

WELCOME TO CHINGFORD MFC

NEW MEMBERS GUIDE

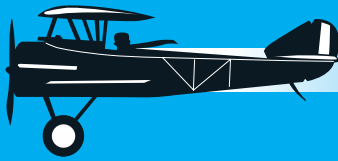
Provided here is some simple advice about what you should be aware of when flying at Chingford Plain or Banks Lane.

It is not intended to be a comprehensive guide but will complement information you should already have available to you in your **BMFA Handbook** and **A Flying Start** booklet.

These two booklets are must reads. They provide important legal advice and detailed information about how to fly safely and the rules BMFA members adhere to.



CHINGFORD MFC



GENERAL

Flying is our hobby. It is intended to be enjoyable and we try to maintain a friendly atmosphere. Members often socialise and generally we try to help each other. Spare parts are often lent or freely given and advice is easily found should you need it. Everybody started out lacking knowledge and experience so no questions are too trivial to ask. If you are unsure about anything then let us know!

Training: If you have passed your 'A Test' (or possess another relevant certification) we will confirm your certification and will advise you of our site rules. We will ask you to perform an assessment flight to be sure you understand our flying boundaries and safety requirements for flying in a public space and you will then be free to fly in accordance with our clubs rules.

If you are a novice you will only be allowed to fly under supervision of a member assigned to train you. Training will usually be done with a buddy box. Once assessed to have acquired basic flying and safety skills you will be allowed to fly with your own transmitter while still under supervision. Whilst on probation* you will not be allowed to fly solo at the site without another member present who has agreed to take responsibility for you.

If you fly with a club instructor using your own aircraft please understand that whilst they will take great care with it the club cannot be responsible to any damage it may incur.

Rules: The regulations for model aircraft flights are contained within the Air Navigation Order 2016. It regulates aircraft with a mass of 20kg or less. These are termed 'small unmanned aircraft' and these are what we fly at our club. The BMFA Handbook also clarifies how these rules apply to model flyers. Check your BMFA handbook for this information. Our club has additional rules concerning the areas we fly in. Site rules and maps of our flying sites are available on our website or from the club safety officer.

Drones & helicopters: these fly under slightly different rules than conventional aircraft. Conventional aircraft under 3.5kg can fly up to 1000ft. Multi rotors must stay below 400ft.

At Chingford Plain we fly in a public space. Be polite when interacting with people. Often an invitation to join us in the safety of the pit area and watch will be appreciated and ensure trouble free flying. Any children can only be allowed in our pit area if supervised by their parent or guardian at all times.

Banks Lane is a privately rented site. It has its rules in regard to compliance with the needs of the landowner and nearby property owners and its proximity to a nearby airfield.

***Probation period:** new members may be on probation for up to 12 months assessment in regard to attention to safety, flying ability and general behaviour by the club committee.



PREFLIGHT CHECKS: AIRCRAFT

A comprehensive list of the checks you should make when flying are to be found in the BMFA handbook. Below is a brief reminder of some of the more important. Please note that a novice pilot is required to present their aircraft for an initial inspection by the club's safety officer or other committee member to assess whether it is safe to fly.

All parts should be looked at and tested to see they are firmly attached, connections to ailerons, elevator, rudder etc. must be secure. Even if you checked it the night before, it is quite possible that a journey in the back of a car can dislodge or damage a part. These checks are to be done every time you come out to fly.

Check servos are firmly glued or screwed in place.

Check the wheels are pointing in the correct direction or you may have problems taking off.

Check the propeller cannot come off. If it does you will probably crash. Make sure it has no cracks or breaks, if you find any replace it, don't fly!

Check the battery cannot fall out. Don't assume the hatch will stay closed. If it looks like it might open whilst performing a loop then fasten it down! Use elastic bands or tape etc. You might additionally consider securing the battery from moving about with Velcro. Total loss of control will occur if you lose a battery.

Check batteries are fully charged. Do not assume they are OK because you charged them recently. Before a battery is plugged in you should test it with a battery tester.

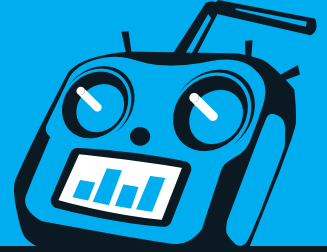
Check the aerial of the receiver in the aircraft is aligned correctly and undamaged.

Check the aircraft's centre of gravity (CG). Your instruction manual should tell you where this is. If you use heavier or lighter batteries than are recommended they may alter the aircraft's balance point and you should consider repositioning the battery to rebalance it or perhaps add lead weights. Changes in CG alters how an aircraft handles in flight.

Be aware that a model you have bought brand new might not be perfect and sometimes parts are not put together as well as they should be. It all should be scrutinised carefully.

Listen to your aircraft when you power it up, does it make any unusual noises, if so find out why. Continue to listen to it in flight, if it looks or sounds wrong land it and check it.

Special attention should be paid to all parts if you have a hard landing.



PREFLIGHT CHECKS: TRANSMITTER

A beginner should set up their transmitter (TX) and aircraft for safe and stable flight. At this stage you do not wish to explore the extremes of what your plane can do but have it react in a smooth controllable way. If you have multiple rate settings then set them to beginner mode or whichever the lowest setting is whilst you are learning the basics. Most likely your instructor will check your aircraft and your TX and set it up for you.

Be familiar with the workings of your transmitter. Know what all the switches do.

Make sure you follow the correct procedure for when to turn on your TX and plug in your aircraft battery. Getting it wrong can lead to loss of control.

Be sure your TX batteries have a strong charge. If you use dry cell batteries buy fresh ones if in any doubt. If they are rechargeable then be sure they are fully charged. Batteries are cheaper to replace than your aircraft.

After your aircraft and transmitter have been fully checked you can switch on your transmitter. Then connect your battery. Make sure it connects correctly and you hear a familiar set of connecting bleeps from the aircraft's ESC.

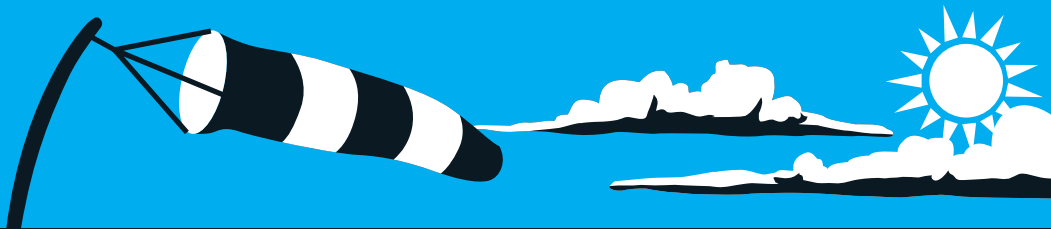
Make sure all your control switches are set correctly. Take time to see now the aircraft control surfaces respond to the TX controls. Do this slowly and be sure the surfaces do not only move but do so in the correct direction.

Ask someone to hold your aircraft securely whilst you advance the throttle. Listen for any odd sounds that might indicate a problem with your motor or your propeller.

If this is your first flight of the day, do a **range test**. This ensures your TX is capable of sending a strong signal over a long distance. You will need someone's help to do this so please ask as any member will be happy to help you.

Do a fail-safe test! Advance the throttle to half power and switch off the TX. If your TX has been set-up correctly this will activate **fail-safe** mode. If the propeller stops spinning then all is well. If it continues to spin, there is a problem. Ask a member for their help. **You cannot fly** until you correct the error.

Please note! If an instructor sets up your aircraft and transmitter for you then do not change anything! Your aircraft should now fly correctly and any alterations to it might cause it to become unpredictable or dangerous next time you fly it. It is expected that you might wish to explore your aircraft and transmitter to become more familiar with them but if you alter anything you must tell us what you have done so we can check it is all OK.



PREFLIGHT CHECKS: ASSESSING THE CONDITIONS

When you first start learning to fly, one of our instructors will assess the flying conditions and decide whether to allow flying to take place. When you start to fly solo though it will be up to you to properly assess the conditions. Below are some of the things you should be looking at:

Look at how good the light is and how far you can clearly see. Is it cloudy or foggy? Might any of these things affect how far or high you choose to fly?

Check the windsock – how fast is the wind and is it consistently coming from one direction or is the direction changing? You must decide how the wind will influence the direction you will take-off and land in.

If you have a light aircraft you might also have to consider not flying too far downwind as there is a possibility you might not be able to fly back easily against a brisk headwind. Be aware that flying into a brisk wind will also reduce your flight time as your battery will drain much more quickly.

You must know where the sun is and whether you might need to change how you fly so that you do not blind yourself. Good sunglasses are essential for any pilot but they still won't protect you much should you find yourself looking directly into the sun. If you cannot avoid it then try blinking rapidly so you can keep track of your aircraft but do your best to avoid needing to do this.

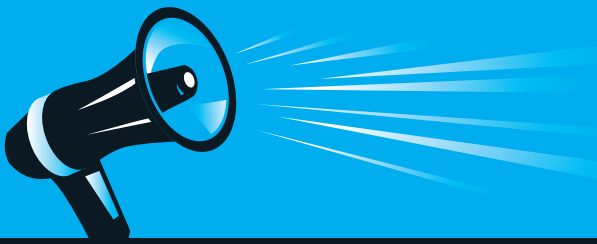
You must know the area we fly in and try not to fly beyond it. Look for markers such as a tree-line or a group of bushes to indicate to you the boundaries. If in any doubt refer to your Site Rules documents which will show the flying area.

You need to be continuously aware of any hazards present such as people or animals on or near the flying strip. Anyone on the strip or close to it means you must not consider taking off or landing until they leave.

Before you fly you should also assess where you might choose to land or ditch your aircraft if for any reason you cannot bring it back to the strip.

If you have any doubts about the flying conditions and whether your skills are sufficient for you to fly in complete safety you should not attempt to fly.

Ask another member to act as a lookout! They can more easily check for potential hazards on the ground and offer guidance where needed.



WARNING CALLS

People need to be made aware of potential hazards. We use warning calls to declare our intentions. Making these calls is important and you should make sure that your call has been heard. These are a few of the most common calls:

When you are ready to fly take your position in the pilots box. If another pilot is already flying ask **'can I join you'**. If they say **'no'** then wait for their permission or until they finish flying. They might be practising a manoeuvre and wish to avoid a collision. They might also be a novice and not wish to be confused by multiple aircraft in the sky. They might be preparing to land so give them all time they need. A pilot landing has priority over one taking off. When you have permission call out **'approaching strip'**. Taxi your aircraft out or position it by hand and quickly retire to the safety of the pilots box. Never taxi your aircraft out of or into the pit area.

We always call out **'taking off'** to alert other pilots and also fellow members in the pit area to be vigilant in case of any mistake.

If a pilot wishes to fly at low altitude over the strip they should call out in good time **'low pass'** or **'touch & go'** so they don't surprise another pilot.

'Dead stick' should be called instantly if a loss of engine power is experienced. This gives members the chance to help guide you back to the strip if possible or tell you where to land if not. They can also warn members of the public to take cover.

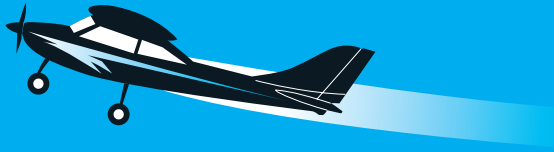
'Lost control' should be called if all control has gone. There won't be much that can be done for the aircraft but you must alert members to the danger so they can look out for themselves and also warn any other bystanders of the danger.

Always call out **'landing'** in good time before you try to land your aircraft. Landings are not always perfect and if it goes wrong, members and the public can be unnerved by an aircraft unexpectedly flying towards them.

Once you have landed taxi your aircraft to the edge of the strip and collect it. Do not taxi close to another pilot. If you are not experienced in taxiing it is safer to pick it up. Leave your TX in the pit or with another member. Call **'approaching strip'** to collect your aircraft. Avoid walking in another pilot's eye-line. Call **'clear'** once you are safely out of the way.

If you need to cross to the opposite side of the strip for any reason call clearly **'crossing strip'**. Do not cross until any pilots flying have given you permission to do so.

It is expected that members who are not flying are observant and notify a pilot if they become aware of anything that might affect their flight. Observing other pilots also aids locating an aircraft which for any reason goes down unexpectedly.



FLYING

When flying be aware it will take time to learn how much control input your aircraft needs. It will probably require you to be much more gentle with the controls than you initially expect.

There may appear to be a time lag between when you moving the controls and when the aircraft reacts. The tendency will then be to push harder on the controls and suddenly you will find your aircraft moving more wildly. Your instructor should be able to help you slow down your movements and gain control.

At first they will probably be taking off and landing the aircraft for you. After a time you will become more skilled and you will be ready to take off and land by yourself.

Your first take off: Face your aircraft into the wind and accelerate. Be prepared to correct it should it veer off course. Build up speed to around 2/3s throttle and it should begin to lift off the ground. Add a small amount of up elevator and let it climb smoothly to a safe height before you try to turn. Do not turn until you have reached sufficient height and are at a horizontal altitude. You are more likely to flip the aircraft into the ground if you turn at low altitude or before your airspeed is sufficient to avoid stalling.

If the aircraft taxis uncontrollably, cut power, collect it and check it. Don't forget to warn other pilots present that you are approaching the strip! There is no shame in repositioning it on the strip and starting again. If you can't control the take-off you might damage your aircraft or injure a bystander.

In-flight: At first you should practise simple circuits clockwise and anti clockwise around the flying strip. Get used to flying at a consistent altitude and speed. Always be aware of our flying site's boundaries. If your aircraft is getting hard to see you are far beyond them, turn around and bring it back! The same applies if it is too high. Try to be aware of what's above and below you, whether other aircraft in the sky or people on the ground. Kept at least 50 metres away from people.

Landing: Before taking off consider the flight line you think you will use to when landing. Are there landscape features that might serve as reference points? Practise approach flights so that you can consistently fly over the strip and control your altitude. When making your final approach a useful tip is to aim the aircraft towards yourself and make small course corrections once it is flying safely above the strip.

Get into the habit of having an organised landing routine. The BFMA Handbook describes flying a rectangular circuit which allows you to set up your aircraft correctly to land. This works very well so be familiar with it and practice it.



SAFETY

Accidents are possible in our hobby but we try our best to minimise them.

If you use LiPo batteries you should be aware of the need to store them in a safe fireproof place and take care charging and discharging them. If you need any advice about batteries and how to use a charger please ask us.

If you are not expecting to use them for a few days then you should put them on a storage charge which will protect the battery's lifespan. When on-site they should be contained in a fireproof battery safety bag.

Any flammable fuel must be contained in a fireproof container and care must be taken at all times in its handling. Fuel vapour can be a fire hazard so take precautions not to cause a fire by a spark from an electrical component.

In the pit we position our aircraft along the edges of the pit area with their propellers facing outwards. This ensures that if someone starts up their aircraft and it gets away from them it will move away from other members and not towards them. IC aircraft must always be tethered to the ground.

If you fly 'electric' be aware that when you plug a battery into your aircraft the motor it is now 'live'. If you need to work on your aircraft with a battery installed then remove the propeller. If anything should activate the throttle the propeller it will spin at considerable speed and may seriously injure you or cause the aircraft to leap forward and injure someone else. **Never handle a propeller when the battery is plugged in!**

At Chingford we fly in an area open to the public which means we must be prepared to do all we can to avoid accidents. This might mean landing your aircraft in an alternate place to the flying strip even if that might damage it rather than risking contact with bystanders (including fellow club members) or property. Remember also that the ANO separation requirements state that we must not fly within 50m of any person, vehicle or structure not under the control of the person in charge of the aircraft.

Flying at Banks Lane is free from the general public which means some of these problems are reduced but there is still a need to avoid accidents or fly beyond site boundaries. It also has specific rules in regard to noise levels and its proximity to a nearby airfield. But, if you are uncomfortable with the general public in proximity it may be a good place to fly. As with Chingford, a novice pilot will only be allowed to fly with a senior member taking responsibility for them.