



# **New Members Guidance and Information**

**June 2019 RJ**

## **Contents**

<b>Welcome</b>	<b>3</b>
<b>About the club</b>	<b>3</b>
<b>Airfield site plan</b>	<b>5</b>
<b>Facilities at the airfield</b>	<b>6</b>
<b>Club fleet</b>	<b>7</b>
<b>Safety on the airfield</b>	<b>8</b>
<b>What to do in an emergency</b>	<b>10</b>
<b>Personal requirements and health</b>	<b>10</b>
<b>Logbooks</b>	<b>11</b>
<b>Weather conditions for flying</b>	<b>11</b>
<b>Training resources</b>	<b>12</b>
<b>What is achievable</b>	<b>15</b>
<b>Who's who</b>	<b>17</b>
<b>Communications</b>	<b>18</b>
<b>Getting the kit out</b>	<b>18</b>
<b>The financial bit</b>	<b>20</b>
<b>Junior members scheme</b>	<b>21</b>
<b>First Lessons</b>	<b>22</b>
<b>Pre-flight checks</b>	<b>29</b>
<b>Launch signals</b>	<b>31</b>
<b>Pre-landing checks</b>	<b>31</b>

## **Welcome**

We are pleased that you have joined our club and want to make you welcome.

This booklet gives you an outline of how we operate and how you can make progress with the sport of gliding but is only an outline. We are keen to teach so please do not hesitate to ask any member of the club for help and information if you require it, we will be very happy to assist you.

Please note that this booklet is primarily aimed at new members who are also new to gliding. If you are an experienced glider pilot, you may find the visitor briefing notes more useful to you.

## ***About the club***

We are a small but friendly club and run entirely by volunteers. Club members take it in turns to run the operations at weekends.

Weather permitting, we fly every weekend and most Wednesday afternoons/early evening during the summer from May to September. Gliding is a sociable but time consuming sport – especially when you are learning to fly. Unlike power flying, it takes several people to launch a glider, so we need helpers at the launch-point and therefore the flying each day is on a “first come first served basis”. When you arrive please make yourself known to the duty plot and duty instructor if they are not otherwise engaged. There is a flying list at the launch-point, so get your name down as soon as you arrive. Members fly in accordance with their place on the flying list, with the exception of booked trial lessons (which can be seen on the club calendar on the website if you want to know in advance if it is likely to be a busy day). If you want a second flight, put your name back on the flying list after you fly.

Please get off on the right foot, by offering to lend a hand at the launch point – someone will be pleased to explain how and when to handle a glider. Where and when to push, how to hook on the tow ropes, how to drive the buggy to collect a glider etc. Joining in makes you part of the team.

**However, please do not attempt any task until you have been properly shown how to perform it.**

If you have not already been given one, ***please ask for a progress training card***. This covers both the ground handling aspects as well as the flying syllabus. Whilst the latter is completed by the instructors that you fly with, any experienced solo pilot (bronze level or higher – see later notes) can train you and sign off for ground activities.

The gliders have to be unpacked at the start of the day – usually about 10 am - and put to bed when we finish flying – often between 5-6pm. If you join as a member, we would encourage you to either be there at the start of the day to help unpack or if you come down to the airfield later, please stay to help pack up. Members that arrive early and get the equipment and gliders out of the hangar have priority for early flying.

# Shobdon Airfield Site Layout

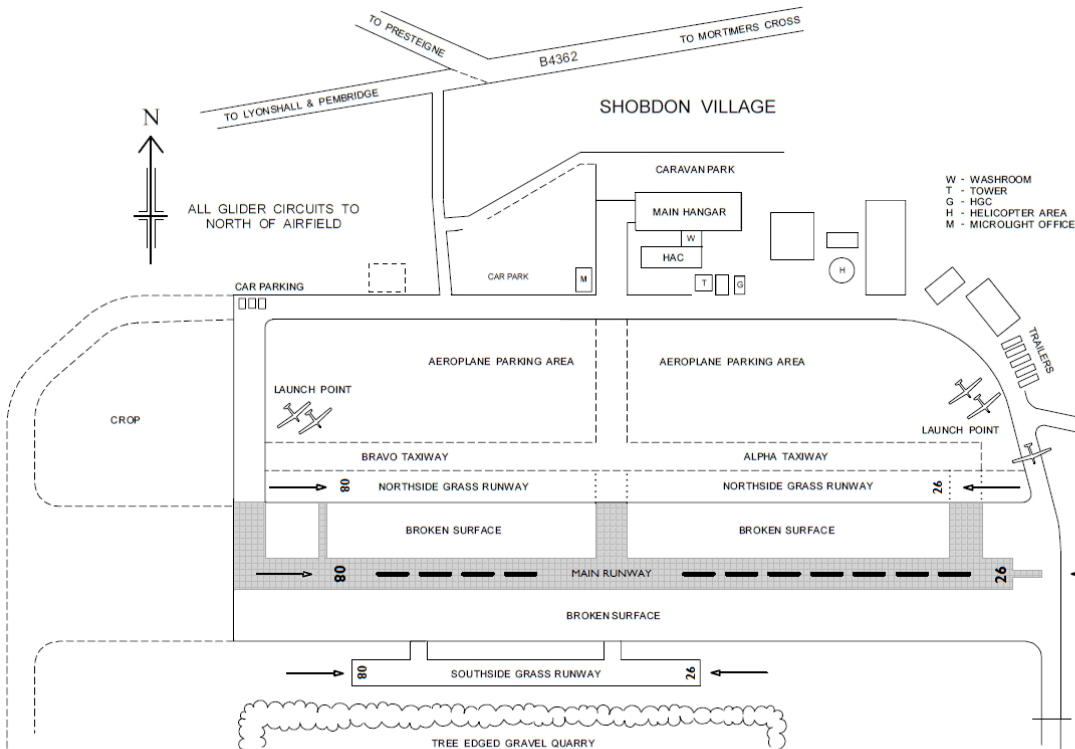


Figure - 2

Please note that most insurance policies will not cover your car whilst you are on the airfield. Under a gliding club insurance policy you will be covered for third party liability in your car, but not for any damage to or theft from your car.

Vehicles are permitted to drive on the tarmac area between the area marked as car parking at the western end and the area of trailer parking at the eastern end. You must keep a good look out at all times and give way to taxiing aircraft. Cars may be parked as marked when launching from the western end on runway 08 or adjacent to the trailers when launching from the eastern end on runway 26, or alternatively in front of the HGC club portacabin near the café area.

Please do not block access to hangars, or trailers or obstruct the perimeter track or access to the chicken sheds.

You are welcome to watch flying from the picnic area in the grassed car parking area on the left as you drive in, or the seating area in the front of the airfield café, or from the trailer area at the launch point.

**Please do not venture onto the grassed airfield area south of the tarmac road or go into the hangar without prior permission from a club member.**

If you would like to fly and there are no club members available to direct you, then please walk down the tarmac road to the glider launch point and talk to a club member.

## **Facilities at the airfield**

We have our own portacabin for holding briefings/ground school/storage of batteries, parachutes etc. There is a kettle and mugs and you are welcome to make yourself drinks – please wash up the cups afterwards!

Toilets are available through the bar area in the aero clubhouse and also in the back of the main hangar. We look forward to having our own washroom facilities in our new hangar in the near future.

There is a club workshop for glider maintenance/ buggy storage etc

All the club gliders and the tug are kept in the gliding club hangar.

The airfield café is open to the public, usually from 9-16.30. There is also a bar, but this is normally only open for events and if we want a drink after flying, we will be usually be found in the Batemans Arms in the village.

Airfield address: Shobdon Airfield, Shobdon, Leominster HR6 9NR

Co-ordinates: 52°14'30"N 002°52'52"W

Radio frequency: 118.155

## **Club fleet**

We have the following aircraft:

Grob 103 – **EWG** -two seater training glider

Twin Astir – **DSJ** - two seater training glider – has a bigger weight range so better for pilots at the upper end of the weight range.

Junior – a single seat glider but ideal for early solo flights. Usually the first half a dozen solo flights or so are done in a 2-seater and then you convert to the junior.

Eurofox tug

## Safety on the Airfield

We take safety very seriously.

Please **don't move away from the launch area adjacent to the control point (adjacent to our small kit trailer) onto any grass part of the airfield** without first obtaining permission from an experienced club member who in turn will ask for permission from the tower if you need to enter the taxiways or runway.

If you are going to be helping push gliders, collect tow ropes etc you must be wearing a hi-vis jacket – available to borrow from the club trailer at the launch point. Gliders are launched by aero-tow from the East or West end depending on the wind direction. We load up the pilot and pupil adjacent to the taxiway. Once the pilots have done their checks and asked for the tow rope to be hooked on, the tug pilot will then ask the tower for permission to enter the runway for a launch.

Vacate the runway as soon as the glider has launched – **remembering to keep a good look out as you walk back to the launch point area.**

When on the airfield you should always keep a good look out for aircraft landing. They make very little noise and may be landing from an unexpected direction. The normal direction would be into wind landing next to the launch point.

If you find yourself on the landing area and a glider is on approach, then clear the field as fast as possible by moving back to the area where the trailer is parked.

Always keep clear and behind a glider that is about to launch, never walk in front of a glider at the launch point.



## Other hazards on the airfield.

Propellers: Obviously turning propellers are very dangerous but be aware that even if the aircraft does not have the propeller running the pilot may be about to fire up. If you do need to approach the tug, do so from the back but make sure the pilot is aware of you before you approach. Planes with the prop turning clearly only move forward but helicopters can manoeuvre in any direction!

Tow ropes: Tow ropes can be a trip hazard on the ground but can also fall in unexpected directions with gusts of wind. The tug will drop the rope as it comes into land and one or two members wearing hi vis jackets will run out to collect it. This is the only time we have dispensation to enter the runway without first asking permission therefore it is essential to keep a good look out for landing traffic; do not run out if there is traffic on approach and vacate the runway promptly. Watch as the rope lands to make sure it is not drifting onto you or the parked gliders.

Vehicles: Unlike most airfields the public are permitted to drive on the perimeter track. However, **aircraft always have right of way**. Therefore, **drive at a slow, safe speed and keep a good look out especially as you cross the area in front of the main hangar and fuel pumps**, as well as the area in front of Tiger helicopters hangar.

## **WHAT TO DO IN AN EMERGENCY.**

**Call for help.**

**If the duty instructor or duty pilot is not immediately available, inform the tower by radio if necessary.**

There is a copy of our emergency procedures as well as a flow chart of what to do in an emergency kept in the log box at the launch point as well as in the portacabin.

Key points:

Keep yourself safe first.

Do not endanger others.

Do not move injured personnel or damaged aircraft without permission unless avoiding a further danger such as a fire risk.

The following emergency kit is kept in the launch point trailer:

Handheld radio

First aid kit

Fire extinguisher

Cutting gear - axe and bolt croppers

## **Personal Requirements and Health**

Generally, if you are fit enough to drive a car, you are fit enough to fly. Therefore, if you have a UK driving licence you meet the medical requirements to fly solo. If you are under 25 and do not have a driving licence you are required to sign a self-declaration available on the BGA website (see list of links at the end of this document). If you do not

have a driving licence and are over 25 you will need your GP to sign a certificate that you are fit, before you fly solo.

Because of the size of the aircraft, a maximum allowable (clothed) weight is imposed therefore we do not generally fly individuals who are less than 50kg or approx. 5ft (1.5m) tall or more than 16st ( 105kg). If you are near to these limits, you should discuss it with your instructor. There is no age limit to gliding if you are physically fit, but you must be over 14 years old to fly solo.

Before flying you will be required to fill-in and sign a membership form. If you have started gliding with us by having a trial lesson, this gives you three months membership of the Herefordshire Gliding Club, allowing you to fly as a club member at normal club rates.

There are also 5 and 10 lesson package options.

### **Logbooks**

If you are learning to fly gliders you will need your own logbook. We provide you with a temporary log card when you start but if you are committed to learning please invest in a proper logbook - £4 each available from the portacabin. You should fill in all your flights (please transfer any you have started on your temporary log sheet.) An instructor should make a comment and sign off all instructional flights. Once you are solo you will want to make your own comments against each flight – it is a lovely record to look back on and is helpful for your instructors to have a look and see how current you are and what your previous experience is.

### **Weather conditions for flying gliders at Shobdon**

All flying is at the discretion of the duty instructor, however as a general rule of thumb we do not fly gliders at Shobdon when it is

actually raining, if cloud base is less than 2000ft and if the wind is greater than 25kts or 15 knots cross wind.

In the early stages of your training, it is usually not beneficial to fly if the wind is great than about 16kts unless an instructor is planning on taking you “wave hunting”.

## **Learning to fly gliders -training resources**

Learning to fly gliders takes time and commitment but should also be an enjoyable process. Obviously, airtime is the most exciting bit, but you will progress quicker in the air if you avail yourself of other learning opportunities:

### **Ground school**

#### 1. Informal briefings and debriefings.

- Instructors love to teach but sometimes need a little prompting to make the most of ground time. Use the time between flights to ask questions and get the instructors and experienced pilots to give you micro-sessions on topics such as circuit planning, effects of controls, understanding the current weather conditions etc – a list of suitable topics is found at the end of this document.

#### 2. Formal lectures.

- On non-flyable weekend days, the duty instructor may be prepared to give a more formal lecture on useful topics – everyone learns at their own rate and has already had different ground school briefings so make sure you ask for subjects relevant to your needs.

#### 3. Winter lecture series.

- Over the winter we lay on a series of monthly lecture evenings – usually 2 lectures on a Tues evening held in a

local pub with subjects of interest to both inexperienced and experienced pilots. If you have ideas for topics – please ask. Details of events are circulated on the club’s emailed newsletter.

## **Flying opportunities**

1. There is instructing available every Sat and alternate Sundays – please look at the rota on the club website for info: <https://shobdongliding.co.uk/calendar.php> and click on rota.
2. We normally fly on Wed afternoons during the summer but move this to alternative afternoons if the weather looks more promising. Ask Bobbie to add you to the WhatsApp group to keep in touch with the start time and to confirm it isn’t cancelled or moved due to the weather.
3. We normally run two full week courses during the summer. If there are not sufficient pupils wanting a full week, we may be prepared to take trainees for part of the week – liaise with Diana.

## **Reading List**

There are many good books on gliding, and we all have our favourites. Here are some recommendations:

1. Gliding: From passenger to pilot. Steve Longland Basic introduction to key points of learning to glide. Also available in kindle format.
2. Understanding gliding. Derek Piggott. For those of you who want to know more about how the glider flies.
3. Bronze and Beyond. John McCullagh £15 from the BGA shop online. All you need to know to pass your bronze exam.

4. Managing flying risk. BGA. Essential reading to keep yourself and others safe. Club copy available in clubhouse and downloadable from BGA website.
5. The Soaring Engine vol 1 ridge and thermal vol 2 wave flying. G Dale – a primer about how to find and use lift
6. Cross country soaring Reichmann – the bible for those who want to progress to cross country soaring.
7. Dancing with the Wind, Jean-Marie Clément – Manual of slope and wave soaring techniques.
8. Sailplane and Gliding – the magazine of the British Gliding Association (BGA) – full of interesting stuff.

**The gliding simulator.** The club has a flight simulator set up in gliding mode in the portacabin which you are welcome to use free of charge. You will be surprised how it helps with basic understanding of controls etc when you are first learning to glide.

#### **Useful websites:**

<https://shobdongliding.co.uk> **Herefordshire Gliding Club**

[www.gliding.co.uk](http://www.gliding.co.uk) **British Gliding Association. BGA**

[www.xcweather.co.uk](http://www.xcweather.co.uk) **Useful site for wind forecast for next 5 days**

<http://rasp.stratus.org.uk> **Free site with thermal forecast**

[www.metoffice.gov.uk/public/weather/will-it-rain-today/](http://www.metoffice.gov.uk/public/weather/will-it-rain-today/) **Rain forecast for next 24 hrs**

<https://notaminfo.com/ukmap> **For interest - shows current Notams (Notices to Airmen) for cross country flying**

## **What is achievable**

Whilst you may at this stage just be thrilled with the general idea of soaring solo in an engineless plane, we hope you will make good progress and wish to progress. There are many aspects to gliding including local soaring, cross country flying (flights of up to 1,000km are achievable in the UK), aerobatics, flying competitions, and instructing. Our various instructors have skills and experience in training people to achieve any or all of these goals.

There is a long established series of goals to provide some structure to your post solo training and these are outlined below.

### **1<sup>st</sup> solo flight**

#### **Conversion to single seater**

##### **Bronze**

This is the next step towards what most people would recognise as a qualified pilot.

You will need to have done:

- 20 solo flights and 10 hours solo

- A general skills test of flying competency

- A theoretical knowledge multiple choice exam paper.

##### **Silver**

A cross country endorsement (Field landing exercise & Navigation exercise).

- Silver height – gain of 1000m

- Silver distance – 50km flight straight distance

- Silver duration – a solo flight lasting at least 5 hrs

**LAPL(S)** – the formal licence to enable you to fly in Europe.

1. 10 hrs dual instructional flight time
2. 2 hours of supervised solo flight time

3. 45 launches and landings
4. 1 solo cross-country flight of a least 50km (27NM) or 1 dual cross-country flight of at least 100 km (55NM)

**Gold** – 300km distance, 3000m height gain

**Diamond** - 500km flight, 300km distance to a goal, 5000m height gain

**750km diploma**

**1000km diploma**

### **Instructing certificates**

In gliding you may not carry passengers unless you are specifically authorised by the CFI or deputy to have a “friends and family rating.” The first stage of becoming an instructor is a Basic Instructor (BI) who is authorised to provide instruction on the first few flights, but the pupil may not handle the controls below 500ft. Usually you will have approx. 50-100 hrs before starting down this route



## **Who's who at the gliding club**

The club is run entirely by volunteers and we are proud of the fact that we rarely have to pay anyone to do a job as we have members with so many skills.

Some key members are:

**Mike Hayes** – Chairman, instructor and tug pilot.

**Rose Johnson** - Chief Flying Instructor (CFI) is responsible for all the flying operations of the club and has the final word in any flying matter.

**Mike Dodd** - Deputy Chief flying Instructors (DCFI) – retired from 20 yrs as CFI but still giving valuable support to the CFI.

**Phil King** - Safety Officer has the responsibility for overseeing the day to day safety of the club.

**Diana King** - Secretary and membership secretary.

**Peter Poole** - Tug master and general glider maintenance.

**Andreas Jelden** - Junior flying co-ordinator.

### **Duty Pilot**

Experienced members who are not on the instructors or tugging rota are asked to join the duty pilot rota. They are responsible for overseeing the ground activities including getting the kit out and putting it away as well as welcoming visitors and trial lessons to the launch point. They are also responsible for ensuring that someone completes the log.

### **Duty Instructor**

Most days that we fly there is a duty instructor who will do most of the instructing and oversee safety aspects. All flying is at their discretion.

### **Duty Tug Pilot**

## Communications

An email is sent out each week with likely weather conditions for the weekend, the duty team for the weekend and other useful/interesting news. Diana will add you to the list when you join. Please email Diana if you do not wish to be included at any stage.

There is an active WhatsApp group which is particularly useful if you wish to participate in mid-week flying. Please ask Bobbie to add you to the group if you are interested.

### **The website:**

The calendar page has a link to the duty rota so you can see which instructors are on duty. It also includes details of trial lessons that are booked and whether we are expecting other visitors so you can see in advance if we are likely to be particularly busy.

All log sheets are available on the website, and there is a facility to pay for your flights online or by bank transfer.

If you ask Les Kaye or Mike Dodd for a login and go to the payments login section under members you will be able to download a list of your own flights.

There are also useful links to various weather sites and sites for x-country planning when you are an experienced solo pilot.

### **Getting the kit out/putting it away**

Weather allowing, we normally get started approx. 10.00 at a weekend. Once you are familiar with the kit and the airfield, if you arrive early you can help by getting the kit out but **do not try getting the gliders out unless the instructor or duty pilot are on site**. Please ask for a guided tour of all the kit and where it is kept at some point when you join the club.

The buggy is kept in the club workshop on charge. Please ask for the code to get into the workshop when you join. Unplug the buggy and reverse out. Ask someone to show you how to check it over before starting.

The small trailer needs to be taken to the normal launch control point, together with the aerotow rope. Please check the state of the rope and the weak links before taking it out on the airfield.

The radio for the buggy is kept in the club house together with its battery which will have been put back on charge. Please put the radio onto the buggy with its battery and collect the battery for the glider as well as 2 club parachutes which will have been put back in the drawers in the portacabin. We also need the wooden log box and a handheld radio (which will also have been put on charge).

When packing up, make sure the following are all put away:

Gliders – as appropriate

Glider batteries – and put on charge

Buggy radio and batteries (put on charge)

Parachutes – placed in their bags in the drawers in the clubhouse.

Tow rope

Buggies (put on charge with the seat propped up)

If you are the last person to leave, make sure the workshop and portacabin are locked up.

### **Driving the buggy**

**Please note that the buggy can only be driven by members age 14 and over (or named members under 14) who have been instructed how to use the buggy and the radio calls.**

You may not drive onto the active airfield i.e. grassed areas/main runway without permission from the tower. If the tower has closed

down for the day – usually approx. 16.30 – you will need to make the calls to Shobdon traffic instead of Shobdon information. When the tower is closed you are entirely responsible for checking whether it is clear before you cross the runway so listen to the radio for other traffic, look to make sure it is clear and nothing is landing or taking off, announce that you are crossing and then cross.

The suggested correct terminology to use is:

Shobdon information – Rover 1 to cross grass runway to retrieve glider.

Shobdon information – Rover and glider combination to cross grass runway to return to launch point.

**Do not move the glider or buggy or walk across any part of the active airfield with first being given permission by the tower**

## **The financial bit**

The good news is that all instruction is free!

All pupils are required to have some form of membership for which there is a fee. If you are on a trial lesson or 5/10 flight package, temporary membership is included with these flights. If you want to continue flying, you will need to pay for membership with the first year's payment being pro-rata depending on which part of the year you join us. See price list on the website (visiting pilots – make a payment)

The cost of your flight is calculated by adding the cost of your launch (currently £26 to 2000' and pro-rata if you tow higher) and the cost of your flying time (currently £27.60/hr pro-rata but free for under 25's) – see price list in portacabin and website for full details

**After flying please complete a payment slip with details of your flight time and tow height, add your remittance, place in an envelope and post through the slot of the payment box in the gliding club cabin. If**

you are paying by bank transfer, please still complete a remittance form and note that you will pay by bank transfer.

## **Junior members scheme**

To encourage youngsters, namely students between 14 and 21 years of age, the club operates a Junior Scholarship Scheme. This currently has 4 active participants. In recognition of regular duty days that “Juniors” undertake, their flying is part subsidised by the club. As members, the Juniors have the same rights and privileges as other members and all members have a responsibility for their safety and wellbeing while they are under the supervision of the club.

**More information is available on the website.**

## First Lessons

### Thermal Soaring

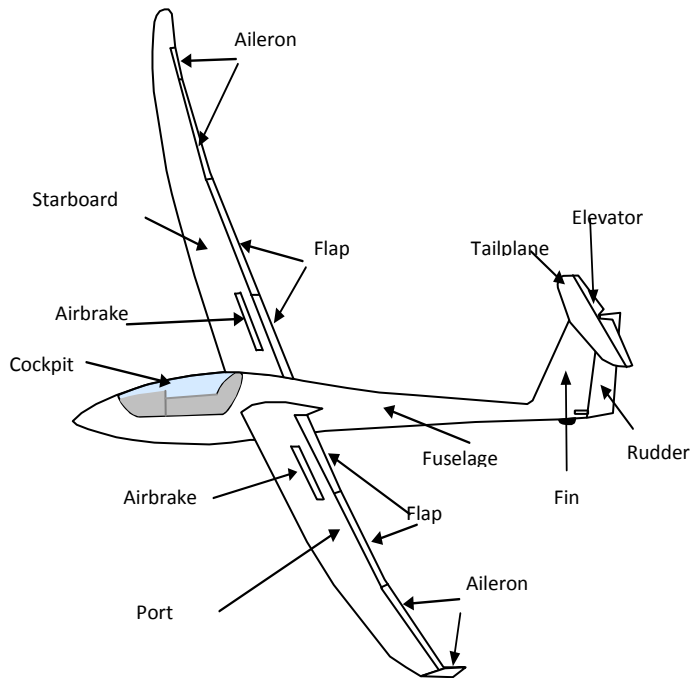
The most common type of lift is the thermal which is a rising current of warm air that has been heated by the sun. As the sun heats the ground, the air near the surface gets hot. Once the air is warm enough, it will start to form a bubble and rise. As the air rises, it starts to cool, until eventually it is at the same temperature as the surrounding air and in some cases forms a cloud. Depending on the weather, the bubble may rise as much as 7,000ft or higher. The bubble will have areas of lift on the inside (at the core) and associated areas of sink on the outside. By circling in the core, you can use the rising air without flying through the sinking air. Although thermals are weather dependant, they can be experienced for the majority of the year, with the main season being March-October. Thermals are generally very easy to find, and you can be taught from an early stage how to use them, making you flights longer and more enjoyable

**Ridge/hill soaring** – using the deflection of the wind up a slope to soar

**Wave flying** – Deflection of large mass of air over mountains in laminar flow to allow soaring to greater heights than ridge lift. Heights of more than 19,000 ft have been achieved in Wales

## Parts of a Glider

In gliding, flying and other sports certain terminologies are used to describe controls, parts. In the diagram below the different external parts of a glider are illustrated. Some of these parts are the control surfaces that allow you to control the flight of the glider and will be explained in more detail later in this booklet.

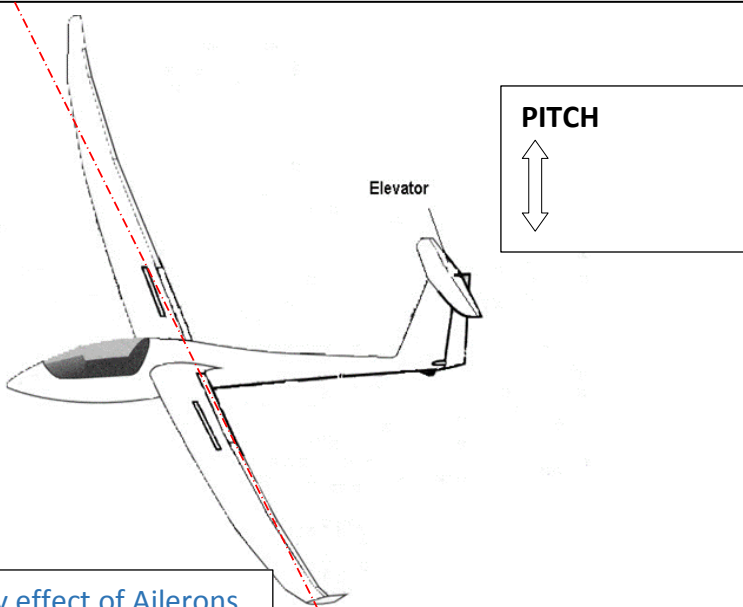


# PRIMARY EFFECTS OF CONTROLS

## Primary effect of elevator

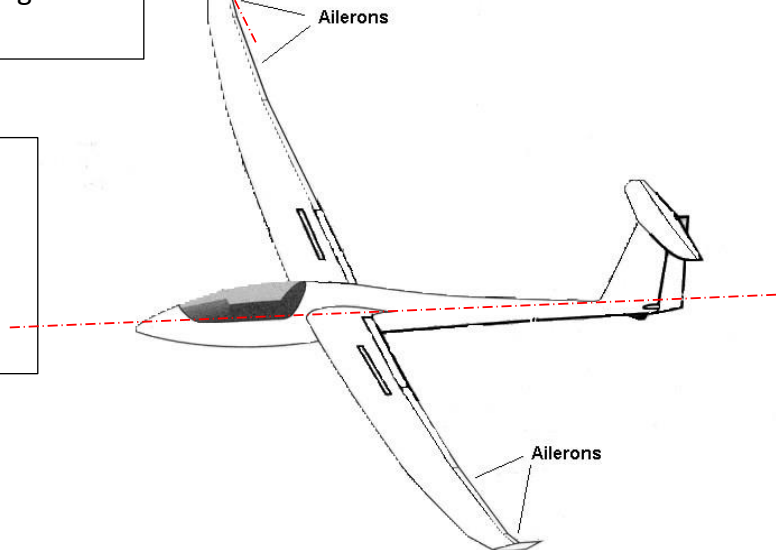
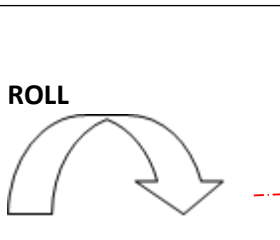
Purpose – to control the aircraft in pitch and therefore airspeed

Control column – forward moves elevator down, back moves elevator up



## Primary effect of Ailerons

to control the aircraft in roll to establish angle of bank



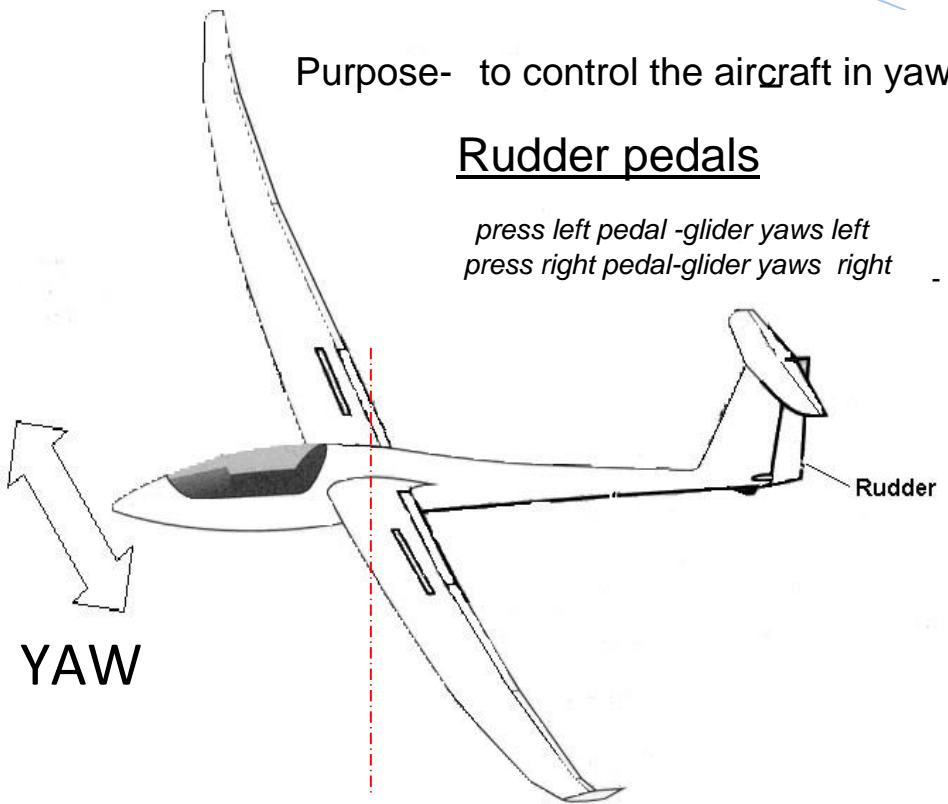


# PRIMARY EFFECTS OF CONTROLS

Purpose- to control the aircraft in yaw

## Rudder pedals

*press left pedal -glider yaws left  
press right pedal-glider yaws right*



# Cockpit Instruments



## Airspeed Indicator

Airspeed indicators measure the airspeed by measuring the difference between total pressure and static pressure by the deflection of a diaphragm



## Altimeter

Measures the height of the aircraft if you have set the datum. By measuring static air pressure which decreases with altitude y the expansion and contraction of a sealed capsule.



## Variometer

Measures if the aircraft is ascending or descending. Has a total energy system to compensate for changes of speed of the aircraft

## Ground Handling of Gliders

If you see any problem, even if you are unsure if it is a problem, report it to the duty Pilot/instructor

### Canopies

Canopies are very fragile and prohibitively expensive to replace. Don't hit, scratch, push on, or support yourself on a canopy.

Only use the DV for ventilation when you are in the cockpit. The only time you can put your hand through the DV is to unlock or lock the canopy from the outside.

Support the canopy when opening or closing and **never leave a canopy open** or unlocked

### The glider

A dolly is used to help recover and move the glider. This allow the glider to be pivoted on the main wheel.

The Dolly must always be removed prior to take off.

**Do not leave gliders parked with the tail dolly on.**

A glider trolley (skate) is used under the main wheel and in combination with the Dolly allows more manoeuvrability in confined spaces. This is only used on the concrete floors.

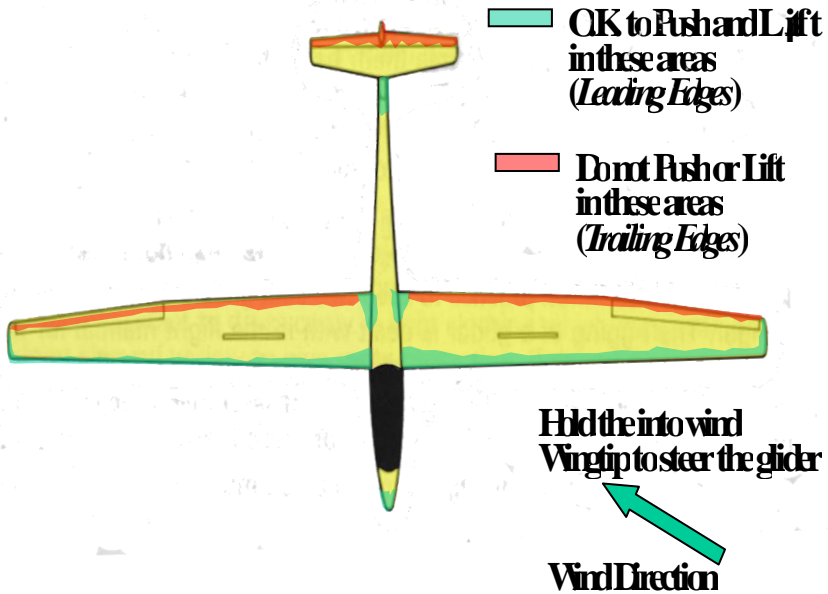
Hold the into wind wingtip - steers the glider -only one person on a wingtip and ensure you "hand over control" by saying "my wing" or "your wing"

Tow behind vehicle - one person beside the nose to prevent over run.

Push on leading edges of wing - close to cockpit

Lift only on rear of fuselage - **do not lift on the tail plane.**

Park glider with "into wind" wing down.



Don't be afraid to ask !

## Pre-Flight Checks **C.B.S.I.F.T.B.E.C**

**Do not interrupt the pilot whilst they are doing their pre-flight checks.**

Before every flight, the pre-flight checklist must be completed as follows:

**Controls:** Move each control individually, you must complete visual checks, i.e. have someone tell you what position each control surface is in, and make sure it corresponds to the control input from the cockpit. Then check all three controls (rudder, ailerons and elevator) together, checking for full and free movements, with no restrictions. **The check is for controls having full and free movements and operating in the correct sense.**

**Ballast:** Check that the glider does not have unneeded ballast weights in situ before you get in the glider. Check to ensure that the aircraft is to be flown within the placard weight limits. A glider should never be flown outside of these limits, i.e. too light or too heavy. The cockpit weight can be increased by installing ballast weights to the securing points in the cockpit. **The check is for the Ballast is within limits.**

**Straps:** Ensure that the straps of **both pilots** are on and secure. If the aircraft is flown solo, ensure that the straps in the rear cockpit are secured and will not foul any of the controls. **The check is for straps on and secure.**

**Instruments:** . Ensure that where appropriate, the instruments are set to zero. Check that the instruments are reading correctly and there is no broken glass and that electric power is switched on. Also ensure that the instrument panel is secure. Check that the radio is switched on, on the correct frequency, volume set appropriately, and control switched to front or rear as appropriate **The check is for Instruments all reading correctly, with no broken glass, and set to zero where appropriate.**

**Flaps:** The flaps, if fitted, should be moved through their full range of movement and set for the take-off. **The check is for flaps having full**

**and free movement and being set for take-off. or, flaps not fitted to this aircraft.**

**Trim:** The trim lever should be moved through its full range of movement, and. set for the take-off. If the glider is fitted with a trim tab, then it should move in the opposite direction to the elevator, i.e. trim lever forward, trim tab moves up.

**Brakes:** The brakes should be moved through their full range of movement. Open the brakes fully out, and then to half brake, checking on both wings for symmetry. The brakes should then be closed and locked. Most airbrakes will lock with a clunk, and some may take a great deal of pressure to lock. After locking the brakes check that they are locked by trying to open them gently. If you feel no resistance, then they are not locked! **The check is for Brakes fully out, symmetrical, brakes half, symmetrical, closed and locked.**

**Eventualities:** Pause for a moment and consider your actions in the event of a problem with the launch or a launch failure. Check the weather conditions and make a note of the wind speed and direction and what your minimum landing speed for the current conditions should be. Consider your options in the event of a launch failure given the prevailing weather conditions. Remind yourself that **the check is in the event of a launch failure. I will obtain a minimum approach speed of 50 kt , 55kt, 60kt etc and then make a decision as to whether to land in a field or whether I have sufficient height to return to the airfield.**

**Canopy:** The canopy(s) should be closed and locked, taking great care as the canopy is fragile, easily scratched and very expensive to replace. To ensure that the canopy is locked, you should do a physical check by applying an upward force on both canopy frames. **The check is for Canopy down and locked and resists upward pressure.**

**Have a last look round for any other potential unexpected problems before accepting the tow rope.**

## **LAUNCH SIGNALS**

Pilot indicates he is ready by accepting the aerotow rope.

After checking all around it is safe to launch the signaller indicates by using a bat waved downwards and signalling with a light box and clearly says “ ALL CLEAR ABOVE AND BEHIND – TAKE UP SLACK”

When the aerotow rope is taut the signaller then indicates by the bat waved overhead, pressing the all out button on the and clearly says “ALL OUT, ALL OUT ”

Anyone – at any time - can stop a launch by clearly shouting “STOP” and holding the bat still above their head.

### **Pre landing checks**

#### **WULF**

**W - water**

**U - Undercarriage Down and Locked**

**L – Look Out, keep a good look out in all directions**

**L - Loose articles - this includes the pilot i.e., tighten the straps**

**F – Flaps set for appropriate stage of Landing**