

# RULES FOR RATED COMPETITIONS

2025

Version 1.3

#### **FOREWORD**

Welcome to the 2025 Rules for BGA Rated Competitions.

The following significant changes are made in this edition. Pilots and organisers are advised to read the text relating to these changes carefully:-

- Length of competition (4.8) New rule to clarify length of the competition
- Role of PSC (5.1.1) New role to advise on suitability of daily tasks and procedures
- Logger in FES equipped gliders (5.5.2) Addition to rule governing ENL loggers
- Use of secondary logger (5.5.10) Clarification of when 2<sup>nd</sup> logger may be used
- Start Calls (5.6.8) New rule added to allow Regionals to require start calls
- Strobes (5.16.5) Forward facing strobes are recommended alongside FLARM
- Protest period at end of competition (5.19.1) Protest period always 24 hours
- Turbo procedures (5.22) Rules for turbo testing and relights have been revised
- **UK ratings from Overseas Competitions (6.1)** Rating points gained in European Championship and World Championships only to be included in UK ratings list
- WWGC Selection Procedures (6.2.6) Redrafted to remove anomalies
- Finish Ring Penalties (7.1) Penalty for finishing more than 50ft below finish ring changed to loss of speed points only
- Airspace Infringement Penalties (7.1) 50 point penalty for small horizontal airspace infringements removed
- Club Class Overweight Penalties (7.1) Small change to clarify penalty
- Minimum AAT time (7.2.2) Minima reduced to 1.5 hours for Regionals and Juniors
- Glider Speed Indices (7.3) Change to Arcus, ASG32, HPH304TS and the addition of JS5

The Competitions Committee welcomes the inputs that we have received from competition organisers and pilots. Don't hesitate to get in touch if you have a point to make. You can email the committee direct on <a href="mailto:compscommittee@gliding.co.uk">compscommittee@gliding.co.uk</a>.

I would like to offer a personal thank-you to all the committee for their hard work during 2024.

The committee can always use new blood. If you think that you have the skills and experience to assist us in our work please contact me through the email address above.

Finally, to all those reading this, I wish you fun, safe, and successful racing in 2025

Jim White

on behalf of the BGA Competition & Awards Committee

## **Committee Members at time of publication**

Jim White (Chair)Russell CheethamChris LutonPaul CrabbBrian SpreckleyWerner StroudFran RobertsMatt DavisMax Lazenby

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## **INTRODUCTION**

This 7-part document sets out the official BGA rules for rated competitions.

## **Part 1 "Competition Preparation and Publication"**

Rules about planning and publicising a competition.

Part 2 "Pilot Entry - General"

What every prospective competitor must do to enter a competition..

Part 4 "Glider Compliance-General"

Rules regarding the permitted physical properties of competing gliders

Part 3 "Competition Types"

Types and classes of competition and the rules specific to each.

Part 5 "Conduct of the Competition"

Rules applied during the competition itself

Part 6 "Rating Lists and Team Selection"

Pilot rating and team selection procedures.

Part 7 "Appendices"

Complex or detailed information, referred to in the rules.

#### **DEFINITIONS**

## Wording.

Throughout these rules, the words "must", "shall", and "may not" indicate mandatory requirements; "should" indicates a recommendation; "may" indicates what is permitted, and "will" indicates what is going to happen.

## Units.

Speed in kilometres per hour; Wind Speed in knots; Height in feet above the airfield; Altitude in feet above mean sea level; Directions and Radials in degrees true; and Distance in metres and kilometres.

## GPS Datum.

WGS 84.

## Organiser

The individual or group of individuals, who undertake the running of a BGA Rated Gliding Competition. (This will usually be a sub-committee of a gliding club)

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## 1 COMPETITION PREPARATION & PUBLICATION

#### 1.1 OFFICIALS

#### 1.1.1 Director

The competition organisation must be headed by a Director who has overall responsibility for ensuring that suitable personnel, equipment and facilities are available for the efficient organisation and running of a BGA rated competition. The Director or appointed Deputy must be available throughout the competition period and at the end ensure results and reports are promptly forwarded to the BGA in the required format.

The Director must ensure that the conduct of competition flying with respect to the approach to the finish line and to the landing is continually observed in person, if not by the Director, then by other key officers specifically briefed. Note that where a finish ring is used, approach to the finish may not be directly observable, but flight thereafter must still be observed for compliance with these rules.

A key responsibility of the director is to ensure that all of these rules are applied correctly as written. Where ambiguity is found to exist, or a rule cannot be applied as written, the matter should be taken up with the Stewards and, ultimately, with the BGA Competitions Committee through its appointed referee.

The Director has discretion to award penalties for unsporting behaviour (see rule 2.1.8) and having consulted with the PSC, flying that in the directors opinion endangers competitors, crews, officials, spectators, or members of the public.

#### 1.1.2 Key Officers

The Director shall appoint the key officers of Task setter, Airspace Officer, Deputy Director and Safety Officer. The club CFI, or their delegate, shall be appointed as a key officer in the capacity of Director, Deputy Director, or Safety Officer. The Airspace officer and Task setter must not be the same person.

#### 1.1.3 Stewards

Three suitably experienced current competition pilots shall be appointed as stewards to monitor the conduct of the competition and report any unfairness or infringement of the regulations and investigate protests. Stewards must not be Key Officers as defined in 1.1.2 above nor be competitors. They need not be in continuous attendance throughout the competition and a quorum for a meeting is two. Stewards should refer to the BGA Competitions Committee appointed referee for guidance prior to any decision where there is ambiguity within the rules or no specific rules covering the case in question. The stewards' decision on any protest is final.

## 1.2 CANCELLATION

Once entry fees have been paid, a competition must not be cancelled, except for reasons of 'force majeure' and only after consultation with the BGA competitions committee or (if already started) the stewards.

#### 1.3 LOCAL PROCEDURES

## 1.3.1 Approval and Publication.

Local Procedures must be approved by the Competition Committee prior to publication. Distribution should ensure competitors receive them at least three weeks before the competition starts.

#### 1.3.2 Minimum Contents.

As a minimum they must define:

- the boundaries of the airfield.
- · times for pilot registration.
- details of radio frequencies to be used,
- a copy of the current BGA registration form unless its requirements are embodied in an alternative registration process.
- specifications of any additional temporary airspace restriction or dispensation known to be in operation during the contest period.
- any rules that are additional to these rules.
- Local Procedures must also contain a reminder to fly within the requirements of the law, namely the UK implementation of SERA (Standardised European Rules of the Air) and its associated UK exceptions regarding low flying and reckless or negligent endangerment of any person or property.
- Circuit and Landing Procedures
- Whether turbo relights will be allowed
- For Regionals, whether or not start calls are required and their use

#### 1.3.3 Additional information.

Normally included are:

- the start point co-ordinates and details of finish lines and control points that may be used
- domestic and site information.
- a list of the anticipated entrants unless that information is readily available elsewhere
- a list of required documents to be produced at registration, unless such submission is required by an alternative registration process.

## 2 PILOT ENTRY- GENERAL

## 2.1 PILOT LICENCING, ELIGIBILITY & CONDUCT

## 2.1.1 FAI Competition Licence

All pilots, including hors-concours entries, except two-seater P2s, must hold a valid FAI Competition Licence. *Note: these can be obtained through the BGA website at https://members.gliding.co.uk/competitions/renewal-and-initial-application-for-fai-competition-licence* Applicants must hold a Silver badge.

#### 2.1.2 Nationality

Only pilots of British nationality, or principally resident within the UK and subject to British income tax, may qualify for the title of National Champion and be awarded BGA trophies. Pilots not meeting the British Nationality or residency requirement may enter any BGA competition but will gain no priority rating and will not affect other competitors' ratings other than by virtue of their daily performance affecting the number of points allocated.

## 2.1.3 Team Entry, Same Glider.

Two or more pilots may compete as a team entry in the same glider in the Junior Nationals, Overseas Championship and Regionals. Pilots must not compete in more than one glider in the same task group.

## 2.1.4 Team Entry, Different Gliders

Two or more pilots may compete as a team entry in different gliders in Regionals, provided that the handicaps of the gliders fall within a single task group; that only one glider competes on any one day; that the days on which each glider is to compete shall be agreed with the Director before the start of the competition and that no pilot competes in more than one glider during the competition (subject to 3.3.2). Each glider is to be scored using its own handicap.

#### 2.1.5 Team Entry Penalties

When pilots compete as a team entry as permitted in 2.1.3 or 2.1.4 above, any penalty incurred (including warnings for first offences and penalties for second and subsequent offences) shall count against the entire team regardless of which pilot was responsible.

#### 2.1.6 Multi-seaters.

The registered pilot must be generally accepted as no less proficient than any other occupant of the glider. If there is any significant doubt about the relative proficiency of the pilots, except in the case of European and World Championships where the primary selected pilot is always deemed to be the most proficient, then it should be determined by the current rating list. A multi-seat glider may be flown on a team basis in accordance with 2.1.3.

#### 2.1.7 Hors-concours.

The Competition Committee must approve all National Championship hors-concours entries, each of which must have the prior approval of the competition organiser. The normal entry fee is payable in all cases.

## 2.1.8 Unsporting Behaviour

By entering the competition, pilots and crews undertake to behave in a sporting manner and to show courtesy towards fellow-competitors and officials at all times.

Unsporting behaviour is defined as:

- Aggressive or abusive actions (verbal or physical) toward Competitors, Organisers, volunteers, or Officials.
- Deliberate attempt(s) to circumvent these Rules.

The penalty imposed for competitors may be a warning, issuance of competition penalty points, day disqualification, or event disqualification at the discretion of the Director.

The penalty imposed for crews may be a warning or, in exceptional cases, removal from the event at the discretion of the Director.

## 2.2 REGISTRATION

#### 2.2.1 Registration Form.

The form shall be completed and submitted to the organising club as directed, unless an alternative registration process (e.g. on-line) is used. If any of the details submitted change, a fresh submission must be made. The contents of the registration form or alternative process must, as a minimum, mirror the requirements of the BGA sample form downloadable from the BGA website including all pilot declarations.

## 2.2.2 Registration In-Person

Prior to flying, competitors must attend registration and show evidence of FAI competition licence unless such evidence has previously been submitted in an alternative registration process. The organisation may require sight of other supporting documents at registration – these will be listed in Local Procedures.

## 2.2.3 Supporting Documentation

Subsequently during the competition, pilots may be required to produce supporting documentation for any of the information declared on the registration form or in an alternative registration process. Scrutineering of the glider to be used and any equipment on board may also be undertaken by the organisation before launching on the first day and on any subsequent day to ensure compliance with the rules.

#### 3 GLIDER COMPLIANCE - GENERAL

#### 3.1 AIRWORTHINESS

The airworthiness of competing sailplanes and any associated equipment shall be the responsibility of the competitors at all times.

Each competing sailplane must have a valid Certificate of Airworthiness or Permit to Fly or be in compliance with applicable national airworthiness regulations.

#### 3.2 GLIDER IDENTIFICATION

#### 3.2.1 Display of Tri-Graph or Competition Number

Gliders must display their BGA tri-graph or Competition number as large as practicable in a contrasting colour on both sides of the fin / fin & rudder.

## 3.2.2 National Aviation Authority Markings.

Appropriate National Aviation Authority issued registration markings must additionally be displayed as required.

#### 3.3 CHANGES

## 3.3.1 Change of Task Group or Glider Configuration.

A glider shall not, during a contest, change task groups or vary its configuration from that declared at registration other than as allowed in 5.11.2.

#### 3.3.2 Complete Change of Glider

One complete change of glider may be declared at registration to be actioned on a specific day and to run for a defined number of calendar days, provided that the handicap of the replacement is within the limit of the task group or the same as the glider replaced. The change, or any details of the change, may not be cancelled unless the Director is satisfied that the replacement glider has been damaged beforehand or in transit and the pilot is not seeking a tactical advantage. Changing the configuration of the same glider is not regarded as a glider replacement and is therefore not permitted within the context of this section.

## 3.4 MAXIMUM WEIGHTS

#### 3.4.1 Take Off Mass

The take-off mass of a glider shall be the lower of: -

- Manufacturers certificated limit
- Standard and 15 metre classes 525 kg.
- 18 metre class 600 kg.
- Open Class 850 kg.
- 20 metre Multi-Seat 800kg

#### 3.4.2 Weighing.

Organisers are encouraged to check weigh gliders if they suspect that limits are being overlooked and to check handicap declarations in Club Class. To be effective, this may require some restrictions in the local procedures on the loading and dumping of ballast or

engine fuel prior to launch and when equipment may be added. Gliders should be weighed with wings balanced and with all equipment required for flight. If weighing takes place on the way to the grid it must be ensured that the glider has a small into wind component. The mass of the pilot is also measured at this time. The intended take off mass is the combined mass of glider, all equipment, pilot and any calibration error that is registered for the weighing scales in use. A tolerance of +/- 1% is additionally allowed before overweight or out of handicap penalties are considered.

## 4 COMPETITION TYPES & TASK GROUPS

## 4.1 NATIONAL CHAMPIONSHIPS

#### 4.1.1 National Championships Classes

The national championships shall be sub-divided into the classes of :

#### FAI Classes:

- Open
- 18 metre
- 15 metre
- Standard
- Club Class
- 20 metre Multi-Seat

#### Non-FAI Class:-

Junior

each producing a National champion.

## 4.1.2 Nationals Championships Venues.

Suitable clubs will be invited by the Competitions Committee to bid.

## 4.1.3 Nationals Pilot Eligibility

All pilots must have previously competed as P1 in a BGA rated competition or if a foreign pilot, in an equivalent event abroad. In exceptional circumstances substantial non-rated competition experience will be considered acceptable if recommended by the director and agreed by the Competitions Committee.

## 4.1.4 National Championships Entry

Applications to enter a National Championships (except Junior Nationals, see 4.4.2) must be received by the BGA office by January 31st to avoid placement on the late entry list. If oversubscribed, entry is prioritised by the rating list followed by late entries in order of application. In any case, an application, even if a late entry, must be received by the BGA to allow the pilot to enter the competition. Deposits will not be accepted by the organising club until this step is completed.

#### 4.2 20m. MULTI-SEAT NATIONAL CHAMPIONSHIPS

#### 4.2.1 General

The event will be run in accordance with these rules except in the case of glider eligibility, and handicapping, which will instead be in accordance with sections 2.2, 2.6, and Appendix 2 of the latest "IGC Procedures for Handicapped Classes" Part 2.

The latest version of this document can be found on the FAI website. The link at the time of publication of this BGA Rulebook was <a href="https://www.fai.org/sites/default/files/sc3ah">https://www.fai.org/sites/default/files/sc3ah</a> 2021a.pdf

## 4.2.2 20 Metre Multi-seat Entry Requirement

Only one pilot entry is required for the lead pilot, who must fly on every day of the competition, but 2 occupants must fly on board, the second of which may alternate subject to being registered daily with the competition organisation.

## 4.2.3 IGC Handicap Integration with BGA Scoring

It should be noted that IGC handicaps will require a multiplier of 100 prior to integration with BGA scoring formulae as described in Appendix 7.2. For the UK Nationals, this is done automatically by the UK SeeYou Scoring Script.

## 4.3 CLUB CLASS NATIONAL CHAMPIONSHIPS

#### 4.3.1 General

The event will be run in accordance with these rules except in the case of glider eligibility and handicapping which will instead be in accordance with sections 1.2, 1.6, and Appendix 1 of the latest version of "IGC Procedures for Handicapped Classes" Part 1. The latest version of this document can be found on the FAI website The link at the time of publication of this BGA Rulebook was https://www.fai.org/sites/default/files/sc3ah 2021a.pdf.

Additionally, a glider not eligible according to the above document, may receive approval and be allocated an appropriate IGC compliant handicap and reference weight by the BGA Competitions Committee provided the glider is a single seater fitting the performance range and ethos of IGC Club Class.

#### 4.3.2 Maximum Take Off Mass (MTOM)

The take-off mass must be less than or equal to the lesser of:

- Maximum certificated take-off mass, according to type certificate data sheet or BGA approved limit.
- Maximum certificated take-off mass without water-ballast, according to type certificate data sheet or BGA approved limit.

#### 4.3.3 Water Ballast

With exception of fin ballast, as set out below, water ballast must not be carried in Club Class. Any fixed ballast must be securely installed and must meet airworthiness requirements. Water ballast may be carried in the fin tank, if fitted, for the sole purpose of adjustment of the position of the centre of gravity. If carried, it must be included in the take-off mass. The configuration and weight of the glider, including any fin water ballast, must remain the same throughout the competition.

## 4.3.4 IGC Handicap Integration with BGA Scoring

It should be noted that IGC handicaps will require a multiplier of 100 prior to integration with BGA scoring formulae as described in Appendix 7.2. For the UK Nationals, this is done automatically by the UK SeeYou Scoring Script.

## 4.4 JUNIOR NATIONALS

## 4.4.1 Junior Age Limit

Only pilots whose 26<sup>th</sup> birthday falls after the year of competition are eligible to enter the Junior Nationals.

#### **4.4.2 Junior Nationals Entry**

Applications to enter the Junior Nationals are made on the Junior Gliding website: -

## http://nationals.juniorgliding.co.uk

## 4.4.3 Junior Nationals Maximum Glider Speed Index.

Gliders with a speed index not exceeding 106 are eligible to enter.

#### 4.5 REGIONAL CHAMPIONSHIPS

## 4.5.1 Regionals Venues and Dates

Any club may apply to the Competitions Committee to run a BGA rated Regional Competition. Those without a proven competition track record will be required to satisfy the Competitions Committee that they have the expertise. It may be necessary to apply control over dates to reduce competition conflictions.

## 4.5.2 Regionals Entry

Application to enter a Regionals must be made directly to the organising club. If oversubscribed, entry is decided by the order the entries are received or by a ballot of all applicants. Pilots from outside the organising club must have the same opportunity of entry including notification of entry procedure.

#### 4.6 TASK GROUPS

#### 4.6.1 Task Group Definition

A competition may consist of one or more task groups determined either by FAI class, or glider speed. Where two similar classes – e.g. 15m and Standard - are combined into a single task group which is set the same task and scored together, they together constitute a single task group.

#### 4.6.2 Size of Task Group.

A task group shall not be larger than can normally be launched in less than one hour and in any case must not exceed 50.

#### 4.7 ALERNATIVE RULES AND PROCEDURES

All events will be run in accordance with these rules except that specific alternative rules and/or procedures may be trialled with the express prior approval of the BGA Competitions and Awards Committee. If this is the case, the intention must be published as soon as possible and highlighted in the Local Procedures.

#### 4.8 LENGTH OF COMPETITION

National competitions will be run over 9 consecutive days. Regional competitions may be run over 7, 8, or 9 days.

## 5 CONDUCT OF THE COMPETITION

## **5.1 PILOTS SAFETY COMMITTEE (PSC)**

#### 5.1.1 Role of the PSC.

- To ensure, by use of 'peer pressure', that safe flying and airmanship standards are followed by all pilots (including tug pilots).
- To assist the organisation in promoting a positive safety culture.
- To provide advice to the organising team daily on the suitability of tasks and procedures.
- To be available as a point of contact to any pilot who wishes to voice a safety concern regarding either the behaviour of another pilot or pilots, or a general safety concern of any kind. To investigate such matters and take appropriate action.
- To act as the representative body of the pilots as a group on all such matters.
- To advise the director on the awarding of penalties for non-specific hazardous / dangerous flying if the director considers an infringement deserving penalty has occurred.

#### **5.1.2** Powers of the PSC

The PSC will investigate issues related only to safety and flying standards during the competition. General safety concerns may be raised directly with the Organisation, but if a pilot or pilots are thought to have been responsible, the PSC should take the matter up with the pilot or pilots concerned without involving the Organisation in the first instance. Only if considered necessary should the matter be escalated to the Director.

It is intended that considerable discretion should remain with the PSC to deal with pilot behaviour without involving the Organisation. However, as it acts purely in an advisory capacity and is not empowered to impose penalties, behaviour considered to warrant further action must be reported to the Competition Director.

### **5.1.3** Operation of the PSC.

All competitors must make themselves available for the post unless they have already served on a PSC this year, in which case they should make their exemption known to the Director as soon as possible.

#### **5.1.4** Election of PSC

Prior to the commencement of the competition, the Director will solicit nominations from the pilots entered in the competition either for themselves or others to serve on the PSC and, with the agreement of the pilots concerned, select three pilots and a reserve. The director is free to choose the method for gaining nominations but must ensure that the selected pilots are aware of their role before registration is completed.

## 5.1.5 Resignation from the PSC

A member of the PSC may resign if they feel it is affecting their own competition result, with the next placed candidate filling the position.

## 5.2 BRIEFINGS

## **5.2.1** Daily Task Briefings

The organisers must hold a task briefing every day of the contest at 09.30 hours (or other published time) that includes the following: -

- Previous day's results (if applicable).
- Meteorological forecast.
- Details of the day's tasks (any number of options) for each task group this shall include verbal briefing and task sheets with detail in accordance with 5.2.2.
- Airspace restrictions, exemptions and hazards that might affect competitors. see
   "Airspace Briefing minimum content" below.
- Time on grid and earliest time of first launch (if not on the task sheet).
- Time of last launch (not earlier than 1800 hours).
- Tug and glider relight landing areas.
- Finishing procedures.
- Administrative notices.
- Date and time of next briefing.

Flight and safety requirements given at briefing carry the status of Local Regulations.

Pilots unable to attend briefing must ensure they are in possession of all relevant briefed information prior to launching.

#### **5.2.2** Airspace Briefing – minimum content

Each morning briefing must include a section on Airspace, delivered either by the Director or the Airspace Officer. The minimum content of the Airspace Briefing is as follows:

- Local hazards, including reminders of known issues arising from the configuration or proximity of local airspace, even if it is marked on the current air chart.
- Details of LOAs & Dispensations (e.g. Daventry Box et al) including procedures for their use.
- Deemed active parachute zones to be treated as prohibited airspace.
- Temporary Controlled, Restricted or Prohibited airspace.
- Advisory navigation warnings issued by NOTAM.
- Sensitive and other ATZs to be treated as prohibited airspace.
- Any other areas designated as Additional Penalty areas.
- This information to be provided in graphical format, displayed on screen during the briefing or by the issue of printed maps to allow easy identification on pilots' air charts.

Whilst the organisation will use all reasonable endeavours to brief pilots on temporary or notamed airspace and navigation warnings, the responsibility for obtaining information necessary for the conduct of the flight remains with the Pilot in Command.

#### 5.2.3 Task Sheet - minimum content.

A task sheet must be supplied to pilots for each task briefed with minimum content to include the following:-

- Task date and priority designation
- Written task description to include tri-graph, description and co-ordinates of start, finish, and turn points in degrees and decimal minutes, task length, leg lengths, leg headings (degrees true),
- For Distance Handicapped Tasks, a supplementary sheet must be supplied
  indicating the radius of barrel in km to one decimal place to be employed for that task
  for each handicap of glider in the task group. The task sheet must also clearly
  indicate that the task is a Distance Handicapped Task and show a defined example
  barrel size of 5km, or the maximum barrel size required if it is less than 5km.
- Written observation zone description where task is an AAT.
- Graphic interpretation of task area (minimum size A5) showing all observation zones, track lines, all relevant permanent airspace boundaries and any temporary restricted/prohibited airspace including prohibited parachute zones identified as shaded areas.
- List of relevant temporary restricted/prohibited airspace and prohibited parachute
  drop zones to be titled as ADDITIONAL PENALTY to include time, location and
  height descriptor as appropriate. In the event of any discrepancy between graphical
  and text descriptions of such airspace/parachute zones, the text version will always
  be authoritative.
- Written list of relevant navigation warnings with descriptors as appropriate to be titled as **ADVISORY**.
- Written list of relevant airspace exemptions in operation to be titled EXEMPTIONS.
- Radio frequencies of any ATZ within 5km of track lines, start volume or TP
   Observation Zones for Speed and Distance Handicapped Tasks discretionary for
   Assigned Area Tasks.
- The version of the applicable published Competition Airspace file, if any.

#### **5.2.4** Additional Briefings

The Director may hold additional briefings for any reason provided reasonable steps are taken to notify all pilots of the time and place (which may be at the launch point).

## 5.2.4.1 Task Not Previously Briefed

An additional briefing must be held if a task not previously briefed is to be flown, with at least 30 minutes from its completion to the start of launching.

#### 5.2.4.2 Pilot Notification

The Director must ensure all pilots are aware of any resulting changes.

### 5.2.4.3 Previously Briefed Task

An additional briefing is not required if a previously briefed alternative task is to be flown. However, the Director must ensure every pilot is aware of the change at least 15 minutes before launching commences. This ruling also applies to a change of minimum task time for an Assigned Area Task.

#### 5.2.5 Task and Rules are definitive

When determining whether an infringement of these rules has occurred, and for assessing protests, the task sheet, the local rules, and the published and notified airspace file, taken together, will be definitive.

#### **5.2.6** Mandatory Safety Briefing

The organisation will present a safety briefing on the first day of the competition that will cover the desired pilot flying behaviour at key points in the contest: prior to starting, on task, joining and flying in thermals, and upon finishing and landing. This briefing shall be mandatory for all pilots. Pilots will not be launched unless they attend this briefing. In the event that pilots are unable to attend on day 1, the organisation will endeavour to provide a further safety briefing so that such pilots are able to compete on subsequent days.

## 5.3 LAUNCHING

#### **5.3.1** Launch Method

Launches must be by aero tow or self-launch, unless stated otherwise before entry fees are paid.

#### **5.3.2** Release Zone

Gliders should be towed or self-launch to the release zone specified for each task group and be 'waved-off' by the tug, or shut down their engines, at the specified release altitude. Pilots may release or shut-down earlier at their discretion. The Director may change the release zone at any time if it is considered to be necessary for sporting reasons.

## **5.3.3** Launching Multiple Task Groups

Each task group must be launched separately, except as specified for relights, the first launch of each task group being at the Director's discretion.

#### **5.3.4** Nationals Priority

If competitions include a National Championship and Regional Task Group, the Nationals must always be launched first. In this case, Organisers must ensure all Regional's pilots are aware of this prior to entering.

## 5.3.5 Task Group Launch Period

All gliders of a task group should have the opportunity of a competition launch within one hour. This can normally be achieved by having not more than six gliders per tug.

#### 5.3.6 Launch Order

Within each task group the order of launch shall be in order of registration letters or competition numbers with the first to take-off on the first flying day being selected by lot. Thereafter the order shall advance after each contest day by 2/7ths of the number of competitors in the group.

#### **5.3.7** Notice of First Launch

Announcement of the earliest first launch time should be given, ideally at briefing, and updated regularly if slippage occurs. The first launch shall be no earlier than 30 minutes after the completion of all business at the morning briefing session. A previously announced earliest launch time must not be brought forward and, in addition, a 10 minute warning of the time of the actual first launch must also be given even if it coincides with the previous

estimated time. These announcements may be made using standard competition messaging systems as well as on the competition frequency. It should not be necessary to call pilots together for this. If stream launching a second task group immediately after the first, the 10 minute notice rule will apply only to the first launch of the first group provided that the intention to stream-launch has been previously briefed.

## 5.3.8 Refusing a Launch

Pilots who refuse a launch shall follow the relight procedure. A pilot who is unready for their grid order launch shall be deemed to have refused a launch.

#### 5.3.9 Launch Grouping

Organisers may group gliders and launch them in their group provided that for each glider its launch position is within five places of its official place.

#### **5.3.10 Motor Gliders**

Motor-gliders may be grouped together in list order to assist launch point organisation or be positioned so that their slipstream does not hazard other aircraft.

#### **5.3.11** Director to be Present

The Director or their deputy should be present at the launch point during the main periods of glider launching and must suspend launching if it appears dangerous to continue.

## **5.3.12** Additional Launches (Relights)

If a pilot wishes to be launched either after refusing the offer of a launch or after landing back at the airfield the pilot must, when fully ready to launch, notify the Launch Marshal and position their glider as instructed.

#### 5.3.13 Relights During Launch of Next Task Group

If the launching of another Task Group is in progress, every fifth launch must be available for 'relights' of any previous Group.

#### **5.3.14** Failed Launches

If a pilot fails to be launched satisfactorily through no fault of the pilot or their crew, the pilot must be offered an additional launch without delay.

#### 5.3.15 No Relight after an Outlanding

A glider that lands outside the official boundary of the airfield (except as above) shall not be permitted any further contest launches on that day. Where doubt exists on a pilot's entitlement to a relight, the pilot should be launched, and the dispute resolved later.

#### **5.3.16** Relight Cancels Previous Starts

Each relight automatically cancels all previous starts unless the task has been completed.

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#### 5.4 TASK POSTPONEMENT OR CANCELLATION

#### **5.4.1** Task Cancellation After Launch

Once launching has commenced, the task may be cancelled for safety or sporting reasons only.

## **5.4.2** Start Postponement

The Director may delay the opening of the start for either of the above reasons.

## **5.4.3** Re-tasking After Launch

Prior to the start line opening the Director may cancel the task and at the directors discretion require pilots to land back for a further briefing. This rule would only be invoked if the weather was unsuitable, and it may be possible to task in a different direction. There must be a minimum time of one hour between the recall and first launch on any subsequent task.

#### **5.4.4** Re-Tasking after Mass Land-Back

If after the start line has opened all gliders land back, the Director may set an alternative task.

## **5.4.5** No Reversal of Decision

Once a launch postponement or task cancellation has been made, the decision must not be reversed.

#### 5.5 FLIGHT VERIFICATION

#### **5.5.1** Method.

Flight Verification, both primary and secondary, must be derived from an IGC approved GPS Flight Recorder (FR).

FRs that have previously held IGC approval as a Flight Recorder, now withdrawn, may be used in Regional Competitions only.

The IGC list of approved Flight Recorders may be viewed at <a href="https://www.fai.org/igc-documents">https://www.fai.org/igc-documents</a>

#### **5.5.2** ENL or MOP for Engine-Equipped Gliders

For engine-equipped gliders competing without the engine disabled, any FR used for verification must be fitted with an approved means of indicating engine operation. Gliders with internal combustion engines or FES installations may use engine noise level (ENL) provided that the flight recorder is securely fixed in a single location for the entirety of the competition. ENL flight recorders must not be shielded or placed in a way that reduces sensitivity in flight. Gliders equipped with jet turbines and all other electric installations must use an approved means of propulsion (MOP) detector. In all cases, the recording equipment must be capable of clearly indicating engine use even at low power-settings.

## 5.5.3 Control.

Valid control within a Start or Turnpoint zone is achieved by having a logged point, or any part of the line joining 2 consecutive logged points, within the zone. Start and Finish times are calculated by interpolation. Height verification for the purposes of screening flight logs for any airspace infringements or to confirm control at the start will use the procedure in 7.4.

## 5.5.4 Handing in.

On completion of a task, all evidence from the primary flight recorder must be booked in within 60 minutes. If on a logger or removable memory device, it will remain under the responsibility of the Organisation until released back to the competitor. If permitted in the local rules, pilots may also submit secure IGC files by email, or by uploading to a nominated website.

## 5.5.5 Evidence to Include all Flying that Day.

The flight record must include all flying conducted on the day prior to reaching the landing point even if the day subsequently becomes non scoring.

#### **5.5.6** Flight-Recorder Time intervals.

The time interval between FR fixes should be set at 2 seconds provided the FR is capable of recording 10 hours or more at this setting. In the case of older FRs which may not meet this requirement an alternate setting that just enables 10 hours of recording must be agreed with the Director prior to first launch to avoid penalty.

## 5.5.7 Flight-Recorder Calibration.

A calibration chart from a test carried out within the preceding 5 years must be available to the Organisation. In the event that a valid calibration chart cannot be produced within the protest period should a flight log provisionally indicate an airspace infringement, it will be assumed that the calibration height puts any logged points 100 feet vertically further into the airspace than indicated and any penalties will be amended accordingly.

#### 5.5.8 Software & Hardware.

It is the responsibility of the competitor to ensure the Organisation is in possession of the required software, connecting cable and/or storage media reading device for their FR or IGC file.

#### **5.5.9** Analysis and Scoring Programs

Analysis and scoring programs employed by competition organisations should be approved by the BGA Competitions Committee prior to use. Only SeeYou scoring script versions published on the BGA website are approved.

#### 5.5.10 Use of Secondary Logger

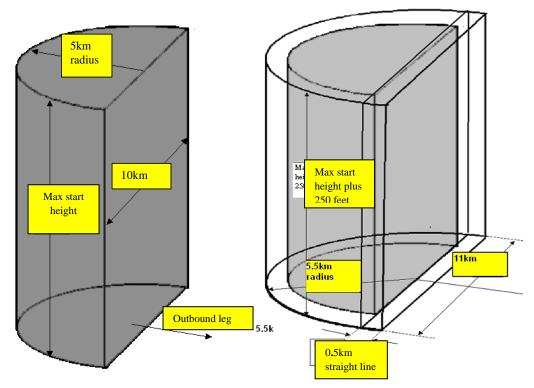
The Organisers will analyse Flight Log files from the Primary FR for the purpose of scoring the flight. If that evaluation shows a continuous flight and indicates no penalties, then that evaluation will be used for scoring.

In case the Primary Flight log fails to demonstrate flight continuity from take-off to landing, OR indicates a penalty, complementary data from the other FR may be used to fill the gap or reduce the penalty.

#### 5.6 STARTING

#### 5.6.1 Start Zone.

This is formed by a 5km radius semi-circle centred on the Start Point orientated opposite to the direction of the first turning point and is shown, surrounded by a further 500m horizontal and 250 feet vertical penalty start volume. Starts outside these volumes are uncontrolled.



#### 5.6.2 Start Announcement.

There will be start time announcements, together with maximum start height, made on the competition frequency 10, 5, and 1 minute prior to and on opening.

#### 5.6.3 Maximum Start Height.

The maximum start height should be set approximately 1000 feet <u>above</u> the expected cloud base level (or the expected maximum height of convection if blue) in the start area when the start gate opens but should also take into account airspace limitations. To best achieve this, the final decision should be made just prior to the first start line open announcement.

#### 5.6.4 Start Open Time.

The start for each task group will open not less than 15 minutes, plus 1 minute for each 200 feet or part thereof by which the cloud base, or maximum height of convection if blue, exceeds 3000 feet, after the last competitor in that task group has had the option to launch. Directors are reminded that this is a minimum time. More time may be allowed, if necessary, for instance if the start zone is remote.

## **5.6.5** Cloud Flying Before Start.

Cloud flying is permitted only on task after a start when more than 10km from the airfield reference point or any start zone reference point. If, following such a cloud climb, a second or subsequent start is made, the glider must have recorded one fix at an altitude below release height to avoid the climb being counted as a cloud climb prior to that start and penalised accordingly.

#### 5.6.6 Safety and Airmanship around Start Zone.

Pilots must remain clear of cloud and in full visibility of all gliders in the same thermal when within 10km of any start zone reference point or base airfield reference point.

#### **5.6.7 Control.**

The latest time after completion of the launch phase, and with the start open, that a Start Zone was exited in any direction horizontally or vertically. The declared Maximum Start Height must not be exceeded in the 2 minutes prior to starting. If a start incurs a penalty and an earlier valid start gives a better score, the earlier start time will apply.

#### 5.6.8 Start Calls

In Regional competitions, pilots may be required to make start calls as defined in local rules if the organisation chooses to use this option.

#### **5.7 TASKS**

There are three types of task:

## **5.7.1** Fixed Course.

This is a race either round a closed circuit course, or to a remote goal, with one or more turnpoints. Entry into turning point sectors must be achieved in the order set. Two laps of a closed circuit course may be set provided that it is not an out and return and each lap is at least 100 km.

## **5.7.2** Distance Handicapped.

This is like a fixed-course task except that the radius of the turnpoint barrel centred at the nominated TP is dependent upon the handicap of each glider in such a way that all finishers will have flown the same handicapped distance on completion.

#### 5.7.3 Assigned Area.

This is a race round pilot selected points within prescribed areas in task order. A Minimum Time is set which will penalise competitors racing for a shorter period. This type of task is intended to be set only when soaring conditions are likely to be uniform over the task area. All selected points must be assigned areas including any small area set for use as a control point.

#### 5.8 TURNPOINT

#### **5.8.1** Turnpoint Position

The Latitude and Longitude co-ordinates published by the Competition Organiser.

#### **5.8.2** Fixed Course Turnpoint

A circle of 500m radius plus a 90 degree sector of radius 20 kilometres opposite the bisector of the inbound and outbound direct tracks. There are Penalty areas of a further 500m surrounding the circle and 90 degree sector. This is shown by figure 2.

## **5.8.3** Final Control Point

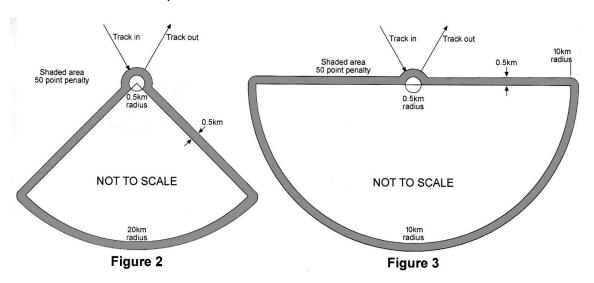
When a fixed course turnpoint is used as a final control point to ensure returning gliders have an acceptable straight-ahead landing option and when there is more than one class whose last task legs approach the same control point from opposite sides, a circle of up to 1km radius may be used instead of the standard 500m circle.

#### **5.8.4** Enhanced Option Turnpoint

A circle of 500m radius plus a 180 degree sector of radius 10 kilometres opposite the bisector of the inbound and outbound direct tracks. There are Penalty areas of a further

500m surrounding the circle and 180 degree sector. This is shown by figure 3. This turnpoint type may be used either exclusively or mixed with normal Fixed Course Turnpoints. It should only be used when the angle made between the inbound and outbound legs is less than 90 degrees.

The purpose of this type of Turnpoint is for it to be used on showery days where there is some doubt as to whether it will be possible to fly safely into the 0.5 km radius of the TP as is usual for Fixed Course Turnpoints.



## **5.8.5** Distance Handicapped Turnpoint.

A circle whose radius depends on the speed index of the glider and is determined using software written for the purpose and approved for use in rated competitions by the BGA, plus either a 90 degree sector of radius 20 kilometres or a 180 degree sector of radius 10km opposite the bisector of the inbound and outbound direct tracks. There are Penalty areas of a further 500m surrounding the circle and the 90 or 180 degree sectors. This is shown by Figures 2 and 3 with variable radius set at 0.5km.

#### 5.8.6 Assigned Area Definition.

A circle of set radius from a defined point or, a sector between specified radials from a defined point with a maximum and optional minimum distance. A 500m. Penalty Zone surrounds the Area. As this may not be recognised by the scoring programs, pilots believing they have rounded and given 'No Control' should apply to the Scorer for a manual assessment.

## 5.9 FINISHING

#### **5.9.1** Publication of Finish Type.

The Organisation shall specify in the Local Rules the type of finish being used together with the flight patterns to be followed after crossing the line.

#### 5.9.2 Finish Line

#### 5.9.2.1 Finish Line Definition

A line of defined length and direction, orientated from between 0-30 degrees to the perpendicular of the inbound track line and situated such that gliders can safely land directly beyond it without turning.

## 5.9.2.2 Position of the Finish Line

Positioning of the finish line and inbound track to it should take into account any potential conflict with any person, vehicle or structure on the approach to and around the finish line and should normally be placed near the runway threshold to maximise the safe landing area beyond.

## 5.9.2.3 Direct Landing Option

A viable direct landing option must be available to allow finishers to land ahead without turning after crossing the line. A Control point should be utilised as necessary to facilitate this.

#### 5.9.3 Finish Ring

#### 5.9.3.1 Finish Ring Definition.

A ring of specified radius (minimum radius 3km) around the finish point that must encompass the contest site and the landing circuits. The final leg distance is measured from the previous turnpoint to the edge of the finish ring.

## 5.9.3.2 Finish Ring Minimum Altitude

When a Finish Ring is specified, a finish altitude (minimum 300ft above airfield reference point) should be set to allow a safe minimum height landing approach after crossing the ring taking into full consideration the distance to the landing threshold, the performance of the lowest performance glider in the task group, terrain, required circuit pattern, obstructions and expected prevailing wind, pressure tendency, likely turbulence and the penalty height of 50ft – consideration should be given to varying both the minimum crossing altitude and ring radius on a daily basis where conditions determine advisability.

Competitors crossing the finish ring below the minimum specified altitude shall be penalised. Note that, for verification purposes, take-off pressure level will be used as the datum.

## 5.9.4 Safety and airmanship at finish.

Competitors shall be reminded in the local rules that all pilots must be aware of and fly within the requirements the law, namely the UK implementation of SERA (Standardised European Rules of the Air) and its associated UK exceptions regarding low-flying and reckless or negligent endangerment of any person or property. To meet this requirement, regardless of the position of the finish, all approaches towards the airfield should prescribe a predominantly descending profile (other than to go-around where necessary), the landing area should be in the pilot's sight, and the airfield boundary must be crossed at a height which cannot endanger persons (seen or unseen), vessels or property.

#### **5.9.5** Control.

#### 5.9.5.1 Control at a Finish Line

Given by the glider crossing the line under its own momentum, in the correct direction; . Gliders landing within the declared boundary of the airfield having failed to correctly finish will be deemed to have finished 5 minutes after they come to rest.

## 5.9.5.2 Control at a Finish Ring

Given by the glider entering the finish ring. Note that entering the ring more than 50 feet below the minimum finish height will result in loss of all speed points, but control is still given, meaning that the glider is counted as having finished for other scoring purposes.

#### 5.10 AIRSPACE

## 5.10.1 Meaning of the term "Prohibited Airspace"

In these rules, the term "prohibited airspace" means any airspace prohibited for use by gliders in the competition and encompasses both regulated and unregulated prohibited airspace. Regulated prohibited airspace means airspace in which flight by gliders is prohibited by law. Unregulated prohibited airspace means airspace which is not prohibited by law but is prohibited either by these rules or by the competition organiser.

## 5.10.2 Pilots Responsibility for Prohibited Airspace Avoidance

To ensure competitive fairness, pilots who infringe either type of prohibited airspace at any time during the competition may incur penalties as set out in section 7.1. The pilot, however, remains solely responsible for their compliance with all the requirements of the law with regard to regulated airspace, regardless of whether a competition penalty is applied or not.

#### **5.10.3** Application of Airspace Penalties

If the flight recorder evidence shows a logged point within prohibited airspace prior to engine start or actual out-landing the specified penalties will be applied, irrespective of whether the flight performance gains a score or not. This is assessed using the procedure in 7.4.

#### **5.10.4** Prohibited Airspace

## 5.10.4.1 Prohibited Airspace Types

Gliders are prohibited from entering the following airspace types during competition: -

Class A

Class C

Class D – Mostly CTRs (Control Zones) and CTAs (Control Areas)

RMZs, TMZs and all airspace above FL100 unless exempted by provision of "Glider sector" that may be utilised without the need for a transponder or clearance from appropriate ATC.

Prohibited Areas (shown as such on the Aeronautical Chart)

Restricted Areas, except Note 2 areas that only apply to helicopters.

Danger Areas (as defined in the UKAIP) prefixed with an '\*' (subject to local bylaws) on the ICAO ½ million charts.

Any other specific areas, i.e. deemed active parachute sites, Temporary Restricted or Prohibited Areas and Temporary Danger Areas specified by the Organisation in text on the daily task sheets or in local rules.

For the purposes of applying penalties during the competition, such areas are as defined in the current UKAIP, unless the organisation has issued an official Competition Airspace File, in which case the Airspace File shall be regarded as definitive.

## **5.10.5** Air Traffic Zones (ATZs)

#### 5.10.5.1 Prohibition of ATZs

Directors may designate any ATZ as Prohibited Airspace taking account of the traffic levels expected at that site or its potential sensitivity.

Any such ATZ so designated shall be Prohibited Airspace during its published hours of activity, will be briefed as such and marked on the Task Sheet as an Additional Penalty zone.

#### 5.10.5.2 Routing of Task Tegs

In Fixed Course tasks, no task leg (IE the straight line joining the start reference point, each sequential turnpoint reference as defined in 5.8.1 and the finish reference point) may pass within the boundaries of any active ATZ, or area of Prohibited Airspace having its lower boundary at the surface. In Distance Handicapped Tasks, this requirement must also be met by the optimum track line of every handicap as indicated by the DHT setting software (View Bestpoints). Exceptionally, a task leg may be set through the relevant portion of an ATZ, or otherwise Prohibited Airspace, covered by an active block transit permission.

#### **5.10.6 Block Airspace Exemptions**

Flights within certain prohibited airspace may be permitted by a briefed block exemption obtained from the controlling authority by the contest organisation.

## **5.10.7** Landing Inside Prohibited Airspace with Permission

Penetration of prohibited airspace associated with an airfield may be made without incurring a penalty provided both of the following conditions are met:-

- The penetration was made in order to land or start the engine and that a landing or engine start was made promptly.
- The Director is satisfied that the penetration was made following the normal radio procedures for entering ATZs.

Notwithstanding the provisions of Rule 5.17.2, when this rule is invoked in order to avoid an airspace penalty, the Deemed Position of Outlanding shall be the point of first penetration of the airspace or the most advantageous Flight recorder logged point prior to penetration, if further.

## 5.10.8 Penetration of Airspace following land out

Following a land out and returning to the competition site (whether following relight or engine start) pilots may penetrate Class D, TMZs, RMZs, ATZs, and Danger areas without penalty provided that necessary permissions, or crossing service, are obtained.

## **5.11 ACCIDENTS & DAMAGE**

## **5.11.1** Accident Reporting.

Any accident or damage affecting the Airworthiness of a glider must be reported to the Director who is responsible for ensuring that the BGA reporting procedure is followed. All competing gliders must be available for inspection at the Director's request.

## **5.11.2** Repair.

A damaged glider may be repaired. The following items may be repaired by replacement: control surfaces, tailplane, airbrakes, flaps, canopy, undercarriage gear and doors, propeller, non-structural fairings, wing tips and winglets. Where damage occurs to wing outer panels, wing extensions or winglets, these may be substituted with stubs or lower span extension parts provided that at all times the glider is flown within its C of A and at the original handicap.

If the damage was no fault of the pilot, the whole glider or any part of it may be replaced with the consent of the Director. Landing damage is normally assumed to be the fault of the pilot.

#### 5.11.3 Collision.

Gliders involved in an airborne collision, however minor, will for scoring purposes be deemed to have out-landed at the point of the collision.

## **5.12 COMMUNICATIONS**

#### **5.12.1** Radio

## 5.12.1.1 Permitted use of Radio

The use of radio in competitions is principally for the communication of safety messages and official competition information. The following conditions apply to the use of radio:

- Pilots may use radio to exchange essential safety information with their crews.
- Pilots may use radio to communicate with other pilots taking part in the same competition.
- Pilots may use radio to exchange competition and safety information with the organisers.
- Pilots may use radio to communicate with air traffic services as prescribed in 5.12.1.3.
- Communications between a pilot (or P2) and any ground station or any other aircraft
  not in the act of competing in the same class (as defined in 5.13.1) that could result in
  competitive advantage to the pilot, including but not limited to any reporting on the
  position, altitude, climb-rate etc. of other gliders, is prohibited.

#### 5.12.1.2 Permitted Channels

Except as permitted by section 5.12.1.3, voice transmissions must only be made on the radio channels specified in this section and as set out in the Local Procedures.

Pilots may use the standard cross-country situational awareness channels (130.105 and 130.130) for on-task situational awareness, pilot chat and team-flying conversations; pilot chat and team-flying conversation is only permitted on these channels and is excluded from all other channels.

Pilots may additionally use the cloud flying channel (130.535) for situational awareness whilst cloud flying; this channel must not be used for any purpose other than cloud flying safety communications.

The competition organisers shall specify channels for the following purposes in the Local Procedures:

- Competition Control (start/finish control, competition announcements, start area safety) on 129.890 or 130.405.
- Airfield Operations (launching and relight coordination may also be used for finish control) 129.980, 118.685 or the airfield's own frequency, if it has one.

## 5.12.1.3 Use of Other Channels

Voice transmissions may be made on other channels to contact air traffic services or airfield operators for reasons of safety and to aid situational awareness only. Valid communications with these ground stations include obtaining permission to enter an ATZ, to land at an airfield, to make courtesy position calls when near to sensitive airspace boundaries, or in the event of an emergency.

## 5.12.1.4 Listening Watch

To improve safety, competitors should maintain a listening watch on the specified Competition Control channel, especially during the launch, prior to starting, whilst finishing and landing.

#### 5.12.2 Information

#### 5.12.2.1 Passing Information

The wilful reception of information by pilots (including P2 in multi-seaters) while airborne, from the ground or from non-competing pilots, by radio or any other means, with the intention of gaining competitive advantage, is not permitted.

## 5.12.2.2 Data Transmission and Reception

Data transmission or reception initiated or made use of by the pilot (or P2 in multi-seaters) by any means is not permitted. This does not apply to automatic communication by anti-collision warning systems (e.g. Flarm, ADSB), one way safety locators (e.g. SPOT), or mobile devices that are switched on but not in use.

#### 5.13 EXTERNAL AIDS

## **5.13.1** Help in Finding Lift

Help in finding lift by any other aircraft not in the act of competing in the same class, is prohibited.

#### **5.14 DOPING**

The British Gliding Association recognises and adopts the UK Anti-Doping Rules published by UK Anti-Doping (or its successor), as amended from time to time. Such rules take effect and will be construed as rules of the British Gliding Association. The British Gliding Association also recognises and adopts the Fédération Aéronautique Internationale (FAI) Anti-Doping Rules and Procedures version 2.1 (or any subsequent amendments). If there is a conflict between the rules of the FAI and the UK Anti-Doping Rules, the rules of the FAI will prevail.

## Additional guidance notes for competitors

Any substance likely to enhance performance or create an unfair advantage, whether taken intentionally or unintentionally, is forbidden in all gliding competitions. Many prescribed or over-the-counter drugs may also be prohibited.

Some drugs prescribed for a medical condition, and whose use is necessary for safety reasons, may be permitted. It is the sole responsibility of the pilot to ensure that any drugs prescribed to them or purchased by them are permitted or that a TUE (therapeutic use exemption) is obtained to cover their use.

A very small number of top international competitors may be required to take part in Out-of-Competition Testing. They will be informed and advised about this separately.

All relevant information on FAI Anti-Doping Procedures including Applications for TUE and List of Prohibited Substances may be found by using the following web link – <a href="https://www.fai.org/anti-doping">https://www.fai.org/anti-doping</a>

#### 5.15 CLOUD FLYING

## **5.15.1 Cloud Flying Radio**

Gliders must not enter cloud unless equipped with a serviceable radio operating on the glider cloud flying frequency of 130.535 MHz

#### **5.15.2** Before Entering Cloud

Shortly before entering, the pilot must announce their intention on this frequency, and give the following:

- Call sign.
- Altitude above sea level and position with approximate bearing and distance from a
  feature on the 1:500,000 map. In addition, the pilot should give the exact bearing and
  distance to their next task Turnpoint in degrees true and kilometres.

Where gliders are approaching or have recently rounded a Turnpoint, the call should be relative to the nearest task Turnpoint.

#### 5.15.3 While in Cloud

If other gliders are present in the same cloud, height information must be exchanged at regular intervals and a minimum vertical separation of at least 500 feet must be maintained, the higher glider having priority.

#### 5.15.4 On leaving Cloud

The pilot must call immediately 'clear of cloud'.

## **5.15.5 Right of Way**

Transiting gliders must give way to circling gliders.

#### 5.15.6 Near a Start Zone or Base Airfield

Pilots must remain clear of cloud and in full visibility of all gliders in the same thermal when within 10km of the base airfield reference point or any start zone reference point.

# **5.15.7** No Cloud Flying Prior to Start

Additionally, pilots must not enter cloud prior to starting even if more than 10km from the start zone reference point of the task group – see start rule 5.6.5

Failure to comply with the above will be considered dangerous or hazardous flying.

# **5.16 AIRMANSHIP & SAFETY**

#### **5.16.1** Parachutes

On every competition flight each glider occupant must wear a parachute unless the glider is equipped with an approved airframe recovery parachute system.

## **5.16.2** Direction of Thermal Turn

A glider joining another in a thermal must circle in the same direction.

# **5.16.3** Illness or Disability

Pilots must not fly if ill or suffering from any disability that might endanger the safety of themselves or others.

# 5.16.4 Jettisoning Water Ballast

Water ballast must not be jettisoned in a manner likely to be detrimental to other competitors.

#### 5.16.5 Flarm and Strobes

The Competitions Committee recommend the use of Flarm (or compatible proximity warning device) and forward facing strobes

# **5.17 OUTLANDING**

## **5.17.1** 3rd Party Complaints.

These must all be promptly reported to the Director.

## 5.17.2 Deemed Position of Outlanding.

For calculation of scoring distance, unless rule 5.10.7 is invoked, the glider will be deemed to have landed at the most favourable of the following: –

- The place the glider comes to rest under its own momentum, except that if the landing is on an airfield then the published reference point will apply, or
- The most advantageous Flight Recorder logged point prior to landing or operation of engine, or
- The next Turnpoint, if it is contained within the boundary of the airfield of landing.

# **5.17.3 Outlanding Reporting**

Pilots having landed out must contact Contest Control within 1 hour from landing advising Turning points claimed and landing position. Further prompt communication is required advising when crew and pilot have met up.

## **5.18 SECOND ATTEMPT**

If after any flight from which a score can be claimed the pilot wishes to make a further attempt, a valid start must be made. This invalidates any previous attempts that day.

#### 5.19 PROTESTS

The following procedure will be used to make, consider, and decide protests. At any point in the procedure the organisation may consult the Competitions Committee's appointed referee for advice on interpretation of the rules.

# **5.19.1 Stage 1 - Contesting a Decision**

A registered competitor wishing to contest a decision must, in the first instance, do so to the Director either verbally, or in writing, stating clearly why they think that a decision or penalty is incorrect and what different result, if any, they consider would be more appropriate. The Director will give consideration to the pilot's argument and explain fully the reasons for upholding, changing, or rescinding the original decision or penalty. Contesting a decision concerning scores must be made within 24 hours of the publication of unofficial results for the relevant day.

# **5.19.2** Stage 2 - Making a Formal Protest

If not satisfied at stage 1, the registered competitor may, within a further 24 hours, make a formal protest in writing to the Director for consideration by the Stewards together with payment of a protest fee equal to the charge for an aero-tow at that competition. The written protest must state clearly the grounds for appeal and present all the evidence that the pilot wishes to be considered. It is not required by these rules that the pilot be given an opportunity to present their evidence to the stewards in person (although the parties may agree to this) so the protest, and evidence presented, must be complete and sufficient to allow proper deliberation and a decision to be made.

The Stewards will decide upon a majority vote to either overturn or confirm the Director's decision at stage 1. A written explanation of the decision will be provided by the Stewards and made available to the pilot. If the protest is upheld the protest fee will be returned; otherwise it will be paid to the charity of the pilot's choice. There is no further appeal beyond stage 2.

## 5.20 CONTEST MINIMA

Any day on which at least one glider scores is a contest day, and any competition with at least one contest day is a valid contest.

## **5.21 PENALTIES**

# **5.21.1** List of Approved Penalties

See 7.1 for a comprehensive list of approved penalties.

## **5.21.2** Disqualification

For scoring purposes disqualified competitors will be deemed not to have flown on the day(s).

# **5.21.3** Application of Penalties

All other penalties are applied after scores have been calculated and, except for Dangerous/Hazardous flying infringements and cheating and falsifying documents penalties, will not result in a negative score.

# **5.22 ENGINE EQUIPPED GLIDERS**

Engine equipped gliders must comply with the following procedures:-

# **5.22.1 Self-Launching.**

Self-launching gliders must follow the same general climb out pattern as aero towed gliders and shut down their engine in the designated release area as designated by the organisation in a published airspace file at or below the designated release height.

# **5.22.2 Self-Sustainer Engine Test**

The engine test run will be performed after release from tow and completed no less than five minutes prior to making a start, when directed by the Competition Organisation to test engine run detection and / or as required by pilots to establish engine serviceability.

The maximum engine test run duration is 60 seconds for all propulsion types other than jet turbines where, because of the slow start, ramp up, and shut down procedures, the maximum test duration is 100 seconds.

Pilots are required to do this in a safe manner well clear of other competitors.

# **5.22.3 Failed engine test**

A further engine test using rule 5.22.2 may be attempted if the first running fails to operate or shut down correctly.

# 5.22.4 Use of engine for relighting

Dependent upon competition site parameters, the organisation may elect to allow engine enabled self-relights. The following procedures will apply:

- **5.22.4.1** For the purpose of a self-relight, engines may be started only within the active engine starting areas as designated by the organisation in a published airspace file
- **5.22.4.2** Engine must be shut down below the designated release height within the active release areas as designated by the organisation in a published airspace file
- **5.22.4.3** Engines may be started up to three times before landing for a normal relight thereby permitting repeat use of these procedures. These three starts include launching for self-launchers, testing according to rules 5.22.2 and 5.22.3, and a maximum of two self-relights.

# **5.22.5 Further Engine Operation.**

Any other engine operation prior to completion of the task ends competition flying for that day (No penalty will be applied if the engine is operated after completion of the task). Self-retrieving gliders must return directly to the competition site without delay to minimize the effect on pilots still competing.

# **5.23 CALCULATION OF SCORES**

## **5.23.1** The 1000 Point Scoring Principle

Scores are calculated each day by awarding the best performer 1,000 points, subject to any devaluation factor, and calculating other competitors' points by comparing their performance to that of the Day Winner. The overall scores are the sum of all of the day scores.

#### **5.23.2 Scoring Parameters & Formulae**

See 7.2 for full details of the scoring calculation system.

# 5.23.3 Glider Speed Index (Handicap).

A competitor's performance is adjusted during the scoring process by the gliders Speed Index. Most gliders and their speed indices are included in the list in 7.3. In Open, 18M, 15M and Standard Class Nationals, a Speed Index of 100 is used for all gliders.

## **5.23.4** Additional Performance Enhancements

Additional performance enhancements to the standard glider will attract the following increments to the speed index: –

Span	1 per ½ metre or part thereof
Winglets	0.5, unless part of the original design or marked with a (w) on the list, the only exception to this being gliders with a span of 21 metres or more prior to modification.
Wing Root Fairings	0.5, unless the modification is manufacturer specified on a later derivative of the same glider design enjoying the same handicap.
Any other performance- enhancing modifications, apart from turbulator tape; vortex generators; taping; sealing and masking of gaps; end plates to ailerons and flaps; bug-wipers.	A speed index adjustment may be applied if deemed necessary by the BGA Competitions Committee. Such adjustment to come into force at the next publication of the BGA handicap list.

## 5.23.5 Windicapping.

With the exception of Distance Handicapped tasks, an adjustment is made to the distance of each task leg flown, depending on the wind strength (in knots) and direction. For Preliminary scores they may be estimated, but for Unofficial and Final scores they must be deduced by assessing the thermal drift from a representative cross section of competitors' Flight Recorder traces.

In Distance Handicapped Tasks, windicapping is applied using a forecast of the competition wind and is applied before the task is flown by influencing the barrel-sizes applied to the various speed indices.

The wind strength is adjusted by dividing it by a contest dependent wind division factor (see 7.2.2), but shall not exceed a value of 30.

#### 5.23.6 Distances.

In all calculations, the Start Point, Finish Point, and Fixed Course Turnpoints are the published Latitude and Longitude coordinates. For Assigned Area Tasks, the Turn-points are the logged point in each Assigned Area that results in the greatest overall distance.

For Fixed Course tasks, the achieved distance of an uncompleted leg is the length of that leg less the distance between the Out-landing Point and the next Turnpoint, or Goal.

For Assigned Area tasks, the achieved distance of an uncompleted leg is computed as follows: -

- Mark the nearest point on the boundary of the next area from the Out-landing point.
- Use this point to find the scoring point in the previous area that will maximize task distance and record the distance between them.
- This distance, minus the distance between the Out-landing point and the next Area, is the length of the uncompleted leg.

If an uncompleted last leg is less than zero its effect is ignored.

# **5.23.7 Scoring Distance Handicap Tasks.**

These task types are not yet fully supported by the SeeYou scoring software, but will be scored as for Fixed Course tasks. The tasks are designed to give all finishers the same windicapped distance. However, using the Fixed Course rules for measuring distances for scoring outlandings, and for assessing whether or not a glider has exceeded the qualifying distance, can potentially lead to some inconsistencies. For all gliders, the distance awarded for any completed leg will be the declared task leg distance (unhandicapped and not wind adjusted) between the turnpoint coordinates. Distances for uncompleted legs will be calculated as for Fixed Course Tasks, regardless of the turnpoint size being used by any glider. This will mean that any two gliders landing at the same point will be given the same distance for that leg, regardless of handicap and regardless of how much distance advantage may, or may not have been gained before landing.

# **5.24 PUBLICATION OF SCORES.**

Preliminary day scores should be published as soon as possible. Day score sheets must contain each competitor's position, day points, name, glider type, glider identity, start time, finish/elapsed time, speed/distance flown and, for handicapped competitions, glider handicap. Unofficial day scores, including description of any penalties or warnings, should be available at the first task briefing on the following day. If there are no protests or requirements for additional evidence these scores become final 24 hours after publication. Otherwise, scores become final 24 hours after the determination of any protest or alteration in the light of additional evidence, and publication of amended scores. Final day scores should be published as soon as practicable and, if not published on a web site, duplicated so that each pilot can retain a copy. Score sheets should be annotated as either Preliminary, Unofficial or Final with Unofficial score sheets carrying the time and date of publication so that protest period may be referenced.

Copies of the last day scores must be available within 5 working days (Organisers should consider using the BGA's or their own Web site) and the final competition scores must be distributed to competitors within 10 days from the end of the competition. If these are subject to protests and amendments, the final results or amendments thereto, must likewise be distributed to competitors within a further 12 days, i.e. within 22 days from the end of the competition.

All hors-concours pilots and any pilots who are not of British nationality, nor principally resident in the UK and subject to the payment of British taxes, must be annotated on entry and result sheet.

# **5.25 DIRECTORS REPORT**

Within 4 weeks of the end of the competition, the Director shall submit a written report to the Chair of the BGA Competitions and Awards Committee. The report should follow the format set out in section 4.8 of the BGA Competition Organisers' Guide.

# **6 RATING LIST & TEAM SELECTION**

## 6.1 RATING LIST.

The **Rating List** ranks pilots for entry into oversubscribed National competitions. It is calculated from performances in BGA rated competitions that comply with these rules and World and European Championships held during the previous twelve-month period ending September 30<sup>th</sup> together with devalued ratings from the previous year's list. Competition Rating.

This is derived by adjusting the **Base Rating** for the type of competition, from the following table, by the number and perceived quality of entrants. The **Base Rating** and **Standard Entry** for foreign competitions will be determined individually by the Competitions Committee based on their perceived individual merit.

Comp Rating = Base Rating + (No. of Competitors – Std Entry)  $\times \frac{1}{2}$  + Pundits  $\times 10$ , where Pundits = No. of competitors with current Rating Score greater than the Comp Base Rating. For non-UK competitions Pundits = zero.

Type of Competition	Base Rating	Std Entry
UK National Championships, except the Junior Nationals	1000	45
UK Regionals and Junior Nationals	750	15
World Championships except the Women's and Junior	1400	25
European Championships - except the Women's and Junior	1300	25
Other International Championships	1000	25

#### **6.1.1** Rating Score.

A competition winner receives a **Rating Score** equal to the **Competition Rating.** Other participants' **Rating Score** is calculated using the **Competition Rating**, their final position and their points score relative to the winner. All pilots receive a **Rating Score** for every competition entered during the twelve month period plus one calculated by deducting 250 from the previous year's highest **Rating Score**. Pilots' positions on the **Rating List** depend on their highest **Rating Scores**.

Rating Score = Comp Rating - 475 x (Pilot Position – 1) ÷ (No. of Competitors – 1)

- 475 x MIN((Winner's Points – Pilot's Points) ÷ (0.6 x Winner's Points), 1)

If Rating Score < minus 200 then Rating Score = minus 200

# **6.1.2** Rating of Team Entries.

Only the team member gaining the greatest proportion of the day winner's points, summed over the days they flew as registered pilot, receives a Rating Score based on the team's overall competition position and points. Rating Ties.

These are resolved in favour of the pilot with the highest percentage of the winner's points in their **Rating Score** competition.

# **6.2 INTERNATIONAL TEAM SELECTION**

The following criteria will be applied in the selection of internationals teams. The final decision on eligibility for selection will remain subject to the discretion of the BGA Executive.

## **6.2.1** Timing of International Team Selection.

Selection procedures are carried out at the end of the UK competition season prior to any International Championship and Pre-Worlds for all Northern Hemisphere competitions. For competitions in the Southern Hemisphere, the World Championship team selection is carried out prior to the Pre-World competition.

# 6.2.2 International Team Member Qualifications.

The Sporting Code requires that competitors in International Championships meet all the following criteria: –

- Satisfy the FAI Sporting Code Annex A Section 3.2 regarding citizenship and representation.
- 250 total hours pilot in command, of which at least 100 hours is in sailplanes.
- Hold a current FAI Sporting Licence.
- Have competed in two National Championships unless a Gold badge is held not applicable for Junior Nationals.
- Junior competitors must not have a 25th birthday prior to the 1st January in the year that the Championship commences.

In addition, the BGA may apply additional requirements, depending on the competition concerned. See the individual competition paragraphs below for details.

# 6.2.3 World Championships (unrestricted) Team Selection

## 6.2.3.1 Open, 18 metre, 15 metre, Standard and Club Class.

Any World Champion from the previous event in class is selected automatically. Up to two further competitors are selected by vote for each class from a voting panel, all being eligible for selection. The voting panels consist of all pilots who have achieved a placing in the top 50% rounded to the nearest place, of the appropriate preceding two UK National Championships in class plus any other pilots in the class team squad. Where this procedure produces a voting pool of eligible pilots of less than 20 then further pilots of lower placings from both years are added in percentage placing order to enlarge the voting pool to 20 where possible.

# 6.2.3.2 20m. Two Seat Class.

Any World Champion from the previous event in class is selected automatically. If there is no current World Champion in class, one lead pilot is selected by vote from a voting panel, all being eligible for selection. The voting panel is to consist of all pilots who have achieved a placing in the top 50% rounded to the nearest place, of the preceding two UK National

Championships in class plus any other pilots in the class team squad. The selected lead pilot may choose their co-pilot and must confirm availability of a competitive 20m. flapped glider prior to a team place being granted as this is a mandatory requirement.

#### 6.2.3.3 13.5m. Class

This class is not currently supported.

# 6.2.3.4 Class Team Squad.

After the World Championship is completed, a new class team squad is formed consisting of the selected participants in class of the just completed unrestricted World Championship plus those selected participants from the previous unrestricted World Championship in class. The squad is then subsequently enlarged to include the top three placed pilots in the two Nationals in class held prior to the team vote as well as participants in class that achieve a top 40% position rounded to the nearest place in the European Championship prior to the team vote. Pilots are deleted from the squad prior to voting if they have not achieved a top 50% placing rounded to the nearest place in at least one of the last three Nationals in class preceding the vote. The identification of class squad members is intended to aid BGA marketing projects and to help target pre-event training opportunities.

#### 6.2.3.5 Pilot Options

All pilots eligible for entry in more than one class may choose which class they wish to compete in.

Priority for choice of class is determined by vote order. In all cases where there is an option, pilots must make their preferences known within two weeks of notification of the vote result.

## **6.2.4** European Championships

# 6.2.4.1 Open, 18 metre, 15 metre, Standard, Club Class and 20metre Multi-Seat Class

Competitors may only compete in the class from which they qualify, with priority for the team of up to two per class (or three if there is a current European Champion in class) determined by the criteria below in order:-

- Current European Champion in class
- Current National Champion (applicable only if National Championship has two or more competition days)
- Current European gold, silver and bronze medal holders
- Current World Championship gold, silver and bronze medal holders
- Current National second and third place holders (applicable only if National Championship has two or more competition days)
- Next most recent National first, second and third place finishers (applicable only if National Championship has two or more competition days)
- Top 6 priority order in most recent World team vote
- Optionally, additional pilot(s) by the invitation of the Competitions Committee if the above criteria do not result in a full team.

#### 6.2.4.2 13.5m Class

This class is not currently supported.

# 6.2.4.3 Pilot Options

All other pilots eligible for entry in more than one class may choose which class they wish to compete in.

In all cases where there is an option, pilots must make their preferences known within two weeks of notification of "eligibility for entry".

# 6.2.5 Junior World Championships.

# 6.2.5.1 Junior Team Squad.

A squad of nominally 8 pilots will be chosen before the 1<sup>st</sup> March following the previous JWGC by current British Team Coaches with reference to BGA Competition and Awards sub-committee and Team Manager. Pilots may exceptionally be added or removed as found necessary at the discretion of the coaching team.

# 6.2.5.2 Junior Team selection.

A team of 4 pilots will be chosen by current British Team Coaches with reference to BGA Competition and Awards sub-committee and Team manager no less than 6 months before the event and normally at the end of season prior to event.

Final selection will be based upon:-

- Performance in all competitions including Regional, National and International Championships (minimum requirement is to have flown at least one National Championship or suitably similar standard of competition other than the Junior Nationals).
- Commitment to team training and development initiatives.
- Commitment to promoting the Junior team within the wider gliding community.
- Commitment to the search for individual or preferably team sponsors.
- Access to a competitive glider that can be shipped to competition site in due time its instrumentation and condition will additionally be taken into consideration.

## 6.2.6 Women's World Championships.

Up to 6 pilots will be selected to represent the UK in the Women's World Championships with a maximum of 3 pilots per class. To be eligible for selection pilots must have fully participated in a UK Nationals for the specific class they intend to compete in within the last two years. This period will be extended to 3 years if participation in the previous WWGC (including practice week) overlapped with a qualifying National competition in class. Pilots will be offered a place using the following criteria and, within each, in points order (highest to lowest):-

1st. Medal Winners from the preceding Women's World Championship will be offered a place for the class in which the medal was achieved.

2nd. Then pilots that have achieved 550 points or higher in a UK Nationals (excluding Junior Nationals) will be offered a place for the class in which points were earned.

3rd. Then pilots that have achieved 550 points or higher in either a UK Nationals (excluding Junior Nationals) or an International Championship (Women's World, unrestricted World or European Championship) in any class will be offered a place for the class of their choice.

4th. Finally, pilots that have achieved 550 points or higher in Junior Nationals, Junior Internationals, or Rated Regionals. If places are available, pilots in this group will first be offered a place in the class in which their points were earned.

Points to be used for qualification must be gained within the two qualifying competition years prior to selection, even if the qualifying period is extended due to WWGC and UK Nationals date overlap.

## **6.2.7** Voting System.

This appears convoluted but minimises the effect of tactical voting. For the result to be accepted, at least 50% of the voting panel must return a valid vote.

## **6.2.7.1** *Valid vote*

A Valid Vote is one where all available places on the ballot paper have been completed with different eligible pilot names which do not include that of the voter.

# 6.2.7.2 Procedure.

**Step 1.** Delete from all ballot papers the name of anyone who has not submitted a valid vote and count the total number of valid ballot papers.

**Step 2.** Delete any pilot already selected from all ballot papers. Make separate piles of ballot papers, one for each pilot who now heads the list on any of them. Count the papers in each pile and calculate that pile's percentage of the total.

**Step 3.** Action the following options as applicable until the required list of pilots is achieved.

**Option 1.** Any pilot heading the list on more than 50% of ballot papers is selected. Go back to **Step 2.** 

**Option 2.** If no pilot heads more than 50% of ballot papers but there are two clear leaders, the one placed above the other on the majority of ballot papers is selected. Go back to **Step 2**.

Detailed procedure: Identify the two pilots with the largest piles from Step 2. Count the number of times each of these two pilots appears above the other on all of the ballot papers. The pilot who is higher placed than the other more often is selected.

If this process results in a tie, go to Tie-Breaking

**Option 3.** If ties result in more than two clear leaders, all ballot papers are re-allocated between the tied pilots in favour of the highest placed on each list. The pilot with the fewest votes is eliminated. This process is repeated until only one of the previously tied pilots remains. If this results in just a single pilot remaining, that pilot is selected. If, as most likely there are two pilots remaining because there was one untied pilot at the outset, repeat the process to select one. Go to **Step 2.** If this process results in a tie still remaining, go to **Tie-Breaking**.

**Tie-Breaking.** If **Option 2** produces a tie or **Option 3** fails to resolve one, then the pilot placed higher on the current BGA Rating List predominates.

# 7 APPENDICES

# 7.1 LIST OF APPROVED PENALTIES

Type of offence	First offence	Repeat Offence on subsequent day	Repeat offence on further subsequent day
Wrong, late or missing inform	nation		
Changing FR without advising the Organisers	10 points	20 points	25 points
FR fix interval set greater than required	Warning	10 points	25 points
Late delivery of FR or other documents > 60 minutes	Warning	10 points	25 points
Late delivery of back-up FR or documents >60 minutes from receipt of request	Warning	10 points	25 points
Missing FR evidence – exceeding 60 seconds, where it cannot be reasonably established that airspace was not infringed, or engine not operated	Out-landed at that point	Out-landed at that point	Out-landed at that point
Incorrect start and rounding	of TP areas		
Cloud flying prior to start	100 points	Day Disqualification – minimum 500 pts.*	Disqualification*
Starting from within Horizontal Penalty Area	50 points	50 points	50 points
Starting from within Vertical Penalty Volume	4 points/10ft or part	4points/10ft or part	4 points/10ft or part
Exceeding maximum start height in the 2 minutes prior to Starting	1 point /10ft. or part, above start height	1 point /10ft. or part, above start height	1 point /10ft. or part, above start height
Controlled only within a Turnpoint Penalty Area	50 points	50 points	50 points
Dangerous or hazardous flyir	ng		•
Cloud flying – incorrect radio protocol	Warning	100 points	Day Disqualification - minimum 500 pts.*
Cloud flying – within 10km. of any start zone or base airfield reference point.	100 points	Day Disqualification – minimum 500 pts.*	Disqualification*
Single or multiple penetrations of prohibited airspace greater than 100' vertically.	500 points	Day Disqualification – minimum 500 pts.*	Disqualification*

Type of offence	First offence	Repeat Offence on subsequent day	Repeat offence on further subsequent day
Single or multiple consecutive penetrations of an individual volume of prohibited airspace NOT greater than 100' vertically.		the number of days on which day 1, 100 on day 2, 150 on	
Finish and subsequent flying-incorrect landing pattern.	Warning	100 points	Day Disqualification – minimum 500 pts.
Approach to finish line or approach to landing after crossing finish ring – hazardous or prohibited manoeuvre including:-	100 points	Day Disqualification – minimum 500 pts.*	Disqualification*
1) flight below 30' AGL outside the declared airfield perimeter. FR evidence from 500' above airfield elevation will be used to verify any deliberate planning of energy management that leads to flight below the minimum limit. Such proven cases will not be exempt from penalty.			
NB Penalty shall not be applied if flight below 30ft outside the airfield perimeter has been due to an emergency straight-in approach where it is not possible to maintain safe airspeed to maintain the minimum ground clearance or in the event of an out-landing.			
2) any approach that does not describe a predominantly descending flight path other than to convert from a straight in approach to a go around or for reasons of flight safety.			
3) Flight below 30' inside the airfield perimeter except when on landing approach			
Hazardous/dangerous flying recommended by the Director <u>and</u> PSC for penalty, if not covered by other penalty	100 points	Day Disqualification- Minimum 500 points*	Disqualification*

Type of offence	First offence	Repeat Offence on subsequent day	Repeat offence on further subsequent day
Cheating or falsifying docume	ents		
Falsifying electronic files or paper	Disqualification		
documents			
Attempt to obtain help for finding lift	Day Disqualification –	Disqualification*	
from non-competing glider or aircraft	minimum 500 pts.		
Use of any non-approved radio frequency for communication of any sort whilst airborne except those expressly permitted in these Rules, or in emergency	250 points	Day Disqualification – Minimum 500points*	Disqualification*
Prohibited content voice or data transmission or wilful reception	250 points	Day Disqualification – Minimum 500points*	Disqualification*
Other violations		1	
Unsporting Behaviour	Dir	ector's Discretion, see 2.1.8	
Glider all up weight in excess of class	Weight over limit in	Weight over limit in Kg. x	Weight over limit
and/or C of A limit	Kg x 2 points	2 points x no. of	in Kg. x 2 points
		occurrences	x no. of
			occurrences
Positive doping control	see FAI policy	see FAI policy	see FAI policy
Excess wingspan when measured	1 point per cm.	1 point per cm.	1 point per cm.
with wings supported to match unloaded shape with 0.3cm.			
allowance. The excess is rounded to			
the nearest cm.			
Self-sustainer engine test > 60	1point per second	1 point per second	1 point per
seconds clean running, or 100	Tpoint por occorra	T point per decend	second
seconds if a jet.			
Late completion of engine test less	Warning	25 points	Day
than 5 minutes prior to starting			Disqualification
Exceeding the designated release	1 point per two feet, or	part thereof, in excess of the	designated
height at point of engine shut-down	release height.		
by more than 100ft (see para 5.22.1)			
Exceeding Declaration Weight in	Weight over limit in Ka	x 2 points x no of competition	n days elansed
Club Class	_	on / last weighing (if less) inc	
	discovery.	,gg (,	
Failure to comply with specific single	25 points	100 points	Day
procedure not covered elsewhere.			Disqualification
			– minimum 500
			pts.*
Crossing Finish Ring up to 50ft below	1 point /1ft subject to li	mit of pilot's speed points	
	i e		
specified minimum altitude			
specified minimum altitude  Crossing Finish Ring in excess of	Loss of all speed points	S	

<sup>\* &</sup>quot;Day Disqualification" means the loss of all day points, with a minimum penalty of 500 points. If the competitor has scored fewer than 500 points, an additional penalty equal to the difference shall be applied.

<sup>\* &</sup>quot;Disqualification" means the loss of all points awarded to date in the contest by the application of an equivalent penalty on the day, followed by compulsory withdrawal with effect from the following day.

# 7.2 SCORING PARAMETERS & FORMULAE.

The following table lists and explains the key parameters and formulae used in calculating the scores; Table 7.2.1 explains the calculation of the Qualifying Distance and 7.2.2 lists the contest dependant variables used in scoring. The following table not only defines each variable used in scoring, but also follows the scoring process flow.

Distance Handicapped Tasks will use the same rules and formulae as Fixed Course Tasks, but the effects of all speed indices and wind adjustment will be ignored. This is done by the UK scoring script using the appropriate option.

Pa	ırameter	Description
W	Contest Wind	<b>W</b> = Wind strength in knots divided by contest wind division factor from table 7.2.2
		If result exceeds 30 then <b>W = 30.</b> See Rule 5.23.5
Н	Glider Speed Index (Handicap)	See Rule 5.23.3
Hi	Leg Handicap Increment	For each leg:- $Hi = 100 * (\sqrt{(1 - (W \div 46)^2 \sin^2 \theta)} - (1 + (W \div 46) \cos \theta))$ Where '\theta' is the non-reflex relative angle between the track
		and the direction the wind is coming from.
Н	Leg Wind Adjusted Speed Index	For each leg:-  HI = H + Hi If result < 25, then HI = 25  For each the leg, the actual distance is adjusted by multiplying by 100 and dividing by HI
Dm	Marking Distance	The total handicapped distance flown by a glider. The sum of ((Actual distance flown along each leg * 100) ÷ HI).
Dmax	Greatest Marking Distance	Greatest marking distance flown by any glider
Dw	Winner's Marking Distance	For Fixed Course Tasks only. The fastest finisher's marking distance or, if no finishers, the greatest marking distance flown by any glider.

ı	Parameter	Description
Tg	Time taken to complete course	Glider's Finish time minus Start time in hours
Tm	AAT Minimum Task Time	In hours
Y	Qualifying Distance	For Fixed Course <b>Y</b> is an appropriate percentage of either the un-handicapped task length or windicapped task length depending on contest type, as shown in table 7.2.1
		For AATs, <b>Y</b> is calculated by multiplying the Minimum Task Time in hours by a contest dependent factor as shown in table 7.2.1  Minimum and maximum values for <b>Y</b> are also listed in table 7.2.1
Sh	Finisher's speed	For Fixed Course tasks, a finisher's speed is produced by dividing the Marking Distance, <b>Dm</b> , by the time taken to complete the course <b>Tg</b> .  For AATs a finisher's speed is produced by dividing the Marking Distance, <b>Dm</b> , by the greater of  (a) the time taken to complete the course <b>Tg</b> (b) the Minimum Task Time <b>Tm</b> .
Vh	Fastest Finisher's speed	The greatest speed of all finishers.  N.B. In AATs the fastest finisher is not necessarily the winner.
N	Number of Participating Gliders	The number of gliders not withdrawn from the contest at the start of launching.  NB "withdrawn" means having given formal notice to the director of the intention to take no further part in the competition or, in the absence of such notice, having been deemed by the director to have withdrawn following reasonable steps being taken to contact the competitor.
NI	Number of Gliders launched	The number of participating gliders accepting at least one launch.

	Parameter	Description			
Ny	Number Past Y	The number of participating gliders for which <b>Dm</b> is greater than or equal to <b>Y</b>			
Nv	Number exceeding 2/3 <sup>rds</sup> Vh	The number of participating gliders that finish with a speed exceeding 2/3 <sup>rds</sup> fastest finisher's speed. i.e. for which <b>Sh</b> > 0-6667 * <b>Vh</b>			
Ff	Day Factor	The Day Factor <b>Ff</b> is calculated by dividing the number of gliders exceeding <b>Y</b> by the number of participating gliders and multiplying by 1·25, thus if 80% or more of the gliders pass Y, Ff will be 1. <b>Ff</b> = 1·25 * ( <b>Ny</b> ÷ <b>N</b> ) If result greater than 1, then <b>Ff</b> = 1			
D	Devaluation Distance	For Fixed course, <b>D</b> = <b>Dw</b> For AATs, <b>D</b> = <b>Dmax</b>			
Da	Devaluation Distance Adjustment	Da = 250 for Nationals, 0 for Regionals and Junior Nationals (see table 7.2.2)			
Т	Devaluation Time (for tasks with a finisher)	For Fixed course, <b>T</b> = winner's <b>Tg</b> For AATs, <b>T</b> = <b>Tm</b>			
Та	Devaluation Time Adjustment	Ta = 200 for Nationals, 0 for Regionals and Junior Nationals(see table 7.2.2)			
F	Day Points	F is the minimum value from  a) Ff * 1000 b) Ff * ((5 * D) – Da) c) Ff * ((400 * T) – Ta) (for tasks with a finisher) d) 0 if task distance is less than contest minimum task length (see table 7.2.2)			

	Parameter	Description
Fv	Day Speed Points	The proportion of Day Points awarded for speed depends on the proportion of gliders that complete the course in excess of 2/3 <sup>rds</sup> of the fastest finisher's speed, to the number of gliders launched.
		It falls linearly from 66·67%, when all gliders complete at sufficient speed, to zero with no finishers.  Fv = 0-6667 * F * (Nv ÷ NI)
Fd	Day Distance Points	Fd = F - Fv
Ps	Glider Speed Points	The speed points gained are proportional to the amount by which a finisher's speed exceeds 2/3 <sup>rds</sup> of the fastest speed.
		Ps = 3 * Fv * ((Sh ÷ Vh) - 0-6667)
		If the result is less than zero then Ps = 0

Р	arameter	Description
Pd	Glider Distance Points	For Fixed Course and Distance Handicapped Tasks:  All finishers receive the same distance points as the winner so in this case:
		Pd = Fd
		Non-finishers receive the Day Distance Points multiplied by the ratio of their marking distance to the greatest marking distance:
		Pd = Fd * (Dm÷Dmax)
		For AATs
		Finishers exceeding 2/3 <sup>rds</sup> of the greatest marking distance receive the same distance points as the winner so in this case:
		Pd = Fd
		The remainder receive the Day Distance Points multiplied by the ratio of their marking distance to 2/3 <sup>rds</sup> of the greatest marking distance:
		Pd = Fd * Dm ÷ (Dmax * 0-6667)
		For non-finishers
		Pd = Fd * (Dm ÷ Dmax)
Р	Glider Points	P = Ps + Pd (sum is rounded to nearest integer, 0.5 rounded up)

# 7.2.1 Qualifying Distance

	Fixed Course and Distance Handicapped Y = %age of task length	AAT Y =Time in hrs multiplied by	Minimum Y (km)	Maximum Y (km)
Open Nationals	50% Wind adjusted	40	100	200
18m and 15m and 20m Multi-Seat Nationals	50% Wind adjusted	36	90	180
Standard and Club Nationals	50% Wind adjusted	32	80	160
Junior Nationals and Regionals	40% Un- handicapped	30	60	120

# **7.2.2** Contest Dependent Variables

	Task Minima		Contest Wind Division	Devaluation Adjustment	
	Fixed Course Task Length (km)	AAT Designated Task Time (hrs)	Factor	Distance Da =	Time Ta =
Open Nationals	150	2.0	1.18	250	200
18m Nationals	150	2.0	1.10	250	200
15m and 20m Multi- Seat Nationals	150	2.0	1.04	250	200
Standard Nationals	150	2.0	1.00	250	200
Club Nationals	120	2.0	1.00	250	200
Junior Nationals and Regionals	NB For DHTs, this applies to the Handicapped Task Distance IE the distance a glider of Handicap 100 would fly to complete the task	1.5	1.00	0	0

		DG300 (w)	96.5
7.3 GLIDER SPEED INDICES		DG303	97
AC-4A	83	DG400 (15m) DG400 (17m)	97 101
AC-4B	83	DG500/505 trainer (fixed gear)	90
AC-4C	85	DG500/505 trainer (retractable)	92
Acro Twin 2	85	DG500/505 Orion (20m)	98
Acro Twin 3	89	DG500/505 (20m) flapped	100
Antares (18m)	111	DG500/505 (22m)	104
Antares (20m)	114	DG600 (17m)	105
Arcus	109	DG600 (15m) DG600 (15m-w)	99 99.5
AS33 (15m)	104.5	DG600 (18m)	107
AS33 (18m) ASG29 (15m)	111.5 104	DG800 (18m)	110
ASG29 (1311) ASG29 (18m)	111	DG800 (15m)	103
ASH30	117.5	DG800 (15m-w)	103.5
ASG32	109	DG1000 (20m)	102
ASH25	113	DG1000 (18)	96
ASH25 (25.6m)	114	DG1000 (18) (fixed gear)	94
ASH25 (26m)	115	Diamant 18 Diamant (16.5m)	100 89
ASH25 (27m)	115	Discus	98
ASH25EB28 ASH26	116 110	Discus (w)	98.5
ASH31 (18m)	111	Discus 2	100
ASH31 (21m)	115	Discus 2 (w) & 2c (15m)	100.5
ASK13	67	Discus 2c (18m)	106
ASK14	72	Discus 2c FES (15m)	99.5
ASK16	60	Discus 2c FES (18m)	105
ASK18	81	Duo Discus	101
ASK21	85	Duo Discus (w) Duo Discus X (700kg)	101.5 101.5
ASK23	85	Duo DiscusX (750kg)	101.5
Astir CS	89 86	Duo Discus XL	102
Astir Jeans ASW12	105	Eagle	68
ASW15	89	Fauvette	74
ASW17	106	FK3	89
ASW19a,b	93	Foka 4	81
ASW19club	90	Foka 5	83
ASW20	98	Glasflugel 304	99 107
ASW20b,c	98	Glasflugel 604 Grob 102	85
ASW20bl	102	Grob 102 Grob 109b	70
ASW20 cl ASW20f	101 98	Grunau Baby	55
ASW20FL	101	Hornet	90
ASW20L	101	HpH304SFES	109
ASW22 (24m)	114	HpH304S	110
ASW22b	116	HpH304TS	109
ASW22bl	117.5	Iris IS28b	80 80
ASW24	97 07.5	IS29d	83
ASW24 (w) ASW27a.b	97.5 104	IS32	101
ASW28	104	Janus a,b	96
ASW28-18 (15m)	100	Janus c (fixed gear)	98
ASW28-18 (18m)	106	Janus c (retractable)	100
Bergfalke 4	69	Jaskolka	69
Bergfalke	65	J\$1a,b	111 111
BG135	74	JS1c (18m) JS1c (21m)	118
Blanik	65 65	JP15-36a	87
Bocian Calif A21	65 100	JS3 (15m)	104.5
Capstan	62	JS3 (18m)	111.5
Cirrus (17.7m)	94	JS5 ` ´	119.5
Cirrus (18.8m)	96	K-2	64
Club Libelle	86	K-6cr	76
Cobra 15	85	K-6e	81 64
Dart 15	76	K-7 K-8	64 69
Dart 17r	83	Kestrel 17	98
DG300 club (fixed)	93	Kestrel 19	102
DG100/101 DG100/101 (fixed)	90 88	Kestrel 20	104
DG200	97	Kestrel 22	107
DG202 (15m)	97	Kite 2a	60
DG202 (17m)	101	Kranich	58
DG300 club (retractable)	95	Lak12	105
DG300	96	Lak17a (15m) Lak17a (15m-w)	103 103.5
		Lakira (ISIII-W)	103.3

Lak17a (18m)	109	Speed Astir	96
Lak17b (15m)	104	Sport Vega	89
Lak17b (18m)	110	Std. Cirrus	90
Lak17b FES (15m)	103	Std. Cirrus (16m)	92
Lak17b FES (18m)	109	Std. Libelle	89
Lak 17b Mini FES (13.5m)	96	Stemme S10	104
	99.5	Super Blanik	72
Lak 19 (15m)		•	
Lak 19 (15m-w)	100	Superfalke	64
Lak 19 (18m)	106	Swallow	62
Libelle 301	96	SZD 59	92
LS1 (0,c,d)	88	SZD 30 Pirat	78
LS1-0 (fixed)	85	SZD 38 Jantar 1	102
LS1f	91	SZD 42 Jantar 2	106
LS3 (15m)	98	SZD 41 Standard Jantar	92
LS3 (17m)	102	SZD 50 Puchacz	80
LS4	96	SZD 51 Junior	83
LS6 (15m)	101	SZD 55	98
LS6 (15m-w)	101.5	SZD 56	103
LS6c (17.5m)	106	SZD-54-2 Perkoz (20m)	93
LS6c (18m)	107	SZD-54-2 Perkoz (17.5m)	87
LS7 Č	97	T21	50
LS7 (w)	97.5	T53	69
LS8 (15m)	100	Tandem Falke	60
LS8 Neo (15m)	100.5	Torva	83
LS8-18 (18m)	106	Twin Astir	87
LS-10 (18m)	110	Vega (17m)	101
LS-10 (16m)	104	Vega (1711) Vega (15m)	97
	72		104
L-Spatz ME7	83	Ventus a,b (16.6m) Ventus a,b,c (15m)	104
	72	, ,	
M 100S		Ventus c (17.6m)	106
M 200	74	Ventus 2a,b,ax	104
Marianne	91	Ventus 2c,cx,cxa (15m)	104
Meise	62	Ventus 2cxa FES (15m)	103
Minimoa	70	Ventus 2c (18m)	109.5
Mini Nimbus	98	Ventus 2cx (18m)	110
Mistral c (fixed)	88	Ventus 2cxa (18m)	111
Mosquito a,b	98	Ventus 2cxa FES (18m)	110
Moswey 3	69	Ventus 3S (15m)	104.5
Moswey 4	72	Ventus 3S (18m)	111.5
Nimbus 3 (25.5m)	115	Ventus 3S T (15m)	104.5
Nimbus 2,b,c	106	Ventus 3S T (18m)	111.5
Nimbus 2cs (23.5m)	111	Ventus 3S FES (15m)	103.5
Nimbus 3 (24.5m)	114	Ventus 3S FES (18m)	110.5
Nimbus 3 (25.5m)	115	Ventus 3P T (18m)	111
Nimbus 3d (24.6m)	113	Ventus 3P M (18m)	111
Nimbus 3d (25.6m)	114	Viking	85
Nimbus 4	117.5	Weihe	67
Nimbus 4d	115	WA22	72
Oly 403	76	WA28	86
Oly 463	76	Zugvogel 3b	83
Olympia 2	62	=ag. 0g0. 02	00
Olympia 419	78		
Pegasus Club (fixed gear)	92		
Pegasus	95		
Phoebus 17	93		
Pik20	96		
Pilatus B4 (fixed gear)	80		
	82		
Pilatus B4 (retractable)			
Prefect	56		
PW 5	81		
Rhoensperber	57		
Salto (15.5m-w)	87		
SB 5e (16.5m)	83		
SD 3/15	81		
SF 26	76		
SF 27a	82		
SF 27b	83		
SFH 34	85		
SHK-1	89		
Sie3	81		
Silene	88		
Silent 2 Electro	89		
Sky	72		
Skylark 2	67		
Skylark 3	77		
Skylark 4	78		
•	-		

- 119.5 JS5
- 118 JS1c (21m),
- 117.5 ASW22bl, Nimbus 4, ASH30
- 116 ASW 22b, ASH25EB28
- 115 ASH25 (26m),ASH 25 (27m), ASH31 (21m), Nimbus 3 (25.5m), Nimbus 4d
- 114 ASH25 (25.6m), Antares (20m), ASW22, Nimbus 3 (24.5m), Nimbus 3d (25.6m)
- 113 ASH25, Nimbus 3d (24.6m)
- 111.5 JS3 (18m), Ventus 3S & ST (18m) ,AS33 (18m)
- 111 Nimbus2cs (23.5m) , ASG29 (18m), JS1a,b,c(18m), Antares (18m), Ventus2cxa(18m), ASH31(18m) , Ventus 3P T & M (18m)
- 110.5 Ventus 3S FES (18m)
- 110 ASH26 Ventus2cx (18m), Lak 17b (18m), DG 800 (18m), HPH304S, LS-10 (18m) ,Ventus2cxa FES (18m)
- 109.5 Ventus 2C (18m)
- 109 Lak 17a (18m) , Lak 17b FES (18m), HpH304SFES, HpH304TS, ASG32, Arcus
- 107 LS 6c (18m), DG 600 (18m), Glasflugel 604, Kestrel 22
- 106 Nimbus 2, b, c, ASW17, LS8-18 (18m), LS 6c (17.5m), Ventus c (17.6m), SZD 42 Jantar 2, Lak 19 (18m), ASW28-18 (18m), Discus 2c (18m)
- 105 DG 600 (17m), ASW12, Lak 12, Discus 2c FES (18m)
- 104.5 JS3 (15m), Ventus 3S & ST (15m), AS33 (15m)
- 104 ASW27a,b, ASG29 (15m), Ventus2 a,b,ax, Ventus2c,cx,cxa (15m), Lak 17b (15m), Ventus a, b (16.6m), Kestrel 20, DG 500/505 (22m), Stemme S10, LS-10 (15m)
- 103.5 DG 800(15m-w), Lak 17a(15m-w), Ventus 3S FES (15m)
- 103 SZD 56, DG 800 (15m), Lak 17a (15m), Ventus2cxa FES (15m), Lak 17b FES (15m)
- 102 Duo Discus X (750kg),, Duo Discus XL, LS 3 (17m), Kestrel 19, DG1000 (20m),ASWbl, SZD 38 Jantar 1
- 101.5 Duo Discus (w), Duo Discus X (700kg), LS 6(15m-w)
- 101 Duo Discus ,LS 6 (15m), Ventus a,b,c (15m), IS 32, ASWcl, ASW20L, ASW20FL, Vega L (17m), DG 400 (17m), DG 202 (17m),
- 100.5 Discus 2(w) & 2c (15m), LS8 Neo (15m)
- 100 Discus 2, LS 8 (15m), ASW28, ASW28-18 (15m), , Lak 19 (15m-w), DG 500/505 (20m) (flapped), Calif A21, Diamant 18, Janus, c (retractable)
- 99.5 DG 600 (15m-w),Lak 19 (15m), Discus 2c FES (15m)
- 99 Glasflugel 304, DG 600 (15m)
- 98.5 Discus (w)
- 98 Discus, , SZD 55, Mosquito a,b, ASW20, ASWb,ASWc, ASW20f, Mini Nimbus, LS 3 (15m), Kestrel 17, Janus c, (fixed), DG 500/505, Orion (20m)
- 97.5 ASW24 (w), LS7 (w)
- 97 DG 200, DG 202 (15m), Vega (15m), DG 400 (15m), ASW24, LS 7, DG303
- 96.5 DG300(w)
- 96 LS 4, DG 300, Libelle 301, Pik 20, Speed Astir, Cirrus (18.8m), Janus a,b, DG 1000 (18m), Lak 17b Mini FES
- 95 Pegasus, DG 300 Club (retractable)
- 94 Cirrus (17.7m), DG 1000 (18m, fixed)

- 93 ASW19 a,b, DG 300 Club (fixed), Phoebus 17, SZD-54-2 Perkoz (20m)
- 92 SZD 41 Std Jantar, Pegasus Club (fixed), SZD 59, Std. Cirrus (16m), DG 500/505 trainer (retractable)
- 91 LS1f, Marianne
- 90 DG 100/101, Std. Cirrus, Hornet, ASW19 club, DG 500/505 trainer (fixed)
- 89 ASW15, Std. Libelle, SHK-1, Astir CS, Acro Twin 3, Diamant (16.5m), FK3, Sport Vega, Silent 2
- 88 LS1 (0,c,d), Silene, Mistral c(fixed), DG100/101 (fixed)
- 87 JP15-36a, Twin Astir, Salto (15.5m-w), SZD-54-2 Perkoz (17.5m)
- 86 Astir Jeans, Club Libelle, WA28
- 85 Acro Twin 2, ASK 21, ASK 23, Cobra 15, SFH 34, Viking, AC-4C, Grob 102, LS 1-0(fixed)
- 83 Dart 17r, Foka 5, IS29d, SB 5e(16.5m), Torva, Zugvogel 3b, SZD 51 Junior, SF 27b, AC-4A,AC-4B, ME7
- 82 SF 27a, Pilatus B4 (retractable)
- 81 Foka 4, K-6e, SD3/15, Sie3, PW5, ASK18
- 80 Pilatus B4 (fixed), Iris, IS28b, SZD50 Puchacz
- 78 SZD 30 Pirat, Skylark 4, Olympia 419
- 77 Skylark 3
- 76 K-6cr, Dart 15, Oly 403, Oly 463, SF26
- 74 BG135, Fauvette, M200
- 72 ASK14, L-Spatz, M100S, Moswey 4, Super Blanik, WA22, Sky

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- 70 Grob 109b, Minimoa
- 69 Bergfalke 4, Jaskolka, Ka8, Moswey 3, T53
- 68 Eagle
- 67 ASK13, Skylark, 2, Weihe
- 65 Bergfalke, Blanik, Bocian, Mucha Std.
- 64 Superfalke, K-2, K-7
- 62 Capstan, Meise, Olympia 2, Swallow
- 60 ASK16, Kite 2a, RF-5b, Tandem Falke
- 58 Kranich, Mu13
- 57 Rhoensperber
- 56 Prefect
- 55 Grunau Baby
- 50 T21
- 46 Falke

#### 7.4 HEIGHT VERIFICATION PROCEDURE

For checking for vertical infringement in airspace designated by flight level (eg. FL65), all logged heights will be referenced to the 1013.25 HPa standard pressure altitude recorded by the FR recorder at the time of the infringement. If an airspace infringement is indicated then the pilot must submit a valid calibration chart within the protest period to avoid an additional penalty in accordance with 5.5.7 as failure to provide a calibration chart will result in the assumption that the calibrated height puts any logged points 100 feet vertically further into the airspace than indicated with any airspace penalties varied accordingly. Any adjustment required by reference to the calibration chart is deduced by identifying the difference in error between calibrated chart reading at the 1013.25 HPa pressure altitude or that at the ambient test pressure altitude with that closest to height of infringement. In any case, the calibration will be used to reduce, eliminate or increase the airspace penalty as appropriate. Where a chart shows a calibration at a particular test altitude more than once, the most advantageous calibration favouring the pilot should be used in all cases.

For checking for vertical infringement in airspace designated by flight altitude above sea

**level (eg. 3500ALT),** any verification software will correct all logged readings by the offset of documented airfield altitude from logged take-off height. If an airspace infringement is indicated then the pilot must submit a valid calibration chart within the protest period to avoid an additional penalty in accordance with 5.5.7 as failure to provide a calibration chart will result in the assumption that the calibrated height puts any logged points 100 feet vertically further into the airspace than indicated with any airspace penalties varied accordingly. Any adjustment required by reference to the calibration chart is deduced by identifying the difference in error between calibrated chart reading closest to airfield height compared to that closest to height of infringement. In any case, the calibration will be used to reduce, eliminate or increase the airspace penalty as appropriate. Where a chart shows a calibration at a particular test altitude more than once, the most advantageous calibration favouring the pilot should be used in all cases.

For checking for vertical infringement of start height above airfield elevation (eg. 4000ft QFE) or during the pre-start interval, or infringement of minimum finish height, any verification software will correct all logged readings by the offset of documented airfield altitude from logged take-off height. If an infringement is indicated then the pilot may submit a valid calibration chart within the protest period. Any adjustment required by reference to the calibration chart is deduced by identifying the difference in error between calibrated chart reading closest to airfield height compared to that closest to height of infringement. In any case, the calibration will be used to reduce, eliminate or increase the airspace penalty as appropriate. Where a chart shows a calibration at a particular test altitude more than once, the most advantageous calibration favouring the pilot should be used in all cases.