

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.

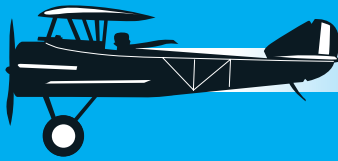
It is not intended to be a comprehensive guide but will complement information you may already have available in your **BMFA Handbook** and **A Flying Start** booklet.

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.

Also refer to the BMFA website and guidance for drone flyers on the CAA's website



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 much 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 an 'A Test' (or possess another relevant certification) we will advise you of our site rules and ask you to perform an assessment flight to show you understand our flying boundaries and safety requirements. 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 a member's supervision. 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 either of our sites without another qualified 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 held responsible for any damage it may incur.

Rules: CMFC flies under a set of regulations set out by the CAA for BMFA registered clubs called Article 16. You can read more information about this at: See: <https://rcc.bmfa.uk/article-16>. These regulations are a more flexible set of rules than the 'Open Category' which may apply to non members of a BMFA affiliated rc flying club.

Our club also has its own rules concerning the areas we fly in. Site rules and maps are available on our website.

At Chingford Plain we fly in a public space. We aim to be polite when interacting with others. If people are crossing the strip where we fly, often an invitation to join us in the safety of the pit area and watch will be appreciated and ensure trouble free flying. 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 reminder of a few 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 should be done every time you come out to fly.

Check servos are firmly glued or screwed in place, servo arms and horns are all secure.

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

Check propeller cannot come off. If it does you will probably crash. Make sure it has no cracks or breaks, don't fly unless you replace it with an undamaged one!

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.

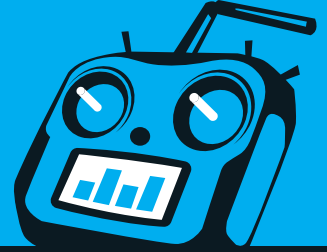
Check batteries are fully charged. Don't assume they are OK because you charged them recently. Before a battery is plugged in you should test it with a battery tester.

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

Check 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. .

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 similar 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. TX is first on and last off!

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 make 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 but make sure you are clear of the propeller in case it spins up for any reason. You should then hear a familiar set of beeps from the aircraft's ESC indicating the number of cells of the battery and its connection to the transmitter.

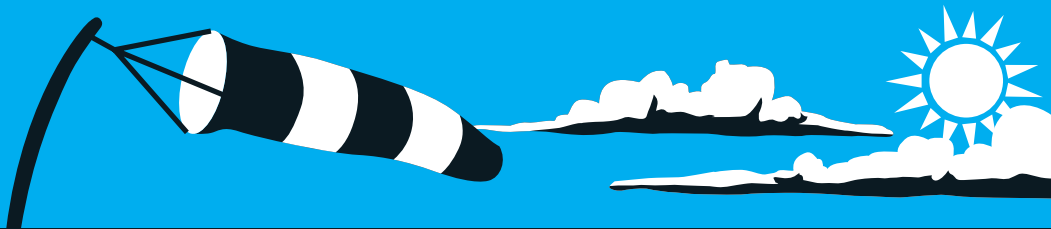
Make sure all your control switches are set correctly. Take time to see how the aircraft control surfaces respond to the TX controls. Do this slowly and be sure the surfaces not only move but do so in the correct direction.

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. Continue to listen to it in flight, if it looks or sounds wrong land and check it.

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 any member. They will be happy to help you.

Do a fail-safe test! Secure your model so it cannot move and then 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. **You cannot fly** until you correct the error.

Please note! If an instructor sets up your aircraft and transmitter for you then resist the urge to change anything! Your aircraft should now fly correctly and alterations to it might cause it to become unpredictable 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 your instructor what you have done so they can check it over.



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? The colour of your aircraft will also be relevant as to how well you can see it,

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 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 should note 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 won't protect you much if you find yourself looking directly into the sun. If you cannot avoid it then try blinking rapidly so you can avoid some glare but still 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 cluster 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.

You should also assess where you might choose to land or ditch your aircraft if for any reason you cannot bring it back safely to the strip. Remember your priority is not to endanger fellow members or other members of the public.

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. If available you might though consider asking a more experienced member to assist with a buddy box.

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



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 slight time lag between when you move the transmitter controls and when you see the aircraft react. This may be because the aircraft is some distance from you and you cannot clearly see the effect of small control surface movements. The tendency will 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 and level off before you try to make your first turn [away from the flying strip]. It is possible to flip the aircraft into the ground if you turn at too low an altitude or before your airspeed is high enough 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 crossing the strip! There is no shame in repositioning your aircraft 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 both 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 it is sometimes easier 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 BMFA 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.



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 want to 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 the 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 a '**low pass**' or a '**touch & go**' so they don't surprise another pilot.

When a number of aircraft in the sky it's usual for all to fly an oval pattern in the same direction, clockwise or anti-clockwise depending on wind direction.

'**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 may not be much you can do with the aircraft but you must alert members so they can look out for themselves, warn any bystanders of the danger and keep sight of where the aircraft comes down.

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 landed, taxi your aircraft to the edge of the strip and collect it. Don't taxi close to another pilot. If you are not experienced in taxiing it is safer to pick it up. Activate your throttle cut and take care you do not activate any TX controls when gathering your aircraft. If you are unsure of carrying it safely and an aircraft at the same time consider setting your TX down in a safe place or give it to another member to look after.

Call '**approaching strip**' and collect your aircraft. Avoid obstructing another pilot's eye-line. Call '**clear**' once safely out of the way.

If you need to cross to the opposite side of the strip for any reason clearly call '**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 intrude on where they are flying or impair their concentration.



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 charging them, please ask us.

If you are not expecting to use them for a few days 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 LiPo safe bag or other secure container.

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.

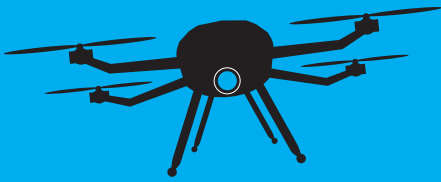
In the pit we position our aircraft along the edges of the pit area with their propellers facing outwards. This ensures that if a member starts up their aircraft and it gets away from them it will move away from other members and not towards them. IC aircraft must always be tethered to the ground when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

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 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 risk a collision 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 has its own specific rules in regard to noise levels and its proximity to a nearby airfield. But, if you are uncomfortable with the general public in close proximity at Chingford Plain then 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.



DRONES, FPV & FILMING

Drones

Drones are a fairly recent addition to the aircraft we fly at our flying sites. As changes in CAA regulations have come about we are experiencing an increasing number of multi rotor (drone) flyers looking for a safe environment to practice in.

Many new members are commercial pilots or pilots still developing their skills in preparation to take tests to equip them for their markets.

Drones fly significantly differently to other rc aircraft but our rules still apply in regard to checking your aircraft, transmitter and the flying conditions and ensuring you have visually checked if anything might impede your flight on the ground or in the air – like the presence of other aircraft that may have different flight characteristics to your own.

All standard warning calls should be made, including 'taking-off', 'landing' and 'dead-stick' or other loss of control warnings. If you have a licence (e.g. PfCO) you can fly solo. If not you should request another suitably qualified member be present to assist you.

FPV

If you fly with a FPV headset you must have a spotter to provide constant line-of-sight contact with the drone. If you rely only on a screen display for flying you should also have a spotter.

Flyers who fly line-of-sight and who may only refer to a transmitter mounted display to occasionally confirm orientation of their drone do not require a spotter.

Filming

Chingford Plain is a public space managed by the City of London Corporation and they do not allow still or video photography to be recorded from an airborne vehicle at this location. The use of an onboard camera to fly FPV is allowed but not for recording and retaining flight video.

Our Banks Lane site is a privately rented space and practicing flight photography, stills or video, can be done there but only in accordance with current drone regulations in regard to privacy and data protection.

Advise members on site you are recording and avoid the recording of uninvolved people. Whilst Banks Lane is private land there will be other people on site occasionally, such as farm workers. Filming around the various properties close to our site is absolutely prohibited.