



## Local Rules

### Kingaroy Soaring Club, Kingaroy September 2018

1. **ORGANISER:** The organiser of the 2018 State Gliding Championships is the Kingaroy Soaring Club, on behalf the Gliding Federation of Australia.
2. **LOCATION:** Kingaroy Aerodrome. Lat. S 26.34.8, Long. E 151.50.5

The Aerodrome is located on the south eastern edge of Kingaroy Township. Note that Kingaroy is a Non-Towered Aerodrome and is designated a CTAF.

3. **DATES:** 29th September - 6th October 2018.
4. **OFFICIAL TIME:** Official time is Australian Eastern Time
5. **RULES:**

#### STARTING

##### Definitions

- a. Start Line – a straight line, of 20km length, perpendicular to the track to the first Turn Point.
- b. Extended Start Line - the start line extended on both sides to the infinite.
- c. Start Area - the half circular area with of 20km radius located "behind" the Start Line opposite to the first Turn Point.
- d. Extended Start Area - the area located behind the Extended Start Line.
- e. Start Altitude – the maximum altitude at which the start line may be crossed once the start line is open. This altitude shall be set daily by the organiser as a function of the meteorological conditions. On the flight record the altitude of the start shall be measured by interpolating between the altitude at the last fix before the line and the altitude at the first fix after the line. A tolerance of 5 meter shall be applied (The pilot shall get no penalty if he crosses the line less than 5m above the maximum altitude, but he shall get the penalty corresponding to the full difference between his altitude and the maximum altitude if the excess is higher than 5m).
- f. Start Point – the centre of the Start Line. The Start Point should normally coincide with the Goal.
- g. Start Speed – the maximum ground speed at which the start line may crossed. This speed is 170 km/h. This ground speed on the start line shall be calculated as the average ground speed for the last three seconds up to and including the first fix after the start line. The ground speed measured on each of the fixes shall be measured by dividing the distance from this fix to the previous one by the time interval between the two fixes. In the event that there are not 3 valid fixes available before the first fix after the line that are 3 or less seconds from this fix, the ground speed shall be calculated by measuring the speed from the first valid fix before the crossing the line to the first fix after the line.



## Starting Procedures

- a. The Organisers shall announce by radio the opening time of the Start Line which shall be not less than 20 minutes after the main launch procedure has been completed.
- b. Once the Start line opening time has been announced, the Organisers shall no longer delay the opening of the Start Line even if pilots fail to stay airborne or to reach the start altitude. They may however cancel the opening of the Start Line if it is dangerous to continue launching or the weather deteriorates so that the task may not reasonably be attempted or if more than half of the pilots fail to stay airborne before opening of the start line.
- c. During the last 5 minutes before the opening of the Start Line, circling or turning (by more than 90°) to the **Left** is prohibited in the Start Area. Non-compliance shall be penalised.
- d. The pilots must be behind the Extended Start Line no later than one minute before the Start Line is opened. Non-compliance shall be penalised.
- e. Once the Start Line is open the pilots must start by crossing the line below the Start Altitude and within the Start Speed limit. Non compliance shall be penalised.
- f. A pilot starting before the opening of the Start Line shall be penalised.
- g. A pilot manoeuvring in such a way as to fly in the opposite direction or perpendicular to the track of the other pilots, within three minutes from the opening of the start line, shall be disqualified for the day (The intent of this rule is to penalise a pilot for turning back in the first few moments after the start which could create a risk of head on conflict with the other gliders). Circling to climb is excepted from this rule.
- h. A competitor landing back to the airfield after having started may be relaunched. He shall be released directly in the Start Area at the nominated Start Altitude. He does not need to stay behind start line for one minute and may start immediately but must cross the start line below the start altitude and within the speed limit. In this case no time penalty shall apply for not being behind the start line for one minute before the opening of the Start Line.

Radio Procedures The following radio messages will be made by the Organisers:

- a. At least 20 minutes before the opening of the start line: "The Start Line will be opened at Y Hour and the maximum start altitude is XXXX ft " (altitude expressed in QNH).
- b. At 10 minutes before the start: "The Start Line will be opened in ten minutes. The maximum start altitude is XXXX ft. Pilots must be behind the Extended Start line in 9 minutes".
- c. At 5 minutes before the start: "The Start Line will be opened in five minutes, the maximum start altitude is XXXX ft. From now, turns to the **Left** are prohibited in the start Area . Pilots must be behind the Extended Start line in 4 minutes.
- d. At 3 minutes before the start: "The Start Line will be opened in three minutes. Pilots must be behind the Extended Start line in two minutes".



- e. At 2 minutes before the start: "The Start Line will be opened in two minutes. Pilots must be behind the Extended Start line in one minute".
- f. One minute before the start: "The Start Line will be opened in one minute"
- g. 30 seconds before the start: "The Start Line will be opened in 30 seconds "
- h. 10 seconds before the start: "Start in 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, Go !"
- j. Circling Direction after start: For safety reasons the CD may impose a common turn direction up to a given distance from the start.

## 6. SCORING AND PENALTIES

### Definitions

- a. Race Distance - the distance from the Start Point to the Goal via all Turn Points.
- b. Start Time - the time at which the Start Line was opened.
- c. Finish Time - the time the sailplane first crosses the Finish Line after completing the task.
- d. Marking Time – the time elapsed between the Start Time and the Finish Time for an individual competitor.
- e. Marking Distance - the sum of the legs correctly completed by the competitor, commencing from the Start Point, in their proper order and the distance achieved on the next leg attempted but not completed if any. The achieved distance of the uncompleted leg is the length of that leg less the distance between the Outlanding position and the next Turn Point, or Goal in the case of the last leg, with the provision that if the achieved distance of the uncompleted leg is less than zero it shall be taken as zero
- f. Valid Day - a Day shall be counted as a SGP Day if:
  - (i) A launch opportunity has been given to each competitor in time for the competitor to carry out the task of the Day in question, and
  - (ii) At least one competitor has completed the task.

Flight verification      Flight verification will be made using the SkyMate device.

In the event of failure, GNSS flight recorders (FR) will be used as a backup under the following conditions

- a. At least one GNSS FRs must be carried. If two recorders are used, one shall be designated to the Organisers as the primary recorder and the other one as a backup.
- b. The Organisers shall be informed of any change of equipment including the designation of the primary FR. Non-compliance shall be penalised.

GNSS FRs recording intervals shall be set to 3 sec or less. Noncompliance may be penalised.



FRs shall be switched on for at least two minutes before take off to establish an altitude baseline. For motor gliders having an MoP capable of being started in flight (including sustainer MoP) a test run during flight on the first Contest day or the last practice day shall be required to prove the ENL of the flight recorder works. The FR must remain switched on following an engine run on the ground.

The Organisers shall require the flight record from the backup FR only in the event that the primary FR fails. .

If both recorders fail and the flight record is interrupted for a period longer than one minute the sailplane shall be considered as having a virtual outlanding at the point of interruption unless satisfactory evidence can be provided that the sailplane did not, during the interruption of the FR record, violate airspace, or in the case of a motor glider, use the MoP. IGC Files delivered by tracking units may be used to provide this evidence.

Penalties shall be imposed by the Organisers for unauthorised interference with the GNSS equipment, data, or internal program.

#### Basic scoring

The Scoring Time of all finishers shall be their marking time plus any applicable penalty.

The Scoring Speed of all finishers shall be their Marking Distance divided by their Scoring Time.

#### Place scoring

If there are at least 9 finishers, the day's fastest pilot receives 10 points, the second fastest pilot receives 8 points, the third fastest pilot receives 7 points and so on down to the ninth finishing pilot who receives 1 point.

If the number of finishers  $N_f$  is lower than 9, the fastest pilot receives  $N_f+1$  points, the second fastest pilot receives  $N_f-1$  points, the third fastest pilot receives  $N_f-2$  points and so on down to the last finisher who receives 1 point. For example if there are only 3 finishers the first finisher receives 4 points, the second 2 points and the third one point.

In case of a tie of two or more pilots, all tied pilots shall receive the same Place Score. The Place Scores of lower ranking pilots remain unchanged. If there were 9 finishers and positions 2, 3, and 4 were tied, the Place Scores would be : 10, 8, 8, 8, 5, 4, 3, 2, and 1.

On the last designated competition day, the organisers shall give an additional 1 point bonus to the winner of the day.



Scoring parameters All times

are in seconds and all distances in km.

Competition Day

$D_t$  = Task Distance  $T_s$  = Start Time

Competitors

$D$  = Competitor's Marking Distance

$T_f$  = Competitor Finish Time

$T$  = Finisher's Marking Time =  $T_f - T_s$

$N_f$  = Number of finishers

$S$  = Score

$R$  = Competitor's ranking (according to  $S$ )

$P$  = Daily Place Score

$O$  = Overall Place Score

#### Scoring formula

Daily Time Scores The day is not a valid day if there are no finishers. The scores shall be displayed in hours, minutes and seconds.

For finishers:  $S = T$

#### Daily Place Scores

For the winner of the day: If  $N_f < 9$ ,  $P = N_f - R + 2$  If  $N_f \geq 9$ ,  $P = 10 - R + 1$

For all finishers: If  $N_f < 9$ ,  $P = N_f - R + 1$  If  $N_f \geq 9$ ,  $P = 10 - R$

If a bonus point has been given on the last day, it shall be added to the daily place score of the pilot receiving it:

$P = P + 1$

#### Overall Place Scores

For each pilot:  $O = P_1 + P_2 + \text{etc...}$

Tiebreak: If two or more pilots have the same place score after the last Sailplane Grand Prix day, the sequence between these pilots shall be decided by the daily results. The best ranked pilot shall be the one who has the most daily wins. If a tie still exists, the best ranked pilot will be the one with the most second placings, and so on. In case this procedure does not help to break the tie, the speeds achieved every day will be added together and the faster pilot (the one having the higher total of speeds) shall be ranked higher.



## Penalties and disqualification

The CD shall impose penalties for infringement of, or non-compliance with, any Rule or Local Procedure. The severity of the penalties ranges from a minimum of a warning to disqualification as appropriate for the offence. The penalties imposed shall be in accordance with the appropriate list of penalties stated in Section 8.7 below.

All penalties shall be expressed in times and added to the scores after they have been calculated'

If a pilot has been disqualified, he shall be scored as though he had not started.

Offences not covered by this list may be penalised at the CD's discretion in accordance with the provisions of the Sporting Code, General Section 5.2.

Penalties shall be listed on the score sheet of the Day on which the penalty was given.

In case of unsporting behaviour, the SGP Director may penalise a pilot with a warning or depriving him from one position in the overall ranking for first offence. A second offence may be penalised by disqualification from the event



## LIST OF APPROVED PENALTIES

<b>Type of Offence</b>	<b>Penalty</b>
Overweight of W kilograms in case of a random check	W x 10 sec
Wrong or Missing Information Documentation not complete	No launch
Scrutinising not complete	No launch
Late submission of FR Time interval between fixes > 1s	3sec
Changing FR without advising the Organisers	1 minute
<b>Incorrect Start</b>	Time spent outside the Extended Start Area during the final 1 minute before the Start Line is open Time x 2
Start before the Start Line is open	Time difference x 10
Start above maximum start altitude	0 sec/meter for the first 5 meter, 2 sec/meter there after
Start speed above 90 knots	10 / knot
Missing the start line by less than 500m	5 minutes
Manoeuvring in opposite direction or perpendicular to track of pilots attempting to cross the start line	Day disqualification
<b>Incorrect Rounding of Turn Points</b>	More than 0.50 km from turn point or area 5 minutes
	More than 1.00 km from turn point or area No control
Flying above max altitude in the observation zone of a Turn Point (if a maximum altitude has been set)	0 sec/meter for the first 5 meter, 2 sec/meter above the maximum altitude thereafter
<b>Incorrect Finish</b>	
Flying below the minimum altitude between the reporting point and the finish line.	0 sec/meter for the first 5 meter, 2 sec/meter below the minimum altitude thereafter (measured at the lowest point)
Landing on the airfield but not crossing the finish line	5 minutes



### **Dangerous or Hazardous Flying**

Cloud flying	Disqualification
Circling in wrong direction in the start area before opening of the start	30sec / Left turn or left circle
Towing: early or late release/ pull-up before release	1 minute
Finish Line: hazardous manoeuvre	1 minute
Landing: incorrect landing lane	1 minute
Flying above the absolute altitude limit (defined at briefing) if excess altitude < 100m	0 sec/meter for the first 5 meter, 2 sec/meter above the maximum altitude thereafter
Flying above the absolute altitude limit (defined at briefing) if excess altitude > 100m	Outlanded at the entrance in the airspace
Entering restricted or closed airspace	Outlanded at the entrance in the airspace
Landing after legal daylight	Outlanded at the position of the sailplane at the expiry of the legal daylight

### **Cheating or Falsifying Documents**

Falsifying documents	Disqualifying
Attempt to obtain external help for finding lift from non-competing sailplane or airplane	Day disqualification
Use of frequency other than the common frequency	5 minutes
Attempt to interfere with the tracking units	5 minutes

### **Other Violations**

Flying under influence of alcohol	Day Disqualification
Positive doping control	See GFA policy
Unsporting behaviour	See above





7. **FOREIGN PILOTS:** Foreign pilots are welcome to compete
8. **PROTEST:** Each protest must be accompanied by an amount of \$50, which will be returned in the event that the protest is upheld.
9. **REGISTRATION:** All pilots are required to register at the competition office by 29<sup>th</sup> September 2018. Each pilot will be required to present documented proof of compliance with the entrance requirements (refer to General rules) and the conditions stipulated on the Entry form. Particular note should be taken of additional insurance requirements stipulated on the Entry form. The Organisers reserve the right to charge an additional amount in conjunction with the first tow ticket sold to each pilot to cover the cost of any additional charges or levies which may arise from time to time.
10. **TWO SEAT GLIDERS:** Every pilot who will be competing in a two seat aircraft must complete and sign an entry form. However, there will be only one entry fee per glider. Should a pilot in command of a two-seat glider carry a passenger during a competition flight it is his/her responsibility to ensure the passenger reads, understands and signs the declaration/waiver form which will be available at registration. Should the passenger be a minor, the declaration/waiver must be signed on their behalf by their parent or guardian.
11. **ASADA ANTI DOPING RULES AND PROCEDURES:** Pilots who enter gliding competitions are required to comply with the ASADA Anti-Doping Rules and Procedures. The Rules have been published on the GFA web site. Pilots are advised to review the Rules and be prepared to sign the Acknowledgement and Agreement form (Appendix 2 in the Rules) at registration for these Championships.
12. **FLYING PRIOR TO THE COMPETITION PERIOD:** Will be permitted
13. **LOCAL FLYING DURING THE COMPETITION PERIOD:** All local flying must be authorised by the Competition Director or his delegate.
14. **BRIEFINGS:** A compulsory initial briefing, which will include a mandatory safety briefing, for all competing pilots, tug pilots and crews will be held in the Kingaroy Clubhouse at 9.00 am on 29<sup>th</sup> September 2018. Daily briefings will commence at 9.00 am unless a different time is posted on the noticeboard in the clubhouse.
15. **MAPS and WAYPOINTS:** World Aeronautical Charts for Brisbane (3340) and Armidale (3357) cover the entire competition area. Details and files in .dat and .cup format will be made available on the competition website.
16. **TASKS:** GP format is planned to be the default format however in the event of unforeseen technical difficulties Assigned Speed and Assigned Area tasks may be set, GP starts may be implemented in both cases. A GP start means that all pilots will be given the Window Open Time as their start time, and a maximum start height and speed will be declared at briefing.
17. **AIRSPACE:** Restricted areas are shown on the Oakey/Brisbane VTC charts. The official airspace file can be found on the competition website, the file and map define a "Contest Area" which in most cases encloses official airspace boundaries. Flying outside the Contest Area will incur a progressively increasing penalty however any entry into officially designated airspace will incur major penalties.



18. **FLARM** – Mandatory in all competing gliders.

A FLARM unit operating on the designated Australian FLARM frequency and programmed with the ICAO aircraft designator is mandatory and must be carried and be operational throughout every competition flight.

In the event of a general failure of the FLARM system, the Contest Director will ask pilots to vote on whether the contest day should be flown or cancelled. In the event that a majority of pilots vote to fly the day then the day will be flown.

19. **RADIO FREQUENCIES:**

- CTAF 127.45
- Safety – gagging 122.025
- Retrieves 126.70
- Finish CTAF 127.45
- AWIS 125.95
- Brisbane Centre Above 8500 feet 123.0 or as per AIP

20. **RADIO PROCEDURES:** The following radio procedures will apply:

- Pilots communicating on CTAF frequencies must hold a Flight Radiotelephone Operator Licence or an equivalent GFA logbook endorsement. GFA Radiotelephone Operator Authorisation endorsement requirements are contained in the GFA Operational Regulations 6.5 and GFA Airways and Radio Procedures for Glider Pilots 3.2.2
- **MARSHALLING:** When marshalling and returning to tie owns monitor 127.45.
- **LAUNCHES:** Use the CTAF frequency 127.45 during the Aerotow and when below 4500ft QNH in the start area
- **STARTING:** The start gate will be opened with calls on 127.45 and 122.025.
- **FINISHING:** Switch to the CTAF frequency (127.45) about 25 km from the finish line and remain on that frequency until you have landed on the airfield. Make a brief inbound call at approximately 10NM e.g. "Kingaroy - glider Hotel Delta Xray - 10 miles to the north west - inbound - Kingaroy. Make another brief inbound call at about 3NM e.g. " Hotel Delta Xray – 3NM - north west. Straight-in landings are preferred and will be encouraged.

21. **GAGGLES:** When outside a CTAF all pilots must switch to 122.025 when entering and flying in gaggles. A list of CTAF frequencies will be provided and pilots within these areas are reminded of their obligations to monitor and report their presence.



22. **AIRFIELD ETIQUETTE:** Kingaroy Aerodrome is home to many forms of aviation.

- Taxi adjacent to runways on grassed areas outside white cones.
- Taxiing via designated taxiways (yellow cones, yellow lines) is permitted.
- No parking on apron or on the taxiway. (keep clear for RFDS and other GA aircraft)
- Powered GA aircraft have 'right of way' on all taxiways and runways for take-off.
- No dogs allowed.

23. **MARSHALLING:** Launch order and take-off direction will be posted in a nominated position prior to briefing. Aircraft not marshalled when launching is about to commence will be held until launching of all classes is completed. There will be no marshalling while launching is in progress.

24. **RELEASE CHECKS:** Pilots will be responsible for doing their own release checks. Release checks will not be provided on the grid or during the launch.

25. **LAUNCHES:** Launching is by Aerotow only. Tug tickets will not be issued. You will be asked to purchase a quantity of Aerotow launches at registration. Individual accounts will be kept for each aircraft and pilot and the account will be debited each time you take a launch. A refund will be issued for any unused launches. Self-launch gliders will use the same runway direction and blend with the Aerotow launches under the direction of the Launch Master or the Contest Director.

26. **START PROCEDURE:** As per 5. In the Local Rules. The Organisers will broadcast the start gate opening time for each class on **122.025**. Gliders to remain on CTAF (127.45) until above 4500'. The daily briefing will outline the communications procedure for the start.

27. **FINISH PROCEEDURE:** The finish line is a line centred on the waypoint **KRYSF** of **2.0 km radius**. A minimum finish height may be set. Recommended finishing and circuit procedures will be advised on the website and at briefing, a straight-in approach with a long landing on the active runway is preferred. Taxying off the active runway is permitted and encouraged.

28. **SEARCH AND RESCUE:** SAR action will be taken at last light plus one hour eastern standard time (EST) if no out-landing advice has been received by the flight office. To avoid unnecessary SAR action, competitors must comply with the General Rules.

29. **VEHICLES:** Crew vehicles must carry their aircraft registration letters on a rear window. A vehicle may, while towing a glider, use the runway and taxiways, mandatory CTAF broadcasts apply.

30. **TIE DOWN AREA:** The tie down area will be marked out. There will be no allocation of a particular space for each sailplane. Competitors must consult the organisers before first tying their gliders. Competitors are to bring all necessary tie down equipment. Stakes are to be driven in flush with the ground and left there for the duration of the competition. Pilots who do not make pegs flush will be liable for all damage caused.



31. **HANDICAPS AND REFERENCE WEIGHTS:** The aircraft handicaps and reference weights for this competition are those published on the GFA web site. Random weighing may occur on the grid.
32. **CONFIGURATION CHANGES:** Except as provided for in the rules, the glider must fly the entire competition in the configuration in which it is weighed and scrutinised before the start of the competition, and at the handicap and reference weight determined by that configuration. The “start of the competition” is the start of briefing on the first scheduled contest day,
33. **FLIGHT RECORDERS:** Flight Data Recorders, as specified in the Competition Rules, are mandatory for this competition. Competitors must download their own loggers and transfer their files to the scorer using methods to be advised. While other types of recorders are permitted by the General Rules, the Organisers strongly recommend the use of IGC approved secure recorders. Pilots of gliders which have functioning motors are reminded that a means of detecting engine runs must be provided.
34. **USE OF MOBILE PHONES AND SIMILAR DEVICES:** Mobile phones and similar commercial devices are permitted for internal use in the glider, for navigational and similar functions. Such devices must not be used to share information with other pilots or to acquire information about the location or progress of other gliders, or to provide any other information prohibited in the rules (such as Artificial Horizons). The only exception to this is for position reporting in the case of an actual or anticipated out landing, or in an emergency.
35. **TEAM FLYING.** In accordance with General Rule 33, Team Flying is not permitted in this competition. Pilots are expected to abide by both the letter and the spirit of this Rule. Pilots will be required to sign a specific declaration affirming this when they register. This is an individual competition, and team or prearranged co-operative flying will be addressed strictly in accordance with the rules.
36. **OXYGEN:** Oxygen filling will not be provided.

The Competition Organisers strongly encourage the carriage and use of a supplemental oxygen system and wish to remind pilots of the competitive advantage that can be gained by the use of supplemental oxygen even at altitudes well below 10,000ft. In addition, we remind pilots that CASA Civil Aviation Regulation 20.4 requires the carriage and use of supplemental oxygen for flight above 10,000ft QNH. If a functioning Oxygen system is not fitted, flight above 10,000ft will be monitored and dealt with as a safety matter.

37. **NUMBER OF ENTRIES:** Entries received and fully paid before Aug 31, 2018 will be accepted up to a limit 20 per class i.e. Open/18, Std/15. Any pilots who are not accepted will be placed on a waiting list and will be selected first if any vacancies occur.
38. **RETRIEVES:** Crews must notify the Organisers of any road retrieves before leaving the airfield.
39. **AERO TOW RETRIEVES:** The availability of aero tow retrieves shall be by arrangement with the Tug Master and authorised by the Competition Director. The flight office is to be notified prior to the tug aircraft leaving on a retrieve. The tug pilot retains the right to reject an aero tow retrieve if on arriving he/she feels that the site is unsuitable for the current conditions. In such cases, the glider pilot will be responsible for the cost of the flight. The costs of all Aerotow retrieves will be payable to the Contest Organisation.
40. **CATERING:** Catering for lunch and dinner each day and refreshments during the day will be available on the Airfield during the competition period.

