details of how to secure / picket a particular type of glider.



←
Here is a superb wingstand and tie-down system where the anchor point is a heavy cable on the ground.

→
This photo shows how a shoulder and lap strap can be looped around the airbrake handle to keep the brakes open.

