

pre-flight hang glider checks and inspection

Each day when you go flying with a school you will assist in rigging the glider you will be flying. The most important parts of the glider are shown in the illustration. In common with all aircraft, it is of the utmost importance that thorough and systematic inspections are carried out before a hang glider is flown, to ensure that it is in good condition and safe to fly, and that the pilot and harness are properly connected to it.

Before the end of the course you should be able to rig and de-rig the glider yourself. One rule that must always be remembered when you leave a glider unattended is to lower it flat onto the ground by releasing the nose catch. This will prevent the wind lifting the glider and blowing it away. After rigging and before the first flight a check of the equipment must be carried out, and before you take-off a further check must be made. It is imperative that you learn the following check lists:

the daily inspection (s.w.a.n.k)

This should be made before each flying day, each time the glider is rigged and also after any heavy landing. It is best to start this at the nose of the glider and systematically work round it until reaching the nose again. You will need the assistance of an instructor or fellow student holding the glider at the nose to accomplish this.

- **Sail** Check for damage and that the attachment points and stitching are secure
- **Wires** Check for twisted tangs, kinks, frays and corrosion
- **Airframe** Check keel, leading edges, cross-tubes, kingpost and control frame for damage, cracks and corrosion
- **Nuts and bolts** Check that all bolts are locked, nuts secure and locking pins in position where necessary
- **Kingpost** Upright and without bends; rigging correctly attached.

the pre-flight check

The pre-flight check (Will Geordie Have His Cat Aboard?) must be done before every flight. It is complementary to, but separate from, the Daily Inspection. If the sequence is ever interrupted the pilot should start again

at the beginning. If some time has elapsed or the glider has been laid flat since the last flight, adjusted in any way or de-tensioned, a brief examination to check the above points should again be made.

W - Wind and weather

Check:

- wind direction - is it shifting around?
- wind strength - is it varying much? Is it OK for your level of experience?
- visibility - is it satisfactory?
- weather. Is any rain approaching? Are there any signs indicating likely turbulence?

G - Glider

Give your glider a quick 'once-over' to confirm that nothing has altered since your DI. Check:

- quick-release points (nose, base-bar corners, pull-back bridle)
- batten elastics engaged
- tip sticks correctly fitted
- undersurface zips and inspection points closed
- luff-lines caught under battens
- nose cone fitted (if glider has one)

H - Helmet

Check:

- that you are wearing one
- that it fits snugly and will not drop over your eyes
- that it is fastened and won't fall off

H - Harness

Carry out the hang-check with assistance from a nose-person. Lie down and check:

- that you are clipped in properly (to both the main and backup hang-loops) and that the carabiners are locked
- that your clearance above the base-bar is sufficient (about 5 - 8cm) - swing back and forth to check this
- that your harness is worn properly and is comfortable
- that your harness straps are untwisted
- that your legs are through the leg-loops
- that your emergency parachute (if fitted) is stowed correctly, the release pins are in place and that the handle is within reach

C - Controls

Check:

- trimmer (not usually fitted to training gliders) tension set for take-off

A - All clear

Check:

- that your take-off path is clear - nothing to trip you or wrench your ankles
- that no bushes, posts or other fixed obstructions, or roving people or livestock, are within leading-edge range
- that the airspace above, in front and below you is clear from other air users and will remain so during your take-off sequence
- that no-one is about to overshoot their top landing and need the airspace you are about to occupy

Still clear? Then off you go.

All the above checking may seem very complicated and long-winded. be assured that it isn't. At school you will be thoroughly taught so that this becomes automatic for you. It's your personal safety that is at stake. Memorise the phrase: Will Geordie Have His Cat Aboard?

the periodic inspection

This is a major, comprehensive inspection as recommended by the manufacturer, usually annually. Most manufacturers and dealers offer this service during the winter.

The inspection, sometimes called a stripdown, should involve complete disassembly of the glider and careful examination of the sail and all tubes, bolts, wires and fittings. Worn or damaged wires or components must be replaced and any necessary sail repairs carried out.

Wires should be replaced at 100 hours or annually (most manufacturers recommend wire replacement at 100-hour intervals). Within the school environment this inspection is taken care of by the instructors. When you buy your first glider you should seek assistance and preferably have the periodic inspection done by experts.

