

# **WEST AUSTRALIAN GLIDING ASSOCIATION INC**

## **STATE GLIDING CHAMPIONSHIPS**

### **RULES**

**2008**

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**ISSUE**  
**September 2007**

## **1 – GENERAL**

### **1.1 AUTHORITY**

- 1.1.1 These Rules are issued by the West Australian Gliding Association (the Association) and shall govern the West Australian State Gliding Championships (the Championships).
- 1.1.2 The Association shall nominate an affiliated Club (the Organisers) to arrange the Championships.
- 1.1.3 The Championship rules shall consist of these Rules, together with any changes authorised by the Association and any Local Rules issued by the Organisers.
- 1.1.4 A copy of these rules together with any authorised changes and Local rules made prior to the Championships shall be made available to a competitor on entry. (Note 1.1.9 requires 21 days notice for a rule exemption. ie A copy of the Rules should be made available as early as possible, say Aug/Sep each year).
- 1.1.5 The Organisers shall provide a Championship Notice Board at the competition site. Authorised notices on this board shall be deemed to have been published and issued to each competitor.
- 1.1.6 The Organisers shall appoint and publish the names of the following officials prior to the Championships:
- Competition Director, Deputy Competition Director, Chief Scorer, Chief Marshal, Tug-Master, Safety Officer, Chief Task-Setter.
- Competing pilots at the initial briefing shall elect the following officials:
- Two Protest Committee Pilots, Two Reserve Protest Committee Pilots.
- 1.1.7 The Competition Director may amend these rules during a Competition only to the extent necessary to overcome an impracticality. No amendment may change the intent of these rules.
- 1.1.8 The Competition Director may issue additional 'local' rules to cover flying operations, safety and administration at the Championships.
- 1.1.9 An intending competitor may apply in writing to the Competition Director for an exception to a rule. The Competition Director must receive such an application at least 21 days prior to the start of the Championships. The Competition Director may grant such an application only in accordance with Rule 1.1.7.
- 1.1.10 In the absence of the Competition Director during the Championships, the Deputy Competition Director shall act for the Competition Director.

### **1.2 CHAMPIONSHIP DATES AND VENUE**

- 1.2.1 The Championships shall be held annually at a time and venue approved by the Association.
- 1.2.2 Details of the venue, dates, duration and contacts for information shall be published in the club newsletters of the major gliding clubs in WA and circulated by email.
- 1.2.3 The Championships shall be for a minimum of 9 possible contest days. There shall be no mandatory practice or rest days.
- 1.2.4 The Championships shall be deemed to start at 9:00 am on the first published day or practice day, whichever is the sooner. (Advise all competitors).

1.2.5 A contest day shall be deemed to start at the beginning of the daily briefing.

### **1.3 CHAMPIONSHIP CLASSES**

1.3.1 The Championships shall be held for the following Classes: Championship, Open, 15 Metre and Standard. All pilots are entered in the Championship Class. Open, 15 meter and Standard classes are subsets of Championship Class.

1.3.2 All gliders may carry water ballast. For Championship Class, handicap adjustments will be applied in accordance with 6.2.2.

1.3.3 Any glider flown solo or dual may be entered in the Championship Class.

1.3.4 The Open, 15 Metre and Standard Classes shall be non-handicapped.

1.3.5 Any glider flown solo may be entered for the Open Class.

1.3.6 Any glider flown solo with a wingspan not exceeding 15 metres may be entered in the 15 Metre Class.

1.3.7 Any glider flown solo, which meets the Federation Aeronautique Internationale rules for Standard Class gliders, may be entered for the Standard Class.

1.3.8 *Clause deleted.*

1.3.9 *Clause deleted.*

1.3.10 A glider may be entered in all appropriate classes.

1.3.11 A Class shall be held only when, at the close of registration, five gliders can be shown to be scheduled to fly each contest day.

1.3.12 Competitors may compete as a Casual Competitor on days they are not scheduled to fly, only with the express permission of the Contest Director or his/her deputy. In this case they may receive starts and finishes. Their speeds will be calculated and shown on the score report for the day but they are not to affect the results of the official competitors nor be included in the cumulative scoring system.

### **1.4 CLUB TEAMS**

1.4.1 Each affiliated Club may enter a Team of 3 pilots for the Team Class.

1.4.2 Team members shall be nominated in writing to the Competition Director before the beginning of briefing on the first contest day.

1.4.3 A team shall consist of three members plus a reserve. The reserve shall be nominated at the same time as the team.

1.4.4 Should one of the team be unable to fly part way through the championships and will not compete for the remainder of the championships, then the reserve will take his place.

1.4.5 The scores will be such that the original team member's scores will count until the last day he flies. The reserve pilot's scores will be counted from then on.

1.4.6 To be eligible to win the Team trophy all members of the team must be members of the respective Club.

### **1.5 SELECTION OF CHAMPION**

- 1.5.1 The title of Champion shall be awarded to the highest placed West Australian competitor/team in each Class. A West Australian competitor or team member is defined as one who is normally resident in Western Australia.
- 1.5.2 The declaration of a Champion requires that all competitors in that Class have had the opportunity to fly a minimum of four contest days.
- 1.5.3 Pilots electing to join the scramble or flying as a pilot pair are not eligible to be declared a Champion of a class.

## **1.6 PILOT SCRAMBLE**

- 1.6.1 Competitors may either:

- a) Fly every competition day, or
- b) Join a scramble list and fly half the competition days according to the scramble list, provided this is permitted by Rule 1.3.11.

All pilots shall be available to fly as required by the Organisers. Scrambled pilots shall fly according to the scramble list as published by the Organisers. Refer to 1.5.3 with respect to eligibility for champion.

- 1.6.2 Furthermore the pilots must declare their intent in writing to the Organisers as to whether they elect to fly every day or join the scramble list. This decision is to be made by 1800 hrs on the day before the start of the competition and may not be altered during the competition. In the event of no such declaration being made, the pilot will be deemed to be flying every day and will be scored accordingly. Clearly if two pilots enter with the same aircraft they will be deemed to be sharing it and will join the scramble list. Refer to 1.5.3 with respect to eligibility for champion.
- 1.6.3 A pilot who elects to fly every day may nominate a rest day or date that the pilot is not required to fly. Conditions on this are:
- The nomination of the day must be given prior to briefing on the previous day (24 hours notice).
  - Rest days can not be requested on the first or last competition day.
  - The Pilot's score for the pilot initiated rest day will be the pilot's average score to date with a 5% penalty applied.
- 1.6.4 Where there are insufficient entries to scramble two pilots per glider, entries may be cancelled by the Organisers in order that one pilot per glider may be used. Entrants affected under this rule shall be allowed to enter in an alternate Class without penalty under Rule 2.1.3, provided such entry is made before the start of the first contest day.
- 1.6.5 If there are any entrants requiring a scramble list in terms of Rule 1.6.1, the list may be compiled by a committee (appointed by the Organisers) of three members from three different clubs. This scramble list should be published at the end of briefing on the first contest day and must remain in force unchanged from then on. Should a day be lost, the contest days will continue as originally published. ie. Day 4 remains day 4 until flown.
- 1.6.6 A competitor may compete in more than one entered glider within the same class. The pilot must nominate on which days the alternate glider will be flown by 1800 hrs on the day before the start of the competition and may not be altered during the competition.
- 1.6.7 Two seat gliders may be flown with 2 pilots provided that, on any day, the nominated competing pilot is the most experienced pilot, as determined by the Organisers.
- 1.6.8 Should a day be cancelled for one class, making a situation where it would force a pilot pair to fly on the same day, the scramble will be altered so that the higher seeded pilot maintains his scramble position whilst the lower seeded pilot flies on the remaining days.

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- 1.6.9 Each scrambled pilot will fly on either the first or the second and on either the last or second last contest day. Scrambled pilots shall not be required to fly more than two days consecutively or have more than two rest days consecutively.

### 1.7 PILOTS MEETING

- 1.7.1 A Pilots' Meeting shall be held during the course of the Championships, at which changes to the Championships rules may be discussed. This meeting is to be chaired by the Contest Director or his/her appointee. Minutes of this meeting shall be forwarded to WAGA. Only pilots competing in the current competition, but excluding casual pilots, shall be Eligible to vote at these meetings. Observers may speak at the chairs discretion.
- 1.7.2 Rule changes requested at the pilots meeting shall be considered by the Association.
- 1.7.3 Pilots' Representatives and a Convenor of these Pilots' Representatives shall be elected at the Pilots' Meeting. They shall meet later to consider these rules and:
- a) Propose any necessary rule changes that reflect the decisions of the Pilots Meeting, as far as are practicable.
  - b) Propose any changes that they deem necessary, in the light of occurrences at the last State Championships, which would improve safety, sportsmanship or the smooth running of the State Championships. These changes must be within the spirit of the current rules and/or the wishes of the Pilots' Meeting.
  - c) Overhaul the rules from time to time to ensure their clarity, consistency and conformity to current practices and ensure they do not conflict with GFA Operational Regulations and the MOSP.
  - d) Submit all necessary rule change proposals to WAGA for ratification. In turn, any further changes required by WAGA must be referred back to the Convenor of the Pilots' Representatives for amendment.
- 1.7.4 A person appointed by WAGA to provide continuity will chair this meeting of Pilots' Representatives. This Chairman and the Convenor shall report back to WAGA on any rule changes proposed by the Pilots' Representatives. The RTO (Ops) may be a member of this committee or should be consulted. All rule changes should be finalised at least three months prior to the next State Championships.

## 2 - ENTRY

### 2.1 GENERAL

- 2.1.1 Competitors shall apply for entry on the Official Entry Form, with the prescribed entry fee.
- 2.1.2. The amounts of the prescribed entry fee and any late entry fees shall be submitted by the Organisers to WAGA for approval prior to circulation of the entry form, on which these fees must be stated.
- 2.1.3 Late entrants, as defined by the Competition Director, shall be subject to an additional late entry fee.
- 2.1.4 Competitors shall agree to abide by all the Championship rules and any Local Rules as a condition of entry.
- 2.1.5 Competitors must agree to waive all claims against the West Australian Gliding Association Inc or their agents in the event of any injury to any person or damage to any glider, equipment or property whatsoever and must sign an Indemnity to this effect on the Official Entry Form, as a condition of entry.

- 2.1.6 Nothing in these rules, in any other document or acceptance of an entry shall imply that a Championship shall actually be held or that an entrant shall be allowed to compete. Competitors must agree to waive all claims against the West Australian Gliding Association Inc or their agents in the event of cancellation of the Championships, a Championship Class or an individual entry. This is a condition of their applying to enter the Championships.

## **2.2 REGISTRATION**

- 2.2.1 Competitors shall register at the Organisers Office prior to the initial briefing on the first published contest day. There they shall be required to present documented proof that both pilots and their gliders comply with the Championship rules.

- 2.2.2 No glider or pilot may fly in the championships unless registration has been completed.

## **2.3 GLIDER REQUIREMENTS**

- 2.3.1 A glider shall not be flown in the Championships unless the Organisers are provided with documentary evidence that the glider may be flown legally in Australia for the duration of the Championships. A current Maintenance Release will be required for inspection at registration.

- 2.3.2 A glider shall not be flown in the Championships unless the Organisers are provided with documentary evidence that the glider and its pilot(s) are covered by Third Party Insurance for the duration of the Championships with an indemnity value of at least \$1,000,000.00 for any one accident, or equivalent GFA insurance.

- 2.3.3 All entered gliders with main and/or tail skids must have main and/or tail skids constructed of non-sparking materials. Acceptable materials are aluminium, copper and brass but not steel.

- 2.3.4 All entered gliders must have large contest numbers or letters clearly marked under the starboard wing and on each side of the fuselage or rudder. The top of the letters under the wing must be nearest the leading edge.

- 2.3.5 Competitors shall present their glider for scrutiny by the Organisers and shall rig or de-rig their gliders as required by the Organisers.

- 2.3.6 Where doubt exists about the airworthiness of a glider, the Organisers may require that glider to be withdrawn from the competition until it is shown to be airworthy, to the satisfaction of the Organisers.

## **2.4 PILOT REQUIREMENTS**

- 2.4.1 Competitors who act as pilots-in-command will be required to provide documentary evidence that, at the time of registration, they have a current FAI Competition License .

- 2.4.2 Should the medical fitness of a pilot be in doubt, the Competition Director may obtain the opinion of a qualified Medical Practitioner and may require a pilot to undertake an examination by a qualified Medical Practitioner. The onus shall be on the competitors to show that they are medically fit.

- 2.4.3 The Competition Director shall forbid a medically unfit pilot to fly in the competition.

# **3 - OPERATIONS**

## **3.1 FLYING CONTROL**

- 3.1.1 The Organisers, through the Competition Director, shall issue directions concerning control of operations and safety.

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- 3.1.2 For the duration of the Competition, including any formal practice days, the Competition Director shall control all operations. This includes extra-contest activities such as local flying and movements for retrieves.
- 3.1.3 All communications with the appropriate aviation authorities for clearances etc., shall be made only with the approval of the Competition Director.
- 3.1.4 Failure to observe operational directions shall render the offender liable to disqualification or any alternative measures that the Organisers see fit.

### **3.2 BRIEFINGS**

- 3.2.1 In addition to the initial briefing for all pilots, there will be a special briefing for any pilots flying for the first or second time. The said pilots must attend this meeting. In addition similar briefings will be given to ALL pilots who fit into this category and arrive during the competition, whether or not they are competing.
- 3.2.2 There shall be an initial briefing for all pilots and crews at 9:00 am on the first contest day.
- 3.2.3 There shall be daily briefings for all pilots at 9:30 am on each contest day, or at an alternative time as notified by the Organisers.

### **3.3 FLYING SAFETY**

- 3.3.1 All pilots operating from the competition site during the contest and formal practice days are required to follow the safety rules as stated in Rules 3.3.2 to 3.3.7.
- 3.3.2 When joining or leaving a thermal, a pilot should fly in such a manner that other pilots do not need to take avoiding action. When centering, joining or leaving a thermal no abrupt or excessive changes of speed or direction should be made unless a pilot is absolutely sure that there are no other gliders nearby.
- 3.3.3 No pilot should fly close to another glider, or continue to fly in its blind spot, unless absolutely certain that the pilot of the other aircraft is aware. This is particularly important where there are only a few gliders in a thermal.
- 3.3.4 Pilots who fly in another glider's blind spot must assume full responsibility for avoiding the other glider.
- 3.3.5 Pilots shall maintain at least two hundred feet separation, either vertically or horizontally, from other gliders.
- 3.3.6 Gliders joining a thermal shall circle in the same direction as the first glider in the thermal.
- 3.3.7 The Organisers shall prescribe the direction of turn in thermals near the base aerodrome and for entering starts. Unless otherwise prescribed, this shall be to the right within 5 km of the base aerodrome.
- 3.3.8 All relevant aviation regulations shall be observed. Infringements shall invoke a penalty or disqualification.

### 3.4 TASK-SETTING

3.4.1 The Task-setting Committee shall comprise the Chief Task-Setter and three competitors as appointed daily by the Organisers.

3.4.2 The Safety Officer may cancel a task on the grounds of operational safety before the first contest launch.

3.4.3 *Clause deleted.*

3.4.4 Tasks shall be set according to the following guidelines:

a) –Championship Class - Shall be Assigned Area Tasks (AAT) or RUN Tasks.

b) The possibility of setting records is not relevant to the purpose of the competition. No compromises shall be made to this purpose in task setting either in task length or shape.

c) Tasks shall be set between the following limits unless an exceptional day occurs or the pilots of that class request a longer task.

Championship Class: 150 to 600 km

d) The task distances shall permit pilots who achieve 80% of the winner's speed to complete the task, so favouring 100% completion.

e) The task distance should be calculated from the task time, based on the expected last launch for a class and the last thermal time indicated by the forecast, and the speeds as shown in the following table:

Climb rates - Kts		Average Speeds (kph)							
		1	2	3	4	5	6	7	8
<b>Standard Class</b>	Light	37	56	68	78	87	93	98	104
	Heavy	-	-	84	95	102	110	115	118
<b>15 Metre Class</b>	Light	43	65	78	89	98	106	113	117
	Heavy	-	-	83	95	104	112	119	125
<b>Open Class</b>	Light	48	69	83	93	102	109	117	122
	Heavy	-	-	89	100	110	117	124	130

Note: This table is based on a straight McCready system. Speeds should be increased or decreased to allow for the composition of a fleet in a class or for special conditions such as thermal streets.

f) Tasks shall be of sufficient length or time to discourage pilots from delaying their starts for more than half an hour after the gate opens.

g) No out and return tasks shall be set.

h) A four or five-sided course may be considered, in preference to a triangle, to enable a long task to be set without sending pilots too far from base.

i) Tasks should be set so that the final legs for all classes are within 15 degrees of each other to prevent widely different finish approaches.

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- j) One or two alternate tasks may be set if there is doubt about the accuracy of weather information. The decision as to which task is to be flown may be made by the Organisers on the launch grid. If an alternate task is to be flown then the Organisers must ensure that all competitors are informed.
- k) If a high altitude day is forecast, block airways clearance may be arranged. Failing this, pilots must be thoroughly briefed on any height restrictions.
- l) A task shall not be flown in surface winds of 25 kts or more.
- m) Long into-wind legs shall be avoided, particularly in combination with a short down-wind final leg.

### 3.4.5 RUN tasking

- a) The objective of a RUN task is to fly the maximum distance possible in a time period set by the organisers, using waypoints selected by the organisers.
- b) The organisers will specify a task time which is to be flown by each class.
- c) The organisers will specify the order in which the waypoints must be visited. The waypoint sequence can be repeated. Failure to visit waypoints in the specified order will result in the glider being scored as if it had outlanded at the point closest to the first waypoint in the sequence which is missed.

### 3.4.5 Assign Area Task (AAT)

Further rules pertaining to setting AATs are in section 9 of these rules.

- d) 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. The minimum time and the radius of the areas must be set such that a glider must exceed 180kph to complete the maximum possible task in the minimum time, and can complete the minimum possible task in the minimum time at less than 75kph.

## 3.5 FLYING ORDER AND LAUNCHING

- 3.5.1 The launching grid order shall be determined by the Organisers on the first day. Thereafter the order shall be adjusted daily to rotate the launch grid.
- 3.5.2 All launching shall be by aerotow to a maximum of 2000 feet AGL.
- 3.5.3 Aircraft requiring re-launching shall be moved to the end of the line for their class.
- 3.5.4 Pilots shall take their assigned grid launch position by the nominated grid time, or be launched at the discretion of the Chief Marshal.

## 3.6 RADIO

- 3.6.1 Start and finish frequencies shall be set by the organizers. Inappropriate usage of these frequencies may incur a penalty.
- 3.6.2 The Organisers shall confirm all start times radioed in, in terms of Rule 3.7.17, on the start line frequency. Frequency 122.7 MHz shall be used for all other transmissions.
- 3.6.3 Other approved gliding frequencies may be used for glider/ground crew communications.
- 3.6.4 Organisers may require additional frequencies specified on the entry form.

## 3.7 THE START

## WAGA Championships - Rules

- 3.7.1 Starting shall be at unlimited height.
- 3.7.2 To start, a glider must cross the start line or start zone in accordance with instructions provided by the Organisers at the daily briefing.
- 3.7.3 More than one start is permitted, except where Rule 3.7.10 applies.
- 3.7.4 A Class may begin to start, only after at least ten minutes has elapsed from the launch release time of the last glider in that Class. This period may be increased by the Organisers according to weather conditions.
- 3.7.5 *Clause deleted.*
- 3.7.6 There shall be a non-thermallng area within a radius of one kilometre of any starting point and on either side of any starting line during the time that the start points/lines are active.
- 3.7.7 Competitors who do not attempt the task shall be awarded zero points and deemed to have withdrawn for the day and they shall not be considered in the scoring process.
- 3.7.10 If a pilot lands either on or off the home airfield, that pilot may re-launch and may rejoin the competition only if a start has not been made. If the retrieve was by aerotow, they need not land at the base aerodrome but must release from tow at or below 2000 ft AGL and behind the start line.
- 3.7.11 The only evidence of the start time of a pilot shall be that provided by the pilot's approved data logger. The pilot's elapsed time shall be the difference between that pilot's finish and start times.
- 3.7.12 Only data loggers approved by the Organisers will be permitted.
- 3.7.13 *Clause deleted.*
- 3.7.19 *Clause deleted.*
- 3.7.20 A start point evidence, taken out of sector, will incur the same penalty as that for an out-of-sector turning point.
- 3.7.21 Only data logger starts will be permitted. All competing pilots must have and use data logger.

### **3.8 TURN POINT VERIFICATION AND USE OF DATA LOGGERS**

- 3.8.1 Evidence from an approved data logger shall be the only acceptable evidence of rounding that turning point. If a pilot wishes to use a GPS track log or similar system, that has not been previously approved, the software and hardware should be offered for approval to the pilot's representatives contact through the convenor. Two months notice must be given. As a guide the unit must be able to show start time, finish time and turning point details suitable for the class entered.
- 3.8.2 The Organisers shall provide adequate details of all turning points. Gliders will pass through a 90 degree sector, which shall consist of the two 45 degree sectors on either side of the line bisecting the two course legs, and extended out from the turn point. Gliders passing through only one of the two 45 degree penalty sectors, on either side of the permitted sector, shall be subject to a penalty. Gliders not passing through penalty sector shall not be accepted as evidence that the pilot has rounded the turning point. In addition to this sector there will be a cylinder around the turning point of 500 metres radius. Details in Penalties.
- 3.8.3 Flight Data Recorders. Satisfactory rounding of a turn point will be achieved if a data point or a straight line joining two data points passes within the turn point zone. All points from a data recorder will be considered as absolute points for the purpose of this calculation. No allowance for position error in the GPS will be made.

- 3.8.4 The rules committee will make available a list of Turning points that may be used during the championships, with Longitudes and Latitudes. These coordinates will be those used to specify the turning point. It will be considered that these coordinates are the points that will be turned irrespective of the position of the feature on the ground. The list will not restrict the host club issuing additional turning points, but they must specify the Longitude and Latitude of each of these additional turning points in Degrees Minutes and Seconds as well as Degrees and Minutes and decimal minutes.

### 3.9 THE FINISH

- 3.9.1 The time of the finish will be when the glider passes through the finish line, a circle of 1.5 km radius with the centre based on the middle of the airfield. The co-ordinates for these points on the common airfields are:

BEVAIR	S32°07'33"	E116°56'51"	S32°07.550'	E116°56.850'	Beverley Airfield
CUNAIR	S31°37'24"	E117°12'59"	S31°37.400'	E117°12.983'	CUNAIR
NARFIN	S32°56.007'	E117°04.562'	S32°56'00"	E117°04'34"	Narrogin centre finish

- 3.9.2 A glider shall be deemed to have finished if, under its own momentum, the nose of the glider crosses the Finish Line and lands on the airfield.
- 3.9.3 A straight in approach is permissible. Gliders making a straight in approach and landing on the base aerodrome shall be deemed to have completed the task, with their end of roll time being their finishing time. In this situation it is the responsibility of the pilot or the pilot's crew to draw the attention of the finish-line crew to such a finish.
- 3.9.4 A glider must land without delay after crossing the Finish Line, unless specifically stated otherwise at briefing.
- 3.9.5 Pilots must not pull up sharply at the finish, fly or land in any way that may create a hazard.
- 3.9.6 A minimum finishing height will be set at the start of the competition, 500ft unless otherwise stated. Any obvious infringement of the minimum height finish will be penalised.
- 3.9.7 A penalty shall be imposed on any pilot who makes an unsafe finish.
- 3.9.8 The designated finish frequency or CTAF shall normally be used for broadcasting finish line information. Pilots shall call the finish line when they are 10 Km out on final glide.
- 3.9.9 In the event of logger failure the touch time will be deemed as finish time.

### 3.10 OUT-LANDING

- 3.10.1 Pilots who out-land shall notify the Organisers of the time and location of landing as soon as practicable. If pilots are in radio or telephone contact with their crew, the crew shall inform the Organisers immediately.
- 3.10.2 Data loggers will give sufficient evidence of out-landing position and time.
- 3.10.3 A pilot may choose to abort a task and will be deemed to have landed out at the furthest point along the track that his data logger has logged.

### 3.11 VERIFICATION

- 3.11.1 Pilots, who complete a closed circuit task, shall hand in their Data loggers or IGC file to the organisers within 60 minutes of landing at the airfield.
- 3.11.2 Pilots who out-land are required to hand in their Data loggers to the organisers within 30 minutes of arriving back at the airfield,

3.11.3 The Chief Scorer may question a competitor about his/her, data logger. A notice placed on the Competition Notice board to this effect shall be deemed to have been given to a competitor. All competitors must give the Chief Scorer all assistance or evidence that is required as soon as possible.

3.11.4 A competitor eligible for a Championship Award at the closing ceremony must have handed in all his/her data logger before receiving the award.

### **3.12 MEASUREMENTS**

3.12.1 Distances may be rounded to the nearest kilometre when measured from either the W.A.C., or the National Survey Series Maps.

3.12.2 The scoring program shall not be less accurate than the following:

- Start and finish line times may be rounded to the nearest two seconds.
- Speeds may be rounded to two decimal places.
- Scores may be rounded to one decimal place.

### **3.13 EXTERNAL AID**

3.13.1 Assistance from any other aircraft or glider competing in another Class is prohibited. A penalty shall be imposed on any competitor who receives or attempts to obtain such assistance.

### **3.14 GLIDER DAMAGE**

3.14.1 If a glider is damaged during the Championship it may be repaired. Components such as a tailplane, aileron, elevator or canopy may be replaced. Major components such as the fuselage or the main-plane, including components larger than one third of the main-plane may be repaired. If damage to the glider was not caused through the fault of the pilot during flight, including launching or landing, then the entire glider or any part thereof may be replaced after consultation with the Competition Director. The Competition Director may request a ruling from the Protests and Disputes Committee if any doubt exists under this rule.

3.14.2 Damage caused during out-landing shall normally be considered the fault of the pilot for the purpose of Rule 3.14.1.

3.14.3 Any accident resulting in pilot injury or damage to a glider, which renders it unairworthy, must be notified immediately to the Competition Director, who shall ensure that the GFA/ATSB accident reporting procedure is fully complied with (This is done through the RTO ops or the CTO ops). Any such glider must not be moved or interfered with in any way without the express consent of the Competition Director.

### **3.15. BALLAST AND WEIGHT LIMITS**

3.15.1 Any glider, which is ready for take-off and found to exceed its maximum all-up weight, shall incur a penalty. It shall then drop ballast until it conforms to the glider's maximum all-up weight.

3.15.2 For the purpose of these Rules, a glider shall be deemed to be ready for take-off when it starts to move towards the launching area.

3.15.3 The Organisers may weigh any glider once it is ready for take-off. The maximum all-up weight includes the weight of the pilot. A 10 kg margin shall be allowed, when a glider is weighed outdoors, except where a glider is found overweight and is required to drop ballast.

3.15.4 A set of scales, provided by the Association, shall be used for all weighing.

3.15.5 The maximum allowable all-up weight, specified on a glider's Certificate of Airworthiness, shall be definitive. In cases of doubt, a ruling shall be obtained from the RTO Airworthiness as to the glider's maximum allowable all-up weight.

- 3.15.6 No additional ballast or equipment may be added to a glider, once it is ready for take-off, without the express consent of the Competition Director. A penalty may be imposed on any competitor found adding ballast or equipment, once the glider is ready for take-off.
- 3.15.7 In the event of a written and signed protest being submitted to the Competition Director by a competitor, the Organisers may prevent a glider taking-off and re-weigh the glider subject to the protest.
- 3.15.8 Any competitor, whose glider is found to be overweight, shall incur a penalty of 100 points per 10 kg, or part thereof. If the glider was weighed outside, there shall be a 10 kg margin over and above the maximum all-up weight, which will not incur a penalty.
- 3.15.9 A second infringement of the maximum all-up weight requirement by any one pilot, during the Championship, shall incur disqualification for that day.

## **4 - EQUIPMENT**

### **4.1 MANDATORY EQUIPMENT**

- 4.1.1 All glider occupants must wear a serviceable parachute on all flights.
- 4.1.2 A Data logger with the following:
- \* Having a secure device acceptable to the organisers which has the effect of verifying that the data has been recorded on the flight and has not been modified.
  - \* Be able to download its data to an IBM compatible PC or printer through serial or parallel ports normally available on such computers.
  - \* Have an analysis program which allows the input of turn point locations and which will display the flight path in sufficient detail to allow verification that the glider has passed through the allowable or penalty sector of the turn point. It is the pilot's responsibility to supply the program, documentation and data interface cable which the data can be downloaded and analysed.
  - \* Record the time at which each data point was recorded, or provide sufficient timing information to allow the time to be easily determined.
  - \* Have a mechanism which clearly indicates if the time has been changed during flight.
  - \* Where motor gliders are flown, evidence must be recorded to indicate when the engine is started.
- 4.1.3 An adequate survival kit, including water shall be carried.
- 4.1.4 A radio with at least the frequencies as required by the organizers shall be carried.

### **4.2 PROHIBITED EQUIPMENT**

- 4.2.1 Gyroscopic instruments must either be removed or blanked out and disconnected.
- 4.2.2 Bohli compasses may not be used unless a recently calibrated barograph, sealed and examined by the Organisers on each contest day, is carried.

### **4.3 OPTIONAL EQUIPMENT**

- 4.3.1 Barographs are not required (except if a Bohli compass is used) unless a competitor wishes to claim a record.
- 4.3.2 Oxygen equipment may be used.
- 4.3.3 Competitors are expected to supply their own maps.

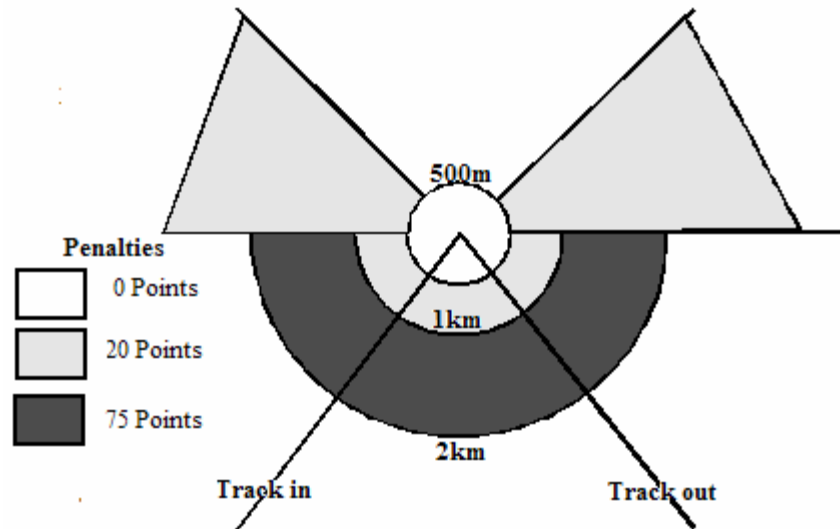
## **5 - PENALTIES AND DISPUTES**

### **5.1 PENALTIES COMMITTEE**

- 5.1.1 A Penalties Committee shall impose penalties in accordance with the Penalty Guideline's described in Rules 5.2.1 to 5.2.5. The Penalties Committee shall consist of the Competition Director, the Deputy Competition Director, the Chief Scorer, the Safety officer and two pilots from Clubs not represented by the members of the Organisation. A quorum shall consist of not less than four of the above, see 5.3.1.
- 5.1.2 A competitor has the right of appeal against any penalty through the Protests and Disputes Committee.

### **5.2 PENALTY GUIDELINES**

- 5.2.1 The Penalties Committee may penalise a competitor for infringements of the Rules, by deduction of points, suspension or disqualification. Infringements of the Rules fall into three general groups, of increasing severity:
  - A. Technical errors and failures to comply with requirements, such as incorrect turning point evidence, crossing the finishing line incorrectly.
  - B. Dangerous or hazardous flying, including airspace infringements and flying outside the limitations of the glider C of A. Flying back across the finish line.
  - C. Cheating, falsification of documents, use of prohibited equipment (Rule 4.2).
- 5.2.2 The Penalties Committee shall determine the penalty, provided that it shall not be less than the following minimum, for the infringement groups as defined in Rule 5.2.1.
  - A. A minimum deduction of 20 points.
  - B. A minimum deduction of 100 points and, where the infringement has to any extent advantaged the pilot, disqualification of all flights for the day on which the infringement occurred.
  - C. A minimum disqualification of all flights for the day on which the infringement occurred.
- 5.2.3 The Penalties Committee, in determining a penalty, shall take into account the severity of the infringement, the extent to which the competitor was advantaged, and any other similar infringements. The committee shall also assess the extent to which the infringement could have been deliberate and any other aggravating or ameliorating circumstances. The size of the penalty should be large enough to act as a deterrent.
- 5.2.4 No penalty shall reduce the score of the pilot to less than zero.
- 5.2.5 Deduction of points shall be made after scoring is completed. Flights, which are disqualified, shall be totally excluded from the scoring calculations.
- 5.2.6 Turn point penalties shall be as in the diagram below.



5.2.7 A pilot who fails to turn the compulsory first or final turning point will be penalised as a "Group B Penalty 5.2.1"

### 5.3 PROTESTS AND DISPUTES COMMITTEE

5.3.1 The Protests and Disputes Committee shall consist of the Competition Director, the Safety Officer, the Chief Task-Setter and two pilots from Clubs not represented by the three members of the Organisation. A quorum shall consist of not less than four of the above, see 5.1.1.

5.3.2 If either or both of the pilots on this committee are directly involved in the dispute, their places shall be taken by the reserve pilots.

5.3.3 Any protest or dispute must be lodged in writing, together with a fee of \$20.00, with the Competition Director, within 24 hours of the event under protest or dispute. The \$20.00 fee shall be refunded if the protest is upheld.

5.3.4 The decision of the Protests and Disputes Committee shall be final.

## 6 - SCORING

### 6.1 Scoring Rules

The Common Definitions are set out in (6.2). Scoring rules for individual scoring models (FAI and Handicap) are contained in sections 6.4. Section 6.5 contains details of additional constants required for scoring AAT tasks.

### 6.2 Definitions

6.2.1 **Contest Day:** A contest day may only be declared a Championship Day if a pilot completes 100 kms of task distance.

**Non starter:** Any pilot who makes a start but who subsequently does not finish, does not submit an outlanding report, fails to show a turn point film or is disqualified in any way, will be considered to have outlanded at the airfield and will be awarded zero points.

**Finishing Competitor or Finisher:** A pilot will be deemed as such as per rule 3.9.2 after having completed the designated course. See 6.5.2 for additional qualifications for AAT finishers

**Disqualification:** Any pilot who makes a start, does not finish and does not submit an outlanding report and or turn point photo/s with the intent, in the opinion of the Disputes Committee, of deliberately subverting the competition, may be disqualified from the competition.

6.2.2 **Handicap:** In the application of these rules each aircraft is assumed to have a handicap.

**Championship Class:** All competitors in Championship Class will have their handicaps calculated each day using the following system. The base handicap (Hclub) shall taken from the National Club Class Handicap table in Appendix 1.

$$Hcp = Hclub / (1 + 1.2 * ((Wl/Wr)^{0.25} - 1))$$

**Where:**

**Wr = The reference weight shown in the handicap table in Appendix 1.**

**Wl = The flying weight nominated by the pilot for the day.**

**Hclub = The handicap shown in the handicap table in Appendix 1.**

**Non Handicap Class:** To score a non-handicapped class under these rules (for example Standard Class), all aircraft in the class are assigned a handicap of 1.0.

6.2.3 **Maximum Points:** The maximum calculated points available on each contest day for a class is 1000. These points will be awarded to the competitor making the best flight

6.2.4 **Competitors who withdraw:** Competitors who are scrambled to fly and withdraw will score zero points.

6.2.5 **Penalty applied to Winner:** In the case where a winner is penalised the score will be reduced from 1000 points and therefore the winner will score less than 1000 points. There will be no changes to other pilot's scores to compensate.

6.2.6 **Casual Pilots:** All classes shall allow for Casual pilots. The scoring system shall not show the pilot's score and the Casual flight shall not affect the scores of other pilots in the class. A Casual pilot's results shall not be recorded in the progressive scores.

### 6.3 Glossary of Terminology and Abbreviations

The following terminology and abbreviations are used in the scoring calculations for all classes:

Dc	= competitor's handicap distance
Di	= competitor's marking distance
Dm	= longest corrected distance. That is MAX (Dc) for all competitors
FAI	= refers to only to the group of classes, Standard, 15 Metre and Open Class
f	= day factor correction if no competitors achieves greater than 100 km f = 0
Hcp	= The handicap assigned to that aircraft in that competition for the class and day
N1	= number of competitors with Dc greater than 100 kms
n	= number of competitors exceeding 2/3 the maximum handicap speed of the day in the class
Nd	= number of gliders that make a start in a competition class on that day
Rn	= n/Nd
Rs	= Sc/Sm
Pmax	= Maximum uncorrected points available
Pc	= the corrected points scored by a competitor for the days competition
Pcp	= the penalty corrected points scored by a competitor for the days competition
Pd	= points calculated on the basis of distance flown
Pf	= day factor corrected points
Ps	= points calculated on the basis of the handicapped speed (finishing pilot)
Pu	= uncorrected points scored by a pilot
Pum	= the maximum of all Pu in the class
Sc	= competitor's handicap speed
Si	= competitor's unhandicapped speed
Sm	= fastest handicap speed
T	= the AAT minimum task time
Ti	= the individual pilot's time for a AAT Task

### 6.4 Scoring Algorithms

6.4.1 The marking distance (Di) is multiplied by the aircraft's handicap to determine the competitor's handicap distance (Dc).

$$Dc = Di * Hcp$$

6.4.2 The maximum uncorrected points available is the lesser of 1000, (5 \* Dm) -250 or (400\* Dm/Sm) -200

That is:  $Pmax = \text{minimum} ( 1000, (5 * Dm) -250, (400 * Dm/Sm) - 200)$

*This rule remains in for the sake compatibility with the nationals scoring rules.*

6.4.3 The competitor's handicap distance (Dc) is divided by the competitors actual time (Ti) to obtain the individual competitor's handicap speed (Sc).

For Speed tasks:

$$Sc = Dc/Ti$$

For pilots competing in AAT tasks where the finisher has exceeded the minimum task time (T), speed will be calculated by dividing the handicapped distance by the actual time. Where a finisher has not exceeded the minimum task time, speed will be calculated by dividing the handicapped distance by the minimum task time.

That is: if  $Ti > T$  then  $Sc = Dc/Ti$  else  $Sc = Dc/T$ .

6.4.4 Rn (2/3) factor is the ratio of the number of pilots exceeding 2/3 of winners speed

$$Rn = n/Nd$$

6.4.5 Speed points:

$$P_s = 2 * (S_c/S_m - 2/3) * R_n * P_{max}$$

If  $P_s < 0$  then  $P_s = 0$

6.4.6 Distance points:

For tasks with finishers

$$P_d = (1 - (2/3 * R_n)) * P_{max}$$

For tasks without finishers  $P_d$  becomes

$$P_d = (D_c / D_m) * P_{max}$$

6.4.7 Point uncorrected: The sum of Speed points and Distance points.

$$P_u = P_d + P_s$$

6.4.8 Day factor:  $N_1$  is the number of pilots exceeding 100kms.  $N_d$  is the number of pilots taking a launch in the class for the day. Hence if no pilot achieves 100 kms then all scores will be 0.

$$f = 1.25 * (N_1 / N_d)$$

if  $f > 1$  then  $f = 1$

*This rule remains in for the sake compatibility with the nationals scoring rules.*

6.4.9 Day devalue corrected points

$$P_f = f * P_u$$

6.4.10 Scaled points: This is used to rescale the winner back up to 1000 points.

$$P_c = 1000 * P_f / P_{um}$$

6.4.11 The maximum corrected points ( $P_{cp}$ ) is the value assigned to uncorrected points ( $P_c$ ) minus the amount of any penalty imposed.

$$P_{cp} = P_c - \text{Penalty}$$

**6.5 Assigned Area Tasks (AAT)**

These rules apply to the scoring of AAT.

6.5.1 A pilot who aborts the task and returns prematurely to the airfield, whether or not they have exceeded the minimum scoring distance, must advise the organisers. In this case the pilot will be scored as a non-finisher. The Contest Director must investigate any situation where the pilot claims a finish but flies for less than 70% of the minimum task time, and may deem a pilot to be a non-finisher if there is evidence that the pilot did not genuinely attempt to fly the task

**6.6 RUN tasks**

- 6.6.1 The task distance will be measured from the Start Point used to the first waypoint specified, and then to each waypoint in sequence until the task time expires or the glider lands. The distance of the last leg attempted will be the length of that leg less the distance to the next waypoint from the closest point of approach prior to the task time expiring.
- 6.6.2 If the glider fails to land at the home airfield after the task time has expired, the distance calculated will be reduced by 10% before applying the handicap.
- 6.6.3 If the glider outlands or returns to the home airfield before the task time has expired, the glider will be scored as having landed on track to the first waypoint in sequence that was not visited. In this situation clause 6.6.2 will not apply. The task distance achieved will be multiplied by the handicap for the purposes of scoring.
- 6.6.4 The maximum marking distance is the longest handicapped distance flown by a pilot in the class.

## **7 - MOTORISED SAILPLANES**

- 7.1.1 A motorised sailplane incorporates a power unit available for use in flight and such a sailplane may compete with the following restrictions.
- 7.1.2 Each motorised sailplane must carry a data logger that shows when the engine was running. The Contest Director is to be satisfied as to the correct and proper operation of the recording equipment prior to the start of the competition. The only exception to this is Rule 7.1.7.
- 7.1.3 If the engine has not been restarted after the launch, and the task is completed, the motorised sailplane is scored normally.
- 7.1.4 If the motor is started in flight after the pilot has started the task, the pilot will be scored as having outlanded at the point at which the motor was started.
- 7.1.5 The engine may be used to relaunch the sailplane for a retrieve. Provided that the recording equipment proves that the engine was not used prior to the outlanding and that the location of the landing is properly recorded on an official outlanding report and attested by an independent witness to the satisfaction of the Organisers, that sailplane will be scored normally as outlanded. There must be no subsequent outlandings before a return to the home field or scoring by Rule 7.1.4 applies.
- 7.1.6 Failure of the recording or sealing equipment or any discontinuity's in the record will result in a zero score.
- 7.1.7 The engine may be sealed by the Organisers in such a way to prevent its operation in flight (eg. motorglider to be launched by aerotow), then the motorglider will be scored normally. The integrity of the seal is to be verified by the Organisers after each flight. Should this seal be broken, the score will be zero.
- 7.1.8 During self-launching motor gliders must operate as directed by the Operations Director and must shut down their motors at the aerotow release height.
- 7.1.9 A motor glider which did not use its motor to launch may operate the motor for testing purposes as required by their flight manual prior to starting but must not use this to gain height or other advantage.

## **8 - POST TASKS**

- 8.1 *Clauses Deleted*

## **9 - ASSIGNED AREA SPEED TASK (AAT).**

- 9.1 The Organisers shall define areas, which the competitor will have to enter in a prescribed order. A minimum time will be designated for the task.
- 9.2 An area may be defined as follows:
- As the area enclosed by a circle of a given radius, centred on a designated turn point, or
  - As the area between two radials originating at a start point, or any other designated turn point, and located between a minimum and/ or maximum distance from that point.
- 9.3 The competitor shall fly the greatest possible distance via these areas in the designated time.
- 9.4 To complete the task the competitor must provide a GNSS flight record with a valid start and at least one valid GNSS fix in each area in the prescribed order and cross the finish line.

## WAGA Championships - Rules

- 9.5 The score given to each competitor shall take into account the marking distance, as defined in 9.5.9, and the speed achieved in the designated time and the speed achieved if the pilot completes the task.
- 9.5.9 The task is defined by the competitors start point, any number of assigned areas and a finish line. Competitors must have at least one valid GNSS fix in each of the assigned areas in the order they were specified on the task sheet. The marking distance (overall distance flown) is calculated from the competitors start point to the finish line via the valid GNSS fixes (scoring points) in the assigned areas. The scoring point chosen in each area is that GNSS fix which gives the competitor the best possible distance flown. Only one point can be selected in any one area.
- 9.5.10 Calculating the Designated Time distance or the total distance flown if there is an out landing. If the competitor has outlanded the marking distance shall be the sum of the distances up to the Final Scoring Point in the last assigned area before the out landing or the designated time expired plus the distance to the landing point determined as follows. The Final Scoring Point in the last assigned area shall be that point in the area that maximises the length of the last completed leg. The distance to be added for the incomplete leg shall be calculated by the following method. The distance from the landing place or the claimed GNSS outlanding point, to the nearest point of the next area, control point or finish line, subtracted from the distance between that point and the previous scoring point.

## Appendix 1

<b>Handicaps and weights for Australian Club Class Competition 2006/07</b>
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GliderType	Handicap	RefWeight
NIMBUS 4DM	0.780	770
ASH25M	0.790	750
NIMBUS 3DM	0.790	750
NIMBUS 4M/4T	0.790	670
ASH 25(25m)	0.800	700
ASW 22 BLE/BE	0.800	670
ASW 22 (22)	0.810	530
NIMBUS 3-22	0.810	570
NIMBUS 4	0.810	600
Ventus 2CM/2CXM 18m	0.840	485
ASH 26E	0.850	440
Ventus 2CT/2CXT 18m	0.850	440
LS10/18m	0.850	390
ASG29	0.850	390
Ventus 2C/2CX/18m	0.850	410
Ventus CM/CT 17.6	0.850	460
DG 600-18	0.860	395
DG 500 M (22)	0.860	735
STEMME S10	0.860	750
Ventus C 17.6	0.860	380
DG 600-17	0.870	387
Ventus 2 A/B 15m	0.870	375
Ventus 2C/15m	0.870	375
LS6C/18	0.870	380
LS 8/18m	0.870	380
ASW 27	0.870	350
ASW28/18	0.870	430
DG 1000	0.870	750
Duo Discus	0.870	596
VENTUS 16.6	0.870	370
ASW 17(19m)	0.880	541
ASW 17(20.5m)	0.880	530
JANTAR 2	0.880	465
JANTAR 2B	0.880	477
LS 6a/b	0.880	380
NIMBUS 2 & 2b	0.880	470
NIMBUS 2C	0.880	460
Ventus C 15m	0.880	375
ASW 20/16.6	0.890	395
DG 505	0.890	500
DG 600m-15	0.890	370
VENTUS A/B	0.890	356
ASW 28T 15M	0.900	420
DG 200/17	0.900	361
DG 400 M/17	0.900	427
Discus 2T	0.900	395
JANTAR 1	0.900	417
JANUS CM	0.900	680
KESTREL (19)	0.900	402
ASW 20 (A&C)	0.910	400
ASW 24E	0.910	415
ASW 20B	0.910	400
ASW 24E(no eng)	0.920	385
ASW28	0.920	350
Discus 2	0.920	350
G304cz	0.920	380
LS 3	0.920	408
LS 8	0.920	370
DG 200	0.930	360
DG 202	0.930	360
DG 400 (15)	0.930	427

GliderType	Handicap	RefWeight
ASW 24	0.930	352
DISCUS (a& b)	0.930	363
JANUS (a & b)	0.930	594
KESTREL(17)	0.930	390
LS 3A	0.930	380
LS 7	0.930	345
MINI NIMBUS	0.930	366
MOSQUITO	0.930	380
SZD 55	0.930	336
ASTIR speed	0.940	375
IS 32	0.940	530
PIK 20E	0.940	437
DG 300	0.940	390
LS 4	0.940	380
LS 4A	0.940	381
PIK 20A-B	0.940	360
PIK 20D	0.940	359
PIK20 B	0.940	364
G 304 std	0.950	380
Open Cirrus	0.980	370
ASW 19 B	0.980	380
DIAMANT 16.5	0.980	390
JANTAR STD 2	0.980	385
JANTAR STD 3	0.980	390
CIRRUS STD	1.000	335
DG 100	1.000	357
HORNET	1.000	364
JANTAR STD 1	1.000	365
LIBELLE 301	1.000	300
LS 1F	1.000	364
ASTIR CS/77	1.020	380
ASW 15B	1.020	360
COBRA	1.020	370
LIBELLE STD	1.020	320
LS 1a,b,c & d	1.020	327
ASW 15	1.040	318
IS 29D	1.040	360
SALTO	1.040	306
JUNIOR	1.070	340
LIBELLE CLB	1.070	328
TWIN ASTIR	1.080	520
Grob 103 TWIN ASTIR II	1.100	520
FOKA 5	1.100	366
ASK 21	1.120	540
IS 28B2	1.160	574
KA6-E	1.160	300
BOOMERANG	1.180	343
PILATUS B4	1.180	340
PW5	1.180	300
PW 6	1.180	545
PUCHACZ	1.200	550
BERGFALKE 4	1.240	480
PUCHATEK	1.260	524
KA6-CR	1.280	300
ARROW	1.300	280
ASK 13	1.320	470
BERGFALKE 3	1.320	465
BLANIK	1.320	472
KA7	1.320	460
OLYMPIA	1.340	315
ZEPHYRUS	1.400	616