



# How It Works

**An introduction to  
Stratford on Avon Gliding Club  
for new members**

Stratford on Avon Gliding Club  
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# **Welcome to Stratford on Avon Gliding Club**

It is not unusual for newcomers to the sport to have some difficulty in unravelling the mysteries of a Gliding Club. However, as in many other situations, it is all relatively simple when you know how.

This booklet is written principally for new members who have just taken up gliding, and for those who may be considering the idea. It is an attempt to explain the workings of Stratford on Avon Gliding Club.

It isn't intended to tell you everything that you need to know as a pilot or as member of the Club. Rather, it's intended to give you an introduction to all aspects of the way the Club operates.

Gliding can sometimes seem hard work and a little frustrating, and rather slow at first. It is, however, a sport that offers a lifetime of pleasures and can provide excitement, beauty, new challenges and new friends.

Your first solo soaring flight will make all the hard work seem well worthwhile.

Happy flying.

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## **Safety**

An airfield is a hazardous place for the unwary, and many of the Club rules and procedures are there purely to make it safe for the aircraft, the operation, and – most of all – the people.

At first, it may seem that we have lots of rules that don't make much sense to you. Eventually, however, they will become second nature rather than rules. In the meantime, take it on trust that many people, in the Club and in the British Gliding Association, have put their experience into making these rules. The Club's Safety Officer is the person who is responsible for monitoring and improving the safety of the airfield operation.

Of course, nobody expects you to learn all the rules by heart before you take your first step onto the airfield. Rather, you'll learn what to do and what not to do as part of your general introduction to the way we work. For this reason, it's very important that you should be shown how to do each job by an experienced Club member.

Most safety considerations are common sense, such as being behind the launch point when an aircraft is about to launch, so it's important to keep your brain switched on at all times. However, some things need to be learnt, such as the need to look *up* as well as *around*.

Safety is everyone's responsibility, including yours. If you see something that you think is unsafe, or you think that somebody else has overlooked something important, you should say so.

Until you're sure of yourself, the best thing to do is point out the problem to a Club member, who will either take action, or explain why it's not actually a problem. However, if you're sure that something is wrong, and there is no time or opportunity to check, you're entitled to act, for example by stopping a launch.

Even if the problem turns out to be unimportant, it's always better to be safe than sorry, and nobody will blame you for your action.

In fact, we aren't interested in *blame* in a gliding club. If something goes wrong, we're more interested in finding out why it went wrong, and preventing it from happening again, than in identifying a culprit. Everybody can make a mistake, even the most experienced pilots, and we prefer to learn from those mistakes.

## **A Day at the Airfield**

The first thing to do when you arrive at the airfield is to put your name on the flying list, which is a queue for the use of the Club aircraft. The flying list is kept on the Club computer, which is central to the day's operation, and it will make things a lot easier if you know your membership number.

At the start of each flying day, all the aircraft, parachutes, mechanical equipment, and launch cables are subjected to a Daily Inspection, or DI as it is usually called. This needs plenty of pairs of hands, and takes at least an hour. At the end of the day, all the kit needs to be cleaned and put away, which also takes plenty of pairs of hands. You should plan to be at the airfield to be able to help with one or both of these.

Once everything has been inspected, the Duty Instructor holds the Daily Briefing, and you should always try to be present at that. The Duty Instructor is in charge of the airfield on the day, and is responsible for everything that happens there. The briefing covers the layout of the airfield, the flying rules for the day, the weather, who's going to start doing the various key jobs, and anything extra that is important.

If you don't recognise many faces there, explain that you're a new member, and perhaps also that you'd like to find out about the jobs that need to be done at the launch point. Let the Duty Instructor know if there is anything particular that you want to do that day.

When it is your turn to fly, you will normally have two consecutive flights with an instructor, or three if you arrive early enough, unless the first happens to be a prolonged soaring flight, in which case you will only have the one. Later in the day, if there is sufficient time, you can have a further flight or flights. It all depends how busy we are.

While you are waiting to fly, there are many jobs that you can help out with, such as pushing aircraft, holding wings, and driving buggies. It takes six people to launch a glider, so we all need each other's help to fly, and everybody has to do their share of these things.

At the end of the day, fill in your log book with the details of your day's flights. Your instructor may wish to add some notes. Your log book is your flying record, and must be kept up to date.

Your flights are recorded on the Club computer, including the flight time and the fee. These details are usually printed out at the end of the day, and you can query your account or your flying logs at any time the computer is not in use. Your membership details are there, too, and you should check that they are correct, and change them whenever it is appropriate to do so.

You must pay your flying fees on the day you fly, by cheque or in a cash envelope. You may also pay in advance - membership (and flying fees) may be paid by Standing Order. You should write your membership number on the back of your cheque or envelope, and post it in the Flying Fees box, by the office door. You can check the balance of your flying account on the computer, and you must always keep your account in credit.

## **Learning to Fly**

You'll learn to fly in the front seat of one of the Club's two-seat training gliders. Your log book and Pre-Solo Training Record sheet are a record of your training, and you should always present them to your instructor before you fly. That's the only way that they know how you are progressing.

When you have mastered the training syllabus, one of the Club's senior instructors will send you off on your first solo flight.

There is no hard and fast rule about how many launches it will take you to reach solo standard. It all depends on your ability and the frequency of your flights. Your age makes a difference too, because younger people generally learn much faster than their elders. As a guideline, if you fly regularly one day a week, it will take between six and twelve months.

The motor glider is a training aircraft, although many people also fly it for fun. It gives you valuable time in the air when you're learning to fly, so your instructor might suggest you fly it, or you can ask to fly it, to speed up your flying skills.

Going solo is only the first step, and the instructors will give you further training for a some time afterwards. This means that, before you launch for a solo flight, you will be asked to have a check flight or a briefing with one of the Duty Instructors. This will establish whether or not you can safely handle the weather conditions on that day. If the conditions are particularly difficult, or if you are not quite up to your usual standard – we all have good and bad days – you may only be allowed to fly dual with an instructor at that time.

Once you've got past that stage, of being *on checks*, you can regard yourself as a solo pilot, and can fly whenever you want to, subject to the flying list and the availability of a suitable club aircraft.

## **The Training Syllabus**

When you're learning to fly, the instructors will tailor their teaching to suit your progress. There are advantages to flying with just a few different instructors, since they will quickly get to know how you fly.

The instructors follow a training syllabus, and you will be given a copy of this, the Stratford on Avon Gliding Club Flight Training Plan, when you join the Club. You should track your progress through this syllabus, because it will help your instructors to understand exactly how you are progressing with your training.

## **Other Things to Read**

If you want to read more about the sport, there are several good books available. One such is *Gliding: From Passenger To Pilot*, by Steve Longland. Derek Piggott is a very well-known glider pilot who has written many books covering all aspects of the sport.

The British Gliding Association publish their rules in *Laws and Rules for Glider Pilots*. This is aimed at pilots who are at or about solo standard, so a lot of it won't make much sense to you yet.

## **Health and Fitness**

When you joined the Club, you signed a declaration that you're medically fit to fly, but there's more to it than that. Every time you fly, you must be sure that there is nothing that will cloud your judgement or otherwise affect your ability to fly safely.

Your general state of health is one thing that has an effect. If you are under the weather or have a bad cold, or are stressed, or had a late night the night before, you may not be able to fly as well as you should.

Medication is another thing that can adversely affect your judgement, often without you realising it.

Alcohol always affects your ability to fly safely, so the acceptable upper limit is exactly zero.

Even if you start the day fit and healthy, the weather can have its effect. Sun, heat, and cold can all cause problems in their own ways, so whatever the weather, you should wear appropriate clothing. Sunburn and dehydration are common problems on an exposed airfield, and also when you are flying, so it's essential to protect yourself with sunblock and a hat, and to drink enough to keep your body hydrated. Remember that a breeze might keep you cool but it won't protect you from these problems.

It's your own responsibility to monitor your state of health, of course, because you're the only person who really knows. If you're in any doubt at all, discuss it with the instructors.

## **BGA Medical Requirements**

Before you can fly solo, you must have lodged a medical declaration with the Club, which states that you meet the required health standards. The easiest form of this is just a photocopy of your UK driving licence.

If you haven't got a driving licence, you can have a declaration signed by your GP, stating that you meet the DVLA 1 standard, which is that required for a private driver.

## **How the Airfield Works**

There are many things to learn about the way the airfield works, and the best way to learn about these is from the instructors and other members at the launch point.

This booklet is not intended to provide detailed instruction about all the various procedures used on the field. Everything is formally documented in the Club Procedures manuals, and a copy of this is kept in the Clubhouse, but these are for reference rather than being training guides.

While you are waiting to fly, and afterwards, you can help at the launch point and on the airfield. There are many tasks necessary to keep the aircraft launching and the people flying.

These include: Pushing gliders into position at the launch point; Holding a wing when a glider is being launched; Attaching launch cables to gliders; Signalling the launch; Logging the flights; Marshalling the launch point; Driving the buggies used for retrieving the gliders that have landed; Driving the cable retrieve vehicles; Driving the winch.

Although everybody is expected to play their part in these activities, some tasks require a little more experience and instruction before you can do them. A few others, such as signalling the launch and driving the winch, are restricted to solo pilots. Remember, safety always comes first, so ask and learn before doing anything for the first time.

It will also be necessary, in the interest of safety, to learn about field discipline, such as how to move around the airfield, where to look for aircraft in circuit, how to handle and park gliders, and so on.

The more experienced Club members will be happy to explain the things that you need to know. Usually, there will be somebody who can spend some time showing you the ropes. Don't forget, though, that they want to fly too, and may have other responsibilities, so they can't give you their undivided attention, and they may not be there next time you come to fly.



## Things it Helps to Know

Here are a few basics that will cut down the number of times you hear a shout of "Don't do that!".

- **Safety**

There are many cases where something is safe in some circumstances and not in others. An example is walking in front of the aircraft at the head of the launch line, which is a problem if it's about to be launched, but safe if it's not. It's always safe to walk behind that aircraft, though, and that's the habit you should get into. Once you have acquired these safe habits, you can use your judgement in particular situations.

Make a habit of watching for aircraft in circuit, especially if you're on the landing area or the perimeter track, on a buggy or with an aircraft. Don't forget that aircraft can land anywhere.

Keep clear of moving cables, and also the unused cable during a launch, which might move too.

Aircraft are moved around, so be careful to stand well clear of the wings, and always keep an ear open for cries of "*Mind your head!*".

- **Handling an Aircraft**

Aircraft can easily be moved around by hand. One person holds a wingtip and steers the aircraft, while one or more other people push or pull the fuselage. It's hard work for just one person, though, so don't just stand and watch.

It's safe to push or pull anywhere on the top of the fuselage or the edge of the cockpit, or on the leading edge of the wing if the aircraft is going backwards. Never push or pull on the canopy or on the tailplane. Older aircraft have vulnerable areas, such as the trailing edge of the wing.

Gliders are by their nature comparatively light, and are susceptible to strong winds or gusts, so it's important to park them safely. One wing should be pointed into the wind, and held down by tyres, and the aircraft may need to be prevented from turning by using more tyres at the nose or tail. Never leave an aircraft unattended if it's not safely parked.

Never leave the canopy open if you're not right next to it.

- **Driving a Buggy**

When you go to retrieve a glider, always drive behind aircraft at the launch point. If there are any aircraft in circuit, wait at the launch point until they have landed.

Once you get close to the glider that has landed, slow down, and don't drive directly towards it in case your feet slip off the pedals. Wait until the aircraft has been turned round, then drive the buggy across the front and stop near the nose of the aircraft while the pilot attaches the rope. Don't move until the pilot is ready. While you are waiting, have a good look round for aircraft that will be landing soon.

When you tow the aircraft back, drive at a comfortable walking speed, keeping one eye on the pilot, one eye on the circuit, and one eye on where you're going. If you see an aircraft in circuit, point it out to the pilot, who may ask you to stop and wait.

When you get back to the launch point, slow down so that the pilot can manoeuvre the aircraft. Never tow a glider directly towards another one, and never use the buggy to manoeuvre a glider near to others. If there is another aircraft on the same launch line, just drive across the line at right angles until the pilot signals you to stop.

Many single-seat aircraft need a tail dolly when they're moved on the ground, so you'll have to take that with you from the launch point.

- **Launching an Aircraft**

The heart of the launch point is the launch point trailer, which contains the computer logging system, radios for communication with the winch and aircraft, and the launch signalling system.

The launch is controlled from outside the trailer by a signaller, who uses a signalling box to signal to the winch. This job is normally done by a solo pilot. The signaller is responsible for ensuring that the launch is safe. In particular, this involves looking out for aircraft which are in circuit and about to land, and which are therefore, out of sight for the pilots in the cockpit.

The signaller is assisted by a wing runner, who attaches the cable to the aircraft, when the pilot requests it, and then holds the aircraft wings level, at which point the signaller will initiate the launch. The wing runner moves with the aircraft until the winch is up to power and the wings are working enough for the pilot to have control.

The launch cable ends with a colour-coded strop, which is changed to suit the aircraft being launched. Only one cable should ever be brought to the launch point, because the other is live whenever the Winch Active light is flashing.

- **Signals**

There are three basic signals used all over the airfield: *Take Up Slack*; *All Out*; and *Stop*. During a launch, these signals are sent to the winch by a wifi signalling system.

There are versions of these signals which can be used wherever they are appropriate, such as at a distance or where it is difficult to hear speech: *Take Up Slack* is an arm waved low with the forearm downwards, or a slow flash of light, one second on and three seconds off; *All Out* is an arm waved above the head, or a quick flash, one second on and one second off; and *Stop*, one or both arms raised and usually accompanied by a shout, or the light solidly on.

- **The Launch Point Trailer**

The launch point trailer holds the signalling system to the winch. Each launch is controlled by a signaller, using a signalling box outside the trailer. Inside the trailer, launches and landings are logged on the Club computer using our logging system, Glidex. There are radio ground stations inside and outside the trailer. However, radio is normally not used to control the launch, because of the risk of interference and misunderstandings.

Logging is a responsible job, and you need to be familiar with the Club aircraft and at least some of the members' names before you start. You'll need a couple of training sessions too, because the flight database is our financial and aviation record, and therefore needs to be accurate. You'll also need to be familiar with radio procedures.

- **Marshalling**

On busy days, the launch point marshal is responsible for organising the launch point so that everything runs smoothly. This involves ensuring that people on the flying list fly when it is their turn to, that people doing particular jobs do not do more than their fair share, and that aircraft do not sit idly by when there are members waiting to fly.

- **The Cable Retrieve Vehicle**

The cable retrieve vehicle brings a pair of cables from the winch to the launch point. It's important to drive at a constant speed in a straight line, which is harder than it sounds on a rough open field. The vehicle also carries other equipment, and has a ground radio, so you may also be asked to use your mobility to help out at various points on the airfield.

Driving the cable retrieve vehicle isn't difficult, but you must be properly trained to do it. You are in charge of moving cables, and mistakes can cause delays for the launch point, problems for the winch, or even danger to people and aircraft.

- **The Winch**

The winch drivers are all volunteer Club members, but we won't start teaching you this until after you have become a solo pilot. If you drive the retrieve vehicle, you'll have plenty of time to talk to the winch driver, who will explain how it all works.

During a launch, make sure that you are safely in a cab, because the cables are very dangerous. An extra pair of hands at that end of the field is always welcome, but ask the winch driver to tell you what you should or should not do.

- **The Clubhouse**

The clubhouse has four main rooms, plus the usual facilities. The club room is for the general use of members and visitors. The briefing room is for the morning briefing, other meetings, or private discussions. The office is used for club administration, and is not for general use. The kitchen is for members only, and there is a stock of snacks, drinks, and prepared meals that any member can take, paying for them in an honesty box.

## **Once you are Solo**

Going solo is only the beginning of your flying career. Once you are off checks, the next major step will be to qualify for a Bronze 'C' badge. The Bronze 'C' is the preparation to fly cross-country, and this is the stage where you can call yourself a fully-qualified glider pilot. It will probably take another twelve months to reach this stage.

To gain the Bronze certificate, you must pass the following tests, which are all done within the Club: two 30-minute soaring flights, solo; a written paper on airmanship, air law, meteorology, and the principles of flight; a flying test to check your airmanship; a flying test to check your ability to land in an unknown field; and the Cross-Country Endorsement, which is a navigation, field selection, and field landing check, flown in a motor glider.

Once you have your Bronze 'C' certificate and the endorsement, you can fly cross-country, which is one of the great pleasures of gliding.

Once you have been solo for a while, and probably after you've gained your Bronze, you may decide to buy your own glider. Many pilots do this by joining, or forming, a syndicate with several others of similar standard. Most syndicates have three or four members. This makes it cheaper to buy a glider, gives you more freedom to fly, and can considerably enhance the pleasure that you get from gliding.

Glider types vary considerably, though, in both performance and flying characteristics. Make sure the aircraft you intend to buy is one that you can safely handle, and confirm this with the CFI.

You should take advice on this from experienced pilots and your instructors. If you buy a glider that is beyond your capabilities, you will not be able to fly it until you have gained the necessary experience. Although it is normally only a

formality, you must also get permission from the Club committee before you can keep a glider and trailer on site.

After Bronze comes the Silver 'C', which is confirmation that you are a cross-country pilot. The Silver 'C' is within reach of all pilots, and most pilots progress to this stage. This will probably take another twelve months after your Bronze, although some pilots have done it within a couple of weeks.

To gain your Silver 'C' certificate, you must perform the following flying tasks, which must be backed up by a data logger and checked by an Official Observer, and which are ratified by the BGA: a height gain of 1000 metres; a duration flight of five hours; and a straight-out cross-country flight of 50 kilometres.

The Silver certificate is confirmation that you are an accomplished cross-country pilot, and it is recognised internationally.

Further qualifications, the Gold and the Diamonds, need good conditions and a good aircraft, so not everyone gets that far.

Once you've reached Silver standard, there are many choices open to you, and you can set your own goals. Some people fly cross-country whenever possible, on flights of 100km, 300km, or even 500km, lasting many hours; others are content to fly locally; some fly with visitors, introducing them to the sport; and some train to become instructors.

## **Instructors and Instruction**

Instruction is provided for student pilots, at no charge, by our BGA-rated instructors. Most of the Club's instructors actually learnt to fly at the Club.

The standard of flying and training required to become and remain an instructor is, rightly, very high. If you want to become an instructor, you must have a Silver 'C' and at least 50 hours solo to qualify you to attend a P1 course run by the CFI and his deputies, which is a stepping stone to becoming an instructor. A P1 rating allows you to fly with other Club members and close friends or relatives, provided you pay for the flights yourself at normal Club rates.

Following this are the BGA ratings: Basic Instructor, which lets you fly with members of the public, and Assistant Category and Full Category Instructor, which let you teach people to fly. All of these require BGA examinations and the approval of the CFI.

## **Members of the Public**

Members of the public often visit us, either in an organised group on a Trial Lesson Evening, or during any flying day.

These people are our main source of new members, and their first impression of the Club is very important. We always try to greet people as they arrive, and not leave them standing around looking lost.

This is usually their first flight, and they're keen and excited, which is as it should be. However, they have no idea what they should and should not do, and what is and is not safe, so they need to be guided.

On busy days, there are pilots on duty for greeting and flying with visitors, but they may already be in the air or elsewhere. If you see visitors arrive looking lost, and nobody else seems to have noticed, a polite enquiry is always appropriate.

Try to find the pilot on duty, or an experienced Club member, who will be able to answer all their questions. If you do have to leave them alone, leave them in or near the Clubhouse, for safety's sake, but try not to leave them alone for long.

It is very important that you don't make any promises, such as the waiting time or the length of a flight, because we may not be able to honour your promises. Instead, leave this up to the pilot on duty. Of course, you should always be friendly and helpful in all your dealings with visitors.

## **Young People**

The Club operates a Young Persons Safeguarding Policy and it is important that you follow this policy and its guidelines in all your dealings with young visitors and young members.

This Policy, together with guidelines for members, is posted in the Clubhouse. An extract from that policy states: *It is the responsibility of all adult members of the Club to ensure that their behaviour, and that of others, including any visitors, is appropriate at all times.*

## **About the Club**

The Club was formed at Long Marston in April 1974, and moved to Snitterfield Airfield in September 1987. It is affiliated to the BGA, the British Gliding Association, which is the governing body of the sport in the UK. The Club is owned solely by its members, and nobody makes a profit from it.

It is managed by a committee which is elected by the membership from among themselves. As in most clubs, the officers are Chair, Deputy Chair, Treasurer, and Secretary, with the Chair elected by the committee each year. All committee members are Directors of the Company, and as such are responsible for its well-being.

The CFI, the Chief Flying Instructor, is responsible for all flying matters, and appoints and approves all other instructors. The CFI is appointed by the Chair, on the advice of the committee and senior instructors, and this appointment must be approved by the BGA. The CFI is responsible both to the committee and to the BGA.

The Club has no permanent employees, so the many tasks necessary to ensure its smooth operation have to be carried out by the members on a voluntary basis. It is essential, therefore, that all members do their share towards its day-to-day and long-term running.

The Club publishes an email newsletter, *Club Matters*, when appropriate. In it, the committee and the CFI publish Club and gliding news, information about committee decisions, and occasionally rulings that must be strictly followed. The Safety Officer and Winch Master have their own newsletters, *Safety Matters* and *Winch Matters*.

The Annual General Meeting is held in or about October, and is a review of the season as well as being a formal meeting. The Club trophies are awarded at the AGM. This meeting offers an opportunity for broad discussion among the members of the Club, and all major decisions are put to these meetings before they are implemented by the committee.

The Committee consists entirely of Club members, and is responsible for the Club as a business. The committee is elected by the Club members at the AGM. Committee members must stand down after three years, and can stand for re-election. The Chair is elected by the committee from among its members, annually after each AGM.

Minutes of all committee meetings, which are held monthly, are posted in the Clubhouse.

There are many organisational jobs that have to be done regularly. For administrative purposes, these are divided up into areas of responsibility, and separate groups of people are responsible for these areas. The groups are usually led by committee members, but the group members need not be on the committee. The groups are, currently:

- **Field Operations**

This group is concerned with the day-to-day flying operation, in particular with the efficiency and safety of all flying-related ground activities and equipment. It is chaired by a senior instructor who is

usually also the Club's Deputy Chair, and includes both the Winch Master and the Safety Officer.

- **Flying Committee**

This group is chaired by the CFI, and consists of all the Club instructors. It is responsible for the training syllabus and all other matters of flying policy, and for implementing the rules and recommendations of the BGA.

- **Aircraft**

This group's responsibilities include the upkeep and maintenance of Club gliders as well as associated equipment such as radios, parachutes, flying instruments, and loggers. The Chief Technical Officer leads this group.

- **Engineering**

This group is responsible for the provision and maintenance of winches, vehicles and other mechanical equipment.

- **Site**

This group maintains and provides buildings, signs and so on, and looks after the field and roadways as necessary.

- **Marketing**

This group promotes the Club and its activities, organises courses and trial lesson evenings, produces Club literature, and so on.

- **Finance**

The Treasurer leads this group, which is responsible for the Club's financial matters. All the Club's income, from flying fees and so on, are handled by the Bursar.

If you have any relevant skills, or if you can assist in any of the areas mentioned, please contact the appropriate group, who will be most pleased to hear from you. A list of the current committee members and their groups is posted in the Clubhouse.

Of course, the committee members are Club members too, who enjoy flying just as much as anyone else, so you'll find that many of them are on the airfield on most flying days. They'll be happy to help you, so don't hesitate to talk to them.



## **In Conclusion**

There's a great deal to learn before you can be a solo glider pilot, and a lot of that isn't directly related to flying. However, you'll quickly pick up most things that you need to know, simply by talking to people on flying days.

There are lots of things to be done to keep the Club running, on flying days and away from the airfield. Nobody is expected to do things that they're no good at, nor jobs that they dislike, although of course the unpopular jobs still have to be done by somebody.

We encourage everyone to join in and help, simply because the Club works that way. Without the help of the members, we would rapidly grind to a halt.

We hope that this booklet has given you an introduction to Stratford on Avon Gliding Club, the things that you will need to do and the things that you might choose to do while you are learning to fly, and the goals you can set for yourself once you are a solo pilot.

**Welcome to the Club, and enjoy your flying**