

## **MENDIP GLIDING CLUB**

### **NOTES FOR BEGINNERS AND NEW MEMBERS**

#### **Introduction**

These notes are for the benefit of beginners who know little about gliding and for new members, regardless of their experience, as procedures vary from club to club.

#### **The Club**

The club is based at Halesland airfield on top of the Mendip Hills on New Road, which runs from Draycott (on the A 371 between Wells and Cheddar) to the B 3135. There are signposts to the club at both end of New Road. A map and other information about the club are on the website at [www.mendipglidingclub.co.uk](http://www.mendipglidingclub.co.uk). It is a very attractive spot with magnificent views across the Somerset Levels; however it is very exposed to the elements and in wet weather it can be muddy. So do dress accordingly.

It is an all-volunteer club with about 70 to 80 members but no professional staff, so they are all expected to 'muck in' with the many jobs required to run it successfully. In addition to the tasks directly associated with gliding, many have other technical and administrative skills and experience which can be usefully employed, so all offers of help are welcomed.

Weather permitting, the club operates on Thursdays, Saturdays and Sundays and most Bank Holidays throughout the year. It normally opens at (or soon after) 8.30 a.m; those wishing to fly put their names on the Flying List when they arrive and normally fly in this order. Flights cannot be booked in advance. Most members stay for the day, even after they have flown, to help with the many tasks on the ground. Even if they have other commitments, they are encouraged to at least stay for half of the day.

The domestic facilities are limited. Drinks and light snacks are usually available in the clubhouse but most people bring a picnic lunch if they are staying for the day.

The club has two 2 seat training gliders (called K13s) fitted with dual controls. Student pilots will make all their flights in these with a qualified instructor until they are ready to go solo. There is no set time for this as it depends on many factors (not the least of which is continuity of training – where possible students are given three flights in a day) but usually takes between 50 and 100 flights. Flight duration depends on 'lift' conditions and can vary from a few minutes to several hours; training flights with an instructor are normally limited to one hour.

Before flying solo students must provide a medical declaration, countersigned by their GP (who may charge for this service), certifying their physical fitness to fly on their own. The standards required are similar to those required for a driving licence. Copies of the form, with explanatory notes, are available in the clubhouse or from the Membership Secretary. Members should retain the original but must send a photocopy to the Membership Secretary for club records. While not technically required until ready to fly solo, students are strongly encouraged to provide this form at an early stage in their training to avoid any delay in their progression or later disappointment in case they are declared unfit to fly solo. Some members (for medical or personal reasons) cannot or do not want to fly solo but still wish to fly with an instructor or experienced pilot; they should advise the Membership Secretary and Chief Flying Instructor accordingly.

The club also owns three single seat gliders and many of the more experienced pilots own or share ownership of their own aircraft. Most flights are launched using a winch but there is also a motor glider (like a light aircraft), which can be used for aerotowing.

Apart from those who have joined the Fixed Price to Solo or Flying Start schemes or those holding Three Lesson Vouchers, club members can either pay for their flights (cash or cheque) on the day or, as most do, open a Flying Account by paying in a lump sum which they top up periodically to keep it in credit.

On their first visit new members and visitors should make themselves known to the Duty Instructor, Duty Pilot or any club member who can show them around and give them a short briefing (don't forget the Flying List!). Student pilots should always bring their log books with them and ask their instructor to fill them in after flying.

When flying is in progress the following safety precautions should always be observed:

- a. Never walk in front of the winch or a glider which is about to be launched.
- b. If walking around the airfield keep close to the perimeter fence or wall – not across the middle of the field.
- c. Private vehicles must be parked in the designated car park and not driven onto the airfield. If the launch point is at the far end of the airfield ask the winch driver or other club member in the hangar or clubhouse to arrange transport.
- d. Keep your eyes open – gliders take off and land very quietly.

### **Ground Procedures**

Gliding does tend to be manpower intensive and there are many jobs to be done on the ground before it can start, while flying is in progress and at the end of the day. While some of these tasks can only be undertaken by more experienced members (as noted below), many can quickly be learned and enjoyed by beginners.

At the start of the day any livestock have to be driven off the airfield, the windsock erected and all the equipment given a Daily Inspection; for the gliders and winch this latter job will always be done by an instructor or experienced member. The gliders and winch are then moved into position for the days flying, which is usually preceded by a briefing in the clubhouse by the Duty Instructor.

Because of their light construction, gliders can easily be damaged on the ground by incorrect handling. The only place to lift the tail of most gliders is by a special lifting bar or handle situated just forward of the tailplane. When the tail has been lifted the glider can be pushed on any part of the front (leading edge) of the wings as near to the fuselage as possible.. It must not be pushed or lifted by the back (trailing edge) of the wings, any control surface, any fabric covered surface or any part of the tailplane. Only one wingtip should ever be held at a time; if wingtip holders are to be changed, the person taking over calls "My wing" and the relinquishing person "Your wing".

**Towing.** If a glider is to be moved any distance it is towed behind a vehicle. In light winds and on level ground only one person is required, holding the windward wingtip slightly below the horizontal so that the wind strikes the upper surface. In strong or gusty winds or when moving down a slope a second person must walk beside the cockpit ready to steady the glider by leaning back against the leading edge of the wing or to release the tow rope; the latter should only be done by pulling sharply backwards on the tow rope or by opening the canopy to pull the yellow release knob, never by reaching in through the small DV (Direct Vision) panel. The vehicle driver must keep the speed down to a slow walking pace, have both windows open and keep a continuous lookout behind.

Turning. Always turn a glider with its nose into the wind. If necessary, change wingtip holders so that someone is always holding the 'into wind' wing. The aircraft should be pivoted on the main wheel with the tail clear of the ground.

Parking. A glider must never be left unattended without being securely weighted down with tyres on the wingtip and the canopy must never be left open. If it is to be left unattended for any length of time it must be parked across wind with the windward tip weighted down with tyres and another tyre placed on the down-wind side of the tail to prevent the glider swinging. (Please note that tyres should not be placed on the wingtips of the more advanced fibreglass gliders – if in doubt, consult the owner or an experienced member.) If it is raining ensure that the DV panel and air brakes are closed and parachutes removed.

Launch Point Procedure. The various jobs required at the launch point are as follows:

- a. Log Keeper. Logs all glider movements such as details of pilots' names, take off and landing times, etc. He/she also operates the telephone link with the winch driver.
- b. Wing Tip Holder. Holds the wings level with the ground (which, if the launch point has a lateral slope, may not be quite horizontal) before the launch and as the glider moves forward on its ground run.
- c. Glider Retrieve Driver. Unless a glider lands close to the launch point when it can be retrieved manually, it is towed back by a vehicle. The driver must keep a good look out for other gliders taking off and landing, be aware of the position of the cables and cable retrieve vehicle and tow the glider off the landing strip and back to the launch point as soon as possible, but only at a slow walking pace. Prompt retrieval on the ground means more time in the air for everyone.
- d. Cable Retrieve Driver. Pulls out the cables from the winch to the launch point. After the cables are attached to the trailer using the 'weak link' cords, he/she should confirm with the winch driver that the brakes are set for towing out and then gently move forward until any slack is taken up. He/she then drives at a moderate speed (10-15 mph) to the launch point without stopping (except in an emergency). On reaching the launch point the vehicle should be brought to a gentle halt and reversed a few feet to release the tension and allow the cables to be removed.
- e. Cable Attacher. After confirming with the winch driver (via the log keeper) that the cables are safe to handle, he/she pulls the appropriate cable and parachute across to the glider about to be launched, checks all the attachments and that the correct weak link is being used for the type of glider. When the pilot is ready to launch he/she will request "Cable on". The cable attacher calls "Open", inserts the ring into the release hook and calls "Close". He/she pulls on the cable to check its attachment, confirms "Cable on and secure" and the colour code of the weak link. Once the cable is attached everyone must keep clear of the front of the glider unless the cable is released again.
- f. Launch Point Marshal (may also be the Cable Attacher and/or Duty Pilot). This job is always carried out by a solo pilot. He/she checks that it is clear in front of, above and behind the glider and that there are no other gliders about to land. He/she then calls "All clear above and behind – take up slack" and relays this to the winch driver via the log keeper with an underarm wave. Once the cable is tight and the glider starts to move the marshal calls "All out" and relays this with an overarm wave. If an overrun or any other problem occurs he/she shouts "Stop" and raises both arms above the head. (Any pilot at the launch point can also give the stop signal).

Note. It is very important that the precise launch orders are used to avoid any confusion. The log keeper should give a preliminary warning to the winch driver to get ready when a launch is imminent (cable being attached) and will precede the "Take up slack" order with details of the type of glider, where appropriate the number of people on board and the cable to be used (e.g. "K13, two up, south cable" or "K8, remaining cable"). The verbal orders of "Take up slack", "All out" and "Stop" are

confirmed to the winch driver by the relevant buzzer. The log keeper must constantly watch the marshal and keep the telephone link open during the early part of the launch until he/she is satisfied that the winch driver can see the glider.

All these procedures (and the similar ones used for aerotow launches) will be explained in more detail to new members who will be given practical training before undertaking them on their own. They are also encouraged to read the Mentors Notes, Club Rules and other relevant documents kept in the clubhouse; ask any instructor or experienced club member to point them out. Instructors can also advise about suitable books on gliding and related topics which beginners might wish to read.

**Pre Flight Checks.** No mention has so far been made about actual flying because this will be taught by the instructors. However new members may like to learn the pre flight checks which are carried out before the start of every flight. There are, in fact, two sets of checks – the first (ABCDE) conducted before the pilot(s) enter the aircraft and the second (CBSIFTCBE) after strapping in:

- A Airframe. Check round the aircraft for any visible damage/defects.
  - B Ballast. Cockpit load within aircraft limits. Any weights required securely fastened.
  - C Controls. Check that primary controls working freely and in the correct sense.
  - D Dolly. Dolly wheel (only used on some gliders) removed.
  - E Exercises. Discussion/decision about what exercises will be conducted.
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- C Controls. Full and free movement of primary controls after straps are secured.
  - B Ballast. Re-check within aircraft limits.
  - S Straps. Harness(es) done up correctly and tightly.
  - I Instruments. Undamaged, functioning and reading correctly.
  - F Flaps. Check operation and set for take off (only fitted to some advanced gliders).
  - T Trim. Check operation and set for launch failure recovery and landing.
  - C Canopy. Shut and properly locked.
  - B (Air) Brakes. Check operation, shut and properly locked.
  - E Eventualities. Consider actions in the event of a launch failure and other options.

**End of the Day.** Weather permitting, flying normally continues until dusk or until everyone has had enough! After the last flight of the day the gliders are parked carefully back in the hangar with parachutes replaced in the clubhouse lockers and batteries disconnected or removed for recharging, the winch and vehicles refuelled and parked in the MT shed, the windsock taken down, fencing erected, livestock released, any debriefing carried out and the buildings secured. It therefore helps if most members can remain until these tasks are completed. In other words, “It ‘aint all over ‘til the fat lady sings!”

Amended September 2011