# THE GLIDING FEDERATION OF AUSTRALIA INC

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# **Australian National Competition Rules**

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# Preamble

These rules are developed and maintained by the National Competitions Committee. They take guidance from, **but are not bound by, input from the competition pilot community, including** any decision made at the and competition surveys, input from the SDP, and Pilots Meetings held during the National Championships in the preceding season. These rules are then endorsed by the SDP.

In addition to these rules, pilots are invited to familiarise themselves with the National Competition Guidelines, which provide advice to competitors and organisers on how competitions should be conducted.

The overarching competition principles are to encourage fairness, participation and safety.

At all times it remains the responsibility of pilots to operate in accordance with the Gliding Australia Manual of Standard Procedures and all applicable laws and regulations.

Pilots are expected to conduct themselves at all times in the spirit of these rules, in accordance with the practice of good sportsmanship, and in a manner that will not bring disrepute on the Organisers, the hosting club or Gliding Australia.

Rule changes made since the last edition are shown in *bold Italic* This excludes formatting or positioning changes, or changes made purely for clarity.

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#### General Definitions ΑΑΤ Assigned Area Task **Ballasted Class** A competition class where gliders may dump ballast during flight Champion The winner, or, in a two seater, the joint winners, of a competition class Competition The area defined by the Organisers in which all competition flying must occur Area Competition The person with primary management responsibility for the competition Director Competition A date, not later than two months before the scheduled Start of Competition, on which **Entry Closing** the pilot selection process will be applied if the competition is oversubscribed Date Competition The maximum number of entries permitted for the competition as defined in Local Rules Maximum Size FAI Federation Aeronautique Internationale – the global peak controlling body for air sports FDR Flight Data Recorder **Foreign Pilot** A pilot who is not an Australian Citizen nor a permanent resident of Australia GFA Gliding Federation of Australia - the peak controlling body for Gliding in Australia, trading as Gliding Australia GPC Glider Pilot Certificate Handicap List A list published by the NCC, indicating the scoring handicap and reference weight to be applied to each model of glider. A separate list is published for ballasted and unballasted classes **Hors Concours** An unofficial competition entry, scored with the official entries but having no effect on the scoring parameters. Hors Concours entries are ineligible for any day prizes or competition placing IGC International Gliding Commission - the global peak controlling body for Gliding A set of rules published by the Organisers and specific to the particular Nationals being Local Rules held. These rules must be approved by the NCC prior to the competition Motor Restart The area within 3km of the Airfield Reference Point and below release height Area MTOW Maximum Take-off Weight, as placarded in the glider cockpit Nationals All rules contained in this document Rules NCC National Competitions Committee, consisting of Convenor, and at least one elected representative from each Nationals competition (including Juniors) - primarily responsible for defining these rules Operations Competition Director (or delegate) - responsible for directing operation of airside Director activities Organisers The Competition Director and Officials representing Gliding Australia and appointed to organise the Championships Penalties Committee tasked with determining penalties to be applied for breaches of the rules. Committee PEV Pilot Event Marker on the FDR trace created by the pilot **Pilot Pair** Two or more pilots who share the flying of a single-seater aircraft on different competition days, or who share the role of Pilot in Command in a two-seater

Pilot Ranking List	A list published by the IGC, ranking pilots according to their competition results
Pilot Safety Committee (PSC)	Committee tasked with hearing safety concerns.
Protest Committee	Committee tasked with hearing protests.
Regional Association	Any one of the state-based gliding associations
RMO	Regional Manager Operations
Rules	The combination of the Nationals Rules, as augmented by the Local Rules
Safety Officer	The person primarily responsible for advising on, and monitoring all safety-related aspects of the competition
Scrutineering	The process, performed by the Organisers, prior to the Start of Competition, where all gliders are checked for weight, class conformity, and mandatory / prohibited equipment
SDP	Soaring Development Panel - responsible for managing all sporting aspects of Gliding
Start of Competition	The start of briefing on the first scheduled competition day
Steward	A delegate of the NCC appointed to oversee the application of the Rules and the conduct of the competition
Un-ballasted Class	A competition class where gliders must not dump ballast during flight, except in an emergency or during an out-landing
Verification Boundary	The line marking the boundary of a start circle/line, waypoint, assigned area or finish zone

## A. General Rules

#### Authority

- 1.1 These Rules apply to the Australian National Championships in all Championship Classes. All Australian National Championships will be organised on behalf of Gliding Australia by a nominated Regional Association, Club or organising team, and will be held annually.
- 1.2 The Gliding Australia SDP, through the NCC, will approve the proposed Competition Director in writing. The Competition Director is ineligible to fly in the competition.
- 1.3 The Organisers will appoint a Safety Officer who must be approved in writing by the RMO in the corresponding Regional Association. The Safety Officer is ineligible to fly in the competition.
- 1.4 The Competition Director will have control over the operation of the competition and the administration of the Rules, subject only to the Safety Officer having an overriding authority in matters of operational safety.
- 1.5 The Organisers must not suspend, ignore, add to, or modify any Nationals Rules except via approved Local Rules.
- 1.6 The Gliding Australia SDP through the NCC retains the authority and right to exercise all Rules in their totality post competition if a breach of any Rules during the competition is found within 30 days of the completion of the competition. Pilots' rights of appeal and protest as defined in the Rules are preserved.

#### Local Rules and Entry Forms

2.1 The Organisers will prepare and submit the Local Rules, the Budget and the Entry Form to the NCC for approval. The Local Rules will state the version of the Nationals Rules which will apply.

#### Championship Dates and Venue

3.1 The Organisers will publish the dates, venue and contact information in *Gliding Australia Magazine* and on the Gliding Australia website.

#### **Official Practice Period**

4.1 The Organisers must schedule at least one practice day. They may at their discretion schedule a second practice day. If the scheduled practice day(s) cannot be flown then the competition may proceed without one.

#### **Competition Period**

- 5.1 All Nationals events will be held over a minimum of 7 scheduled competition days, in addition to practice days.
- 5.2 The Organisers will select the dates in consultation with the NCC. The competition timetable will be specified in the Local Rules.

#### Availability of Rules and Entry Forms

6.1 The Organisers will make an electronic copy of the Nationals Rules and Local Rules available to all competitors prior to the competition.

## Championship Classes

- 7.1 The following classes are recognized in Australian Nationals competitions:
  - Open Class
  - 18 Metre Class
  - 15 Metre Class
  - Standard Class
  - Sports Open Class
  - Sports 15m Class
  - Club Class
  - 2-Seater 20 Metre Class
  - 2-Seater Open Class
- 7.2 Usually, the following classes compete at the same event, although this may be varied for operational reasons:

- Multiclass Nationals Open, 18 Metre, 15 Metre, Standard
- Club and Sports Class Nationals Sports Open, Sports 15m, Club
- Two Seater Nationals 2-Seater 20 Metre Class, 2-Seater Open Class
- 7.3 The Junior Nationals may include any one or two classes, as specified in Local Rules or decided by the Competition Director before the start of the competition.
- 7.4 All National Championships will be handicapped competitions in all classes.
- 7.5 Motor gliders and power assisted gliders are permitted to enter any class for which they are eligible.
- 7.6 Hors Concours entries are permitted to enter any class for which the glider is eligible.
- 7.7 The maximum number of entries in any one class will be 40. The Organisers may reallocate entries between the classes where the pilots concerned agree to facilitate a change.
- 7.8 The Organisers may combine complete classes, where a class is undersubscribed.
- 7.9 Where classes are combined, all gliders will fly in the higher performance class and will be tasked together. Only one day prize will be awarded each day.
- 7.10 Where an undersubscribed class is combined with a class of lower performance, gliders from the lower performance class will be scored in both classes, except that if both classes are undersubscribed then the lower performance class will not be scored.

#### **Class Criteria**

- 8.1 In all FAI classes, entries are restricted to those gliders which meet the criteria for that class as specified in Section 3 Chapter 5 of the FAI Sporting Code.
- 8.2 Wingspan will be measured as the maximum distance between the two planes tangent to the wingtips and parallel to the glider plane of symmetry, with the glider positioned horizontally on the ground and the ballast tanks empty. Gliders which exceed the wingspan for a class will be accepted into that class in unmodified form if that glider type has previously been accepted into the same class at a World Championship.
- 8.3 In all ballasted classes:
  - 8.3.1 All gliders will be handicapped using the Gliding Australia ballasted handicap list
  - 8.3.2 The maximum allowable take-off weight is the lesser of:
    - the glider's placarded MTOW
    - the reference weight for that glider's type in the Gliding Australia ballasted Handicap List
      850kg.
  - 8.3.3 The glider may be loaded with jettisonable ballast to achieve the maximum allowable weight.
- 8.4 In all un-ballasted classes:
  - 8.4.1 All gliders will be handicapped using the Gliding Australia un-ballasted handicap list
  - 8.4.2 The maximum allowable take-off weight is the lesser of:
    - the glider's placarded MTOW
    - 850kg.
- 8.5 Classes are defined as follows:
  - · Open Class includes any glider and is a ballasted class.

• 18 Metre Class includes any glider with a maximum wingspan of 18.0 metres and is a ballasted class.

• 15 Metre Class includes any glider with a maximum wingspan of 15.0 metres and is a ballasted class.

• Standard Class includes any glider with a maximum wingspan of 15.0 metres and is a ballasted class. Any method of changing the wing profile except by normal use of ailerons is prohibited; lift increasing devices are also prohibited, even if unusable.

• Sports Open Class includes any glider and may be a ballasted or an un-ballasted class.

• Sports 15m Class includes any glider with a maximum wingspan of 15.0 metres and may be a ballasted or an un-ballasted class.

• Club Class includes any glider on the published IGC Club Class handicap list at the Competition Entry Closing Date and is an un-ballasted class. Other gliders may be considered on application to the NCC at least 2 weeks before the first competition day. • 2-Seater 20 Metre Class includes any 2-seater glider having a crew of 2 pilots and a maximum wingspan of 20.0 metres and is a ballasted class.

• 2-Seater Open Class includes any 2-seater glider having a crew of 2 pilots and is a ballasted class.

#### **Champions and Eligibility**

- 9.1 At the end of each Nationals Competition, a champion may be declared in each class that was flown.
- 9.2 Where classes were combined, a class champion may be declared in the combined class, as well as any constituent class that had sufficient entries to stand on its own merit.
- 9.3 In all classes, champions will be determined based on handicapped scores. Trophies or prizes based on unhandicapped (scratch) results may be awarded at the discretion of the Organisers.
- 9.4 Champions will be declared in each class where:
  - at least three competition days as defined by the scoring formula have been flown, and

• at least eight gliders (excluding Hors Concours entries) are registered as competing in the class, and

• at least six of the registered gliders in that class achieve a score of at least 20% of the winner's score at the end of the competition.

- 9.5 If the above criteria are not met, Class Champions will not be declared. However, the Organisers may declare class winners without the award of Gliding Australia trophies.
- 9.6 The title of Class Champion will be awarded to the pilot who:
  - has the highest aggregate score at the end of the Championship, and
  - was not a member of a Pilot Pair, and
  - has been scored only using an IGC-approved FDR (except where another FDR has been used as a backup on a maximum of one day)
  - is not a Foreign Pilot
  - was not flying Hors Concours
  - has an Australian-issued Competition Licence or Gliding Australia GPC
- 9.7 If a two-seater wins any class, then the additional rules apply when determining Class Champion:
  - Pilots who did not fly on every competition day are not eligible
  - · Pilots who flew one or more days with a Foreign Pilot having a higher IGC ranking are not eligible

• Pilots in a 2 seater class who flew solo without a P2 on any day are not eligible (not applicable to Open class)

• If both pilots are eligible as a result of the above rules, then they will be declared joint Class Champions

• If neither pilot is eligible then consideration passes to the pilot(s) of the next placed glider in the class.

#### Steward and Committees

- 10.1 The NCC will appoint a Steward, preferably a non-competitor, for the event. Stewards will be NCC members, senior competition pilots or other appropriately qualified persons. Stewards will be available to both pilots and Organisers for advice on the Rules and the conduct of the competition. Stewards may compete but must withdraw from any matter where there is a conflict of interest and a replacement Steward appointed. Stewards may attend Penalty and Protest Committee meetings but may only advise.
- 10.2 The Steward has the authority to suspend the competition in extreme cases where the competition is not being conducted according to the Rules. The Steward will refer the situation to the Chairman of the SDP and/or the Chairman of the NCC or an officer of the Gliding Australia Executive for further action.
- 10.3 The Task Setting Committee will consist of:
  - the Chief Task-setter, an experienced pilot with local knowledge, and

• at least two pilots, from different competing classes where possible, chosen daily by the

- Organisers, and
- the Competition Director.
- 10.4 The Pilot Safety Committee (PSC) consists of three pilots elected by pilot vote at the initial briefing. The Penalties Committee consists of the Competition Director and one pilot from each class, elected by pilot

vote. If there is only one class, the Scorer will act in place of the pilot representative. The pilot from the same class as the pilot who may be penalised must not participate in the meeting.

- 10.5 The Protest Committee consists of the Competition Director and two pilots elected by pilot vote, plus the Steward in an advisory role.
- 10.6 Pilot representatives must not be on both the Penalties and Protest Committees.

#### **Task Setup Requirements**

- 11.1 Whether start lines or start circles are used, a minimum of nine start points will be provided. The start points will be divided into groups by geographic area such that the number of groups is approximately equal to the number in each group. Start points will be a minimum of 4km apart and need not correspond to visually identifiable features.
- 11.2 The finish zone will:
  - be delineated by a circle of radius no less than 1,500 metres

• enclose all runways or sufficient length of all runways to allow safe landing on any given competition day

· be centred as close as possible to the physical centre of the airfield and/or the longest runway.

#### **Defined Competition Area and Waypoints**

- 12.1 The Organisers will define a geographic Competition Area, enclosing all start zones, waypoints and the finish zone.
- 12.2 Before the competition, the organizers must provide electronic copies of the geographic Competition Area, associated airspace and waypoints, including start and finish reference points in data formats suitable for uploading to navigation devices. All such files must be clearly version-controlled.
- 12.3 The Competition Area may be varied from day to day to accommodate Airspace restrictions.
- 12.4 Co-ordinates will be stated in Latitude and Longitude using the WGS84 Datum.
- 12.5 Waypoints may correspond to a visually identifiable feature. However, it is the published co-ordinates that define the waypoint, not the physical feature.
- 12.6 The official list of waypoints will be available in hard copy or electronic PDF version to pilots at the time of registration and must be clearly version-controlled to correspond with the electronic copies.
- 12.7 The hard-copy version-controlled waypoint list remains the official list.
- 12.8 The pilot is in all cases responsible for the accuracy of the data uploaded to their Navigation Devices.

### **B.** Entrance Requirements

#### Pilot Qualifications

- 13.1 In the Multi-Class, Club and Sports Class and Two Seater Nationals, every pilot in command must, at the Start of Competition, have all of the following:
  - · At least 100 hours solo in gliders
  - A Silver Badge plus at least one 300km flight

• Completed at least two Overseas, National, SkyRace GP or State Competitions in which at least ten gliders competed

- · Knowledge of Gliding Australia Operational Regulations in regard to the Rules of the Air
- Current flying practice in competition and/or cross-country gliding as defined by Gliding Australia
- Current membership of Gliding Australia and an affiliated Gliding Australia Club
- A Current FAI Sporting Licence (Competitor's Licence) or Gliding Australia GPC
- An Annual or Biennial Flight Review valid for the duration of the competition.
- 13.2 In the Junior Nationals, every pilot in command must, at the Start of Competition, have all of the following:
  - An age of 25 years or less
  - At least 50 hours solo in gliders
  - A "C" certificate

• A statement signed by the CFI of their club stating that in his/her opinion the pilot is competent to fly at these Championships, OR completed at least two Overseas, National, Skyrace GP or State Competitions in which at least ten gliders competed.

- Knowledge of Gliding Australia Operational Regulations in regard to Rules of the Air
- Current flying practice in competition and/or cross-country gliding as defined by Gliding Australia
- Current membership of Gliding Australia and an affiliated Gliding Australia Club
- · A Current FAI Sporting Licence (Competitor's Licence) or Gliding Australia GPC
- An Annual or Biennial Flight Review valid for the duration of the competition
- 13.3 The Organisers may require an entrant to present documented evidence that the qualification standards are met. Entrants who do not meet the specific qualifications listed above but have significant gliding experience may be accepted at the discretion of the Competition Director.
- 13.4 Foreign pilots may enter, provided that sufficient places are available once all eligible Australian pilots applying by the Competition Entry Closing Date have been accepted.
- 13.5 Pilot Pairs may enter, and will be regarded as a single entry for scoring purposes
- 13.6 The Competition Director, Operations Director, Steward, and Safety Officer must not compete. The Scorer may compete but is strongly discouraged from doing so.

#### **Glider Requirements**

14.1 Each glider entered must have all of the following:

• Documented evidence that it can be legally flown in Australia - either an Australian Certificate of Airworthiness or Permit to Fly (which must include approval to compete in competitions) as evidenced by a current Gliding Australia Maintenance Release, or equivalent overseas documentation

• Third Party Insurance cover for competitive flying which includes the Gliding Australia General Competition Endorsement or equivalent cover for Competition Officials (Gliding Australia holds this insurance for all Gliding Australia members)

- Any additional insurance as specified in the Local Rules
- 14.2 The Organisers may scrutinise any glider at any time during the competition for compliance with the rules.
- 14.3 All cockpit equipment must be securely fixed such that monitoring and/or operation of it does not compromise lookout.
- 14.4 The glider must fly the entire competition in the configuration in which it is weighed and scrutinised before the Start of Competition, and at the handicap and reference weight determined by that configuration.

#### Mandatory and Optional Equipment

15.1 The following equipment is mandatory, must be functioning and serviceable, and may be checked at Scrutineering or on the grid:

A parachute which must be worn in flight, or a certified aircraft recovery parachute
A primary Flight Data Recorder (FDR) which must be switched on throughout all competition flights and aero-tow retrieves

A radio capable of transmitting and receiving on all frequencies specified in the Local Rules
A FLARM device operating on the Australian standard FLARM frequency. The device must be switched on and both the visual and audio alerts must be functioning at all times during the competition flight. A FLARM flight trace and FLARM range analysis must be provided to the organisers before the first competition flight (practice or competition day)

- At least one audio variometer
- · Aeronautical Maps as specified in the Local Rules to cover the Competition Area
- A GPS position tracker (if supplied by and required by the organisers)
- At least 2 litres of accessible drinking water per pilot

Pilots will not be penalised for accidental failure of mandatory equipment during a flight if they can provide a valid Flight Log to the Scorer.

- 15.2 The following equipment is optional, and strongly recommended:
  - · A mobile phone

• Oxygen Equipment (Whilst CASR Part 91 now requires supplemental oxygen above 12500ft, Gliding Australia recommends 10,000ft due to workload and safety enhancement)

- a backup FDR
- · a survival kit, including extra drinking water
- an ELT beacon, SPOT or similar

#### FLARM Devices

- 16.1 FLARM Devices must have a functioning visual and audio alert at all times during competition flight.
- 16.2 "Competition Mode" and "Stealth Mode" may be set at pilot's discretion.

#### Flight Data Recorders

- 17.1 FDRs that do not record pressure altitude may not be used for scoring.
- 17.2 A pilot's primary FDR must be either:
  - A type approved by the IGC on their website, prior to the Start of Competition period, or
  - A type not approved by the IGC which records pressure altitude and which is acceptable to the scorer.
- 17.3 A pilot may have one or more backup FDRs, which must meet the criteria for the primary FDRs.
- 17.4 The Scorer may reject any trace if the FDR is faulty, damaged, unreliable, or where there is a suspicion of unauthorised modifications.
- 17.5 FDRs must never be enclosed in any container that may modify their response to pressure altitude. Doing so will be considered cheating and will be penalised accordingly.

#### **Entry and Registration**

- 18.1 Entry must be made on the Official Entry Form. The entry form may be online. If an online entry is made, signatures as specified below must be provided at the time of registration.
- 18.2 As a condition of entry, or during registration, all entrants must sign a declaration that they will:
  - abide by the Competition Rules
  - be bound by the Gliding Australia anti-doping policy
  - waive all claims against the Gliding Australia or its agents in the event of any injury to any person or damage to any aircraft, equipment or property whatsoever

• take personal responsibility for flying in accordance with the Gliding Australia MOSP and all applicable regulations

comply with Member Protection Policy ADMIN008 and its codes of conduct

18.3 All competing pilots must report to the Organisers' office for Registration at a time and date to be advised in the Local Rules and provide documented proof that they and their glider comply with the entrance requirements.

#### Oversubscription

- 19.1 The IGC maintains an International Pilot Ranking List, published on the IGC website.
- 19.2 On the Competition Entry Closing Date, paid-up pilot entries will be accepted into their nominated class in order of the current version of this ranking list. Pilots not on the ranking list will be ranked after all other pilots, and in order of paid-up application for entry.
- 19.3 Where a pilot's nominated class is full, they will be given the option of flying in another class or being placed on a waiting list for their nominated class.
- 19.4 If the number of allocated places reaches the Competition Maximum Size, then all remaining pilots will be placed on a general competition waiting list.
- 19.5 If places remain after the Competition Entry Closing Date, the Organisers may accept subsequent entries in order of payment.

# C. Operational Rules

#### Pilot Ground Crews

20.1 Pilots are responsible for their ground crews and may be penalised for rule breaches committed by them.

#### **Flying Control**

- 21.1 The Organisers, through the Competition Director, will make all rules and issue directions concerning control of operations, safety, launching arrangements and other operational aspects.
- 21.2 For the duration of the Competition and Practice Period, all operations will be controlled by the Competition Director, or delegate. This includes activities such as local flying and tug movements for retrieves.
- 21.3 All communications with Airspace Authorities for clearance, etc., will be made through the Competition Director. Pilots must not request individual clearances except in the case of emergency or in legally required situations.
- 21.4 Failure to observe instructions from the Airspace Authorities will be penalised.
- 21.5 The Competition Director may cancel the day for a class or classes at any time, for reasons of safety or because weather or other factors create a situation where a fair competition cannot be held.
- 21.6 Pilots will not incur penalties if they deviate from operational rules and directions of the Organisers in order to comply with their legal responsibilities as pilots, or to ensure the safety of themselves or others.

#### **Flying Safety**

- 22.1 Safety is at all times the primary consideration. If at any time a pilot feels that the requirements of these rules compromise the safety of their flight then they should take whatever actions are required to ensure the safety of themselves and of other air users. This may include withdrawing from the task or from the competition.
- 22.2 The Pilot Safety Committee (PSC) will be available to hear complaints by pilots relating to safety and flying standards during the competition and will liaise with the Competition Safety Officer.
- 22.3 The PSC will work with pilots and organizers to improve competition safety. The PSC acts in an advisory capacity only and cannot impose penalties.
- 22.4 In case of a general failure of the FLARM system, a competition day may still be flown.

#### Task Setting

- 23.1 When Racing Tasks are set, the Task Setting Committee must set an A and B task for each class. The A and B task distances will differ by at least 20%.
- 23.2 Tasks must not be set over terrain that is non-landable over large areas, such that lower performance gliders would be placed at a disadvantage.
- 23.3 Task Types must only be chosen from the types specified in these Rules.
- 23.4 The Organisers must set tasks in accordance with the Gliding Australia National Competition Guidelines document.
- 23.5 Prior to the first competition day, the Organisers may declare an Early Bird Bonus for one or more classes. If declared, the bonus must be used on all competition days.

#### Briefing

- 24.1 All competing pilots and crews must attend the initial competition and safety briefing at a date, time and venue specified in the Local Rules, or must be individually briefed by the Organisers before flying on their first competition day.
- 24.2 All pilots must attend the daily briefing, at a time specified in the Local Rules or as announced by the Organisers.

#### Medical Fitness

- 25.1 If the medical fitness of any pilot is in doubt, the Competition Director may seek the opinion of a qualified medical practitioner. If the practitioner considers the pilot medically unfit, the Competition Director may decide to forbid the launch. The pilot will be scored zero points for the day.
- 25.2 Any glider in a Two seater class will not score for the day if one pilot is unable to fly for any reason, medical or otherwise.

#### Ballast & Weight Limits

- 26.1 The Organisers may weigh any of the competing gliders on any day. Where practical, gliders will be weighed facing into wind on their way to the grid. Outdoor weighing will include a 2% allowance.
- 26.2 Weighing may be either:
  - · Random, where selected gliders are weighed, OR
  - · Comprehensive, where all competing gliders are weighed daily.
- 26.3 If a tow-out weight has been established during Scrutineering, then this may be used to determine the daily weight of the glider, otherwise a full weighing must be performed.
- 26.4 Where Comprehensive weighing is used, and a glider is found to be overweight, the pilot may drop ballast to reach the required weight without penalty.
- 26.5 Where Random weighing is used, any pilot whose glider is found to be overweight will be penalised. The pilot may request a full weighing before penalties are applied. The full weighing must be conducted either indoors or facing into wind, at the discretion of the competition Organisers, and will then be the weight used to determine if penalties are to be applied.
- 26.6 In all cases where a glider is found to be overweight, it must be reduced to the permitted weight prior to being launched. The 2% outdoor weighing allowance is forfeited.
- 26.7 Ballast or additional equipment must not be added to the glider after it has arrived at the launch grid or after weighing. While on the grid, if an imbalance is discovered, water ballast may be transferred between tanks but no further ballast may be added.
- 26.8 A competitor may request the weighing of any competing glider in the same class. The Organisers will decide whether the glider will be weighed.
- 26.9 For an Open Class glider with two seats, the tow-out weight will be determined using only the P1 and then adjusted at the weigh point for a P2 if being carried that day. (Not applicable to the two seater classes).
- 26.10 The following rules apply to the carriage of ballast in un-ballasted classes:
  - 26.10.1 Fixed ballast may be used only to the extent necessary to bring the glider's flying weight up to the reference weight as stated in the un-ballasted handicap list, or to allow the pilot to fly at a CG position within the glider's placarded limits.
  - 26.10.2 Fixed ballast must not be used at both the front and the tail of the aircraft if doing so would cause the glider's take-off weight to exceed the reference weight.
  - 26.10.3 Fixed ballast may be carried in the cockpit and/or fuselage provided that the total load does not exceed the placard and Certificate of Airworthiness requirements of the particular aircraft
  - 26.10.4 Water ballast may be used in place of fixed ballast, but only to bring the total weight of the glider up to the maximum that would be permitted if fixed ballast were used
  - 26.10.5 If water ballast is used, it must be loaded at the Start of Competition and the dump valve sealed in a manner that will allow the water to be dumped in an emergency or an out-landing, but will clearly allow the Organisers to know it has been dumped
  - 26.10.6 If the pilot claims a finish but it is found that ballast has been dumped during the flight, then the flight will be scored as an out-landing at the distance flown.
- 26.11 In all classes up to 3 litres per pilot of drinking water carried in the cockpit will be excluded from the aircraft total weight calculation for handicap purposes.

#### Launching

27.1 The order of launching on each competition day will be chosen by the Organisers, and cycled to ensure that all competitors are at some time launched from near the front of their class.

- 27.2 Launching will usually be by aero-tow or self-launch. The Organisers may vary the launch height to provide a fair opportunity to all competitors, for example by towing the last group of gliders to a higher altitude. Where operational arrangements are suitable, and with the approval of the RMO, winch launching may be offered but only as an alternative to aero-tow or self-launch.
- 27.3 Pilots requiring relights must go to the end of the class currently being launched or follow other procedures outlined at briefing for the day.
- 27.4 Pilots will be relaunched in order of advising the Operations Director that they are ready to launch.
- 27.5 Pilots are permitted three competition launches per day (excluding aero-tow retrieves).
- 27.6 Failure to launch as directed will be counted as one of the pilot's permitted launches on the day.
- 27.7 It is the pilot's responsibility to release from the aero-tow when the release height is reached. A pilot who stays on aero-tow above the nominated release height may be given a wing-rock signal by the tow-pilot. Pilots who fail to release immediately from the aero-tow will be reported to the tug-master by the aero-tow pilot and will be penalised.

#### Motor Gliders

- 28.1 Motor gliders that choose to self-launch must do so from a position and order agreed with the Operations Director.
- 28.2 During self-launching, motor gliders must operate as directed by the Operations Director, must shut down their motors at no more than 500 feet above the aero-tow release height, and if then still above the aero-tow release height must immediately descend to log a point within 100ft of the aero-tow release height. Their motor may be stopped and restarted at any time during the self-launch process.
- 28.3 A motor glider must complete its self-launch within 20 minutes.
- 28.4 A motor glider which did not use its motor to launch may operate the motor briefly for testing purposes prior to starting but must not use this to gain height or other advantage.
- 28.5 Motor gliders may self-retrieve after an out-landing.
- 28.6 If the motor is started in flight outside of the Motor Restart Area, the pilot will be scored as having outlanded at the point at which the motor was started.
- 28.7 A motor glider within the Motor Restart Area may operate their motor to relaunch, rather than landing and relaunching, and this will count as one of their competition launches. They must then fly to the designated release area and height as briefed.
- 28.8 All motor gliders must either:
  - Use an FDR capable of recording the engine noise of the glider concerned, OR
  - · Use seals which break when the motor is deployed, OR
  - Seal the engine compartment to the satisfaction of the organisers.

If breakable seals are used they must be verified by the Organisers after each flight.

#### Start Procedure

- 29.1 The start zone may be either a start line or multiple start circles. Each day only one option will be used for all classes.
- 29.2 Start line:
  - 29.2.1 The Start Line is a minimum 10km straight line (5 km each side), centred on a defined start point and perpendicular to the course to the first waypoint, or the centre or defining point of the first Assigned Area. The length for the competition will be stated in the Local Rules.
  - 29.2.2 There must be only one start line allocated for each scoring class. Different classes may share the same start line, subject to approval by the Safety Officer. Where classes are combined for scoring purposes they must share the same start line.
  - 29.2.3 Pilots must start by crossing the start line in the direction of the first leg, after the gate is opened. The start time will be the time at which the glider crosses the start line.
  - 29.2.4 Pilots who do not make a valid start will score zero points for the day, unless the FDR shows at least one data point less than 0.5 km from the start line after the gate is opened, in which case they will be given the time of the point closest to the circle or line with a penalty.

- 29.3 Multiple start circles:
  - 29.3.1 The Start circle is a minimum 1km radius circle around each start point. The radius for the competition will be stated in the Local Rules.
  - 29.3.2 On each day, a pilot will be allocated multiple start points, one start point chosen from each group, unless otherwise specified in the Local Rules. The allocation will be random, given privately and not made public by the organisers.
  - 29.3.3 Pilots must start by exiting one of their allocated start circles after the start gate is opened. The start time will be the time at which the glider exits the start circle.
  - 29.3.4 Pilots who do not make a start from any of their allocated start circles but start from another start circle will be given the time of that start with a penalty.
  - 29.3.5 Pilots who fail to visit any start circle will score zero points for the day unless the FDR shows at least one data point less than 0.5 km from one of their allocated start circles after the gate is opened, in which case they will be given the time of the point closest to the circle or line with a penalty.
- 29.4 The start gate will be opened at a time determined by the Competition Director, such that all competing gliders in that class have been given reasonable and sufficient time to climb to an equitable start height for that day and between 15 and 40 minutes after the last launch in the class. The time will be announced on all relevant radio frequencies and all such radio calls must include the Task designation, (e.g.: Task A, B, C etc.)
- 29.5 Pilots may make as many starts as they wish. The start used for scoring will be the one that results in the best speed or distance for the day.
- 29.6 The Competition Director may close the Start Gate provided that at least 30 minutes warning is given. The time will be announced on the launch and safety radio frequencies. Pilots making their final start after this time will be given the gate closing time as a start time.
- 29.7 Pilots who out-land may relaunch, only if the out-landing was due to a launch failure or a premature release.
- 29.8 If a glider completes the task, it must not restart.
- 29.9 A pre-start groundspeed and altitude limit may be imposed and shall be specified at the briefing. After the start gate is opened and before making a valid start, the pilot must ensure at least one fix below the specified pre-start altitude limit and speed limit. Failure to do so will be penalized.
- 29.10 The start gate for multiple classes must not be opened at the same time except where those classes have been combined for scoring purposes.
- 29.11 Any pre-start thermalling direction must be specified in the Local Rules or at briefing.

Pilot Event Start System

- 30.1 The PEV Start system may be used on any or all days and will be specified at briefing and on the task sheet if used. Pilots must be aware of how to create a PEV on their FDRs before flying a task where it is used.
- 30.2 The PEV Start System requires pilots to define a Personal Start Window by creating a PEV on their FDR.
- 30.3 The parameters for the PEV Start will be defined in the Local Rules and may be modified at briefing or on the task sheet. They consist of the following values:

• The Wait Time – the time between creating the PEV, and the earliest allowable start time. Normally 10 minutes

- The Window Duration the length of time available to start Normally 10 minutes
- 30.4 When ready to start, the pilot must create a PEV on their primary (and backup, if used) FDR. The time difference between primary and backup event markers must be less than 1 minute and the primary must always occur first.
- 30.5 After creating the PEV, the pilot must wait for the Wait Time, and may then make a start at any time during the Window Duration. The start used for scoring will be the pilot's actual start time.

- 30.6 If a pilot wishes to delay their start, they may create a new PEV, but not before the pre-existing start window has opened. Creating a new PEV resets the Wait Time and creates a new Personal Start Window.
- 30.7 A pilot may create a new PEV even after a valid start, if they wish to restart. However they are not obliged to restart and may decide to continue using the original valid start.
- 30.8 The PEV may be created prior to the start gate open time, but the pilot must not make a start until after the gate open time.

#### Finish Procedure

- 31.1 A glider having entered the finish zone must land without delay in a safe manner. Once on the ground, taxiing must be in the landing direction unless otherwise advised by the Operations Director and/or Safety Officer.
- 31.2 A glider will be deemed to have finished if it successfully completes the course and enters the finish zone. A glider which lands off the airfield after having entered the finish zone will be scored as a finisher. A finishing pilot cannot elect to declare an out-landing.
- 31.3 A pilot is permitted one finish per day.
- 31.4 If a minimum finish height is set, pilots finishing below this height will incur a penalty.
- 31.5 The Organisers may issue guidelines and recommendations as to the behaviour of pilots within the finish zone, including preferred circuit procedure and landing direction. Pilots will not be penalised for failing to follow these unless their behaviour is unsafe.
- 31.6 At least one and preferably two Safety Observers will observe gliders finishing. The observer(s) will be the Safety Officer and/or delegate(s).
- 31.7 The Observer(s) will make a subjective decision as to the question of safety within the finish zone. The Observer(s) may issue a warning or a technical penalty, or may refer more serious matters to the Penalties Committee.

#### Controlled Airspace, Competition Boundary, and Competition Floor

- 32.1 Controlled Airspace regulations must be observed. Clearances obtained by the Organisers will be advised to pilots through the Local Rules or at briefing.
- 32.2 Breaches of airspace regulations during a competition flight will be penalised. Breaches which occur outside the competition flight, or outside the competitive part of the competition flight (for example during an aero-tow retrieve, or before starting), will be penalised if in the opinion of the Penalties Committee the breach was the fault of the glider pilot.
- 32.3 Where the vertical limits of the competition boundary or airspace are defined in feet QNH, the Organisers will use the airfield elevation as determined by the take-off ground roll to identify infringements.
- 32.4 Where the vertical limits of the competition boundary or airspace are defined in terms of Flight Level (FL), the Organisers will use the QNH pressure declared at briefing to determine infringements. This value will not be varied during the task. If no QNH pressure was declared at briefing, then the absolute pressure recorded by the pilot's FDR will be used.
- 32.5 FDRs will be used to determine breaches of the competition boundary or airspace, within the limits of their accuracy. In circumstances where an airspace violation is possible and there is no FDR record to demonstrate that it did not occur, the flight will be scored as if the violation occurred. The Penalties Committee may vary this if evidence is presented which demonstrates that no violation occurred.
- 32.6 The Safety Officer must report all Controlled Airspace infringements to the Gliding Australia COP (Chair of Operations Panel). The pilot concerned must submit a SOAR Report.
- 32.7 All infringements include both a vertical and horizontal component. The lesser of the two penalties will apply.
- 32.8 If multiple infringements of the competition boundary or airspace occur whilst in a single thermal or on a single glide, this will be regarded as a single infringement.
- 32.9 A Competition Floor is defined at 500ft above airfield reference height. Any trace which descends below the Competition Floor will be reviewed by the Scorer or safety committee (under advice from the

Steward), whether or not it resulted in an out-landing. If the safety committee decides that the flying was unsafe then a penalty will be applied by the Penalties Committee for hazardous flying.

#### **Cloud Flying**

- 33.1 Cloud flying is prohibited. Infringements will be penalised. FDRs and video evidence may be used to determine breaches of this rule.
- 33.2 Instruments or displays with features that aid cloud flying are prohibited. Such features must be removed or disabled to the satisfaction of the Organisers prior to the commencement of the competition and must be disabled for the duration of the competition.

#### **Airborne Communication**

This section is intended to restrict two-way communications to specific VHF radio frequencies which are publicly known, in the interests of safety and to encourage individual competition.

- 34.1 The Organisers will approve in the Local Rules mandatory radio frequencies for launch, safety (gaggling), and finish, and any other available frequencies.
- 34.2 Pilots may use only the frequencies provided, and only for the purposes stated by the Organisers.
- 34.3 Pilots must adhere to the rules for radio use defined in the Local Rules or at briefing.
- 34.4 At any time when in company with other gliders, pilots must switch to and remain on the safety frequency.
- 34.5 When approximately 20km from the finish, pilots must switch to and remain on the finish frequency until landing and reaching the tie-down area, or follow Local Rules or directions given at briefing.
- 34.6 All voice communications are to be clearly stated. The use of codes, abbreviations or language not generally understood by officials or competitors is not permitted.
- 34.7 The use of other forms of two-way communication during flight, including but not limited to voice calls, texting, VoIP, CB or HF radios, or any VHF frequency not allocated by the Organisers, is prohibited except in the following circumstances:
  - In response to an emergency, or
  - to conduct legally required operational communication, or
  - to advise of an anticipated out-landing.
- 34.8 Intentional blocking of communication on any frequency is prohibited.
- 34.9 Breaches of communication rules will be penalised and may be considered cheating.
- 34.10 Mobile Phones and similar devices may be used to support those flight navigation apps and internet sources that are publicly available to all participants.

#### Mentoring

- 35.1 The Organisers will invite experienced Nationals pilots to act as Mentors for lower experienced pilots. Mentors may provide one to one counselling and airmanship advice. The list of Mentors will be placed on the public notice board and mentors may be approached either directly or have pilots referred to them by the Organisers.
- 35.2 Mentoring is defined as where an experienced pilot leads or guides another less experienced pilot with the intent of only improving the performance of the less experienced pilot. Such pairings must be declared in advance to the Competition Director who may veto them if it appears that the relative skills and experience of the pair are too close (and are thus a de facto team).
- 35.3 Radio communication between a Mentor and Mentee is allowed but must be on authorised frequencies.
- 35.4 When airborne, mentoring must not use any other forms of electronic communication such as VOIP, text message etc.

#### Team Flying

- 36.1 Team flying is not permitted in any Australian Nationals *with the exception of Sports Class.*
- 36.2 Team flying is defined as deliberate, pre-arranged, systematic communication or co-operative flying between two or more pilots, whether in the same or different classes, for the purpose of improving the performance of any pilot involved.

36.3 Team flying does not include:

• Coaching or mentoring arrangements where an experienced pilot leads or guides another less experienced pilot with the intent of only improving the performance of the less experienced pilot.

• Random gaggles, where pilots follow or join thermals shown by others

• Casual, short term meetings with other pilots where the pilots help one another through difficult conditions.

- 36.4 The decision as to whether pilots are team flying is made by the CD in consultation with the Penalties Committee and the Steward, based on evidence actually observed or from reports from other pilots.
- 36.5 Where the Penalties Committee first determines that team flying has occurred, they will advise each pilot involved in writing of the decision and the type of activity that led to this decision. This will count as the first occasion for each pilot. The warning will be placed on the score sheet for the day in question.
- 36.6 If any of the pilots are involved in team flying on subsequent occasions during the competition, then these will count as further breaches and the penalty will apply.
- 36.7 Any penalty applied for team flying will be in addition to any other penalties applied, for example a penalty incurred for using an unapproved radio frequency.
- 36.8 If the first occasion of team flying occurs on the last scheduled competition day, this may be treated as the second occasion for the purpose of penalties.

#### Out-landing

- 37.1 An out-landing is defined as any landing that occurs off the competition airfield.
- 37.2 Pilots landing out must inform the organisers of their position and retrieve status, as soon as possible, either directly, or via their crew. Crew must liaise with the organisers so that all pilots are accounted for.
- 37.3 Pilots who out-land or abandon the task will be scored to the point on the flight that results in the best score.

#### External Aid to Competing Pilots

- 38.1 Pilots who are not entered in the competition may fly but must agree to remain clear of all set tasks and follow any instructions issued to them by the Competition Director.
- 38.2 Leading, helping, or guiding from any non-competing aircraft is prohibited and will result in the offending pilot(s) being disqualified from the competition.
- 38.3 Assistance, advice and information on any weather or task-related matter from any person or source, other than on authorised competition radio frequencies is prohibited whilst the aircraft is in flight, with the following exceptions:
  - · safety advice provided to assist the pilot during an out-landing
  - automated VHF weather stations
  - publicly available internet sources

#### Verification

- 39.1 Verification will be carried out initially using a valid IGC log file from the primary FDR carried on the flight. Should the file be incomplete or unreadable the Scorer will request a backup file, which may come from any conforming FDR carried on the flight. Data from more than one valid file may be used to demonstrate that the flight was completed. In the absence of any FDR evidence the pilot will score zero.
- 39.2 Evidence from the FDR will be the only means of verification of the flight except in the event of FDR failure following a valid start. In this case, the landing position will be used to determine distance points from the last valid waypoint or from the start. If the pilot out-lands, a Landing Certificate confirming the position of out-landing and signed by an independent witness, a member of the retrieve crew or the tugpilot must be provided to the Scorer. If the FDR fails prior to entering the finish zone, no speed points will be awarded.
- 39.3 FDR traces for all competition launches for the day must be provided to the Scorer. This includes official practice days.
- 39.4 Pilots are responsible for downloading their own data and delivering it to the Scorer.
- 39.5 The data must be delivered within 90 minutes of returning to the airfield.

- 39.6 The data must be transmitted to the Scorer as specified in Local Rules or at briefing.
- 39.7 A pilot may not communicate directly with the Scorer unless authorised to do so by the Competition Organisers.
- 39.8 The Organisers may provide equipment, software and assistance to pilots, however it remains the pilot's responsibility to deliver valid data to the Scorer.
- 39.9 The data downloaded from an FDR may be used by the Organisers to verify and score the flight, to detect infringements of the rules and/or to investigate incidents or accidents. The data may also be used by the Organisers for publicity or public display. The data may be placed on the competition website.
- 39.10 A glider will be considered to have crossed a verification boundary line if a straight line between successive data points crosses the verification boundary line.
- 39.11 A glider which fails to cross the verification boundary of a waypoint or Assigned Area by more than 0.50km will be scored as if it had out-landed at the point on the track log that produces the optimum score. If the FDR shows at least one data point less than 0.50km from the verification boundary (other than the Finish Zone) then the Scorer will choose whichever evaluation results in a higher score: either

• The pilot will receive credit for achieving the waypoint or Assigned Area, and a penalty will be applied, or

• The pilot will not receive credit for achieving the waypoint or Assigned Area and will receive no penalty.

#### Measurement and Reporting

- 40.1 To determine the time at which a line was crossed, the speed between successive data points is assumed to be constant.
- 40.2 Time will be measured and reported to the nearest second.
- 40.3 Position will be reported in Latitude and Longitude using the WGS84 Datum, either to the nearest second or to the third decimal of minutes. No allowance for GPS position error will be made.
- 40.4 Altitude will be reported in feet AMSL.
- 40.5 Speed will be reported in km/h to two decimal places.
- 40.6 For Start and Finish circles, regardless of task type, time is measured at the point of entering or leaving the circle and distance is measured to or from the edge of the circle. For Start and Finish Lines, time is measured at the point of crossing the line and distance is measured from the mid-point of the line.

#### Penalties

- 41.1 For penalties of a technical nature or those defined by formula, the Penalties Committee will not meet unless they wish to consider a variation to the standard penalty.
- 41.2 The Penalties Committee may impose any penalty within the limits permitted in the Rules for the category of infringement or may disallow the penalty if they decide that there was insufficient evidence that an infringement occurred. The Penalties Committee may not suspend, ignore or modify any Rules.
- 41.3 The Penalties Committee, in determining the penalty, will take into account the severity of the offence, the extent to which the pilot was advantaged, any previous similar offences and any other relevant circumstances.
- 41.4 Deductions of points will be made after scoring has been completed. Flights which are disqualified will be treated as if they had not launched, for the purpose of scoring.
- 41.5 Penalties will be listed, with reasons, on the score sheet of the day on which the infringement took place.
- 41.6 The Penalties Committee may penalise by deduction of points or may suspend or disqualify a competing pilot for infringement of the Rules in accordance with the following table. Where a separate maximum deduction is not shown, there is no flexibility in the penalty.

#### Table of Penalties

Infringement	Standard Deduction	Maximum Deduction
Technical errors and failure to comply with procedures	20 points	All points for the day
Attempts to improperly influence the decisions of any Competition Organisers	20 points	All points for the day
Failure to comply with Gliding Australia Member Protection Policy ADMIN008	1 <sup>st</sup> offence – warning 2 <sup>nd</sup> offence – disqualification from competition	
Dangerous or hazardous flying including flying outside the glider's Certificate of Airworthiness or Permit to Fly	100 points	All points for the day, if the infringement has to any extent advantaged the pilot
Any flying incident on the last competition day being the fault of the pilot and resulting in glider damage sufficient to render it unserviceable for flight the following day	All speed points for the day	All points for the day
The use of bad language on the radio or the abuse or vilification of any of the Organisers by radio or otherwise	100 points	All points for the day
Conduct which brings the reputation of the Gliding Australia or the hosting club into disrepute or into conflict with regulatory authorities	100 points	All points for the day
Cheating, falsification of documents, use of forbidden equipment or communication methods, physical abuse of officials etc.	100 points	1000 points
Infringing actual Air Services Defined Airspace	1 <sup>st</sup> offence: 1000 points 2 <sup>nd</sup> offence: disqualificat	ion from competition
Exceeding the vertical limits of the defined Competition Area by x feet	$10\left(\frac{x}{50}\right)^{2}$ ¶Examples: 100ft = 40points, 250ft = 250points, 500ft = 1000points	1000 points
Exceeding the horizontal limits of the defined Competition Area by x metres	$10(\frac{x}{100})^2$ ¶Examples: 200m = 40points, 500m = 250points, 1000m = 1000points	1000 points
Failing, in a self-launched motor glider, to descend to within 100ft of the Competition Release Height, immediately after stowing the motor	1 point per metre	All points for the day

Failure to immediately release from tow after	100 points	All points for the day
receiving a wing-rock signal from the tow pilot		
Starting prior to or after the Personal Start	1 <sup>st</sup> offence – warning	
Window, where PEV starts in use	Then 10 points per minute or part thereof	100 points
Failure to log a PEV, where PEV starts in use	1 <sup>st</sup> offence – warning	100 pointo
	Then 100 points	100 points
Backup PEV before, or more than 1 minute after primary PEV, OR	1 <sup>st</sup> offence – 50 points	
Failure to provide primary trace, where backup PEV used	Then 100 points	100 points
Failing to log a point below start height at a speed below the nominated speed, where implemented	1 point por km/h, plup	
(Penalty to be calculated at the slowest point below the start height, or if no point is below the start height, then the point nearest to the start height)	1 point per km/h, plus <b>1 point per meter</b>	All points for the day
Deliberately disabling or degrading a GPS Tracker supplied by the organisers	50 points	
Failure to submit FDR trace within 90 minutes of landing at, or returning to the airfield	1 point per 5 minutes	50 points
Ballast Infringements (where random weighing is used)	20 points per full 1kg over the 2% outdoor weighing allowance, multiplied by the number of offences	
Use of an unallocated start circle	150 points	All points for the day
Missing, by less than 0.5km, an allocated start circle, start line, waypoint or Assigned Area verification boundary	50 points or all points gained beyond the missed feature, whichever is lower	
Finishing under the Finish Height where implemented	1 point per metre	All Speed points
Failure to submit FDR traces for all flights of the day	100 points	
Team Flying	(n-1)*100, where n is the offence has been comm	

#### **Complaints and Protests**

- 42.1 A pilot who believes that a decision of the Competition Organisation or Penalties Committee is not in accordance with these Rules or the Local Rules may register a written complaint with the Competition Director. If the pilot is unsatisfied with the outcome of the complaint they may then register a protest.
- 42.2 A protest must be made in writing to the Competition Director detailing the issue being protested, and accompanied by a Protest Bond of \$50. The bond will be returned to the pilot after the protest has been decided, unless the Protest Committee decides that the protest was unreasonable.
- 42.3 The Protest Committee will consider the issues and arguments presented. The pilot and the officials concerned must be invited and may present supporting evidence or witnesses, and may ask questions of anyone present.
- 42.4 The Protest Committee may uphold or dismiss the protest. If the protest is upheld, they may vary any penalty within the limits permitted in the Rules for the category of infringement and may make

judgements as to the interpretation or consistent application of rules. The Protest Committee must not suspend, ignore or modify any Rules.

- 42.5 The decision of the Protest Committee will be given in writing to the Scorer and to the pilot.
- 42.6 The decision of the Protest Committee will be final. In the event of a tied vote, the Competition Director will have a casting vote.
- 42.7 The Competition Director will publish the wording of any protest on the Competition Notice Board as soon as practicable after receiving a protest and will likewise publish the decision of the Protest Committee as soon as possible after it is delivered.

#### **Rest Days**

- 43.1 The Competition Director may declare a rest day as circumstances warrant.
- 43.2 A day abandoned before 1pm counts as a rest day. A day abandoned after 1pm does not count as a rest day.
- 43.3 A forced rest day must occur after eight non-rest days. For the purposes of this rule, any official practice days count as competition days.
- 43.4 The Competition Director will decide when any rest day will be called.

#### Glider Damage

- 44.1 If a glider is damaged during the competition, it may be repaired or have components replaced. The whole glider or any major part of it (such as an entire wing or fuselage) may be replaced only if it has been damaged through no fault of the pilot.
- 44.2 Damage to a glider on landing or self-launching will normally be considered to be the fault of the pilot.
- 44.3 Subject to accidental damage, wing panels and winglets may be changed during the competition period, provided that:
  - · the replacement wing panel or winglet is type approved

• if the change results in a change in handicap, then the less advantageous of the two handicaps will be applied for the totality of the competition including days already flown.

- 44.4 Damage to a glider which renders the glider un-airworthy must be notified immediately to the Organisers. If the damage occurs on the last day of a competition then the pilot may be penalised.
- 44.5 In the event of accidents resulting in pilot injury or major structural damage, the aircraft must not be moved until official permission has been granted. Notification of authorities and granting of permission to move will be handled through the Organisers.

#### **Mid-Air Collision**

- 45.1 Gliders involved in mid-air collisions will be deemed to have out-landed at the place the collision occurred, and will be scored accordingly. The Scorer will determine the position.
- 45.2 In the event of a known or suspected mid-air collision, the pilot (or any pilot witnessing the incident) must make every effort to ensure the safety of the other pilot/s once the pilot is sure that their own situation is secure. In such circumstances, clear and concise transmissions on the relevant safety frequency, giving details including the position are recommended; emergency frequency 121.5 should only be utilised if there is no response on the safety frequency.
- 45.3 After a mid-air collision has occurred, pilots must follow correct radio procedures and must not make radio transmissions unless direct assistance or acknowledgement of the initial emergency radio transmission is required.

# D. Scoring

**Scoring Definitions** 

Handicapped Speed	Marking Distance flown by a competitor divided by the time spent on task by that competitor.		
Marking Distance	The distance flown on task by a glider from its start point, divided by the glider handicap.		
f	The Day Factor by which all competitors' uncorrected points are multiplied on a given day. If the Day Factor is > 1 it will be taken to be 1.		
P <sub>m</sub>	The maximum points available for the Day, before application of the Day Factor.		
D <sub>d</sub>	The minimum task distance under which a day is devalued.         Unless varied by the Local Rules, the following values apply for minimum task distance:         Club       200km         15m Sports, Std, 15m       225km         Open Sports, 18m, Open, 2- seater       250km		
D <sub>0</sub>	The highest Marking Distance achieved by any competitor.		
T <sub>d</sub>	The minimum task time under which a day is devalued. Equal to 3 hours unless varied by the Local Rules.		
T <sub>0</sub>	The time spent on task by the pilot with the highest Handicapped Speed (or in the case of a tie, the lowest such time).		
R <sub>d</sub>	Relative marking distance flown by a competitor, compared to the maximum marking distance of any competitor. For all finishers, $R_d = 1$		
P <sub>u</sub>	Uncorrected Total points for a competing glider		
P <sub>c</sub>	Corrected Total points for a competing glider		
$P_{v}$	Uncorrected Speed points		
$P_d$	P <sub>d</sub> Uncorrected Distance points		
Ν	Total number of gliders taking a competition launch		
$n_v$	Number of competitors exceeding 2/3 of the maximum handicapped speed of any competitor		
n <sub>d</sub>	Number of competitors exceeding the nominated marking distance.         Unless varied by the Local Rules, the following values apply for the nominated marking distance:         Club       80km         15m Sports, Std, 15m       90km         Open Sports, 18m, Open, 2-       100km		

$R_{v}$ Relative handicapped speed flown by a con handicapped speed of any competitor.	mpetitor, compared to the maximum
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#### **Calculation of Scores**

- 46.1 The score given to each competitor will be expressed to the nearest whole point. The score for the competition will be the sum of daily scores.
- 46.2 The maximum daily points available, before application of the Day Factor, will be:

$$P_m = min\left\{1000, \left(1250\frac{D_0}{D_d}\right) - 250, \left(1200\frac{T_0}{T_d}\right) - 200\right\}$$

- 46.3 For tasks with Finishers, points will be allocated to each competing glider as follows:
  - Uncorrected points  $P_u = P_d + P_v$
  - Distance points  $P_d = P_m \left[ \left( 1 \frac{2n_v}{3N} \right) R_d \right]$
  - Speed points  $P_v = P_m \left[ 2 \left( R_v \frac{2}{3} \right) \frac{n_v}{N} \right]$

Where  $P_{\nu} < 0$ ,  $P_{\nu}$  will be taken to be zero.

- 46.4 For tasks without Finishers points will be allocated to each competing glider as follows:
  - Uncorrected points  $P_u = P_m R_d$
- 46.5 Unless otherwise stated in these rules, any penalties will be deducted after the score for the day has been calculated and will not change the day factor (if applicable).
- 46.6 The uncorrected points  $P_u$  are multiplied by the Day Factor f to give the Corrected Points  $P_c$  which determines the pilot's score for the day. When f exceeds 1 it will be taken as 1.

$$P_c = f P_u$$
 and  $f = 1.25 \frac{n_d}{N}$ 

46.7 Early Bird Full bonus points are granted to any pilot whose final start occurs before the maximum bonus period expires. Pilots starting after this time will receive reduced bonus points according to the decay rate shown below. Pilots starting after the bonus points have decayed to zero will receive no bonus points.

Early Bird Bonus points are multiplied by the Day Factor f, and then added to the pilot's corrected score. The following parameters apply to Early Bird Bonus:

Full bonus points	50
Minutes after start gate opens before bonus starts decaying	15
Decay rate in points per minute	2
Minutes required after start gate opens for bonus points to reach zero	40

46.8 A Competition Day is one on which at least 25% of gliders launched in the class fly at least 40% of the minimum handicapped task distance. The minimum handicapped task distance is the shortest possible distance required to be flown to finish the task, divided by the highest handicap of any competing glider.

#### Samaritan Scores

- 47.1 A Samaritan Score may be granted to a pilot who requests one after:
  - · discontinuing the task to assist in an emergency situation, or
  - suffering a premature release that prevents a timely relight, or
  - being unable to score due to the actions of another party through no fault of the pilot, or
  - suffering a traumatic event that leaves them unfit to fly.

- 47.2 It is the pilot's responsibility to request a Samaritan Score. The decision on whether to grant a Samaritan Score will be made by the Competition Director in combination with the Steward and Safety Officer.
- 47.3 A pilot may not request a Samaritan Score on more than one day in the competition.
- 47.4 A Samaritan Score will not be granted in the case of a premature release, if the pilot subsequently elects to relaunch.
- 47.5 The Samaritan Score will be determined by calculating, for each other competition day, the proportion of the winner's score that the pilot achieved. (On any day that the pilot won, the proportion will instead be compared to the score of the runner-up). These proportions will then be averaged, and the result multiplied by the score of the pilot who won on the day of the Samaritan Score. A Samaritan Score can therefore not be finalized until after the last competition day has been flown.

#### Handicapping

- 48.1 The NCC will provide a list of handicaps to the Organisers. The official Handicap List will be published on the Gliding Australia website.
- 48.2 The handicap for each glider will be fixed for the duration of the competition period. The Organisers have no authority to vary the published handicaps before or during the event.
- 48.3 Handicaps will use a baseline of 1.000 and be expressed to five decimal places.
- 48.4 Glider variants not covered by the handicap list will be allocated a handicap by the NCC/handicap committee.
- 48.5 Performance enhancing modifications may attract an increase in handicap value; the relevant figures will be published with the handicap list.
- 48.6 Two seat self-launchers may compete at 850kg and be handicapped as an 850kg glider subject to the glider's placarded MTOW.
- 48.7 In any un-ballasted class, a glider may compete at a different weight from the published reference weight but may at no time be flown at a weight exceeding the glider's placarded MTOW. If a pilot elects to compete at a different weight from the published reference weight they will incur the following handicap adjustments:
  - 48.7.1 Single-seat gliders with a wingspan of 18m or less which exceed their published reference weight (whether due to an engine, heavy pilot or unavoidable excess weight) will incur an increase in their handicap of 0.0004 for every 1kg, or part thereof, above that reference weight.
  - 48.7.2 Single-seat gliders with a wingspan of 18m or less which are under their reference weight will be allowed a decrease in their handicap of 0.0004 for every full 1kg below that reference weight.
  - 48.7.3 Pilots flying at a weight below the reference weight will also have the choice of adding ballast to raise the flying weight up to, but not exceeding, the reference weight published for that glider. This may be in the form of correctly secured fixed ballast or water ballast. For water ballast, the water dump system must be sealed in a manner that satisfies the Competition Director that no ballast has been dropped during the flight. If additional ballast of any description is carried, the flying weight must be declared before the first competition day, and must remain the same for all scoring competition days.
  - 48.7.4 For gliders with a wingspan greater than 18 metres, and for all two-seat gliders, this same process will be followed, except that the handicap adjustment will be 0.00025 per kg.
  - 48.7.5 No glider may compete in Club Class if the adjusted handicap exceeds 1.0900. These gliders may instead fly in Sports Class.
- 48.8 Pilots will at all times be responsible for ensuring that their glider is flying within the published weight and balance limits for that type.
- 48.9 All Club Class handicaps refer to gliders without winglets. A handicap adjustment of +0.005 must be applied to any glider fitted with winglets when competing in Club Class. In all other classes including Sports Class, there is no handicap adjustment for winglets.
- 48.10 In the Junior Championships, the Organisers may specify other forms of handicapping in the Local Rules provided that these are endorsed by the NCC.

# E. Task Rules

#### **Racing Tasks**

- 49.1 The task consists of a number of waypoints which must be visited in the order specified.
- 49.2 In order to be classed as a finisher the glider must have followed the correct starting procedure, successfully visited each waypoint in the order specified, and entered the finish zone.
- 49.3 The zone which must be entered at a waypoint is defined by a 500 metre radius circle centred on the waypoint co-ordinates. The waypoint is also accepted where the glider has entered the sector defined by the 90° arc of a circle centred at the waypoint and symmetrical about the extended bisector of the inbound and outbound legs. The radius of this sector is unlimited.
- 49.4 The out-landing distance will be sum of the completed legs plus the distance of the uncompleted leg, less the shortest distance to the next waypoint from any point on the flight path. If the distance flown on the uncompleted leg is calculated as less than zero it is taken as zero.
- 49.5 The maximum marking distance will be the longest handicapped distance flown by any glider in the class.
- 49.6 The Task Distance is the distance from the centre of the Start Line or Start Circle used, to the centre of the Finish Circle via all waypoints, less the radius of the Start Circle (if used) and less the radius of the Finish Circle.

#### Assigned Area Tasks

- 50.1 The task consists of a number of circular and/or wedge shaped geographic areas which must be visited in order. In the case of circles, the coordinates of the centre of the area will be one of the official waypoints. In the case of a wedge shape the point will be one of the official waypoints. The radius of each area will be specified in whole kilometres. Consecutive areas must not overlap. Operational restrictions such as airspace may make some parts of an area unavailable.
- 50.2 Wedges may have a minimum as well as a maximum radius. Orientation of wedges will be symmetrical, or expressed in whole degrees.
- 50.3 In order to be classed as a finisher the glider must have followed the correct starting procedure, successfully visited each area in the order specified, and entered the finish zone.
- 50.4 The data point giving the maximum task distance will be used as the point of reference within each area. If the glider does not visit an area, it will be scored as out-landing at the track log point that gives the maximum score.
- 50.5 A minimum time for the task will be set. Gliders completing the task in less than the minimum time will have the minimum time used in the calculation of speed.
- 50.6 The maximum marking distance is the longest handicapped distance flown by a pilot in that class.
- 50.7 The Task Distance is the distance from the centre of the Start Line or Start Circle used, to the centre of the Finish Circle via the optimum data point recorded in each Assigned Area, less the radius of the Start Circle (if used) and less the radius of the Finish Circle.
- 50.8 A pilot who exceeds 95% of the maximum possible task distance achievable from their selected start point, and still completes the task under time, may apply for the task to be rescored using their completion time, rounded down to the nearest minute. For example, if a pilot completes a 3hr task in 2:52:50 then the entire task, for all pilots in the class, will be recalculated with a minimum task time of 2:52:00.

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