



# Competition Rules

Great Britain Radio Control  
Aerobatic Association

---

## F3A & F3P Radio Control Aerobatics

2022 Edition  
Effective 1<sup>st</sup> January 2022

F3A – RC Aerobatic Aircraft  
F3P – RC Indoor Aerobatic Aircraft

### GBRCAA

Web: [www.gbrcaa.org](http://www.gbrcaa.org)

Email: [admin@gbrcaa.org](mailto:admin@gbrcaa.org)

### British Model Flying Association

Chacksfield House

31 St Andrews Road

Leicester

LE2 8RE

Tel: (+44) 116 2440028

Fax: (+44) 116 2440645

Email: [admin@bmfa.org](mailto:admin@bmfa.org)

Web: [www.bmfa.org](http://www.bmfa.org)

# **1 Preface**

The Great Britain Radio Control Aerobatic Association was founded in 1979 to promote F3A flying in the United Kingdom and is a specialist body of the British Model Flying Association.

As part of the BMFA Specialist Body requirements, the GBRCAA runs RC Aerobatics competitions on behalf of the BMFA. These competitions are the BMFA National Championships, the Team Trials and a minimum of three BMFA Centralised Competitions each year. The rules and arrangements for these competitions are contained within the BMFA Competition Rules Section 5 – RC Power and where appropriate, these rules are included in this GBRCAA Rulebook.

In addition to its BMFA obligations, the GBRCAA also runs competitions for its members. These competitions are subject to the GBRCAA's own rules, which are listed in this Rule book. A separate Members' Guide describes the GBRCAA's administrative arrangements and guidance which do not form part of these rules.

## **2 GBRCAA Competition Rules and Procedures**

### **2.1 Reference Documents**

The GBRCAA as a specialist body of the BMFA follows the F3A and F3P rules in the following documents:

- FAI Sporting Code - Section 4 – Aeromodelling - CIAM General Rules which can be downloaded from: <https://www.fai.org/page/ciam-code>
- FAI Sporting Code Section 4 - Aeromodelling Volume F3, Radio Control Aerobatics which can be downloaded from: <https://www.fai.org/page/ciam-code>
- The BMFA Contest Rules – Section 5 which can be downloaded from the BMFA Website

### **2.2 F3A & F3P Competition Schedules**

FAI F3A A, P, and F and FAI F3P AP and AF schedules are listed in the FAI Sporting Code Section 4 Volume F3 Radio Control Aerobatics.

The FAI A Schedule is used as the GBRCAA Masters schedule.

GBRCAA Clubman and Intermediate Class schedules can be downloaded from the GBRCAA web site <http://www.gbrcaa.org> and are listed in the BMFA Contest Rules Section 5.

All GBRCAA (non-FAI) F3P schedules can be downloaded from the web site <http://www.gbrcaa.org>

### **2.3 General Competition Rules**

2.3.1 Entrants to GBRCAA Competitions shall meet the following competency requirements:

- Clubman and Intermediate Class – BMFA A Certificate or SAA Bronze Award
- All other classes – BMFA B Certificate or SAA Silver Award

- Entrants to BMFA Centralised Competitions, the BMFA National Championships and BMFA Team Selection Competitions shall meet the competency requirements mandated by the BMFA for that competition.
- 2.3.2 Scores for all GBRCAA Competitions and all other competitions organised by the GBRCAA on behalf of the BMFA shall be normalised in accordance with the current FAI Sporting Code for F3A RC Aerobatics.
- 2.3.3 Where competition scores are aggregated to calculate positions in a league, each competition shall have its final results re-normalised to 1000 points for the competition winner, with all other competitors' scores recalculated in proportion to the competition winner's score.
- 2.3.4 At all GBRCAA competitions, each competitor shall demonstrate the operation of the propulsion system failsafe device. This check shall be carried out before each competitor's first official flight.
- The failsafe must be set to cause the propulsion device to run at its minimum operating speed (stopped in the case of electric motors) on loss of transmitter signal.
- For internal combustion engines, the failsafe can be checked by observation of the movement of the carburettor to the engine idle position. It is not necessary to run the engine for this check if the carburettor position is visible from the outside of the model aircraft.

## 2.4 Categories of Competitions

- 2.4.1 The GBRCAA runs the following categories of competition:
- BMFA Team Selection competitions (See Section 3.3)
  - BMFA British National Championships (See Section 0)
  - GBRCAA Championships (See Section 0)
  - BMFA Centralised Competitions (See Section 3.6)
  - GBRCAA National League Competitions (See Section 3.7)
  - The Triple Crown Competition (See section 3.9)
  - F3P Indoor Competitions (See section 3.10)

The specific rules applicable to each category of competition are listed in the relevant sections.

## 2.5 Competition Entries and Entry Fees

### 2.5.1 Competition Entries

#### 2.5.1.1 Eligibility

GBRCAA competitions are open for entry to GBRCAA full members only. As an exception to this rule, non-members may enter one competition only, on payment of the appropriate entry fee.

BMFA Centralised competitions, the BMFA National Championships and Team Trials are open to any person who meets the BMFA's entry requirements. These competitions are normally run by the GBRCAA, but GBRCAA membership is not a requirement of entry.

- 2.5.1.2 GBRCAA competitions are advertised on the GBRCAA Competiton Calendar, published on the GBRCAA Forum. BMFA Centralised competitions, the BMFA Nationals and Team Trials are also announced on the BMFA web site. In addition, each Contest Director will announce the competition and entry opening date on the 'Competition News' forum. Entries will not be accepted before the published opening date.
- 2.5.1.3 Any non-member of the GBRCAA who receives scores at a competition before they become a member will not have their scores entered into the GBRCAA National League system, although their name will appear as a competitor. They will be ranked in the competition and receive recognition if they finish third or higher.
- 2.5.1.3 Entries will be normally accepted up to 7 days before the competition, unless stated otherwise in the relevant Competition News forum post. Late entries may be accepted at the discretion of the Contest Director.
- 2.5.1.4 Entries received after any competiton has reached its published capacity will be placed on a reserve list in the order received. If registered competitors withdraw from the competition before the competition date, the Contest Director may offer any open places to entrants on the reserve list, in the order entries were received.

## **2.5.2 Competition Entry Fees**

- 2.5.2.1 Fees for all competitions are set at the GBRCAA Annual General Meeting and shown on the Competition Entry Form available via the GBRCAA web site.
- 2.5.2.2 A two-day event will attract double entry fees. At the discretion of the Contest Director, entries may be accepted for one day of a two day competition at a single entry fee; however a one day competitor cannot win the event.
- 2.5.2.2 Refunds will be given if a cancellation notice is given by the pilot to the Contest Director up to 2 weeks before the date of the competition. If no cancellation is received 2 weeks prior to competition the entry fee will not be refunded.

## **3 Specific Competiton Rules**

### **3.1 F3A International Team Selection**

- 3.1.1 Under BMFA Specialist Body Requirements the GBRCAA is authorised to organise BMFA Team Selection competition(s) each year.
- 3.1.2 For any given year, the actual number of BMFA Team Selection events to be held will be decided at an annual GBRCAA Team Selection Interested Parties Meeting.
- 3.1.3 The GBRCAA may at its own discretion determine any method for Team Selection providing four weeks' notice is given to the BMFA and GBRCAA members.
- 3.1.4 F3P BMFA Team Selection events must be held between 1<sup>st</sup> October and the following 28<sup>th</sup> February.

## **3.2 F3A Team Selection Process - Interested Parties Meeting**

- 3.2.1 The number of qualifying events and the method of Team Selection may only be changed at an 'Interested Parties Meeting'. The meeting is called if any BMFA member submits a proposal for changes to the current method of Team Selection. Each year, the GBRCAA Secretary will issue a notice on the GBRCAA Forum inviting proposals and a meeting date. Proposals which are received no later than 14 days before the meeting date will be discussed and voted on at the meeting for implementation the following year. A majority of votes of those present at the meeting will carry a proposal.
- 3.2.2 An Interested Parties Meeting will only be called if there is a proposal to change the Team Selection rules. If there are no proposals there will be no meeting and the existing rules will continue. Proposals should be received 2 weeks before the meeting by email or in writing to the Secretary, in line with Annual General Meeting procedures.

## **3.3 Rules for BMFA F3A Team Selection Competitions**

- 3.3.1 Rules are based on those which appear in the current FAI Sporting Code and current BMFA Contest Rules Section 5 RC Power. Where necessary the FAI rules in the current FAI Sporting Code may have to be modified for use in one-day competitions.
- 3.3.2 The team for the following year's World or European Championship and the Triple Crown Competition shall be selected based on the results of a single Team Trial Competition in each year.
- 3.3.3 The Team Trial Competition shall be held on two consecutive weekend days between 1<sup>st</sup> September and 30<sup>th</sup> September each year, except any dates within 10 days of a World or European Championship.
- 3.3.4 The Team Trial Competition format will be three rounds on each day – flown in the order, P Schedule, F Schedule, Unknown Schedule. A second, different, Unknown Schedule shall be flown on the second day of the competition.
- 3.3.5 The P and F Schedules shall be the current FAI F3A Preliminary and Finals Schedules in the year of the Team Trial.
- 3.3.6 Flight scores shall be normalised in accordance with the FAI F3A Sporting Code.
- 3.3.7 The final ranking shall be determined in accordance with the following table:

<b>Number of complete rounds</b>	<b>Flights to count</b>
6	Highest 4 Scores
5	Highest 3 Scores
4	Highest 3 Scores
3	Highest 2 Scores
2	Highest 1 Score

- 3.3.8 In the event of a tie in scores, the next highest score for the affected competitors will be used to determine the ranking.

- 3.3.9 In the event that two rounds cannot be completed, a further one day trial will be arranged at the earliest convenient date in order to complete as much of the planned competition format as practicable.
- 3.3.10 If two complete rounds of the Team Trial (including any rearranged rounds) cannot be completed by 30<sup>th</sup> September in any year, the GBRCAA Committee shall determine the method of selection of team members and their decision (which need only be by majority vote) shall be final and binding. In making any such decision, the GBRCAA Committee shall take into account the required period of notice for nomination of team members for ratification by the BMFA Council.
- 3.3.11 The ranking of pilots for the Team Trial Competition described above shall also be used for selection of a team for the Triple Crown Competition England Team.
- 3.3.12 The Team Trial Competition will also have a separate class for P Schedule (Only) competitors to determine a ranking for selection of one or more pilots for the Triple Crown International Team.
- 3.3.13 In the event that a selected pilot should find themselves unable to attend the International event for which they have been selected, or unable to prepare properly, they should inform the Team Manager or the GBRCAA committee at the very earliest opportunity in order to give a reserve pilot as much time as possible to arrange to take their place.
- 3.3.14 Any disputes at BMFA Team Selection events shall be resolved using the guidelines set out in the P rotests & Appeals section of the BMFA Contest Rules Section 5 RC Power.

#### **Selection of Junior Team Members for World and European Events.**

- 3.3.15 A Junior may be a member of an International team providing they satisfy the rules in the current FAI Sporting Code and the GBRCAA rules for junior qualification below.

Rules for Junior Team member qualification:

- Inclusion as a Junior team member is subject to the BMFA guidelines for 'young and vulnerable persons' and the Junior team member must be accompanied to the event by the parent, guardian or responsible person.
- The Junior must compete in recognised BMFA Team Selection events.
- To qualify for BMFA Team Selection, a Junior must have achieved on average at least 85% of the event winner's score to be eligible for qualification as a Junior team member.

### **3.4 The BMFA British National Championships**

- 3.4.1 The following classes shall be offered and will be run to the GBRCAA National League rules:

- Clubman
- Intermediate
- Masters
- FAI (P Only)
- FAI (P & F)

- 3.4.2 The number of entries shall not be limited. The number of rounds will be set to accommodate all entries.

- 3.4.3 The competition to decide the National Champion in each class shall use Preliminary and Finals flights.

The format and rounds to count shall be as follows:

- 6 Rounds – 4 Preliminary Rounds; 2 Finals Rounds (best 3 from 4 Preliminaries, + best Finals)
- 5 Rounds – 4 Preliminary Rounds; 1 Final Round (best 3 from 4 Preliminaries, + Final)
- 4 Rounds – best 3 from 4
- 3 Rounds – best 2 from 3
- 2 Rounds – best 1 from 2
- 1 Round – the 1 round will count

3.4.4 Clubman, Intermediate, Masters and FAI Preliminary Schedules competitors will fly the schedule for their respective classes in all rounds.

3.4.5 FAI Preliminary and Finals Schedules competitors will fly Schedule P-23 in the Preliminary rounds and Schedule F-23 in the Finals rounds.

3.4.6 There will be at least 2 judges. The GBRCAA Chief Judge will decide who is qualified to judge these competitions and will, with agreement of the Contest Director organise the judges for a particular competition.

3.4.7 The Contest Directors should appoint a Jury in case of disputes. The jury should be made up of the Contest Director, a Judge and one or two experienced pilots who can be selected from the entry list. If a decision affects any of those appointed, they should be replaced on the jury before the meeting takes place.

3.4.8 Entry forms are printed in the BMFA News or can be downloaded from the BMFA web site at [bmfa.org](http://bmfa.org) and should be sent to the BMFA Head Office as instructed on the form.

3.4.9 Entry to the BMFA British National Championships is not restricted to GBRCAA members but pilots must hold a BMFA B Certificate or equivalent.

### **3.5 The GBRCAA Championships**

3.5.1 The following classes shall be offered and will be run to the GBRCAA National League rules:

- Clubman
- Intermediate
- Masters
- FAI (P Only)
- FAI (P, F & Unknown)

3.5.2 The number of entries shall not be limited. The number of rounds will be set to accommodate all entries.

3.5.3 The FAI Class (P, F & Unknown) competition format and rounds to count shall be as follows:

- 6 rounds – 2P, 2F, 2Ukn (Best P + F + Ukn + next highest score)
- 5 Rounds – 2P, 2F, 1Ukn (Best P + F + Ukn)
- 4 Rounds – 2P, 2F (Best P + F + next highest score)
- 3 Rounds – 2P, 1F (Best P + F)
- 2 Rounds – 2P (Best P)
- 1 Round – 1P

- 3.5.4 A judges' calibration flight of the P Schedule should be flown at the start of the FAI Class (P, F & Unknown) competition. The warm up flight will be flown by a pilot from the FAI P Only contestants, drawn at random at the pilots briefing.
- 3.5.5 There will be at least 2 judges. The GBRCAA Chief Judge will decide who is qualified to judge these competitions and will with agreement of the Contest Director organise the judges for a particular competition.
- 3.5.6 The Contest Directors should appoint a Jury in case of disputes. The jury should be made up of the Contest Director, a Judge and one or two experienced pilots who can be selected from the entry list. If a decision affects any of those appointed, they should be replaced on the jury before the meeting takes place.
- 3.5.7 The two Unknown schedules should be created in advance of the competition, but not revealed to the competitors until the day before they are due to be flown.

### **3.6 BMFA Centralised Competitions and the BMFA Combined League**

- 3.6.1 Under BMFA Specialist Body Requirements the GBRCAA is required to organise a minimum of 3 Centralised competitions each year, open to any pilot who satisfies the BMFA's entry requirements.
- 3.6.2 The GBRCAA Competition Secretary shall nominate three competitions as BMFA Centralised competitions. The results from Clubman, Intermediate and Masters will count towards the GBRCAA National League and the results from FAI will count towards the BMFA Combined League.

The following classes shall be offered:

- Clubman (GBRCAA National League)
- Intermediate (GBRCAA National League)
- Masters (GBRCAA National League)
- FAI (P Only) (BMFA Combined League)

- 3.6.3 The format and rounds to count shall be as follows:

- 4 Rounds – best 3 from 4
- 3 Rounds – best 2 from 3
- 2 Rounds – best 1 from 2
- 1 Rounds – the 1 round will count

- 3.6.4 A BMFA Combined League result shall be generated from the aggregate scores from each of the three BMFA Centralised competitions, the UK round of the F3A World Cup and the BMFA National Championship FAI Class. The winner will be the competitor with the highest total score, counting all five competitions, or all the competitions held if there are fewer than five in any calendar year.

### **3.7 GBRCAA National League Competitions**

- 3.7.1 GBRCAA National League competitions will be added to the competition calendar by the Competition Secretary, published on the GBRCAA web site and advertised on the BMFA web site.

The following classes shall be offered and will be run to the GBRCAA National League rules:

- Clubman
- Intermediate



- Masters
- FAI (P Only)

3.7.2 The format and rounds to count shall be as follows:

- 4 Rounds – best 3 from 4
- 3 Rounds – best 2 from 3
- 2 Rounds – best 1 from 2
- 1 Rounds – the 1 round will count

3.7.3 A National League will be compiled for all National League competitions and published on the GBRCOA web site. Points will be awarded according to the following formula and a league trophy will be awarded to the competitor flying each schedule scoring the highest number of points in 5 competitions each year.

3.7.4 The winner of the competition will receive 10 points. The remaining pilots will receive a score as a percentage of the winners score, rounded to two decimal places.

3.7.5 In addition, competitors will receive additional bonus points based on their score as a percentage of the maximum score available for the schedule (10 x the sum of the K-Factors), from a maximum of 20 points to a minimum of 2. See table below:

Score	Bonus Points
80.001% - 100%	20
77.501% - 80%	19
75.001% - 77.5%	18
72.501% - 75%	17
70.001% - 72.5%	16
67.501% - 70%	15
65.001% - 67.5%	14
62.501% - 65%	13
60.001% - 62.5%	12
57.501% - 60%	11
55.001% - 57.5%	10
52.501% - 55%	9
50.001% - 52.5%	8
47.501% - 50%	7
45.001% - 47.5%	6
42.501% - 45%	5
40.001% - 42.5%	4
0 - 40%	2

3.7.6 In the case of a tie, the winner is the flyer with the highest average total counting scores of the 5 counting competitions.

### **3.8 The Triple Crown**

- 3.8.1 A competition for the RCM&E Trophy is held annually by England, Scotland and the Republic of Ireland in rotation.
- 3.8.2 There will be 4 judges; 2 from the host country and 1 from each of the other countries.
- 3.8.3 There will be 4 teams of 4 pilots; 1 team of 4 from each country and a 4<sup>th</sup> team made up of 2 pilots from the host country and one pilot from each of the other 2 countries. The 4<sup>th</sup> team will be called the 'International Team' and a team member from the host country will be Team Captain.
- 3.8.4 The England Team will be determined from the result of the Team Selection P, F And Unknown competition and the International Team member(s) will be determined from the result of the Team Selection P schedule only competition.
- 3.8.5 Members of Scotland and Irish teams are decided by their own Aeromodelling Associations.
- 3.8.6 The competition will be run to FAI rules except there will be no model processing or flight timing.
- 3.8.7 The team flying order is chosen by lottery by the Team Captains at the pilots' briefing.
- 3.8.8 The Captain of each National Team, usually the top qualifying pilot for that country, will decide on the order of flight within the team and this can change for each round.
- 3.8.9 There will be 2 Preliminary schedule rounds flown on Saturday and 2 on Sunday.

### **3.9 F3P Electric Indoor Aerobatics Competitions**

- 3.9.1 F3P National League competitions can be organised by any volunteer Contest Director but events must be advertised on the GBRCAA web site, with at least 7 days' notice. GBRCAA rules must be followed for the competition to qualify for league points. The FAI AP schedule and the GBRCAA 'B+', 'B' and 'C' schedules may be flown. If prior notice is given and there is sufficient time, an Aeromusical round or the AF schedule may be flown.  
League tables will be published on the gbrcaa.org web site
- 3.9.2 Schedules are agreed at the GBRCAA Annual General Meeting and are designed to give everyone the opportunity to compete.
- 3.9.3 Any new schedule proposed at the Annual General Meeting has to be accompanied by the manoeuvre descriptions and judge's notes before it can be considered. If no new schedule is presented fully and passed at the AGM, last year's schedules will continue to be flown.
- 3.9.4 The 'C' schedule is considered to be the entry level competition schedule.

- 3.9.5 F3P BMFA Team Selection competitions will be organised to decide members of the United Kingdom Team to compete at the European and World Championships and will be run to the rules in the current FAI Sporting Code, Volume F3, Radio Control Aerobatics.
- 3.9.6 The FAI AP and AF schedules are listed in the current issue of the FAI Sporting Code.
- 3.9.7 There will be a minimum of 3 BMFA Team Selection events each year and these may include the BMFA Electric Indoor Masters. Competitions may include both FAI schedules.
- 3.9.8 If 4 events are organised the best 3 competitions count for final league positions. If 3 competitions are organised the best 2 counts, if 2 competitions are organised the best 1 count. If only 1 competition is run then this result is taken as the final league result.
- 3.9.9 At the end of the season the top 3 pilots in the F3P BMFA Team Selection league will be recommended to the BMFA to represent the United Kingdom in International championships the following year.
- 3.9.10 If any pilot is unable to take up their place in the team, they should inform the Team Manager or the GBRCAA committee at the very earliest opportunity so the next pilot on the list can be asked to join the team.
- 3.9.11 The team will consist of 3 pilots plus a junior as defined in the FAI Sporting Code, as long as that junior's scores in the qualifying competitions has reached a level of at least 85% of the top scoring pilot in the league.
- 3.9.12 All competition dates will be published on the GBRCAA web site or forum, and in addition in the BMFA web site. The BMFA Team Selection events will be advertised as BMFA Team Selection events and all competitions will be the subject of a forum post on the GBRCAA web site.
- 3.9.13 The GBRCAA B+, B and C schedules should be offered to be flown at the same competition / venue for domestic league points providing there is sufficient time. Priority entry must be given to those pilots competing for a UK Team place.
- 3.9.14 Domestic League competitors will be awarded league points. The Contest Director may decide to fly the AF and the AM schedules if time allows providing previous notice is given. GBRCAA F3P Schedules See: <http://www.gbrcaa.org/f3pschedules.htm>
- 3.9.15 At competitions competitors should expect to fly at least 5 rounds, and to save time, rounds may be paired together and flown one after the other. The model must land at the end of the first schedule, so the landing and take-off can be scored for each flight. Batteries can be changed if necessary between flights.

## **4 Interpretation and Disputes**

- 4.1 If there are any disputes regarding these rules or their application, then the matter shall be decided by a majority vote of the current GBRCAA Committee whose decision will be final and binding. The GBRCAA Chairman shall not have a casting vote and if there is equality of votes, the matter in dispute will be referred to the BMFA for a final and binding decision.
- 4.2 Any member of the Committee who in the reasonable opinion of the GBRCAA Chairman has a direct and material interest in the decision of the Committee (e.g. because it may affect their place in a team) shall not be entitled to attend the committee meeting nor to vote on the matter.

**END OF DOCUMENT**