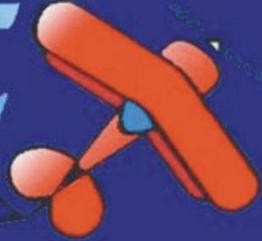


BMFC

BURY MODEL FLYING CLUB



HANDBOOK

In case of emergency, please quote the relevant information as shown below, to the emergency service concerned.

Knettishall: Map reference TL 963 792

Rougham: Map reference TL 893 647

Honington: Main Runway RAF Honington

This Handbook is a new issue and replaces all previous Handbooks. It incorporates changes to the Committee authorised at the 2019 AGM and further modified in November 2020.

Any subsequent amendments or revisions will be shown by highlighted text and a new PDF disseminated.

This information is the property of the Bury Model Flying Club. Please address any queries to the Secretary on: 01284 728460

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Note: This handbook may be updated from time to time as required. All members will be advised of any amendments primarily via e-mail. Periodically, a new handbook (as a pdf) may be e-mailed to members at the discretion of the Committee. A copy of the Handbook will be available to members on the Club website (search **bmfc.bmfa.org**. for the current Club site).

Following the introduction of the Model Aircraft Article 16 legislation, (which must be acknowledged by all model flyers), it is important to be able to demonstrate compliance. To this end, Club Members in possession of a recognised Association Achievement Certificate issued prior to 31 December 2020 should retain their BMFA Membership Card and Insurance Certificate when flying at Club sites. They must also ensure their models display their Operator IDs. Anyone not able to rely on an Association Achievement Certificate must pass one of the online tests provided by the CAA or their particular association in order to demonstrate competency and thus benefit from Article 16.

1 INTRODUCTION

1.1 The Bury Model Flying Club (BMFC)

Initially formed in the mid-1960s, the club was originally known as the Thetford and Bury St Edmunds Radio Controlled Model Flying Club. In those days, membership numbers were small. Today, as well as having a shorter name, we now have approximately 90 members of all ages and experience. In the early days of the club, flying was principally carried out at RAF Honington, but today we also have a partially tarmac-surfaced site at Knettishall and a grass flying site at Rougham Airfield.

The main aim of the club is to promote an atmosphere of enjoyment of our hobby and companionship amongst our members. To that end, we have regular meetings, fly-ins, and family days. In this booklet, you will find a great deal of information about various aspects of model aircraft flying, details of our sites, the British Model Flying Association (BMFA) Proficiency Schemes and of course, Safety. It is recommended that you read the section dealing with safety very thoroughly.

We have a set of general rules and good practices to adopt when flying and, in particular, frequency-control. There are also some more specific instructions to be found on the pages which deal with each flying site and you should become familiar with these.

We have several instructors in the club who will be happy to assist you with getting started if you are a beginner and will help you develop your skills as time passes. If you wish to take the BMFA "A" or "B" Proficiency Test or the Basic Proficiency Certificate (BPC), there are examiners in the club who are available for this purpose. Enjoy your BMFC membership. **Fly safely and have fun!**

Several aspects of model building and flying are regulated in law. The Civil Aviation Authority (CAA) is charged with ensuring the safety of aviation in this country. Model flying is recognised within their definition of "aviation". From 31st January, 2020 the regulations for operating unmanned aerial vehicles (UAVs), (which include model aircraft) was changed. The full requirements of the new regulations (as they apply to all in the UK) can be found in CAP 722. The BMFA has obtained an "authorisation" from the CAA which defines the different and flexible operating requirements for members

operating UAVs within the weight range 250g up to 25Kg. These weights are “ready-to-fly” limits and include fuel and batteries as applicable. The new regulations are contained within the Model Aircraft Article 16 Authorisation and are obtainable direct from the CAA and are also available on their website www.caa.co.uk The Article 16 Authorisation is reproduced in this handbook as Appendix 4, page 16-7.

The BMFA is recognised by government (and thus by the CAA) as the organisation responsible for trying to ensure that model flying is undertaken safely and with minimal negative impact on the public-at-large, communities and the environment. The BMFA and CAA work closely together and all you really need to know about the CAA requirements of our hobby is reproduced in the BMFA Handbook, a copy of which you will receive if you join our club as your sole or primary club. This contains a wealth of information including key safety and good practice guidelines. We have included key extracts in the BMFC Handbook, but we do ask you to read the BMFA booklet and especially take note of their safety and good practice advice.

1.2 **The BMFC Committee**

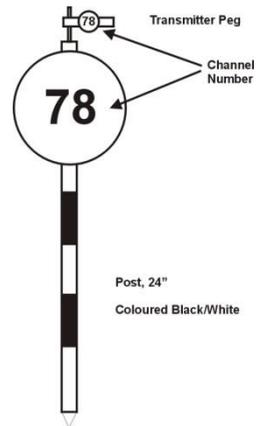
The Committee is listed in Chapter 16, page 16-3.

2 GENERAL FLYING SITE RULES & OPERATIONAL GUIDELINES

2.1 General Rules

The radio frequency control system at club sites is by means of club members' channel masts and pennants. All 35MHz users must display an orange pennant with their frequency number displayed in 1-inch-high numbers. All 27 MHz users must display the appropriate colour ribbon for their frequency.

Upon arrival at the flying site, your mast carrying the transmitter frequency peg must be displayed in the correct area, along with the other masts with the frequencies in sequence.



Note: Only one mast for each frequency must be displayed. If a mast displaying your frequency is already in place, your mast must **NOT** be displayed. In the event that the member whose mast you have been sharing leaves the site, your mast must then be used.

Members should note that only Transmitters with a CE marking (ie legally cleared for operation in the UK) are permitted in the Club. This is because there are different standards for effective radiated power in other countries. Using a non-CE marked Tx will invalidate your BMFA insurance and could result in prosecution.

27, 35 and 459MHz Users: Before switching on your transmitter you must collect the Transmitter Peg from the mast, clip it to your transmitter and, at the same time, place your "In Use" peg on the mast. If the peg is already in use then you cannot fly and your transmitter must **not** be switched on under any circumstances.

As a final safety check, you should observe models that are airborne as you switch on. If there is any sign of loss of control of an airborne model, you

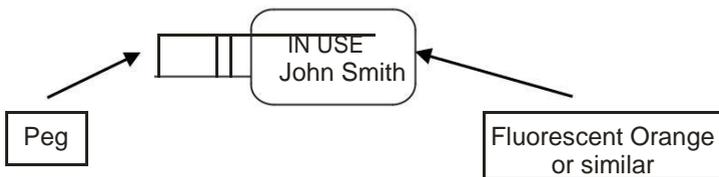
should immediately switch off your transmitter and get it checked against the frequency it is supposed to be on. As soon as you have finished flying, the Transmitter Peg **must** be returned to the mast and your “In Use” peg removed.

There is no requirement for frequency control of 2.4GHz equipment.

There will be **NO** exceptions to these rules. Remember, if you are not operating 2.4GHz equipment, **NO MAST or PEG = NO FLY**

Notes:

- i. The “In Use” peg informs others as to who is using the frequency at that time.
- ii. The “In Use” peg must be distinctly different from your transmitter peg, and the design shown is recommended. The “In Use” peg does **NOT** display your frequency number.



- iii. To cater for changing your frequency at the flying site, whether by using synthesized equipment or by crystal change, the mast can be adapted to display any frequency, ie using a transparent pocket and slot-in numbers. A Transmitter Peg showing the frequency in use **must** be displayed on the transmitter.
- 1 All radio equipment must be of Government approved type and standard, as set out in the current BMFA Handbook. The approved frequencies are 35MHz, 459 MHz (UHF) and 2.4GHz. The use of 27MHz equipment is also permitted, but should only be used on small or lightweight models such as gliders etc.
 - 2 Models should be of sound construction and all linkages, hinges and radio equipment must be checked prior to flying and especially after a heavy landing.

- 3 Models are not to be flown over the pits or parking areas at any height.
- 4 Engines must be started only in the approved areas and, after take-off, pilots must move to the approved standing position. Only cross the flight line when retrieving a model and inform other pilots of your intention when doing so.
- 5 Always commence your take-off run away from the pit area and call "Take Off", "Landing", "Overshoot", and "Low Pass" etc to warn other pilots of your intentions.
- 6 Report any accident involving your model and a third party to the Club Secretary immediately. You will be asked to complete an accident report form for insurance purposes.
- 7 Aim to complete the BMFA Power Achievement "A" and "B" certificates, to prove to yourself, and others, that you are a competent flier of model aircraft.
- 8 If you are unsure about any aspects of the procedures or operations then ask an experienced Club member to help. **Above all – FLY SAFELY**
- 9 **Safety Rules must always be obeyed. We are effectively all Safety Marshals and should always behave responsibly. This is for your own protection, as well as other club members and members of the public. Breaches of the safety rules should be reported to a committee member.**
- 10 Care should be taken in the presence of a running gas turbine. The sides and rear of the engine are danger zones and should be avoided.
- 11 Prevent fuel and oil spillage onto any surface to avoid damage and/or staining. Drip trays and overflow containers are suitable methods.
- 12 **Aircraft Noise:** It is essential that engine noise is kept to a level consistent with avoiding complaints from the public. To this end, the Department of the Environment has issued a code of practice (see BMFA Handbook). It is the club's interest to check each model with an approved tester. The club owns 2 noise measurement test meters. The specific site rules and other parts of the Handbook contain additional details.

13 **Mobile Phones** must not be taken into the pits area, the pilots' box or anywhere in between to maintain maximum separation and to avoid the risk of interference or distraction. If your mobile is switched-on it must be inside your vehicle and any calls must be made at least 50 meters away from the previously defined areas. You should be aware that, during your journey to the site, your transmitter memory could have been affected by your phone.

14 **Models weighing more than 20Kg:** To be flown on Club sites, the appropriate CAA exemptions must have been granted and be valid for that model and the operator.

Legal and insurance requirements dictate that there will be no exception to this rule.

15 **Model Flying Heights:** Model flying height limits are specified in the Model Aircraft Article 16 Authorisation (Article 16) which is reproduced as Appendix 4, Page 17-1 All Club Members are required to comply with the Article 16 requirements.

16 **Fail-safes:** Any powered aircraft fitted with a receiver capable of operating in fail-safe mode (ie PCM, DSP and all 2.4GHz receivers) shall have the fail-safe set, as a minimum, to reduce the engine speed to idle on loss or corruption of signal. Do not forget to re-bind a 2.4GHz Rx after you have re-set the idle speed. Check that the fail-safe functions correctly before the first flight of the day.

NOTE: A fail-safe is mandatory for any model weighing 7Kg or more.

17 **Helicopters:** The flying of helicopters at the same time as other fixed-wing models is not permitted. If a member wishes to fly a helicopter, an equitable slotting arrangement must be mutually agreed by those present to provide air time for everyone. This arrangement is not dependent on the size, method of propulsion or design of the helicopter. (Note: An autogiro is not a helicopter)

18 **Small Unmanned Surveillance Aircraft:** The CAA has drafted a new article (Article 167) which covers small, unmanned surveillance aircraft. This defines such an aircraft as being "a small, unmanned aircraft which is equipped to undertake any form of surveillance or data acquisition". The BMFA has had clarification from the CAA that

“surveillance or data acquisition” does NOT include such items as data-loggers, variometers etc. that are clearly used to monitor the performance of the model carrying them.

They are only concerned with models equipped with cameras or video equipment that have the potential to be used for surveillance purposes, either visual or electronic. The legislation does not prohibit you from flying a camera or video equipped model purely for recreational purposes.

- 19 **Airfield Activity:** From time time-to-time, other activities may occur at any of our sites. These activities may impact our ability to fly. For example, the Suffolk Kiteers occasionally book the airfield for a kite event, thus restricting model flying. Details, if available will be posted on the Club Website and sent as an e-mail to members. It is vital that the Hon. Secretary has your valid e-mail address.

20 **IN THE EVENT OF A CRASH**

Retrieving: If retrieving a model following a crash or forced the Transmitter **MUST** be left behind in the pits area.

FOD To prevent any Foreign Object Damage (FOD) occurring to any full-size aircraft that might be using the site after model flying has ceased, it is **IMPERATIVE** that **ALL DEBRIS** resulting from a crash are identified, collected and removed from the site. All other flying should be suspended whilst this happens.

Note: The rules do not prohibit the operation at any Club site on the basis of aircraft size or weight, subject to compliance with noise and other legal requirements.

- 21 Grass cutting equipment owned by the Club must only be operated by members trained and authorised to use it. Unauthorised use may invalidate any subsequent insurance claim.

3.0 FLYING SITE RULES - HONINGTON

3.1 Introduction

- 3.1.1 The following rules are specific to this flying site and supplementary to the general rules.
- 3.1.2 The RAF Honington Liaison Officer (LO), who is appointed by the Committee, must be present whenever a model aircraft is operated. The role of the LO is to oversee all BMFC activity on the airfield, regarding flight safety and members' compliance with all of the flying site rules on the ground and in the air.

3.2 Access Information

- 3.2.1 If a member wishes to fly at RAF Honington, they must contact the LO no sooner than 10:00hrs on the Wednesday and no later than 21:00hrs on the Thursday before the weekend. (Contact details on page 3-3) This is so that the LO can confirm site availability and compile a list of members for Operations at RAF Honington.
- 3.2.2 On arrival, check-in at the Guardroom and present your passport or photo-driving licence as proof of identity. Your name will be checked against the list. If you are not on the list, or do not have the correct identity documents, you will be refused access. You should be prepared to show your Club Membership Card.
- 3.2.3 You will be met at the Guardroom by a Club Pass-holder who will escort you to the flying site.
- 3.2.4 A hut for Club use is situated 30-50m to the South of the flying area. Members must observe the rules detailed in section 3.3.
- 3.2.5 When leaving the base do not forget to inform the Guardroom.
- 3.2.6 At present there is no week-day access unless previously arranged through the Liaison Officer.
- 3.2.7 Model flying is restricted to between 10:00hrs and 18:00hrs ((or 30 minutes before lighting-up time, whichever is earlier).

3.2.8 Under no circumstances should the runway be crossed without the permission and under the observation of the LO.

3.3 Operational Status

3.3.1 The airfield is used by motor glider, microlight and full-size aircraft. If any manned aircraft is landing or taking-off, or if the LO requests you to do so, you must land your model immediately.

3.3.2 RAF Honington is an operational military establishment and we must be prepared to expect changes to procedures, flying area and availability at little or no notice.

3.4 Flying Site Rules

3.4.1 Flying must not take place unless the LO is present.

3.4.2 The LO is authorised by the Committee to take appropriate action to enforce compliance with the site rules. If he deems it necessary, the Liaison Officer can, as a last resort, ground any offending member for the day. The LO's word is final and without exception must be complied with. Any other reaction will be unacceptable and is to be reported to the Committee who may consider disciplinary action.

3.4.3 Subject to compliance with the LO's instructions, any disagreement with the LO's decision can be referred to the Committee, by the affected member, for review.

3.4.4 The LO is authorised to vary site rules to comply with any requirements imposed by RAF Honington. He is required to report any such variations to the Committee as soon as possible.

3.4.5 The pits area is located along the former Fire vehicle Access Road and at least 15 meters south of the Runway.

3.4.6 Vehicles should be parked on either side of the access road..

3.4.7 Staining the asphalt with fuel/oil/exhaust must be avoided at all costs. Re-fuel and run engines on the grass and, where this is not possible, eg gas turbines, use overflow collector tanks, drip trays etc.
NO FUEL IS TO BE STORED ON SITE

Props: Fill and start these on the grass. To start, face props in a safe direction

Helicopters: As above

Jets: Fill using overflow tanks. Start with the efflux pointing NW or NE (wind dependent), 2 meters from vehicles. Jet pilots must have 2 working extinguishers and there must be an extinguisher in the designated emergency vehicle.

3.4.8 A designated emergency vehicle, containing a fire extinguisher and a first aid box, must be ready to attend a crash at any time.

3.4.9 The Pilots' Box (prop or jet) should be situated at least 15 meters from any pit or car parking area.

3.4.10 Helicopters – 10 meters from pilots' box and at least 15 meters from pits.

3.4.11 Take-off runs are to be made so that lift-off does not occur before the model passes the Pilots' Box

3.4.12 No model to be flown unless there is a 'spotter' and has been cleared by the LO. It is the pilot's responsibility to ensure compliance with this rule. Vigilance is always needed by the 'spotter'.

3.4.13 The permitted flying area is as shown on the plan. Club activity is permitted only in accordance with the Licence conditions.

3.4.14 Do not fly within 500 meters of an occupied building, nor more than 200 meters North of the take-off track.

3.4.15 No model may be flown above 400ft.

3.4.16 Noise emissions should be reduced by the application of effective suppression techniques.

FLYING SITE RULES - KNETTISHALL

The following rules are specific to this flying site and supplementary to the general rules.

4.1 Access

Normally available routes onto and off the site are indicated on the plan. Gates are padlocked. For the code, please contact the Club Secretary

4.2 Retrieval

In the event of a forced landing in the crops, recovery must not damage the crops. If the model cannot be found or recovered, inform the Secretary and the farmer.

4.3 Full-size Aircraft

Beware always of full-size activity. This is an active airstrip for both resident and visiting light aircraft. An observer must be present in the Pilots' Box whenever a model is airborne and is responsible for continuously checking for full-size activity in the air and on the ground. **Compliance with this rule is the responsibility of the pilot.** (NB: An instructor cannot also be the observer). In the event of a full-size movement, the model must be landed without delay.

Do not over-fly or take-off/land towards parked full-size aircraft. In addition, beware of LOW FLYING military aircraft.

4.4 RESTRICTIONS

4.4.1 The site is open every day. I/C powered models may be operated only between 0900hrs and sunset.

4.4.2 Between 1st March and 31st October, i/c engines must not be operated on Sundays after noon when the wind is from the North in the sector shown by the paint lines in front of the Pilots' Box.

4.4.3 All flying must be to the north of the take-off/landing area. Any landing approach from the south due to wind direction should be done at low power. Flying to the south of the paved area is not acceptable during take-off. In the event of any full-size movements, a landing is the correct course of action. Flying to the South should

only be undertaken in an emergency, when a full-size aircraft appears on short finals without giving normal landing indications, and then done at low power and for the shortest time possible.



Noise emissions should be reduced by the application of effective noise suppression techniques.

- i The pits, start-up areas and Pilots' Box are marked with yellow paint.
- ii Start-up with the model facing East.

- iii Gas turbines/large models may be started elsewhere in the interests of safety.
- iv Flight permitted in the area designated “No Fly Area” is defined in para 4.4.3 above.
- v Park only in the marked area.
- vi A Team Up Calendar is available on the Club Website. This provides a convenient means of coordinating flying sessions so that members can easily arrange their mutual flying sessions. Contact the Webmaster (Ian McDowell) to activate this facility.

5 FLYING SITE RULES - ROUGHAM

The following rules are specific to this flying site and are supplementary to the General Rules.

Caution

The site is used for other activities, eg kite and full-size flying. This will sometimes limit our areas of operation although not shown on the map as “dead” airspace. The prime responsibility for safety **always** rests with the pilot or instructor when supervising a novice.

5.1 Access

Access to the site is via a Gate near to the Control Tower roundabout. The gate is secured by a chain and a combination lock. Please contact the Club Secretary for the code. Due to the other site activities the entrance gates are sometimes left open. However, the gates must be locked behind you on entry and exit to ensure the site is kept secured by BMFC members. On entering the site, follow the route across the grass in front of the full-size aircraft parking area. Do not exceed 15mph. Members must avoid driving in the tracks made by other vehicles, particularly when the ground is wet. Park your vehicle in the designated area and be constantly aware of full-size aircraft movements. **Do not drive across the pits.**

5.2 Full-size Aircraft

A “spotter” must assist in the Pilots’ Box whenever a model is airborne by continuously checking for full-size activity on the ground and in the air, visually, aurally and with the radio receiver tuned to the Rougham frequency (**123.165**). He must keep the pilot informed. Compliance with this rule is the responsibility of the pilot. (NB: An instructor cannot be the spotter at the same time). The radio, together with spare batteries, is stored in a metal lock-box attached to the side of the container. If the batteries need replacing, please contact any member of the Committee. If you do not know the lock-box combination, please contact the Club Secretary.

The radio should always be in the control of the designated spotter who must keep the radio on his person whether in the pilots’ box or in the pits if no-one is flying. If the designated spotter changes, then the radio must be handed over to the new spotter.

If full-size aircraft are landing or taking-off, then models **MUST** be landed. However, if a full-size aircraft makes a straight-in approach to the East/West runway (09/27) and there is insufficient time to land a model, then it must immediately be flown towards the pilot and then enter a holding pattern to the South/South West of the Pilots' Box until the full-size is clear, when a landing can then be made. If a confliction occurs, it must be reported to the Committee for investigation.

It is not permissible to over-fly a landing aircraft or an aircraft which is parked or on the runway.

5.3 Site Rules

Park your car in the designated area marked by cones. Allow 20 meters between the tree line and parked vehicles for any passing full-size aircraft.

5.4 Pits/Start Area

This is located 10 meters westwards from the parked vehicles. Engines **must** be started in front of the pits and must be facing west.

5.5 Flying Rules

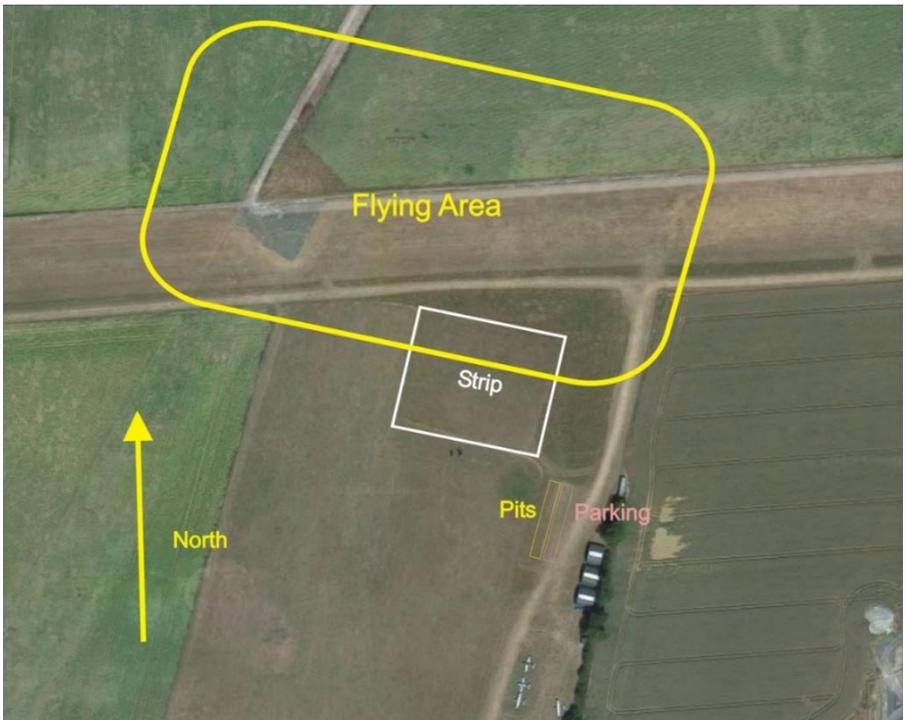
- a No More than 2 I/C-powered models may be airborne at one time and no more than 6 models in the air in total.
- b No I/C-powered aircraft may be flown before 10am or after 7pm.
- c Any I/C-powered aircraft flown at Rougham **must** have been noise checked first. The BMFA ruling on noise will apply, ie 82dB at 7 meters.
- d There are no time restrictions on Silent Flight models.
- e There must be no flying to the East of the tree-line, except in an emergency as previously described.

- f When flying, all pilots **must** stand in the Pilots Box. Pilots may enter the runway and stand behind their model for take-off, provided they have obtained approval from any other pilot (s) in the box. When the model is safely airborne, they should return to the Pilots' Box to continue flying. After landing, if unable to taxi clear of the runway in use, pilots may enter the runway to retrieve their model, provided they have obtained clearance from any other fliers in the box. When retrieving a model, the transmitter should remain in the Pilots' Box.

- g When flying, always inform other pilots of your intentions.

- h. A Team Up Calendar is available on the Club Website. This provides a convenient means of coordinating flying sessions so that members can easily arrange their mutual flying sessions. Contact the Webmaster (Ian McDowell) to activate this facility.

5.6 **Rougham Site Layout**



RADIO CONTROL FLYING SAFETY

From 31st December 2020, the Model Aircraft Article 16 Authorisation became law. This new legislation covers all aspects of model flying and as such, redefines models as Unmanned Aerial Vehicles (UAVs). It contains new rules on where and how we can fly, as well as how big (ie heavy) our models can be. It also requires would-be pilots to register with the CAA, provided the applicant completes an online quiz and pays a £9.00 annual fee. However, the BMFA and LMA have work-arounds for suitably qualified existing members who may avoid the online test if they have already achieved a recognised competency qualification. In addition, the BMFA produce several "guides" which contain much of the legal and practical information required to function safely and legally. This information is easily accessed at bmfa.org

- 6.1 Before every flight, check that the Tx trims rate switches are in their correct positions and that each control surface moves freely and in the correct sense. On PCM, DSP and 2.4GHz systems, fail-safes must be set to give low throttle settings.
- 6.2 Immediately before take-off, flight controls must be checked for full and free, correct movement, under full power if applicable. If there are any doubts as to their operation, do not fly.
- 6.3 Flyers wishing to use adjacent frequency channels should first perform an interaction check. Flyers regularly operating together on adjacent channels should repeat the check every 2 or 3 months.
- 6.4 Inexperienced flyers should never fly without an experienced helper. (see para 3d on page 15-2) The BMFA defines an experienced helper as someone with a minimum of an "A" Certificate or an appropriate BPC.
- 6.5 Unless positive controls are in force, all flyers should use the same take-off area at any flying session.
- 6.6 Do not start your engine in the pits area, close to any parked vehicles. Wheel or carry your model to the engine start zone. Do not taxi your model towards the pits after landing.

- 6.7 Before take-off, check that both ground and sky are clear and never take-off or land towards other pilots, spectators or the pits area.
- 6.8 After take-off, always make the initial turn away from spectators and parking areas. Diving manoeuvres should always be pointed away from spectators, parking areas and other people.
- 6.9 Always maintain a clear view of the model and allow plenty of room between flightpath and spectators, other flyers or the pits area. Never fly between the pilots' box and spectator or pits areas.
- 6.10 Do not overfly houses, domestic gardens, carparks, traffic, railways, organized games or spectators. You may be unable to control people walking past at a reasonable distance from the take-off/landing area and you should take care not to overfly them at low level.
- 6.11 After any sign of a malfunction or an unexpected jettisoning of model parts, you must land as soon as it is safe to do so.
- 6.12 **Do not distract pilots**, particularly during take-off and landing.
- 6.13 All personnel must exercise extreme care when in the take-off/landing area. Only persons with a legitimate reason should be in this area. Pilots about to take-off must inform those already flying. Pilots landing have priority, but must call their intentions loudly and clearly and **must never assume** they have been heard. A pilot going out to take-off may not hear the call over the noise of his model's engine.
- 6.14 **Never assume** that the landing area is clear, even if you have called "Landing!" In emergency situations, call for help from your fellow flyers and always be prepared to land in a safe place, off the strip if necessary. In all cases, the safety of people is paramount.
- 6.15 Care must always be taken to avoid over-flying operating transmitters. Pilots should stand together and not "wander" whilst operating transmitters. When a model is being retrieved, other pilots should avoid taking-off or over-flying the person concerned. There can be exceptions, particularly in silent flight operations and extreme

Care should be taken so as to avoid over-flying transmitters in these cases.

- 6.16 The staging of mid-air collisions at club sites, air shows and public displays is prohibited and activities of this kind are not covered by the BMFA insurance.

7 GENERAL MODEL SAFETY – FIXED WING

- a. Models should be built to a standard such that they will not fail under normal circumstances, giving special attention to control surfaces and connections.
- b. Models should be thoroughly checked prior to each flying session and after any abnormally hard landing.
- c. All projections ahead of the propeller on models powered by an i/c engine(s) or electric motor(s), eg spinners, prop nuts etc should be rounded and there should be no “needle noses”.
- d. Metal or damaged propellers must not be used on i/c engines and electric motors.
- e. Care should be taken to ensure that propellers are of suitable size and construction for the engine or motor’s operating speed.
- f. Heavy ballast or any other heavy part subject to jettisoning in flight is prohibited. Jettisonable ballast must be of a safe nature, eg water.
- g. All models are subject to in-flight vibration, landing knocks and transport damage etc. Ensure that receivers and batteries are well protected, servos are securely fixed, control linkages (push-rods, snakes, closed-loop etc) are robust enough for their purpose and are properly supported where necessary. They must be as slop free as possible and all control surface hinges and horns must be fitted securely.
- h. When starting an engine, always do so in the allocated starting area. Ensure that the model is restrained and cannot move forward. **Never put yourself in the position where your face is in line with a turning propeller.** When holding a model pointing upwards to check the engine setting, do so with the model held well above head height. A broken propeller will fly outwards and forwards, so ensure all engine adjustments are made from behind, if possible. A loose propeller will be a danger to anyone standing nearby so take care that no one is in front or in line when starting.

PRE-FLYING SESSION CHECKS (FIXED WING)

On Arrival at The Flying Site:

- 1 Check the airframe for any transit damage.
- 2 Check that servos and linkages are secure.
- 3 Check the undercarriage for secure fixing and correct alignment.
- 4 Check the propeller for damage and secure fixing.
- 5 Carry out a range check.

Actions and Checks Before Each Flight

- 1 After ensuring frequency clearance, switch Tx “on” whilst observing any airborne models. This could prevent an accidental “shoot-down”. If all is well, switch your Rx to “on”. Check that all controls operate freely and in the correct sense. Check that all control surfaces are in their correct positions with the Tx trims as required. Check rate switches are correctly set.
- 2 Look for any minor radio malfunctions such as slow or “glitching” servos. If in any doubt, **DO NOT FLY**.
- 3 After starting the engine and allowing it to warm up, check that the pick-up from idle to full power is satisfactory. Hold the model well above head height with its nose pointing upwards at a steep angle for 5 – 10 seconds and check engine operation at full power. If the engine falters or cuts, it is usually due to a lean mixture and this should be rectified. Repeat the test until the engine runs correctly. Immediately before taking-off and with the model held stationary on the ground, open up again to full power and re-check all flying controls.
- 4 **DOUBLE-CHECK** all Tx trims, rate switches and mixers are in their correct positions and that the TX power meter is “in the green”.

Be SMART with your Transmitter

S	Switch On
M	Meter in the Green
A	Aerial secure and fully extended
R	Rate switches set correctly
T	Trims set correctly

7.2 ACTIONS & CHECKS AFTER EACH FLIGHT

- 1 Receiver "Off", THEN transmitter "Off".
- 2 Clear the frequency control system (if applicable).
- 3 Clean the model.
- 4 Check the propeller, airframe, undercarriage and wing fixing etc for security of fastening and for damage.

REMEMBER – NEVER fly with a damaged aircraft or propeller or with any suspected radio problem.

8 RADIO CONTROL FLYING SAFETY – HELICOPTERS

It cannot be stressed too highly that a model helicopter must have a high degree of safety built into them. Because the BMFA feels so strongly about this, the comprehensive guide set out below should be closely followed. This is in addition to the regular radio control safety code.

It is **vital** that helicopters are **never** flown or rotors are run-up in or near the pits area or near spectators. When starting the model, hold the rotor head firmly. When the engine is running, carry the model to a sensible distance from other people before running-up or flying.

Do not release the rotor until you are certain that it is safe to do so and always be aware of the amount of energy in a spinning rotor. Never hold a model overhead to run-up the engine or run the engine with no rotor blades fitted.

Rotor blades must always be carefully balanced and you should always remember that vibration in helicopters can be very destructive.

A MODEL HELICOPTER MUST NEVER BE FLOWN OR RUN-UP:

- a. IN or NEAR the pits area or close to any spectators.
- b. Directly towards the pits or any spectators
- c. When fitted with metal rotor blades.
- d. When the leading edges of rotors or tail rotors are knife sharp.
- e. When the rotor blades are damaged or out of balance. Note that blades, especially wooden blades, should be reinforced at the root with hardwood, glass fibre or some other suitable material.
- f. When the radio equipment is un-proofed against shock and vibration.
- g. In the presence of spectators or at a competition or fly-in unless properly tested and proved airworthy.
- h. Until thorough maintenance checks have been carried out as set Out in the PRE-FLYING SESSION CHECKS.

Helicopter Rotor Blade Safety

Rotor blade failures have 5 basic causes as follows:

1 **Design and Manufacturing Faults**

Most design and manufacturing faults are centred around the rotor fixing hole. Typical faults include the hole being drilled through the junction between 2 wood laminations and incorrect wood selection, leading to the hole being drilled through a soft lamination. Blades with this type of fault should not be used, as even root reinforcement may not prevent a failure.

2 **Incorrect Assembly**

Incorrect user assembly is commonly found in root reinforcements and in blades that need to have tip weights of some description added. In all cases, care must be taken to ensure that any added components are fitted correctly, using suitable adhesives. Incorrect glue joints and badly applied reinforcing components are probably the biggest single cause of blade failure. It is vital that you take the greatest care with any assembly work required.

3 **Incorrect Repairs**

Do not be tempted to undertake major repairs to rotor blades unless you know exactly what you are doing. Minor repairs to blade edges are permissible but blades must always be re-balanced after completion.

4 **Unnoticed Accident Damage**

Any ground strike or boom strike will almost certainly cause damage to rotor blades. In many cases this may go unnoticed under the blade covering. If in doubt, do not hesitate to strip-off the covering for inspection. Re-covering and re-balancing blades is a small price to pay for peace of mind.

5 **Ageing and Weathering**

The ageing of glue joints in wooden structures is common and the high stresses inherent in rotor blade operation mean that you should watch closely for any signs of de-lamination in wooden blades.

- 6 Composite rotor blades can be subject to heat damage. Blades left in a car on a hot day can suffer from softening of the resin. When combined with heat expansion of the foam filler can make the blades unsafe. In summary, monitor your rotor blades closely and do not hesitate to discard them if you have any concerns regarding their condition.

PRE-FLYING SESSION CHECKS – HELICOPTERS

Checks Before Each Flying Session:

- 1 Check all ball links for slop and change as necessary
- 2 Check that all rotor blades are in good condition with no damage (other than minor tip damage)
- 3 Check for loose or missing nuts and bolts
- 4 Check that there is no backlash in the drive system, apart from gear backlash which, if present, should not be excessive
- 5 Check that servos are secure and free from oil
- 6 Check that the fuel tank and all piping is secure
- 7 Check that the receiver aerial is secure and in good condition with no chafing or damage

Checks Before Each Flight

- 1 If a helicopter suffers damage or a heavy landing, repeat all of the “Checks Before Each Flying Session” steps
- 2 Check all controls for binding links or slowing of servos before starting
- 3 Re-check all controls at high rotor RPM just before lift-off
- 4 Check for vibration and eliminate before flight
- 5 Check main rotor blades for true tracking in hovering flight
- 6 Check that the receiver aerial cannot become entangled with any moving or rotating part
- 7 Re-check that all Tx switches are in their correct positions before **every** flight

For more information on the British Radio Control Helicopter Association, contact the BMFA's Leicester office.

Multi-Rotor Aircraft (aka 'Drones')

- 8.3.1 Generally, the same **pre-flight checks** required for helicopters (sections 8.1 and 8.2 above) apply to multi-rotor craft. However, some models come equipped with a degree of autonomous operation and these need special attention.
- 8.3.2 **Semi-Autonomous operation.** Some models are equipped with a 'return to base' feature that can be triggered on demand from the Tx, or may return the craft to base if it senses that the battery is running down. Great care must be taken to ensure that the chosen 'base' is safe to access and that a craft returning to base will not try to fly through obstacles or over the pits or pilots box.
- 8.3.3 The **height and visibility** limits are the same for multi-rotor craft as other types of model.
- 8.3.4 As with helicopters, multi-rotor craft **must not fly together with fixed-wing craft.**
- 8.3.5 **'Drone Racing'**. Although increasingly popular, our flying sites are not adequately equipped for this activity and so it is **forbidden on Club sites.**
- 8.3.6 As with all other types of model flying, the pilot of a multi-rotor craft at a Club site, must have an Achievement Scheme Certificate appropriate for that class of aircraft or be accompanied by a qualified person.
- 8.3.7 The laws on multi-rotor flying are evolving continuously. Members will be advised of specific requirements as they affect flying at Club sites. In the meantime, members should keep up to date with developments by reference to the BMFA 'Drone Aware' campaign on the BMFA website.
- 8.3.8 Please note that BMFA insurance is for **recreational flying only.** Flying for any commercial purpose needs other insurance and, possibly, specialist training.

8.4 **First Person View (FPV)**

- 8.4.1 Members wishing to practice FPV flying must observe the following rules:
- 8.4.2 There must be two suitably qualified pilots involved i.e. both must have at least an 'A' certificate appropriate to the class of aircraft being operated. A third person to act as spotter is also required. The non-FPV pilot cannot act as the spotter.
- 8.4.3 Both pilots must have a Tx connected by a 'Buddy' system. The non-FPV pilot will have the master controller so that command of the aircraft can be taken at any opportunity.
- 8.4.4 The aircraft must always be in line of sight to the non-FPV pilot.
- 8.4.5 Height limits are the same as for normal flying.

9 GAS TURBINES

This section includes all the Gas Turbine guidance in the current version of CAP 658.

9.1 General

- 9.1.1 The operation of gas turbines requires special care and the manufacturers' operating instructions must be understood and closely followed. All pilots and helpers must be fully briefed on the operation of the engine before any starts are attempted.
- 9.1.2 Never run an engine more than the manufacturer's recommended power rating. Always follow the manufacturer's recommendations regarding pipework and fittings, especially regarding periodic renewal.
- 9.1.3 Take extra care during the engine's initial operating period. Until the unit is proven, do not operate it near people.
- 9.1.4 Pressurised gas fuels, such as Propane, require care in handling. Spill dispersal rates can be slow and the gas can "pool" in hollows or in void areas in fuselages. The liquid can also cause frostbite if allowed to come into contact with skin.
- 9.1.5 Ensure fuel is stored in labelled containers which are fit for purpose. These containers should be no larger than is necessary.
- 9.1.6 Jet Turbine installations may produce significant amounts of RF interference. In particular, fuel pumps (if they use brushed motors) and the turbines themselves have been known to produce significant static interference especially if ceramic bearings have been incorporated. Ensure that you do not install receivers and servos or run aerials near to the engine installation.
- 9.1.7 The CAA requires all gas turbine models to be fitted with a fail-safe. This must, as a minimum, bring the engine to idle in the event of radio interference or failure. The fuel system must be capable of manual shut-off via a fuel valve or fuel pump switch.

9.1.8 The maximum power engine used at any BMFC flying site shall be one marked or sold as '200'.

9.2 Before Starting

9.2.1 Smoking, or naked flames, must not be allowed near the engine and the fuelling area.

9.2.2 A suitable fire extinguisher, (CO₂ or dry powder but not water) should always be present at start-up and for any period during which the engine is running.

9.2.3 The start-up area should be kept clean and free from any loose items that may be sucked into the fan or turbine.

9.2.4 The start-up area should be on a paved surface, but if this is not possible, the grass should be short and clear of any loose material.

9.2.5 Check the integrity of any air hoses, clips etc prior to turning on the air. Manufacturers' Instructions should always be followed, particularly those relating to safety.

9.2.6 Gas-fuelled models must never be left in the pits area when full. Once refuelled, they should be moved directly to the designated start-up area.

9.2.7 If the engine is home-built or of a new design, you should take extra care during its initial operating period. Until the unit is proven, do not operate it with large crowds of spectators present or in pit areas.

9.2.8 The use of plywood or composite impellers is not recommended unless the builder has detailed and specific knowledge of such materials.

9.3 Starting

9.3.1 The engine should normally be started facing into wind. However, ensure that it is not pointed at people or the pits area. The effect of jet blast must always be kept to the absolute minimum.

9.3.2 Beware of "wet starts" with liquid fuels.

9.3.3 After starting the engine, always check the oil flow to the bearings. It is also advisable to check the exhaust gas temperature each day and keep a constant watch for any new noises or vibration. Any

deviation from normal could indicate trouble. Do not run the engine if you are not sure.

9.3.4 Whenever possible, a reliable helper should assist with the start. The helper should be close-by and fully briefed on the operation of the engine. The helper should ensure you are not distracted during the start sequence.

9.3.5 Models must be physically restrained during start-up. The use of wheel brakes alone is not sufficient.

9.4 Shut-down

After every flight, ensure that the engine is fully shut down, the fuel shut-off has been operated and that any hatches are opened to assist engine cooling.

9.5 Turbine Model Flight Safety Information

9.5.1 Runway conditions can have an adverse effect on the aircraft's performance during take-off. For example, wet or long grass will significantly increase the take-off distance required.

9.5.2 The rate of climb at take-off weight may be significantly less than that of a propeller-driven aircraft. Care must be exercised to ensure the safe clearance of any obstacles immediately after take-off.

9.5.3 The lack of "prop wash" over the control surfaces of a jet propelled model will result in less control surface effect, particularly at low speed.

9.6 Turbines and the BMFA

9.6.1 The BMFA Specialist Bodies covering gas turbines comprise the Gas Turbine Builders Association (GTBA) and the Jet Modellers' Association (JMA). These bodies can be contacted via the BMFA's Leicester office.

9.6.2 There is a detailed guidance booklet covering the safe operation of model gas turbines which is available from the BMFA Leicester office. The booklet is a joint GTBA/BMFA production and is highly recommended as study material for all gas turbine operators.

10 SILENT FLIGHT – THERMAL/SLOPE

- 10.1 Silent Flight models generally operate with low wing loading and low drag. Consequently, the landing approach may cover a lot of ground at low level. Check your landing approach path before you launch. Check again before entering the landing pattern. Remember that people will not hear your model approaching, so take no chances. When strong thermal air or slope lift is encountered, beware of flying too high. At altitude, lift may be very strong and turbulent. Do not try to dive out of strong lift if spoilers are not fitted. Fly away from the lift and try to find sinking air. If emergency action is required, full up-elevator and full rudder may give the safest descent.
- 10.2 Design considerations mean that many silent flight models are lightly built. Ensure the design and materials are adequate.
- 10.3 Silent flight models are often flown at considerable distances from their pilots. A high visibility colour scheme can be a great safety factor. Be extra careful when flying at distance and/or height and beware of flying across the sun.
- 10.4 When using a tow-line, bungee or power winch, locate both you and your equipment well away from parking areas and ensure that there is no possibility of the launching line falling on persons, buildings, roads, runways, taxiways or anywhere which might distress wild, domestic or farm animals.
- 10.5 Launch stresses can be severe. Ensure wing joiners/attachments are strong enough to cope with the high loads imposed. The use of a “weak link” of known breaking strain in launch lines is a measure which may safeguard model wing structures and thus should be considered. Bungee (Hi-Start) anchorages must be **very** securely staked. Use a screw-in type of fixing and do **not** simply peg the end down with such devices as old screwdrivers
- 10.6 Bungee (Hi-Start) anchorages must be **very** securely staked. Use a screw-in type of fixing and do **not** simply peg the end down with such devices as old screwdrivers!
- 10.7 Electric winches should have an obvious and clearly marked ON/OFF switch, accessible to anyone in an emergency. Shrouded

plugs and sockets should always be used and the motor switching should be indirect, ie by relay. Turn-round pulleys must be **very** securely staked. Remember, the load at the pulley is double that on the line and the pulley carrier geometry may produce even more load on the stakes.

11 ELECTRIC POWERED FLIGHT

- 11.1 Electric motors have very different power and torque characteristics to normal I/C engines. You must take great care when setting up their control systems and handling them, as an electric motor can start at any time from such causes as electronics failures or accidental movement of the throttle stick. Remember, an accident such as the propeller striking your hand may not stall the motor or blow the fuse. Indeed, any resistance will make the motor draw more current and turn harder!
- 11.2 Always use a fool-proof system for fast-charging. Overcharging at high current will ruin cells and has caused battery packs to explode violently. A charger fitted with a voltage peak detection system or temperature-controlled cut-off should be used.
- 11.3 Developing technology has made it more acceptable to use Battery Eliminator systems (BECs) to save the weight of a separate receiver battery. However, many older BEC systems are not as reliable as modern equipment and, in these cases, the use of a receiver pack is considered more suitable. The choice is yours but, if in doubt, use a separate battery for the receiver. You should note that the use of BECs will not invalidate your insurance. You should always employ a suitable fuse in the system and, on BEC systems, the fuse should be positioned between the controller and the motor.
- 11.4 Always check that motor operation does not interfere with the radio equipment in the model. Range checks with motor ON and then OFF will highlight any problems. Suppression of the motor is a simple task but you should seek advice from an experienced modeller if necessary.
- 11.5 Fast-charge cells can be discharged at very high currents. Short circuits, faulty wire insulation or loose contacts may result in considerable heat generation and cause fires.
- 11.6 All connectors and cables should be robust enough to safely carry the current for the motor(s) used. Wiring designed for small motors will reduce the power if used for larger motors and may become dangerously hot. If you change the motor, check the wiring is adequate for the new one.

- 11.7 Ensure that flight batteries are securely fixed and cannot move in flight.
- 11.8 Many speed controllers have a specific “arming” sequence which is a programmed sequence of actions that have to be accomplished before the motor will respond to throttle movements. For example, after Tx switch-on and following main battery connection, one type of controller requires the throttle to be moved from IDLE to FULL and back to IDLE before the motor is “armed” and ready for flight. You must be fully familiar with the system fitted to your model.
- 11.9 You must pay particular attention to the “Throttle IDLE – Tx ON – Receiver ON” sequence and be aware that the model you are holding is “live” as soon as the battery is connected, no matter what the controller arming sequence. Ensure the propeller is clear of all obstructions before connecting the flight pack.

12 NOISE TESTING

Minimising the emitted noise is necessary at all 3 flying sites.

All members are expected to reduce noise emissions as far as possible and help avoid noise complaints from local residents. The importance of this cannot be overstated if we are to avoid complaints which would directly threaten the continued use of our sites or result in the external imposition of severe restrictions. One of the conditions of the Planning Permission for our operation at Rougham is compliance with the Department of the Environment (DoE) Code of Practice Guidelines for minimising noise from model aircraft.

The following information is included to ensure that all members are fully aware of the procedures and practices to be followed. The noise test is conducted in accordance with the information contained in the BMFA Handbook. **A BMFC Committee member must conduct any noise test.**

- 12.1 The noise meter must comply with BS5969: 1980 and should be calibrated prior to use. All the Club meters meet these requirements.
- 12.2 Two pegs are used to hold a measured length of cord, aligned with the wind direction to provide fixed “upwind and downwind” positions, 7 meters apart. The test location should be away from noise-reflecting surfaces such as concrete, buildings, cars or other running models. If possible, the test should be conducted over grass.
- 12.3 The Committee member supervising the test must be satisfied that, when any readings are taken, the engine(s) is/are at full throttle, the carburettor mixture settings are producing maximum RPM and the RPM is not reducing during the test.
- 12.4 The meter should be held approximately 1.2 meters off the ground and above the peg at the “downwind” end of the line. **The meter must fitted with a wind shield and set to “A Weighting (dBA)” and “Slow” response.**

- 12.5 The model should be held between 1 and 2 metres off the ground, in a bracket or by a person standing upwind of the model. The wind speed should not be more than 3 m/sec (Force 2 or 7 mph). Large models which are unable to be lifted and held safely may be measured on the ground.
- 12.6 The first measurement is taken with the model pointing directly at the meter. The model is then rotated 90⁰ to the left and a second measurement taken. The model is again rotated 90⁰ left and another measurement taken. A further 90⁰ rotation left is made to complete the readings.
- 12.7 The model should be positioned with the propeller directly over the peg for the “nose-on” reading. The trailing edge of the wing should be used for the “tail on” reading and the remaining readings should be made with the fuselage over the mark.
- 12.8 **The maximum permitted measured noise level is 82 dB.** Any reading above this level constitutes a failure. Successful tests will be logged, and the model owner will receive a copy of the test.
- 12.9 If the wind speed is more than 7 mph, the test may be conducted, and any failure re-checked when the wind is less than this speed. If the failed reading occurred at the “nose-on” position, the measurement can be taken with the relative position reversed, ie the meter is upwind and thus avoiding blade resonance caused by the unrepresentative condition of the wind blowing onto the back of the propeller.
- 12.10 Examples of unacceptable practices to achieve a pass include:
- a. De-tuning the engine by enriching the mixture
 - b. Grossly over-propping if significant unloading then occurs in flight
 - c. Adjusting the throttle throw (mechanical or EPA) to limit apparent maximum RPM
- 12.11 Noise tests at RAF Honington should be pre-arranged through the Liaison Officer, Mark Hinton (01842 762922 or 07976 281655). Knettishall noise tests should be arrange through James Ladell.

Requirement for a Noise Test before Flight at Rougham

- 12.13 Any I/C-powered model must be shown to comply with the 82 dB limit before flying at Rougham.

Note: I/C includes diesel, glow and petrol engines.

- 12.14 Prior to flight, ground running may be completed prior to the noise test unless the model is judged to be excessively noisy. Changes which can affect the noise level, eg fitting a different size, material or make of propeller, adjusting the fuel system, exhaust system modification or use of a different type of fuel will be grounds for re-testing.
- 12.15 The belief, by any Club member, that the aircraft noise appears excessive despite having previously passed the noise test, is grounds for investigation including a further noise check.
- 12.16 It is the responsibility of the operator, whether a member or a guest, to comply with these requirements.
- 12.17 Noise Test equipment is held in the Club container at Rougham, together with a laminated guide and the test documentation. Any BMFC Committee member can conduct the test. Members should pre-arrange a test if they intend to bring a model which has not been shown to meet the 82dB limit.

Gas Turbines

Currently, the BMFA does not include gas turbines in the noise test. Once a suitable noise test has been defined by the GTBA and BMFA, it will be published. Until that occurs, there is no noise test for a gas turbine.

Helicopters

The test procedure is set out in the BMFA Members Handbook under Helicopter Noise Testing. The noise limits and other practices and procedures previously set out are applicable.

13 NOVICE INSTRUCTION

- 13.1 **Introduction** Teaching a novice to fly safely and competently is taken seriously and addressed at every stage from a new member's first enquiries about joining the Club, through to acquisition of the BMFA "A" or Basic Proficiency Certificate. This is the Club's minimum requirement for flying without the supervision of a qualified pilot. In addition, the novice pilot must complete the CAA Drone & Model Aircraft Registration and Education Scheme (DMARES) or have obtained a BMFA Registration Competency Certificate if he owns any model aircraft. All Club instructors are either BMFA Approved or registered. Coaching and help is also available beyond the novice stage at the member's request, hopefully leading the BFMA "B" Certificate. There are BMFA Approved Examiners in the Club who will be pleased to assist.
- 13.2 **Induction** Normally, the new member seeking tuition will contact the Membership Secretary to initiate the joining procedure. He will receive information and advice before his application is processed. Tuition is available at all of our sites, subject to instructor availability and workload. It is highly desirable for any pupil to receive regular tuition from the same instructor, although flexibility must be allowed in exceptional circumstances. Induction is complete when the novice and instructor have been introduced.
- 13.3 **Novice Coordination** The Training Coordinator is a member of the Committee who is responsible for monitoring and managing instructor workload. He will also assign a novice to an instructor. Whilst a novice's preference for a site may be influenced by its location etc, the coordinator may be obliged to make alternative arrangements with a view to spreading the workload and thus improving the opportunities for lessons. He will also deal with any difficulties which may subsequently arise, including re-assignment to another instructor if necessary. We must all recognise that occasionally, personalities do not gel, or the novice may wish to fly at a different site or date. The Training Coordinator will assist in this case. However, issues concerning teaching standards, methods, progress etc are matters for the novice to address directly with the instructor, at least in the first instance.

13.4 **Teaching Methods** Whilst all Club instructors are approved, there is no rigid method of instruction. Each instructor will bring his experience to bear and take the novice's strengths, weaknesses and his equipment into account. However, The BMFA Training Manual "Up and Away" provides a set of general procedures which all should use as the basis for instruction. All novices are expected to obtain a copy and be familiar with the contents. An understanding needs to develop between student and instructor and two-way communication is essential. After the initial introduction, the novice is expected to arrange any site visits/lessons directly with the instructor. Regular flying sessions are necessary if the student is to make the best possible progress. It is important to keep equipment in good condition to avoid the loss of training opportunities due to model/radio unserviceability. Instruction will cover far more than basic flying skills. Safety practices are paramount and familiarity with site rules and etiquette will be addressed, together with everything needed to gain the BMFA Achievement Scheme Certificate when the novice is deemed ready.

14 CLUB REGISTERED INSTRUCTORS

- 14.1 **General** Many members join the club as novices with the expectation of receiving sound instruction expectation of receiving sound instruction, leading to the award of a BMFA Certificate. This is achieved by assigning new members to qualified instructors who hold a relevant BMFA approval or are Club Registered Instructors. Whilst the latter are registered by the BMFA, their appointment is entirely at the discretion of the Club. This document details the standards which are expected by the Committee when appointing a Club Registered Instructor. It is also intended to provide a guide for those members who wish develop their skills to become an instructor.
- 14.2 **The Instructor's Task** Instruction can be described as the art of imparting knowledge and it goes without saying that he must know the subject he is going to teach. Thus, an instructor must be able to fly competently and without showing-off. He must communicate effectively and have sufficient background knowledge to answer the student's questions adequately. The instructor will be able to inspect and test-fly the novice's model before initiating the training programme with the aim of achieving the BMFA Certificate.
- 14.3 **Communication** Whilst we may know what we mean, it is not always easy to put that precise meaning into words. A good instructor avoids jargon and uses simple terms which the student can understand. He will give his full attention to the subject at hand and not be side-tracked or diverted from the task. He will always question the student on what has just been taught to ensure the lesson has been fully understood.
- 14.4 **Flying Ability** The need for an instructor to be able to fly well is obvious. What may not be so obvious is the need for his flying to be accurate and totally safe. An instructor who frequently crashes is unlikely to inspire confidence in his student. Accurate and safe flying by an instructor is always essential and not just when instructing.
- 14.5 **Knowledge** A sound basic knowledge of how and why an aircraft flies is essential if the student's inevitable questions are to be answered. The student is entitled to expect the instructor to have all the answers and the instructor must be as well prepared as possible

to respond. If the instructor cannot answer, he should say so, but be prepared to find the answer later or refers the question to someone who may know. Nothing could be worse than

trying to “bluff”. This is a very quick way to forfeit the student’s confidence. Knowledge of simple aerodynamics is essential; For example, “Why does the nose of an aircraft drop when entering a turn?” The instructor should be able to answer this and similar questions straight away, using a simple diagram if necessary. He does not have to be a brilliant flyer or an aerodynamics expert. He does have to be experienced, competent, knowledgeable, patient and have a quiet authority.

14.6 **Selection Criteria** As previously mentioned, some of the standards required of an instructor are subjective. However, the following considerations will help the Committee to reach decisions which are fair to would-be instructors and fair to our novice members. Prospective Club Registered Instructors should:

- a Hold the BMFA “A” Certificate (as a minimum)
- b Be experienced on a variety of model types (trainers/aerobatic)
- c Be recognised as competent and safe
- d Have a low crash rate
- e Be methodical with pre/post flight checks
- f Respect Site Rules/Etiquette
- g Be familiar with/use the BMFA “Up and Away Training Manual”
- h Have a sound grasp of basic theory
- i Have good availability for instructional duties
- j Have experience of instruction, either alone or with supervision

When the Committee is satisfied, the individual will be added to the Club List of instructors and registered with the BMFA. The Committee can withdraw approval as a last resort should that subsequently be found necessary.

14.7 **Instructors’ Responsibilities** The BMFA advocates that all instructors, especially those working with children or vulnerable adults, must always comply with the principles of good, moral and ethical frameworks and exemplary standards of conduct.

Note: Although the term “instructor” is used, it also encompasses those persons teaching or assisting in schools or youth groups, eg model aircraft workshops, presentations on model aircraft flying and buddy-box flying etc

Instructors having accepted the following conditions may be assigned a child or vulnerable adult to teach. The Instructors must comply with the following guidelines:

- a Instructors should place the well-being and safety of the trainee above the development of performance. They should follow all of the BMFA’s appropriate guidelines appertaining to instruction
- b Instructors should develop an appropriate working relationship with the trainees (especially children and vulnerable adults) based on mutual trust and respect. Instructors must not exert undue influence to obtain personal benefit or reward, nor abuse their position of trust.
- c Instructors should encourage and guide trainees to accept responsibility for their own behaviour and standards of flying, adopting safe procedures.
- d Flying instructors should hold either a BMFA approved instructor or BMFA Club Instructor qualification and ensure that their instruction and knowledge are to current best practice.
- e Instructors must ensure that the activities they direct or advocate are commensurate with the age, maturity, experience and ability of the individual. Those activities which entail increased risks, such as starting an I/C engine by hand, must be carefully controlled and monitored to ensure that the trainee is able to reasonably undertake them.
- f Instructors should, at the outset, clarify with the trainee exactly what is expected of him/her and what the trainee is entitled to expect from the instructor. In addition, it may be appropriate to consult with parents or carers.
- g Instructors should fully cooperate with all other interested parties (eg other instructors, the Club, the school or youth group and the BMFA) in the best interests of the trainee.

- h Instructors should always promote the positive aspects of model flying (eg compliance with BMFA recommendations and Club rules) and never condone unsafe or unacceptable behaviour, or practice
- i Instructors should always display high standards of behaviour, appearance and flying practice. Instructors should refrain from publicly criticising the trainee, fellow members, the Club and the BMFA. Differences of opinion should be dealt with discreetly and through the appropriate channels

I have understood and accepted these

conditions: Signed:

Name:

14.8 **Aspiring Instructors** Help and encouragement is readily available to anyone wishing to become an instructor. If you are interested, discuss the subject with one of the Club instructors and, if necessary, arrange for some help with gaining experience under supervision

Attachment 1

**CLUB INSTRUCTORS
(Approved or Registered)
as at January 2021**

Instructor/Examiner	Fixed Wing	Helicopter	Multi-Rotor
James Ladell	Instructor & Examiner	Instructor	Instructor
Mark Hinton	Instructor & Examiner	Instructor	Instructor
Jeffrey Diamond	Instructor & Examiner		
Peter Lancaster	Instructor & Examiner		
Vic Blackwood	Instructor		
Dave Gregson	Instructor		
Dave Bridges	Instructor		

15 BMFC CONSTITUTION

Foreword

This Constitution was revised by the Committee and approved by the Annual General Meeting in November 2006. Any reference to the male gender in this document should be taken as applying equally to the female gender.

1 General

The Club has been named “The Bury Model Flying Club” and is hereinafter referred to in this document as “The Club”.

2 Objectives

- a To encourage the development of radio-controlled model flying and to provide training and education for new members.
- b To operate as an affiliated Club of the BMFA.
- c To associate with other bodies with similar objectives and interests in the development of radio-controlled model aircraft.
- d To hold and deal with the Club’s property in anyway whatever.
- e To maintain and improve the public image of radio-controlled model flying.
- f To maintain and improve safety standards.
- g To work toward the acquisition of a suitable piece of land for a Club flying area.
- h To maintain and improve where possible the facilities and amenities at club flying sites.

3 Miscellaneous

- a The Club shall be non-political and non-racial.

- b Flying of Control Line, Pylon Racers or Pulse Jets is not permitted at Club sites.
- c Only legally approved radio frequencies may be used at Club sites.
- d No club member can fly without a “spotter” in attendance. Additionally, unless the member has at least an “A” test certificate or a BPC appropriate to the aircraft being flown, a “qualified pilot” must also be in attendance. (Qualified pilot means a Full Member as defined in membership classes b, c or d, and holding at least a BMFA Achievement Scheme Certificate appropriate to the aircraft being flown).

4 **Membership and Fees**

4.1 Membership of the Club shall be restricted to the following:

- a. **Vice President** - A person who desires to assist in the aims of the Club.
- b. **Life Members** – Persons who, in the opinion of the Annual general Meeting, have performed outstanding services to the Club.
- c. **Honorary Members** – Persons flying, or non-flying, whose services have been of considerable value to the Club. (Honorary membership is awarded by the AGM for a period of one year).
- d. **Ordinary Members** – Persons wishing to assist in the aims of the Club and to take an active part in the hobby and the Club’s functions.
- e. **Junior Members** – As (d), but over nine years and under eighteen years of age and paying such reduced rates of fees as the Club may deem proper.
- f. **Social Member** – Persons not wishing to fly model aircraft, but wishing to participate in the social aspects of the Club.

Note: Pre-Insured Members must provide evidence of BMFA Insurance before being allowed to join/re-join or fly at any BMFC site.

4.2 Classes of membership (b), (c) and (d) carry equal powers of voting at Club meetings. Classes (a), € and (f) do not have voting rights.

- 4.3 Fees, including joining and re-joining fees will be determined at the Annual General Meeting (AGM) or, in the case of a desire by the Committee to alter these at some interim period, by an Extraordinary General Meeting (EGM). See Appendices.
- 4.4 All members (except non-flying, Honorary and non-flying, Life and Social members) shall be full members of the British Model Flying Association.
- 4.5 **New Members** - All applicants for membership shall be required to follow the Club's standard application process, as defined by the Committee on behalf of the Club and in effect at the time. Whilst there is no requirement for formal background checks, these may be requested at the discretion of the Committee. The process is designed to ensure applicants can show they have read, understood and are prepared to abide by the Club's operating rules. All new members are Probationary Members for a period of at least 4 months, during which time they will be required to show evidence of satisfactory behavior, within the Club rules. The probationary period may be extended by the Committee where it feels there is insufficient information on which to make the decision to award full membership.
- 4.6 **Subscriptions** – Fees are payable from the date of the Annual General Meeting. Any member not having paid his annual subscription by 31st December shall be deemed to have resigned and will be required to pay the re-joining fee. The Club Year for membership is 1st January – 31st December.
- 4.7 **Repeal of Membership** – The Club (or the Committee acting on it's behalf) shall have the right to expel any member of the Club for gross infringement of the Club's Constitution and flying rules or un-gentlemanly, abusive or violent conduct. The Club shall not refund membership fees for any reason whatsoever.
- 4.8 **Membership Limit** – The Club may agree at an AGM or EGM to restrict the membership of the Club.

4.9 **Guests** – A person may visit the Club to fly as a guest on no more than two occasions during the Club year, provided the host is present and responsible for the guest's compliance with flying site rules and insurance requirements. Exceptionally, the Committee can authorize more than two visits.

5 **Composition and Functions of the Club Committee**

5.1 The Club Committee will consist of the following:

- a. **The Chairman** - who shall preside over all meetings of the Club and Committee and conduct the meetings in accordance with the Constitution of the Club. He is charged with ensuring that the Constitution is implemented by the Committee.
- b. **The Vice Chairman** - who shall fulfil all the duties of the Chairman when the Chairman shall by indisposition or absence be unable to fulfil his duties.
- c. **The Honorary Secretary** - who shall attend all meetings of the Club and Committee and record the minutes of the meetings. He shall deal with the correspondence of the Club, other than routine membership matters, and submit to the Committee such as shall be received officially.
- d. **Membership Secretary** - who shall deal with all routine membership matters, interfacing with the BMFA as necessary.
- e. **The Honorary Treasurer** - who shall keep proper records of the Club's financial transactions. He shall receive and promptly bank monies and shall conduct banking account(s) in the name of the Club, and all cheques drawn on such account shall require signing by himself or the Chairman and Secretary. Immediately after the end of the financial year, the Treasurer shall prepare an audited Income and Expenditure Account and submit this to the AGM. A club member, not on the committee, will be appointed by the Committee to act as Auditor.

- f. **The Honorary Competition Secretary** - who shall organise and conduct all Club contests and inter-Club events, and where necessary call upon members to help. He shall prepare and submit to the Committee a report of Competition matters and also items which require consideration and a decision from the Committee
 - g. **The Newsletter Editor** - who shall produce and circulate the Club Newsletter each month by e-mail or post. Articles supplied by members will not be edited but will be attributed.
 - h. **Ordinary Members** - Up to six Club members
- 5.2 To become eligible for election to the Committee, a member must have belonged to the Club for the preceding period of not less than one full year in membership classes (b), (c) or (d).
- 5.3 The Officers of the Committee are the Chairman, Vice-Chairman, Secretary and Treasurer. They shall be elected at the AGM for a period of two years, but so that one half shall retire at the end of year but shall be eligible for re-election. In even-numbered years the Chairman and Treasurer shall retire and in odd-numbered years the Vice-Chairman, Secretary, and Competition Secretary shall retire. Ordinary Committee members shall also be elected for a period of two years and shall be eligible for re-election. The Committee shall have the power to fill casual vacancies in the number of ordinary committee members. Any such appointee shall retain office only until the next Annual General Meeting but shall be eligible for re-election.
- 5.4 The office of a member of the Committee shall be vacated if:
- a He ceases to be a member of the Club.
 - b By notice in writing to the Committee, he resigns his office.
 - c He retires by rotation and is not re-elected.
 - d He is removed from office by a resolution of the AGM, passed by a two-thirds majority of those present and entitled to vote.
 - e If he absents himself without reasonable excuse from three consecutive Committee meetings.

6 **Functions of the Committee**

The Committee shall be responsible for the routine running of the Club. It will:

- a) Generally, carry on the work of managing the operation of the Club.
- b) Make regulations for the conduct of business, competitions, safety and flying site practices. Such regulations not to be inconsistent with the Constitution of the Club, for the time being. Take such action as may be desirable about matters that affect the Club and members of the Club, relating to the aims and purposes of the Club.
- c) Appoint and dissolve such Sub-Committees as may be considered necessary for technical, organisation, contest, finance or any other aspect of the Committee activities and to delegate such Sub-Committees such powers as it shall think fit.
- d) Co-opt for periods not exceeding twelve months' other individuals who can forward the aims and interest of the Club, but such co-opted persons shall have no voting rights other than as an ordinary Club Member.

7 **Committee Meetings**

Committee meetings shall be held at least once every quarter.

8 **Annual General Meetings (AGMs) and Extraordinary General Meetings (EGMs) of the Club.**

- a) The AGM shall be held every year in November and the notice convening the meeting shall state the time and place of the meeting, together with the agenda.
- b) Notices of motions for the AGM and nominations for election of Club Officers must be received by the Secretary not less than fourteen days before the meeting.
- c) No business not included on the Agenda shall be discussed at the AGM or EGM
- d) Notices convening the EGM must be posted by the Secretary, together with the agenda, time and meeting place, at least seven days prior to the date of the Meeting.

- e)
- f) An EGM may only be called on the demand of 40, or 50% of the Club members (whichever number is lower), or a resolution passed by the Committee.
- g) For an AGM or EGM, a quorum is 20% of the membership entitled to vote
- h) All business shall be deemed special that is transacted at an EGM and all that is transacted at an AGM shall be deemed special except:
 - i) The election of Officers
 - ii) The consideration and adoption of the accounts
 - iii) The consideration and adoption of the Officers' Reports
- h. At all Annual, and Extra-Ordinary General Meetings, any resolution put to the vote of the Meeting shall be decided on a show of hands by a majority of members present and entitled to vote. In the case of an equality of votes, the Chairman of the meeting shall have a second or casting vote.

9 General Meetings

A General Meeting of all members of the Club is to be held on the last Monday in each month or on some other agreed day of the week in each month. The management of the Club's affairs shall be discussed at General Meetings of the Club, attended by elected officers of the Committee and Club members. The views of the membership shall be established and on matters of policy, the endorsement of the members shall be obtained.

10 General Admin

- 10.1 The members shall not use or allow the name of the Club to be used in any advertisement, prospectus, business announcement, or in any manner whatsoever without the prior consent of the Committee.
- 10.2 All communications to members of the Club shall be sent to the address shown in the records of the Club and any such notice sent by ordinary post shall be deemed to have been duly received.
- 10.3 This constitution shall come into force on the fifth day of December 1996 and will be subject to periodic review by the committee. The period of review should not exceed 2 years. Any changes

recommended by the committee shall be subject to ratification by a majority of members at an AGM or EGM.

11 **Finances**

- a. The Chairman, Secretary and Treasurer, acting together, shall have the power to spend up to £1500 of Club funds and inform the subsequent Committee & General Meetings of their action.
- b. A General Meeting shall have the power to spend up to £2000. Any expenditure more than this must be approved by an EGM or AGM.
- c. Four members of the Club shall act as Trustees for any leasing agreement approved by the Club. They shall be nominated from the Chairman, Vice-Chairman, Secretary, and Treasurer and two Committee members. To avoid extra legal costs, Trustees may remain as Trustees once they have finished their term of office, provided they remain members of the Club.
- d. The Club must always maintain sufficient funds to meet the obligations of any leasing agreement properly incurred by the Club.
- e. The Club financial year is from 1st November to 31st October

12 **Policy: Welfare of Children and Vulnerable Adults**

The Club and the BMFA believes that the care and welfare of children is everyone's responsibility, particularly when it concerns protection from abuse.

The Children Act 1989 indicates that anyone who has the care of children should do what is reasonable in all the circumstances for safeguarding or promoting the child's welfare. The parents, guardians, carers, friends and those for whom we are caring also have a vital role to play. Similar principles also apply to those working with vulnerable adults.

Responsibility for children and vulnerable adults is shared between the parents, guardians or carers and the club members and is well publicised to ensure that all are aware of the division of responsibilities. A copy of the club rules and this policy is given to parents, guardians or carers in addition to the club members and their attention is drawn to them. (See Annexe 1 on page 16-1)

13. Dissolution

If the committee, by a simple majority, decide at any time that, on the grounds of expense or otherwise, it is necessary to dissolve the BMFC, it shall call an Extraordinary General Meeting. A decision on whether to cease operation will be confirmed by a simple majority of those members present and entitled to vote at such a meeting. The committee shall have the power to use the club funds to settle any outstanding debts or liabilities. Any assets remaining after this shall be dispersed per the wishes of the EGM.

14 Care of Children and Vulnerable Adults

- a. All members, parents, guardians and carers are to comply with club policy and guidelines for the promotion of welfare and care of children.
- b. A junior member is defined as being less than 18 years of age.
- c. A vulnerable adult is defined as a person of 18 years of age or over but, through mental or physical attributes, requires a higher level of supervision than would be normally commensurate with an adult member.
- d. A responsible adult is defined as a senior member or parent/guardian who has the clearance, experience, knowledge and training commensurate with the type and degree of supervision required.
- e. The club will assign children to Instructors who have agreed to implement and abide by the "Instructor's Responsibilities" document.
- f. A parent, guardian or carer must always accompany children under 16 years.
- g. Junior members must always be supervised by a responsible adult. The level of supervision is to be commensurate with the junior member's age, maturity, capabilities and levels of experience.
- h. Junior members under the age of 14 years shall not start an engine, or carry a model with the engine running, unless they are supervised by a responsible adult.

- i. No child or vulnerable adult shall undertake any activity which might place him or her at risk. In any event, prior consultation with their parent, guardian or carer must take place if there is any doubt on the member's abilities to undertake a specific activity.
- j. No senior member is to be expected to assume responsibility for a child of 16 to 18 years, or a vulnerable adult, unless he/she has been specifically requested to do so by the parent, guardian or carer. If agreed, he/she is to assume complete and total responsibility for the child or vulnerable adult whilst he/she is in their charge
- k. Notwithstanding the previous paragraph and in the interests of safety, should a member discover a child or vulnerable adult that is unsupervised, then he/she must assume responsibility for that person's safety in the first instance. The situation should then be rectified as soon as possible by seeking out the parent, guardian, carer or nominated supervisor. Any instance of such an occurrence is to be reported to the club committee as soon as possible and a record made of the occurrence.
- l. Whilst supervising children or vulnerable adults, members should avoid placing themselves in a position that could be open to misinterpretation or question, in accordance with BMFA policy.
- m. All members are required to respect the rights and dignity of children and vulnerable adults and to promote their welfare.
- n. Should any member, parent, guardian, carer, or the person themselves, have concerns about the welfare of children or vulnerable adults, then he or she is to contact any committee member without delay.
- o. The Committee will regularly review child welfare issues and immediately respond to any suspected cases or complaint in accordance with the BMFA guidelines.

16 COMMITTEE AND CONTACT DETAILS

As at 31st January, 2021

Position	Name	Tel/Mob	e-mail
Chairman	James Ladell	01359-221424 07710-906985	jamesladell@live.co.uk
Vice-Chairman	Mark Hinton	01842-762922 07976-281655	mphtec@hotmail.com
Secretary	Vic Blackwood	01284-728460	vicblackwoodbmfc@gmail.com
Treasurer	Kevin Hunt	07816-866939	info@kevinatbmfc.co.uk
Membership Secretary	Mark Allen	07889-190071	Mwallen65@gmail.com
Website Manager	Ian McDowell	07843-158314	ianmcdowell18@gmail.com
Ordinary Member	Richard Brown	01953-717451 07710200231	c@rrickhouse.com
Ordinary Member	Darren DuRose		ddurose@icloud.com
Ordinary Member	Tim Knox		Knox_j2@sky.com
Ordinary Member	Shaun Sivertsen		Alienwerx1966@gmail.com
Ordinary Member	Gary Spicer		Gspice1957@gmail.com

Appendix 1

Membership Fees Voted at A.G.M. November 2019

Category	BMFA	BMFC	Total
Senior	£38.00	£64.00	£102.00
Junior	£17.00	£10.00	£27.00
Family * 2 x Senior	£63.00	£128.00	£191.00
Family ** Senior + Junior	£51.00	£74.00	£125.00
Family *** Junior	£13.00	£10.00	£23.00
Pre-insured Senior	£0.00	£64.00	£64.00
Pre-insured Junior	£0.00	£10.00	£10.00
Social	£0.00	£5.00	£5.00
New Member Joining Fee	£0.00	£20.00	£20.00
Late Re-joining Fee after 31 st January	£0.00	£20.00	£20.00

Notes: * Applies to co-habiting partners

** Juniors must be aged under 18 at time of application or be in full-time education up to the age of 25. The BMFA will require proof of education status.

*** There is no joining fee for Junior or Social Members

Appendix 2

Discounted Fees Voted at A.G.M. November 2019

To encourage membership, Discounted Membership Fees will be applied as below:

Period	1 st January to 30 th June	1 st July to 31 st December
BMFC	£32.00	£32.00
BMFA	£38.00	£26.00
Joining Fee	£10	£10.00
Total	£80	£68.00

* This is assuming the BMFA offer the same discount as previous years

This is for New Senior membership for their first year only. All other fees remain as before.

Appendix 3

General Data Protection Regulation Compliance Notes

1. Who keeps the data and what data is kept?

The Club's **Treasurer** and **Membership Secretary** maintain the definitive database of members details. The information may be collected in person; by email or in written form. The data will be entered into a password protected computer database maintained by and solely accessible to the Club Officials. For security, a copy of the database will be maintained in the 'cloud'. The data kept is the minimum needed for the effective governance of the Club and to comply with requirements relating to insurances held by members and will comprise personal details for contact by email and post together with details allowing subscriptions to be collected if not paid by cash in person. A copy of the email list of members will be sent to the Club's **Secretary** so that information relating to Club membership can be distributed. The list will be kept on password protected computers.

2. Privacy.

A member has the right to view and amend personal data kept by the Club. The member should contact the Membership Secretary who will provide him/her with a copy of the information within one month of the request. A member has the right for any information to be deleted but must bear in mind that the loss of data might invalidate Club membership. On leaving the Club, information will be kept for no more than 12 months before being deleted from the Club's database. Members worried that their email address might be compromised are encouraged to open a new account dedicated to Club communications. A popular solution is: yourname.bmfc@gmail.com Please ensure that any changes made to the information held by the Club is notified immediately to the Membership Secretary. Other than for confirmation of insurance and achievement scheme validation, a member's information will not be shared with any third party without the member's specific authorization.

3. Consent

Please note that as a not-for-profit, private members club that only processes data to facilitate Club Management, individual consent is not required.

Appendix 4 Model Aircraft Article 16 Authorisation

UNMANNED AIRCRAFT - OPERATIONAL AUTHORISATION



Model Aircraft Article 16 Authorisation

BMFA SAA LMA FPV-UK

1.	AUTHORITY RELEASING THE AUTHORISATION
1.1 State	United Kingdom
1.2 Issuing Authority	United Kingdom Civil Aviation Authority
1.3 Authorising Signatory Point of Contact	Sophie O'Sullivan Kevin Woolsey
2.	ASSOCIATION INFORMATION
2.1 Association Name(s)	The Society of Model Aeronautical Engineers Ltd. trading as the British Model Flying Association (BMFA). The Aeromodellers Association (Scotland) Ltd. trading as the Scottish Aeromodellers Association (SAA). The Large Model Aircraft Association Ltd. Trading as the Large Model Association (LMA). FPV UK Ltd. (FPV UK).
2.2 Point of Contact	BMFA: David Phipps SAA: Steve McDonald LMA: Rob Buckley FPV UK: Simon Dale
2.3 Authorisation Number	UAS 7068
2.4 Application Reference	UKMFA-Art16-Application V6
2.5 Relevant/Other Comments	First Issue (January 2021)
3.	GENERAL LIMITATIONS AND CONDITIONS FOR ALL OPERATIONS

Page 1

Appendix 4

Model Aircraft Article 16 Authorisation

3.1 Applicability	This authorisation shall only apply to a member of one of the UK Model Aircraft Associations described in section 2.1.
3.2 Type of Unmanned Aircraft	<p>(1) This authorisation shall only apply to UAS operators and remote pilots of model aircraft, as defined in section 7.1.</p> <p>This includes:</p> <ul style="list-style-type: none"> - Any model aircraft - Any control line model aircraft - Any round-the-pole model aircraft <p>Subject to the mass limitations described in section 3.6</p> <p>Note 1 <i>Control Line and Round-the-pole model aircraft with a mass of not more than 1Kg are outside the scope of the UAS IR (as defined in section 7) as set out in the Basic Regulation (Regulation (EU) 2018/1139) and are instead regulated within the Air Navigation Order, article 265E.</i></p>
3.3 Minimum Age	<p>(1) The minimum age for a UAS Operator is 18 years.</p> <p>(2) In accordance with UAS IR article 9(5), the minimum age for a remote pilot, operating within the limits of this authorisation, is 10 years.</p> <p>(3) No minimum age for a remote pilot operating within the limits of this authorisation applies to:</p> <ol style="list-style-type: none"> 1) Any remote pilot of a physically constrained model aircraft as defined in 7.1. 2) Any remote pilot who is under the direct supervision of another remote pilot who has reached the age of 14 years, and both are compliant with the applicable competence requirements, set out in 3.12.
3.4 Safety Accountability	<p>(1) The remote pilot is responsible for the safety of the operation and may only fly the model aircraft if reasonably satisfied that the flight can be safely made.</p>
3.5 Registration of the Operator	<p>(1) Any UAS Operator making use of this authorisation must ensure they are registered with the CAA in accordance with Article 14 of the UAS IR, as defined in section 7.1.</p> <p>(2) The registration number (OP-ID) must be clearly displayed on the aircraft, or within a compartment that can easily be accessed without the use of a tool.</p> <p>(3) Control line and round-the-pole model aircraft (as defined in section 7.1) are exempt from some requirements set out in section 4.1 of this authorisation.</p> <p>Note 1: <i>The requirement to register does not apply to the operator of UAS operated only indoors. Additionally, an exemption has been included in section 8, from the requirement to register as an operator of control line or round-the-pole model aircraft of not more than 1Kg, subject to the conditions within.</i></p> <p>Note 2: <i>The requirement to register only applies to:</i></p>

Appendix 4

Model Aircraft Article 16 Authorisation

	<ul style="list-style-type: none"> - the operator of a UAS with a mass greater than 250g; or - the operator of a UAS below 250g which is equipped with a sensor able to capture personal data and which is not a toy as defined in The Toys (Safety) Regulations 2011. <p>Note 3: <i>The definition of a 'toy' includes: 'products designed or intended, whether or not exclusively, for use in play by children under 14 years in age'. Products equipped with combustion engines are specifically excluded from this definition of a toy.</i></p>
<p>3.6 Maximum Take-Off Mass (MTOM)</p>	<p>(1) This authorisation applies only to model aircraft with a MTOM (as defined in section 7.1) less than 25Kg.</p> <p>(2) The operation of model aircraft with a MTOM of 25Kg or greater requires a separate authorisation.</p> <p>Note 1: <i>Model aircraft below 250g, which are operated in accordance with this authorisation, are subject to the limitations and conditions described throughout this authorisation. In most circumstances, however, they may be operated within the Open Category, and subject to the basic requirements for a UAS with a mass less than 250g.</i></p>
<p>3.7 Location(s) of operation</p>	<p>This authorisation may be used throughout the United Kingdom, at:</p> <ol style="list-style-type: none"> 1. Any established model flying club site; <ol style="list-style-type: none"> a) Any established model flying club located in a 'built-up area' as defined in section 7.1, must conduct a risk assessment, with suitable mitigations. This must be made available to members flying at that site, who must be familiar with it; <p>or</p> <ol style="list-style-type: none"> 2. Any other suitable area, which is not a built-up area, as defined in section 7.1, other than in the circumstances defined in 2(a) below; <ol style="list-style-type: none"> a) A built-up area which is <i>only</i> used substantially for <u>recreational</u> purposes may be considered a 'suitable area'. Operation within such an area must be supported by a risk assessment.
<p>3.8 Type of Operation</p>	<p>(1) The remote pilot of a model aircraft must maintain direct, unaided visual contact with the aircraft sufficient to monitor its flight path in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions, unless the aircraft is being flown in accordance with the 'First Person View' conditions of section 4.3.</p> <p>(2) The operation of model aircraft for purposes other than sport, recreation, education or demonstration, places the operation outside the definition of a model aircraft, and therefore this authorisation may not be used for such operations.</p>
<p>3.9</p>	<p>(1) The operation of model aircraft within this authorisation is limited to a height of 120m (400ft), unless the conditions below are met.</p>

Appendix 4

Model Aircraft Article 16 Authorisation

<p>Operating heights/altitudes/levels</p>	<p>(2) A model aircraft is permitted to fly at a height in excess of 120m (400ft) above the surface, in accordance with the limitations of this authorisation, if all the conditions in sub paragraphs a) to e) below are met.</p> <ul style="list-style-type: none"> a) The model aircraft is not a rotorcraft with more than one lift generating rotor or propeller; b) The model aircraft is not an automated model aircraft as defined in section 7.1; c) The model aircraft is not being flown within the Flight Restriction Zone of an aerodrome, unless operating with the appropriate permission from the aerodrome as set out in ANO article 94. d) The model aircraft remains within the visual line of sight of the remote pilot; e) The mass of the model aircraft (MTOM- see section 3.6) shall not exceed 7.5Kg, with the exception of the circumstances in (e(i)) below; <ul style="list-style-type: none"> i. The model aircraft is a glider, the mass (MTOM) of which does not exceed 14Kg. In this case, it <u>may not</u> be flown at a height greater than 120m above the remote pilot but <u>may</u> be flown at a height exceeding 120m above the surface directly beneath the glider.
<p>3.10 Remote Pilot Responsibilities</p>	<p>(1) The remote pilot shall:</p> <ul style="list-style-type: none"> (a) Not perform duties under the influence of psychoactive substances or alcohol or when they are unfit to perform their tasks due to injury, fatigue, medication, sickness or other causes; (b) Have the appropriate remote pilot competency as defined in section 3.12 and carry a proof of competency while operating the model aircraft. (c) Be familiar with manufacturer's instructions provided by the manufacturer of the UAS, if applicable. <p>(2) Before starting a UAS operation, the remote pilot shall comply with all of the following:</p> <ul style="list-style-type: none"> (a) Obtain updated information relevant to the intended operation about any relevant airspace restrictions; (b) Ensure that the operating environment is compatible with the limitations and conditions set out within this authorisation; (c) Ensure that the model aircraft is in a safe condition to complete the intended flight safely; (d) Ensure that any relevant information about the operation has been made available to the relevant air traffic service (ATS) unit, other airspace users and relevant stakeholders, when required. <p>(3) During the flight, the remote pilot shall:</p> <ul style="list-style-type: none"> (a) Comply with the limitations and conditions set out within this authorisation; (b) Avoid any risk of collision with any manned aircraft and discontinue a flight when continuing it may pose a risk to other aircraft, people, animals, environment or property;

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	<ul style="list-style-type: none"> (c) Comply with any applicable airspace restrictions; (d) Comply with the rules and procedures of their respective association; (e) not fly close to or inside areas where an emergency response effort is ongoing unless they have permission to do so from the responsible emergency response services. <p>Note 1: <i>It is acknowledged that in many instances, the UAS Operator and the remote pilot is the same person. In such cases, this person must discharge the responsibilities of both the remote pilot and the UAS Operator (Section 3.16).</i></p>
<p>3.11 Separation Distances for model aircraft</p>	<ol style="list-style-type: none"> 1. A model aircraft that is not a free flight model aircraft, and with a MTOM above 250g and not more than 7.5Kg shall not be flown: <ol style="list-style-type: none"> a) Within a horizontal distance of 30m of assemblies of people, as defined in section 7.1; b) Within 30m of any uninvolved person, as defined in section 7.1. This distance may be reduced to 15m for take-off and landing if required for practical operations and there are locally applied mitigations to protect uninvolved persons, following a local risk assessment. 2. A model aircraft with a MTOM greater than 7.5Kg, and less than 25kg shall not be flown: <ol style="list-style-type: none"> a) Within a horizontal distance of 50m of assemblies of people, as defined in section 7.1. This distance may be reduced to 30m for take-off and landing if required for practical operations and there are locally applied mitigations to protect uninvolved persons, following a local risk assessment. b) Within 30m of any uninvolved person, as defined in section 7.1. <p>Note 1: <i>Specific limitations for the operation of free flight model aircraft are set out in section 4.2.</i></p>
<p>3.12 Remote Pilot Competence</p>	<ol style="list-style-type: none"> (1) Any remote pilot operating in accordance with this authorisation must demonstrate a suitable level of pilot competence, by either (a) or (b) below: <ol style="list-style-type: none"> a) Passing one of the following online tests: <ol style="list-style-type: none"> i. CAA online DMARES test; ii. BMFA online test; iii. LMA Theoretical Proficiency online test iv. FPV UK certificate of competency: Drone Law ('A' Certificate) online test; b) Having passed the test (prior to 31/12/2020) for: <ol style="list-style-type: none"> i. BMFA Achievement Certificate; ii. SAA Bronze Certificate; iii. LMA Basic Proficiency or Full Proficiency test; iv. FPV UK Certificate of Competency: Drone Law Test; (2) Remote pilots demonstrating competence through methods 1b(i), (ii), (iii) or (iv) must also confirm to their respective association(s) that they have read and understood the conditions and restrictions that apply to them when flying unmanned aircraft in accordance with this authorisation. (3) The associations must keep a record of such confirmations that can be made available for audit on request.

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<p>3.13 Reporting Requirement</p>	<p>(1) Correct reporting to the AAIB <i>and</i> the CAA must be carried out.</p> <p>(2) The following must be reported to the AAIB in accordance with Regulation (EU)996/2010 (as retained in UK domestic law) and the AAIB website:</p> <ul style="list-style-type: none"> ▪ Accidents ▪ Serious Incidents <p>(3) The following must be reported to the CAA, in accordance with Regulation (EU) 376/2014 (The reporting regulation) (as retained in UK domestic law):</p> <ul style="list-style-type: none"> ▪ Occurrences which involve any of the following: <ul style="list-style-type: none"> ○ Fatality ○ Serious Injury ○ Manned aircraft <p>The following must be reported to the CAA, as a condition of this authorisation:</p> <ul style="list-style-type: none"> ▪ Serious Incidents or Other Occurrences which involve any of the following: <ul style="list-style-type: none"> ○ Manned aircraft ○ Operating above 400ft ○ Operating less than 50m from uninvolved people ▪ Any instances of flight beyond the visual line of sight of the remote pilot <p>Note 1: <i>Further guidance on reporting requirements and relevant definitions can be found in CAP 722.</i></p>
<p>3.14 Dropping of Articles</p>	<p>(1) Only insofar as it relates to the dropping of material, model aircraft operations are exempt from the requirements in UAS IR Article 4(1)(f), subject to the condition that:</p> <ol style="list-style-type: none"> a) The remote pilot must not cause or permit any article or animal to be dropped from an unmanned aircraft so as to endanger persons or property.
<p>3.15 Member Compliance</p>	<p>(1) Any member of an association listed in section 2.1, making use of this authorisation shall comply with the procedures and rules set out by that association.</p> <p>(2) The rules and procedures of the associations listed in section 2.1, shall reflect the conditions and limitations of this authorisation.</p>
<p>3.16 Operator Responsibilities</p>	<p>1) The registered operator (The '<u>UAS operator</u>') for the model aircraft must comply with the following requirements:</p> <ol style="list-style-type: none"> a) Ensure the remote pilot is in possession of the relevant remote pilot competence requirements, as set out in section 3.12; b) Ensure that the model aircraft is sufficiently maintained, and that any repairs carried out to it are satisfactorily made, such that it is in a safe condition to be flown; c) Ensure that the remote pilot is aware of the limitations and conditions of this authorisation; d) Ensure that the remote pilot is aware of the rules and procedures of their relevant association;

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	<p>e) Ensure that any necessary additional permissions or authorisations are obtained for any specific flight;</p> <p>f) Ensure the remote pilot is aware of any relevant airspace limitations;</p> <p>Note 1: <i>It is acknowledged that in many instances, the UAS operator and the remote pilot is the same person. In such cases, this person must discharge the responsibilities of both the remote pilot (Section 3.10), and the UAS Operator.</i></p>
4	SPECIFIC CONDITIONS
<p>4.1 Physically Constrained unmanned aircraft</p>	<p>(1) Permission is not required to operate a control line or round-the-pole model aircraft (as defined in section 7.1) within an Aerodrome Flight Restriction Zone, providing all the following conditions are met:</p> <ol style="list-style-type: none"> a) The tether line does not exceed 25m; b) The flight does not take place within the Runway Protection Zone (RPZ) part of the FRZ; c) The MTOM, as defined in section 7.1, does not exceed 7.5Kg; d) The flight does not take place over, or within the boundary of the protected aerodrome unless permission for the flight has been obtained, as described in ANO article 94A. <p>Note 1: <i>This exemption is set out in in section 8.1.</i></p> <p>Note 2: <i>Model aircraft, that are operating indoors, are not subject to the FRZ requirement set out in ANO article 94A.</i></p> <p>(2) Control line and round-the-pole model aircraft (as defined in section 7.1) operated within the limits of this authorisation, are exempt from the competency requirements set out in section 3.12.</p> <p>(3) Control line and round-the-pole model aircraft (as defined in section 7.1) are exempt from all the requirements set out in ANO article 265E, providing all the following conditions are met:</p> <ol style="list-style-type: none"> a) The tether line does not exceed 25m; b) The MTOM, as defined in section 7.1, does not exceed 1Kg. <p>Note 3: <i>The Basic Regulation excludes powered tethered unmanned aircraft with a mass of not more than 1kg from the requirements of the UAS IR. ANO Article 265E re-applies certain requirements of the UAS IR to tethered unmanned aircraft with a mass of not more than 1Kg. Section 8.2 contains an exemption that sets out that control line model aircraft and round the pole model aircraft (as defined in section 7.1) are exempt from the requirements of article 265E.</i></p>
<p>4.2 Free Flight Model Aircraft</p>	<p>(1) Before launching a free flight model aircraft, as defined in section 7.1, the remote pilot, taking into account the expected performance of the aircraft, the weather conditions, and any flight termination device fitted to the aircraft, shall be reasonably satisfied that the expected flight path will not</p>

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	<p>infringe a Flight Restriction Zone, or any other airspace restriction (unless prior permission for flight within the airspace has been obtained).</p> <p>(2) The operation of free flight model aircraft must only be carried out within the limits and conditions of this authorisation, or within the Open category of operations.</p> <p>(3) A free flight model aircraft, as defined in section 7.1, shall not be:</p> <ol style="list-style-type: none"> a. Launched, unless from an area which the remote pilot is able to satisfy themselves is free from uninvolved people. b. Launched, until the remote pilot has identified the area within which he or she believes the aircraft will remain (the 'flight volume') based on the considerations in (1). c. Flown, unless the remote pilot is satisfied that the aircraft will remain within the flight volume. d. Flown, unless the remote pilot is satisfied at the point of launch, that no uninvolved persons will enter flight volume and may be endangered by the flight of the free flight model aircraft. <p>(4) A free flight model aircraft, as defined in section 7.1, shall not be deliberately flown beyond the visual line of sight of the remote pilot, unless otherwise in accordance with a suitable authorisation.</p>
<p>4.3 First Person View model aircraft</p>	<p>(1) A model aircraft may be flown by a remote pilot using first person view (FPV) equipment subject to the limitations of this authorisation, and following conditions (a) or (b), either:</p> <ol style="list-style-type: none"> a) The aircraft is flown in accordance with all of the following conditions: <ol style="list-style-type: none"> i. Within a sterile area- meaning a cordoned off, closed area that uninvolved persons are excluded from; and ii. The aircraft is not flown at a height in excess of 160 feet (50 metres) from the surface; and iii. In accordance with procedures specifically set out for the purpose of the event, and in accordance with instruction from the race director or other nominated person, including any 'terminate race and land immediately' instruction; and iv. Any observers are suitably briefed and aware of their responsibilities, including the monitoring of people or aircraft entering the cordoned off area; <p style="text-align: center;">or</p> b) The aircraft is flown in accordance with all of the following conditions: <ol style="list-style-type: none"> i. The remote pilot is accompanied by a competent observer who maintains direct unaided visual contact with the unmanned aircraft sufficient to monitor its flight path in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions and advises the remote pilot accordingly; ii. The MTOM of the aircraft does not exceed 3.5Kg; iii. The aircraft is not flown: <ol style="list-style-type: none"> A. Within an aerodrome FRZ, unless appropriate permission has been obtained; B. At a height of more than 1000ft above the surface, unless it is a rotorcraft with more than 1 lift generating rotor or propeller in which case the height shall not exceed 400ft above the surface; C. Unless within an area as set out in section 3.7.;

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	<p>D. Over or within 150m of any assemblies of people, as defined in section 7.1;</p> <p>E. Within 50m of any vessel, vehicle or structure which is not under the control of the remote pilot.</p> <p>F. Within the minimum distances set out in section 3.11.</p>
4.4 Model Aircraft Display Events	<p>(1) Any operator and remote pilot who wishes to operate a model aircraft as part of a flying display event may do so within the limits of this authorisation, in accordance with CAP 403 and CAP 658 – or any subsequently updated or replacement document.</p> <p>(2) Any such display which takes place above 400ft, must be notified to other airspace users through the use of a NOTAM.</p> <p>(3) Should the operator wish to operate as part of a flying display outside any of the conditions within this authorisation, they must obtain a separate authorisation for the operation, and an additional model aircraft display authorisation using form SRG 1308 and in accordance with the CAA Scheme of Charges.</p>
4.5 Operation of Model Aircraft by non-UK persons	<p>(1) Non-UK residents may operate model aircraft in accordance with all operating conditions of this authorisation, provided that they meet all the following conditions:</p> <p style="margin-left: 40px;">a) Hold temporary or full membership of a UK model flying association named in this authorisation;</p> <p style="margin-left: 40px;">b) Comply with the rules and practices of that association;</p> <p>Note 1: <i>Any non-UK remote pilot must meet the requirements of section 3.12 in respect to pilot competence.</i></p> <p>Note 2: <i>Any non-UK UAS operator must comply with the registration requirements set out in 3.5. This may be achieved by displaying the operator ID of a UK 'host' operator, with their agreement and understanding of their legal obligations as a UAS operator of the aircraft.</i></p>
4.6 Operations of Model Aircraft by non-members under instruction	<p>(1) For the purposes of conducting 'trial flights' by non-members, the non-member may operate the controls of the model aircraft whilst under the direct instruction and supervision of a member. In such an instance, the remote pilot receiving instruction does not need to comply with the competence requirements of set out in section 3.12.</p> <p>(2) The registration requirements and registration display requirements (as set out in section 3.5) still apply.</p>
5	VALIDITY
5.1 Duration of the Authorisation	<p>This authorisation is valid:</p> <p>From: 31/12/2020</p> <p>To: 31/12/2021</p>

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	Unless otherwise suspended.
5.2 Regulation references	This authorisation is issued under: UAS IR Article 16 The operation described in section 4.1 is authorised under: ANO 2016, as amended, article 266. These exemptions are set out in section 8.
5.3 Combination of Authorisations	This authorisation may not be used in conjunction with any other operational authorisation, other than any General Exemption or General permission issued by the CAA.
6	AUTHORISATION SIGNATURE
Signature / Stamp	 <p>The associations detailed in section 2.1 are authorised to conduct UAS Operations within the limitations and conditions set out within this authorisation, providing they comply with this authorisation, Annex IX to Regulation (EU) 2018/1139 and its implementing rules.</p>
Date DAY/MONTH/YEAR	
7	APPENDIX
7.1 Definitions These definitions are included for the purpose of this specific authorisation only.	<p>1) Assemblies of People: <i>Gatherings where persons are unable to move away due to the density of the people present.</i></p> <p>2) Automated model aircraft: <i>A model aircraft with autonomous or automatic flight capability. This does not include systems which are fitted for flight stabilisation purposes or flight termination purposes, such as free-flight termination devices.</i></p> <p>3) Built-Up Area: <i>An area substantially used for industrial, recreational, commercial or residential purposes.</i></p> <p>4) Control Line model aircraft: <i>A model aircraft that is controlled in flight by one or more lines, attached to a handle, that work the required flight functions. The aircraft is connected to the remote pilot by these lines and so its flight is constrained to the surface of a hemisphere around the remote pilot with a radius equal to the length of the lines.</i></p> <p>5) First Person View (FPV): <i>In First Person View operations the remote pilot flies the aircraft using images provided by cameras aboard the aircraft. When flying FPV the remote pilot cannot monitor the flight path in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions to the same extent as</i></p>

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	<p><i>a remote pilot maintaining external direct, unaided visual contact with the aircraft.</i></p> <p>6) Free flight model aircraft: <i>A free-flight model aircraft cannot be remotely piloted and does not have software or systems for autonomous control of the flight path. A flight termination device may be fitted. The aircraft trim is adjusted prior to flight. The aircraft is trimmed (and fuelled if applicable) with the intent that it will follow a substantially circular path relative to the air and ultimately glide to a low velocity landing. A free-flight unmanned aircraft will drift relative to the user depending upon the speed and direction of the wind. The person in charge of the free-flight unmanned aircraft is deemed to be the remote pilot for the purposes of this authorisation.</i></p> <p>7) Maximum Take Off Mass (MTOM): <i>MTOM or 'take-off mass' means the mass of the unmanned aircraft when it is ready for flight with all required equipment and batteries installed and all installed fuel tanks full.</i></p> <p>8) Model aircraft: <i>Any unmanned aircraft being flown purely for the recreational sport of model aircraft flying. This includes shop bought or home built aircraft, which are flown 'manually' using traditional control inputs rather than with any automation other than for flight stabilisation purposes. A model aircraft may be flown under the auspices of an association, or individually.</i></p> <p>Note 1: <i>This includes multi rotor aircraft which are being flown with 'direct' control inputs, and without any automation, other than for flight stabilisation purposes.</i></p> <p>9) Physically constrained model aircraft: <i>A model aircraft that:</i></p> <ul style="list-style-type: none"> <i>a. is flying within a closed building or other physical construction forming a safely enclosed area; or</i> <i>b. is a control-line model aircraft; or</i> <i>c. is a round-the-pole aircraft.</i> <p>10) Round-the-pole model aircraft: <i>A model aircraft that is tethered to a fixed point by one or more lines so that its flight is constrained to the surface of a hemisphere around the tether point with a radius equal to the length of the lines.</i></p> <p>11) UAS IR: <i>Commission Implementing regulation (EU) 2019/947 on the rules and procedures for the operation of unmanned aircraft, as 'retained' in UK Domestic Law'.</i></p> <p>12) Uninvolved Persons: <i>Persons who are not participating in the UAS operation or who are not aware of the instructions and safety precautions given by the UAS operator.</i></p>
8	Air Navigation Order Exemptions

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<p>8.1 Control line and Round-the-pole Model Aircraft: Flight Restriction Zone Exemption</p>	<p>Note 1: <i>This exemption facilitates section 4.1(1) of this authorisation.</i></p> <ol style="list-style-type: none">1) The Civil Aviation Authority (CAA), in exercise of its powers under article 266 of the Air Navigation Order 2016 ('the Order') as amended, exempts the remote pilot and UAS operator of a Control Line model aircraft or a round-the-pole model aircraft, as defined in section 7.1 of this authorisation, from the requirement at article 94A to obtain permission to fly within the flight restricted zone of a protected aerodrome subject to the conditions in paragraphs 2 to 4 below.2) General requirements:<ol style="list-style-type: none">a) The remote pilot (within the meaning given in article 94G of the Order), is:<ul style="list-style-type: none">• In the case of a control line model aircraft: the person that is holding the control lines while the Control Line model aircraft is in flight. Or;• In the case of a round-the-pole model aircraft: the remote pilot of the model aircraft.b) The maximum length of the tether line of the control line or round-the-pole model aircraft shall not exceed 25 metres.c) The flight does not take place within the Runway Protection Zone (RPZ) part of the FRZ.d) The maximum take-off mass of the model aircraft shall not exceed 7.5kg, including any batteries, fuel or payloads.3) The remote pilot shall not fly the aircraft over, or within the boundary of the protected aerodrome unless permission for the flight has been obtained from:<ol style="list-style-type: none">a) any air traffic control unit at the protected aerodrome, if the flight, or the part of the flight, takes place during the operational hours of the air traffic control unit;b) any flight information service unit at the protected aerodrome, if the flight, or the part of the flight, takes place during the operational hours of the flight information service unit and either:<ol style="list-style-type: none">(i) there is no air traffic control unit at the protected aerodrome, or(ii) the flight, or the part of the flight, takes place outside the
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	<p>operational hours of the air traffic control unit at the protected aerodrome;</p> <p>c) from the operator of the protected aerodrome, if:</p> <ul style="list-style-type: none"> (i) there is neither an air traffic control unit nor a flight information service unit at the protected aerodrome; or (ii) the flight, or the part of the flight, takes place outside the operational hours of any such unit or units at the protected aerodrome. <p>4) This exemption only applies to control line model aircraft or round-the-pole model aircraft that are flown for the purposes of sport or recreation. It does not apply to 'tethered' flights of small unmanned aircraft that are capable of vertical take-off/landing or hovering, such as helicopters or multi copters.</p> <p>Note 2: <i>This exemption supersedes General Exemption ORS4 1296, which is now revoked. This is now contained within this Article 16 authorisation, and is no longer a general exemption. Compliance with the entire authorisation is necessary to make use of this exemption.</i></p>
<p>8.2 Control line and Round-the-pole Model Aircraft: Registration and Pilot Competence Exemption</p>	<p>Note 1: <i>This exemption facilitates section 4.1(3) of this authorisation.</i></p> <ul style="list-style-type: none"> 1) The Civil Aviation Authority ('the CAA'), in exercise of its powers under article 266 of the Air Navigation Order 2016 ('the ANO'), exempts any person involved in the flight of a control line model aircraft, or round-the-pole model aircraft (as defined in section 7.1 of this authorisation) from the requirements of article 265E in relation to the flight of such an aircraft. 2) This exemption only applies to the flight of control line model aircraft or round-the-pole model aircraft (as defined in section 7.1 of this authorisation) that are conducted for the purposes of sport or recreation. It does not apply to 'tethered' flights of small unmanned aircraft that are capable of vertical take-off/landing or hovering, such as helicopters or multicopters. 3) This exemption only applies to the flight of control line model aircraft or round-the-pole model aircraft (as defined in section 7.1 of this authorisation) which have a MTOM (as defined in section 7.1 of this authorisation) of not more than 1Kg, and which are flown with a restraining device of not more than 25m. <p>Note 2: <i>This exemption supersedes Official Record Series 4 No.1396, which is revoked. This is now contained within this Article 16 authorisation, and is no longer a</i></p>

	<p><i>general exemption. Compliance with the entire authorisation is necessary to make use of this exemption.</i></p> <p>Note 3: <i>The Basic Regulation excludes powered tethered unmanned aircraft with a mass of not more than 1kg from the requirements of the UAS IR. ANO Article 265E re-applies certain requirements of the UAS IR to tethered unmanned aircraft with a mass of not more than 1Kg. This exemption sets out that control line model aircraft and round the pole model aircraft (as defined in section 7.1) are exempt from the requirements of article 265E.</i></p>
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