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# I - GROUND HANDLING

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## INTRODUCTION

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The first lesson in any proper training course is a ground briefing. Many trainees will have already taken a trial lesson before deciding to learn to glide, and if it was their first flight ever the briefing will usually have been fairly brief.

When the trainee decides subsequently to take up gliding and joins a course or a club, they will be expected to participate in the team side of flying - running the launch point, driving retrieve vehicles and so on. So, a fuller briefing is needed.

This should include the following key areas:

- Airfield discipline - SAFETY FIRST
- Glider and tug handling

## BRIEFING POINTS

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### [1] Launch points

Launch point locations for different wind directions, and how to reach them safely. Are there separate launch points for winch and aerotow?

### [2] Moving about the airfield

Where to look for traffic in the circuit (and for unexpected traffic arriving from cable-breaks or simulated field landings etc)

How to decide whether a winch launch is about to take place or not (perhaps by looking at the movement of the cable retrieve personnel/tractor, or by looking for a glider wings level, or other signalling)

Whether cars or other vehicles are permissible on the active airfield and if so, under what conditions. How to tow gliders out to the launch point in the morning.

### [3] Cable runs

Where they are and why they might be dangerous. Which way the wind will drift the wire as it falls.

### [4] Team effort

Retrieving landed gliders, etc.

### [5] Glider and Tug handling

**Handling points** - grab handles, leading edges, wing tips, cockpit frames, tail or wing dollies and tow-out gear are all useful.

**Non-handling** points trailing edges, tailplanes, rudders, 'no push'/'no handling' labels, canopies, propellers, etc

### [6] Canopy discipline

Do not reach through the DV (Direct Vision) panel to release the cable and do not lift the canopy by the DV

edge. Do not leave canopies open or closed in such a way that they cannot fall shut and shatter or blow open and do the same. Keep canopies clean- only use a scrupulously clean cloth. If the canopy has visible dirt on it, rinse off first with clean water, before wiping with a wiper blade or clean cloth.

### [7] Keeping the log and keeping it up to date

A legal requirement. Names should be entered fully – not simply first names or nicknames.

### [8] Hooking on gliders and signalling

Include briefing on weak link strengths/colour codes, and who is allowed to initiate a 'stop' signal.

(see chapter 3 Preparation for Flight)

### [9] Parking Gliders

Those that are susceptible to blowing over need parking with the into-wind wing down and enough tyres on it to hold it down - clean any grit off the tyre before placing it on the wing. Heavier gliders can safely be left with the into-wind wing up but will still need to be picketed in moderate or strong winds. Care needs to be exercised if vintage types are being parked as their low wing loading makes them very vulnerable to blow over and few of us are now accustomed to the degree of care required.

Always close and lock the canopy.

Removing the tail dolly will help to prevent weather-cocking.

Packing in a hangar can easily result in "hangar rash". Care should be taken to adequately brief those moving the aircraft and those checking clearance, including anyone's use of the command 'stop'!

### [10] Towing behind cars

Confirm the undercarriage is locked down and close and lock the canopy

A rope at least as long as the wingspan is a good idea. The rope should not be elastic and ideally should have a weak link. Loops at the end of the rope instead of proper rings (or a simple chain link) are a false economy.

Attach the cable to the winch hook so that in an emergency it back-releases.

Hold the into wind wing except when approaching a potential obstacle, in which case steer by holding the wingtip nearest the obstacle – that way, the obstacle's proximity to a wingtip is obvious.

Drive at walking pace.

Have someone by the nose of the glider to act as a human buffer. Anticipate overruns (e.g., when approaching a downslope).

Keep the glider straight behind the car if overrunning slightly - do not hold one tip back and accelerate the

other into the car's rear windscreen! It is the job of the person by the nose to prevent any overrun.

**Ensure the car driver is alert**, with the radio off and a window open, so that they can hear requests such as STOP.

If tow out gear is used, Check the towing equipment is serviceable and is fitted correctly to the glider.

### **[11] Tugs and their propellers**

Approach tugs and motor gliders from behind the wing. PROPELLERS CAN KILL.

Tugs and motorgliders should have been left with the magnetos off but do not assume this is the case. Stationary propellers are just as dangerous as moving ones because the tiniest movement of the prop can cause the engine to start. Always treat them as live.

Do not pull an aircraft by the propellor unless the flights manual specifically says that you can and you have checked it is not 'live.'

If you are aware someone is starting an aircraft by 'swinging the prop', ensure the person involved has no loose items on, such as scarves, and ensure someone is at the controls.

Be aware of the effects of prop-wash.

### **[12] Daily Inspections**

Daily inspections need to be carefully taught and trainees checked out for each glider type. Emphasise the importance of rig checks and positive control checks at every DI. If in doubt, do them again. [Fuller details in chapter L, Rigging, De-rigging & Daily Inspection].