



ASIAN CONTINENTAL PARAGLIDING ASSOCIATION

Competition Rules 2017 season

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Asian Continental Paragliding Association
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Terms and Abbreviations

Throughout this document, we use the following terms and abbreviations:

ACPA : Asian Continental Paragliding Association

Asian Paragliding Tour : Asian Continental Paragliding Tour

MD : Meet Director

TD : Technical Director

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1 Preamble

1. The Asian Continental Paragliding Association (ACPA) is an association of pilots, the ACPA members.
2. The ACPA is a non-profit organisation. All incomes are re-invested to develop and improve the experience and ranking of Asian and Australasian paraglider pilots.
3. The annual General Assembly elects the ACPA committee according to the ACPA statutes.
4. Each pilot becomes a member of the ACPA by paying an annual subscription fee of \$50(USD).
5. The purpose of the ACPA is to provide safe, sportive and fair paragliding competitions, to determine the ACPA Champions, Overall, Female and Team.
6. All Asian and Australasian competition pilots who are citizens or legal residents of the countries named in Appendix A.3 have the right to take part in Asian Paragliding Tour events. The selection is based purely on sportive aspects.
7. All pilots fly under their own responsibility.
8. All pilots accept, without restriction, to hold the ACPA, the National Aeroclub, competition organisers, property owners, the Federation Aéronautique Internationale and their respective affiliates, agents, officers, directors, owners, commission or jury members, contractors, volunteers, employees and insurers its bodies and members harmless and waive all claims for compensation.
9. All pilots participating in an Asian Paragliding Tour event accept these rules in their entirety. In case of ambiguities, the spirit of the rule prevails.
10. Political and religious promotion is prohibited.

1.1 ACPA Contact details

Asian Continental Paragliding Association is registered in Singapore as a Society in accordance with section 4A(3) of the Societies Act.

The registration number is: T17SS0036D

Secretary General: Gin Seok Song
Executive Secretary: Nicky Moss
Website: www.asianparagliding.org
Email: info@asianparagliding.org

1.2 Partners

1. Partners support the ACPA with a subscription as defined by the ACPA Committee.
2. Partners will be featured on pilot ID cards, official rankings, results, backdrops and banners, in Asian Paragliding Tour videos, on the ACPA web site, on email or documents issued by the ACPA Office and in potential magazine advertising. Other sponsorship opportunities are available.

2 Asian Continental Paragliding Association Competitions

2.1 Duration

An Asian Paragliding Tour event consists of one registration and training day, usually on Saturday, followed by 5 or 7 competition days from Sunday to maximum, Saturday.

2.2 Schedule

1. All events must be advertised from the registration day to the last flying day.
For example, Asian Paragliding Tour Indonesia, August 20th-25th
Saturday, August 20th : registration.
Sunday, August 21st : first task.
Thursday, August 25th : last task and prize giving.
2. The registration time is by default 17h-20h. These times may change for organisational reasons.
3. The prize giving ceremony takes place on the last competition day or sooner in case of task cancellations.

2.2.1 Training Day

The training day takes place before registration is complete. Therefore, live tracking and full safety backup/retrieval will not be available. It must be borne in mind that this is a free-flying day and the organiser's participation will probably be limited to transport up the hill and possibly a limited retrieve service.

2.2.2 Flying Day

A flying day is a day when a task runs for more than half an hour after the window open time. All other days (rest days, cancelled days, etc.) are non-flying days.

2.3 Participants

1. All competing pilots must be qualified to meet the demands of an international paragliding competition.
2. A current and valid FAI Sporting Licence is necessary for FAI sanctioned competitions.

2.4. Asian Paragliding Tour Events

1. The maximum number of participants is 130 pilots. This number includes up to 5 Wildcards for the organiser, up to 5 wildcards for the ACPA and any partner Wildcards. Partners are given one wildcard per year.
2. More than 130 pilots may be selected for overbooking reasons.
3. A minimum of 10% of the places are reserved for female pilots.
4. Places of pilots not showing up at the competition may be taken by other qualified pilots, or organiser wildcards. A late registration fee of 25USD in addition to the registration fee will be charged.
5. The ACPA will carry out the selection process as described in [Appendix A.2](#).
6. Applications for wildcards must be submitted to the ACPA office at least 8 weeks before the competition.

2.5 Insurance

1. All participants must have third party liability insurance with a minimum coverage of 800,000 USD or foreign currency equivalent.
2. All participants must also be insured to cover all types of expenses in case of an

accident: including but not limited to search and rescue expenses, hospital expenses, medical expenses, repatriation, etc.

3. Pilots must check the validity of their government-run or private insurances in the country where the competition takes place. In some countries, it is strongly recommended to know the insurance company's local contact to avoid delays.
4. It is the pilot's responsibility to ensure his insurance coverage is adequate.

2.6 Local Regulations

1. Local regulations are the event specific rules prepared by an organiser.
2. Local regulations must not conflict with ACPA rules or FAI Sporting Code Section 7.
3. Local regulations must be submitted at the time of the proposal for approval by the ACPA.
4. Local regulations will be published on the Asian Paragliding Tour website.

2.7 Official Language

The official language for all ACPA communications and competitions is English.

3 Pilot Equipment

3.1 Paragliders

1. Pilots are responsible for the choice and maintenance of their flight equipment.
2. Pilots must fly with the same glider during one event. In special cases (lost luggage, damaged equipment, etc.) the MD can allow a glider change during the event.
3. Only certified gliders up to CCC or EN 926 or LTF 91/09, but with tolerances on lines and risers as defined in Appendix D: Glider Checking Procedure, are allowed in Asian Paragliding Tour competitions. Any EN 926 or LTF 91/09 certified glider that has also been CCC certified may only be flown in its CCC configuration.
4. It is not permitted for the pilot to modify the glider in any way, except for the length of the brake main-line.
5. The pilot must fly within the homologated weight range.
6. At registration, pilots must specify the model, size and colours of the glider to be flown during the competition.
7. Gliders will be checked after a complaint or according to some predetermined or random selection schedule. In addition, the MD or TD can request that any pilot's glider be checked.
8. Every pilot must give his glider to the organisation for checking or comparing immediately upon any such request.
9. The MD will nominate a qualified person to perform glider checks according to the published procedure (see Appendix D: Glider Checking Procedure).
10. Results from all glider checks will be published on the event information boards and on the ACPA website.

3.2 Communication Equipment

1. Radios (2 metre band) are mandatory for all pilots and must be used for safety purposes only during flight and upon landing.
2. All pilots' radios must be switched on and tuned to the safety frequency announced at the task briefing during flight.
3. The use of voice-activated microphones ("VOX") is prohibited.
4. All pilots must carry a functioning mobile telephone with them while flying.
5. Pilots not fulfilling these requirements can be grounded or penalised.

3.3 GPS Receiver

1. GPS is the only evidence used for flight verification in Asian Paragliding Tour events.
2. All pilots must be equipped with at least one GPS receiver with GPS altitude recording capability. Only specific models are accepted (Appendix E: GPS Receivers).
3. It is the pilot's responsibility to have at least one working GPS receiver, and to set it up with the right parameters.
4. Pilots must bring their GPS receivers to report-back after each task in order to download their flight tracks.

3.4 Live Tracking

1. As a safety measure the ACPA provides a tracker for each competitor to record their position whilst flying.
2. Each competitor must collect the tracker at take-off and he must carry it on his person whilst flying and whilst being retrieved.
3. Any competitor that does not take his tracker will be deemed not to be flying that

day and will score zero points. A pilot who does not return his tracker may be not be displayed on score sheets until it is returned.

3.5 Protective Equipment

1. Every competitor must wear a protective helmet, use a certified harness and carry at least one suitable emergency parachute during all competition flights.

3.6 Asian Paragliding Tour Sponsors Equipment

1. The ACPA may provide logos or equipment (for example speed arms, stickers, etc.) to promote Asian Paragliding Tour partners or the ACPA itself. In this case it is compulsory to wear this equipment, without intentionally covering the logos.
2. In case of conflict with personal or team sponsors, exceptions may be given if requested in writing.

4 Rankings, Titles and Trophies

4.1 Number of Tasks for Competition Results

1. Overall and female rankings will be scored in accordance with the time based scoring formula, as described in Appendix C: Time Based Scoring. No discards will be applied.
2. Team results are calculated as the sum of the scores of the top 3 pilots each day in this event.

4.2 Team Ranking

1. "Team" refers to any ACPA partners' or any other team entering an Asian Paragliding Tour event.
2. A team is composed of 5 pilots. These pilots can change from one event to another. One pilot can only participate in one team during a competition.
3. The entry fee for a team is 100USD per event. ACPA partners can enter one team for free. Additional teams for ACPA partners are 500USD for the whole season.
4. Incomplete teams can enter an additional pilot during a competition. Injured team pilots can be replaced. New pilots score only from the day they are added to the team. Team composition must be submitted before the task is flown.
5. Each team can be sponsored by one manufacturer and/or sponsor. Team names are chosen by the teams. Names can be adapted or changed during the season. Changes must be submitted to the score keeper at the beginning of the event.

4.2.1 Team Scoring

The scores of the top 3 pilots from a team in each task will provide the team score for a task.

4.3 Nation Ranking

1. The task result of a nation is the sum of the 3 best pilots' scores flying for the same country.
2. The competition result is the sum of the points of the 3 best pilots scores in each task.

4.4 Titles

The winners of Asian Paragliding Tour events are awarded the following titles:

"Event" Asian Paragliding Tour Winner

"Event" Asian Paragliding Tour Female Winner

"Event" Asian Paragliding Tour Team Winner

4.5 Trophies

A trophy for the first 3 pilots overall, the first 3 female pilots and the first 3 teams for each event is awarded by the event's local organiser.

5 Meet Director, Technical Director, Task Committee

5.1 Meet Director

1. The Meet Director's job is to manage all sportive aspects during the event.
2. He is responsible for applying the rules.
3. He must consult with the Technical Director.
4. He shall present the task chosen by the Task Committee at the task briefing.
5. It is the responsibility of the Meet Director to inform himself as fully as possible of the issues affecting all safety elements during the task.

5.2 Technical Director

1. The Technical Director, where present, is responsible for advising the MD on the sportive aspects of the competition.
2. The Technical Director has a right of veto on sportive grounds.
3. The Technical Director ensures that the rules are applied correctly.
4. The Technical Director is a member of the Task Committee.
5. The Technical Director can apply a penalty if he has the written support of one ACPA Committee member.

5.3 Task Committee

1. The Task Committee consists of:
 - a. The Meet Director
 - b. Two pilots elected by the competition pilots
 - c. One pilot appointed by the ACPA to provide local knowledge
 - d. The Technical Director or Safety Director
2. The elected pilots should have sufficient knowledge of the flying site and the Asian Paragliding Tour rules. They must submit their candidature no later than one day before the local registration.
3. If there are less than two applicants, the Technical Director has the right to appoint two pilots from the pilot list.
4. The task should be unanimously agreed by the task committee.
5. The task committee chooses take-off areas and the task of the day according to safety, meteorological, technical and sportive criteria.

6 Briefings

All briefings must be in English only.

6.1 Safety & General Briefing

1. All competitors and team leaders must be present at the safety & general briefing, which will take place as announced by the organiser usually after registration has finished.
2. The main information given at this briefing must also be displayed in English on the official notice board.

6.2 Task Briefing

1. The task briefing is held at the take-off area. All technical data specified during this briefing is displayed on the task board.
2. To avoid stress and to guarantee good and fair preparation for all pilots, provisional tasks should be displayed as soon as possible
3. There must be sufficient time (minimum 15 minutes) between the task briefing and the window opening. When necessary, taking into account all other parameters (start time, unchanged provisional task, conditions, etc.), the window may be opened earlier.
4. The task briefing should contain, in this order:
 - Relevant information about the previous day (protests, incidents, penalties etc.)
 - Winners of the previous days task (overall, female, team)
 - Weather forecasts for the day (winds, forecasted cloud base, day quality)
 - Important information about the day; new waypoints, altitude limits, restricted areas, etc.
 - Task for the day
 - Times (window, start, closing)

7 Displaying Results

1. A provisional results list must be put on the official results board and the website as promptly as possible. Small errors should be submitted for correction as soon as possible to the score keeper.
2. By default, the results timing is:
 - a. Within one hour after the end of the GPS download: Provisional results displayed
 - b. By 10:00 the following day: written complaints (in English) handed to the MD
(This timetable can be adjusted to suit the local requirements)
3. The official task and competition results are displayed when all complaints have been dealt with.
4. The maximum time window for complaints on the last competition day is 30 minutes after the publication of provisional results.
5. In the event of a time-consuming complaint and/or protest, the organisation has the right to run a prize-giving ceremony with provisional results.

8 Complaints, Protests and Appeals

1. Any pilot participating in an ACPA event can make a complaint, a protest or an appeal.
2. Complaints, protests and the related decisions must be displayed by the event organisation on the official information board with the display time clearly marked on each document.

8.1 Complaints

1. Complaints must be made in writing, in English, and must be handed to the MD.
2. Complaints must be made within the fixed timetable after the announcement of the provisional results (see section 7 Display of Results).
3. The Meet Director deals with complaints.

8.2 Protests and Jury

1. If the complainant, or any participant in an ACPA event impacted by a complaint, is not satisfied with its outcome, he has the right to protest.
2. A protest must be made in writing, in English, and be handed to the TD or MD with a protest fee of 50USD (or equivalent in local currency) within 2 hours (30 minutes for the last task) of the publication of the decision regarding the complaint.
3. The jury will deal with the protest and may decide to refund the protest fee.
4. The jury is composed of all ACPA members present at the competition, except the ACPA President and those Committee members involved in the protest. The jury must reach and publish their decision within 24 hours of the protest being received.
5. The TD has a consultative voice in the jury.

8.3 Appeals

1. Any pilot participating in an ACPA event can make an appeal concerning any jury decision.
2. The appeal must be made in writing, in English, and sent to the ACPA office within one week, together with a 300USD appeal fee and accompanied by any documents relevant to the case.
3. The Appeal Committee will consist of the Asian Paragliding Tour President, plus at least 3 ACPA members (committee members or former committee members) appointed by the President, none of them being from the parties involved. The President and MD/TD will have a consultative voice only.
4. All interested parties may be present at the hearing. They must be given notice of the appeal in good time; their absence shall not delay the appeal.
5. The Appeal Committee has full power to make the final decision.
For example, the Appeal Committee's powers include, but are not restricted to:
 - Change ranking lists in case of obvious errors
 - Invalidate a task for an overall ranking in case of severe infringement of ACPA rules
 - Change a jury decision in case of an appeal lodged against a jury decision as well as making a decision in case of jury failure

9 Flying and Safety Regulations

9.1 Compliance with the Law

Each competitor is required to conform to the law and the rules of the air of the country in

which an ACPA event takes place.

9.2 Flight Limitations

1. All gliders must be flown within the limitations of its manufacturer's specifications.
2. Any manoeuvre hazardous to other competitors or third parties is prohibited.
3. A pilot can be prohibited by the MD or the TD from competing or flying for safety reasons.

9.3 Damage to a Glider in Competition

1. Any major damage must be reported to the MD without delay, and the glider may then be repaired.
2. Any replacement parts must conform exactly to the original specifications.
3. A glider may only be replaced if permission is given by the MD. Reasons for a replacement are damage, loss or theft, beyond the control of the competitor.
4. The TD may allow resumption of the original glider after it is retrieved or repaired.

9.4 Fitness

1. A pilot may not fly unless he or she is fit.
2. Any injury, drugs or medication taken which might affect the competitor's performance must be reported to the MD before flying.
3. The MD in accordance with the TD will decide if the pilot will be allowed to fly.

9.5 Collision Avoidance

1. Circuit, turn directions and landing patterns given at the briefing must be complied with. Usually the turn direction is right on even, left on odd days.
2. International collision avoidance regulations must be obeyed and proper look-out be kept at all times.
3. A glider joining another glider in a thermal shall circle in the same direction as that established by the first glider in the thermal, regardless of height separation.
4. A competitor involved in a mid-air collision must not continue the flight if the structural integrity of the glider is in doubt.

9.6 Cloud Flying

1. Cloud flying is prohibited (see section 15.1 Penalties).
2. Cloud flying is defined as any part of the glider or the pilot disappearing from the view of observers or pilots close to him or her.
3. It is the responsibility of the competitors to report cloud flying to the MD or the TD.

9.7 Altitude Control

1. Altitude control will be done using True Altitude, but in the case of any infringement, GPS Altitude will be checked.
2. A progressive penalty will be enforced (see section 15.1 Penalties).

9.8 Ballast, Take-off Weight

1. A competing glider may carry jettisonable ballast only in the form of fine sand or water.
2. A competitor must avoid dropping ballast in a manner likely to affect other competing gliders or third parties.
3. The total weight, including all flight equipment and glider, must not exceed 33 kilograms in addition to the pilot's weight.

9.8.1 Weight control

1. Pilots should specify their weight when they register for the competition. This weight will be checked at the event registration.
2. The pilot's body weight is defined as body weight when dressed in jeans, shirt and underwear but without boots. This weight is increased by 1 kg to allow for footwear.
3. Pilot's may check their weight (at registration or on take-off) and adjust their weight. Also, when being systematically weighed at a launch gate, pilots may adjust their weight, if necessary.
4. Pilot's may be checked as they are about to take off or after landing, and this check will be definitive. If there is any doubt, their body weight will be checked again immediately.
5. If a pilot's all-up weight is out of their glider's weight range, they will be penalized without tolerance on the measurement.
6. If a pilot is carrying over 33 kg of equipment, including ballast, they will be penalized without tolerance on the measurement.
7. The weight measurement machine will be located close to the launch gate. The organiser must provide an inflexible horizontal platform with a minimum size of 100cm x 100cm.
8. The organiser must have a list of pilots at the take-off with their body weight and the weight range of their wing.

9.9 Emergency Rules

1. A new rule may be introduced at any time during an event to address unforeseen problems which are deemed by the MD, TD and ACPA committee members present to pose a major threat to pilot safety.
2. Any such rule must be written down, and referenced on the task board each day that it is in force.
3. Any such rule will not be retroactively applied.
4. The ACPA committee reserves the right to ground any wing or pilot if it is deemed to be in the interests of pilot safety.

9.10 External Aid to Competitors

1. Any external help while flying in navigation or thermal location is prohibited (see section 15.1 Penalties).
2. The organisation can broadcast pertinent information, such as wind conditions at goal, to all pilots. This is both to improve safety and to eliminate the value of such information passed to individual pilots to provide an unfair advantage.

10 Take-off

1. The organisation assumes that all registered pilots will fly each task.
2. All pilots intending to fly must take a tracker. Pilots who do not take a tracker are deemed not to be flying the task and will not score for the day.
3. If a pilot decides not to fly, he must notify the organiser as soon as possible and before the mandatory safety report-back deadline. Failure to do so may result in a penalty as defined in section 15.
4. A pilot who decides not to fly should hand back his tracker at launch. If this is not done, normal check-in procedures at Headquarters must be followed.
5. All pilots must be able to perform safe and controlled launches. If a pilot does not succeed in launching in a reasonable time, he or she may be removed from launch by the MD or TD.

10.1 Launch Procedure

10.1.1 Ordered Launch

1. When necessary, a priority system can be used: all pilots must enter through a designated gate in the order of the last available ranking (Top 30, 40, 50, etc.) This will be defined by the Task Committee and displayed on the Task Board.
2. Pilots who do not enter the take-off area when they would be allowed to, keep their right to enter at any later time.

10.1.2 Launch Window

1. Window Opening and closing times are announced at the task briefing and displayed on the task board.
2. The window should be as long as possible, to allow all pilots to take off even in case of a temporary window closing (e.g. for a helicopter rescue) or to give time to repair broken lines etc.

10.1.3 Re-launch

1. In the case of a problem occurring immediately after take-off, a pilot may ask permission from the MD to land, resolve the problem, and take off again. The pilot may only top land if given express permission to do so.
2. In the case of a re-launch, pilots do not lose their priority rights in an ordered launch.

10.2 Free Flyers and Wind Dummies

1. Free flying is allowed, but those pilots may be asked not to take off during certain times for safety reasons.
2. Wind dummies must be ready to take off before the window opening on organiser request.
3. Free flyers and Wind dummies must not provide voluntary help to competitors for reasons of fairness (see section 9.10 External Aid to Competitors).

11 Landing, Report-back and GPS Track Download

1. During a task, touch and go and take-off after landing are forbidden. If a pilot wishes to re-fly, then he must ensure that the correct flight is submitted for scoring.
2. All pilots must pack their glider immediately after landing. A glider lying open on the ground means "I need help" (see Appendix B: Rescue Actions in Competitions).

11.1 Mandatory Safety Report-Back

1. It is each pilot's responsibility to report back every task day, whether they fly or do not fly.
2. The primary means of reporting back is via SMS.
3. Report-back must be done immediately by SMS to the number given during briefing and indicated on the task board.
4. The format of the message is as follows:
<pilot number(s)> <UTM coordinates> <optional message>
Example: If pilot 174 wants to report landing, together with 3 other pilots (21, 73 and 411), the message would be:
"174 21 73 411 0725738 5020845 waiting at the bar"
5. The system will respond when the SMS is received. If no acknowledgement is received, then the pilot is not yet reported back, and if the pilot moves (or his situation changes) he must report back by SMS again to give an update.
6. All pilots must report back as soon as possible, even before packing the glider (within 20 minutes after landing), including those landing in goal. The later a pilot lands, the faster he must report back.
7. GPS track download is not a way to report back.
8. A pilot can be penalized for reporting back late. In case of unnecessary search and rescue operations caused by a pilot reporting back late or by falsely reporting "Need assistance", the penalty can be up to disqualification from the event and possible S&R costs at the expense of the pilot

11.2 GPS Track Download

1. GPS track download is mandatory for all pilots flying the task.
2. Each pilot must download their GPS track download as soon as possible.
3. When a deadline is set (e.g. on the last competition day), pilots presenting their GPS receiver for download after this deadline may not be scored for the task.
4. A maximum of 2 GPS receivers may be checked from pilots reaching goal and with no problem in their recorded track log.

11.3 Check-in at Headquarters

1. All pilots who fly the task must personally (not team leaders) hand in their trackers once they have completed GPS Track Download.
2. Pilots may not hand in multiple trackers.
3. Handing in the tracker constitutes check-in and is the organisation's guarantee that the pilot has safely returned to base.

12 Tasks

The Asian Paragliding Tour uses four task formats.

12.1 Timed Tasks

1. In all timed tasks the course is the same for all pilots.
2. The course starts at take-off, passes around zero or more turnpoints, and terminates at the goal.
3. Part, or all, of this course is designated as the speed section.
4. The objective is to fly around the course and, in the process, along the speed section in the shortest time.
5. The task distance is the shortest distance around the course.
6. If a pilot fails to complete the course, then the distance awarded to the pilot is the task distance minus the shortest distance from his best position around any remaining turnpoints to goal.

12.1.1 Race to Goal

1. A Race task uses a single start time.
2. The first pilot to complete the speed section has the shortest time.

12.1.2 Clock Start

1. A Clock Start task uses multiple start times, normally at fixed intervals.
2. A pilot's start time is defined as that start time after which he starts the speed section for the last time, to continue and fly the task.

12.1.3 Elapsed Time

1. An Elapsed Time task gives an individual start time to each pilot.
2. A pilot's start time is taken when he crosses the start for the last time, to continue and fly the task.
3. A start opening/closing time and last start time can optionally be set.

12.2 Distance Tasks

1. In distance tasks the aim is to fly the longest distance.
2. The course can start with one or more turnpoints.

12.2.1 Free Distance on an Axis

1. The objective is to fly as far as possible along a predetermined axis from the take-off or the last turnpoint.
2. Distances are calculated as the shortest distance from take-off, around any turnpoints, and thence to the most distant of points on the axis obtained by perpendicular projection of the points of the track log onto the axis.

12.3 Task Deadline

1. A task deadline is set to give enough time for search and rescue at the end of the day, or to avoid forecasted bad weather.
2. If any pilot is still flying after this deadline he should go to land as quickly as possible in a safe place. His best position up until the task deadline will be used for scoring.

13 Turnpoints, Cylinders, Start and Goal

13.1 Turnpoints

1. All turnpoints are given as GPS coordinates.

2. The list of turnpoint coordinates must be uploaded onto each pilot's GPS receivers from the scorer during event registration.
3. It is not acceptable to use turnpoints from any other source.
4. Organisers can change or add co-ordinates during the event. In this case the changes will be announced at the task briefing and displayed on the task board.
5. The official map datum is WGS84, and position format is UTM. For safety reasons and to facilitate communication, pilots must set their GPS receivers to WGS84 and UTM to be able to provide coordinates in the right format at any time. This also avoids mistakes when manually entering new coordinates.

13.2 Vertical and Horizontal

1. A vertical line is defined as a straight line that is perpendicular to the surface of the WGS84 ellipsoid at the point that the line (or its projection) crosses the ellipsoid.
2. A Horizontal Surface (of height v) is defined as a curved surface with a constant vertical separation (v) from the WGS84 ellipsoid.

13.3 Cylinders

1. Cylinders are defined as a circle on the WGS84 ellipsoid, projected vertically upwards to an infinite altitude.
2. Cylinders are drawn around a central point which is a turnpoint specified by the task-setters.
3. Cylinder radius can vary for each cylinder, even within the same task when a turnpoint is used multiple times. Defining the cylinder sizes is part of task setting.
4. A cylinder can have an opening time and a closing time. A cylinder can only be validated after the opening time and before the closing time.
5. Each cylinder can either be an entry or an exit cylinder. An entry cylinder is validated when a pilot enters it and an exit cylinder is validated when a pilot leaves it.

13.4 Start

1. All information concerning the start definition will be announced during the task briefing and displayed on the task board.
2. Two types of start are available.

13.4.1 Ground Start

1. In the case of a race to goal task, the race starts when the window opens.
2. In the case of a clock-start or elapsed time task, it will be necessary to determine the launch time of each pilot. This can either be recorded by marshals, or it can be automatically determined from the GPS track log. In this case the pilot needs to turn on their GPS at least two minutes before taking off to store at least four points at take-off immediately before they leave the ground. If there is no valid recording of a pilot's start time, the window opening time will be applied to that pilot.

13.4.2 Air Start

1. An air start is either an entry cylinder or an exit cylinder.
2. An entry start cylinder is used when the next turnpoint is inside the start cylinder.
3. An exit start cylinder is used when the next turnpoint is outside the start cylinder.
4. In the case of a race to goal task, the start cylinder opens at a pre-determined time. The start cylinder is validated as follows:
 - a. In the case of an entry cylinder, the pilot must have at least one point in his

- track log outside the cylinder after the opening time (and before the closing time, if applicable).
 - b. In the case of an exit cylinder, the pilot must have at least one point in his track log inside the cylinder after the opening time (and before the closing time, if applicable).
 - c. If the pilot does not satisfy these requirements, then the pilot will be scored back to the start cylinder.
6. In the case of a clock-start or elapsed time task, if the start cylinder has an opening or closing time, then it is validated in the same way as in a race task. But, in addition, the pilot's individual start time is determined as follows:
- a. A pilot's individual start time is calculated from the last time the pilot crossed the cylinder in the direction defined by the task (enter or exit).
 - b. If there is no valid recording of a pilot's start time, then the pilot will be scored back to the start cylinder.
 - c. A last start time may be set. In this case, if the pilot crosses the start for the last time after this time, his individual start time will be set to the last start time.

13.5 Goal

1. By default, the Asian Paragliding Tour goal is a goal line.
2. The virtual goal line extends to 200 m each side of the GPS goal coordinates, to a total of 400 m, and is perpendicular to the line between the goal point and the previous turnpoint.
3. The virtual goal line is validated when there is a point in the pilot's track log inside a 200 m radius semi-cylinder whose flat face is coincident with the virtual goal line and whose interior is on the opposite side of the virtual goal line to the previous turnpoint.
4. If present, a physical line should be at least 50 m long and 1 m wide. If less than 50m, the physical line will be deemed to extend to 25m on either side of the centre of the actual line.
5. The physical line must match as closely as possible the virtual line and should not be further from the previous turnpoint than the virtual line.
6. The physical line is validated when the pilot is observed to have physically crossed it. The pilot needs to fly further than the physical line or at least land on it.
7. A pilot is deemed to have reached goal if either the virtual line or the physical line is validated.
8. For safety, or other reasons, a cylinder may be used instead of a goal line; this must be explained at the briefing and displayed on the task board. In this case there is no physical equivalent.
9. Pilots should not take any risk to cross the goal line. Not crossing a goal line for obvious safety reasons will be considered in favour of the pilots.
10. Organisers should use physical lines as often as possible for several reasons (goal visualisation, safety, public, media etc.).
11. For public and media reasons, pilots are asked, if possible, to cross the goal line in the same order as the time cylinder.

13.6 End of Speed Section

1. The end of speed section may be:
 - a. An entry (or exit) cylinder centred on the goal coordinates (2000m by

default). In this case, the pilot's finishing time is taken when he enters (or exits) the cylinder. After that, the pilot must validate the goal to complete the task.

- b. Another turnpoint. In this case, the pilot's finishing time is taken when he validates that turnpoint. After that, the pilot must validate all subsequent turnpoints and the goal to complete the task.

13.7 Crossing Times

1. Crossing times of SSS/ESS cylinder boundaries and goal lines are determined from the pilot's track log.
2. The actual crossing time is found by interpolating between the timestamps of the last track log point before crossing and the first track log point after crossing.

14 Task Evidence

14.1 Source

1. Data will only be collected directly from a GPS receiver. Emailed tracks are not accepted.
2. IGC files are also accepted if they are digitally signed by the GPS unit itself.
3. Only valid GPS data will be considered as true evidence. Data may also be collected from data loggers, but in such case, a GPS receiver may also be requested to verify the data logger's data validity.
4. No copies of files, or files from any other source will be accepted as evidence for a flight.
5. Track log data is public.

14.2 Valid GPS Data

1. To be considered as valid, the track log must satisfy the following criteria:
 - a. The track log must show at least 2 minutes of data and at least 5 continuous track points prior to and after the track log points used to verify a turn-point or start.
 - b. The track log must show at least 2 minutes of data and at least 5 continuous track log points prior to landing.
 - c. The track log must have valid and consistent time stamps as well as GPS altitude recording.
 - d. A continuous track log is one where each consecutive point is 5 seconds or less from its predecessor.
 - e. Partial tracks from several GPS receivers can be combined to create a valid track.
2. GPS data validity is verified by the GPS software.
3. In some particular cases, where forbidden or dangerous areas exist, the MD can require the pilots to provide a continuous track log that shows that they did not fly into the unauthorized area.

14.3 Scoring Software

1. The scoring software used by the ACPA to evaluate pilots' performance is FS. Rankings are then created based on FS' output using Excel, until such a time when FS supports time-based scoring
2. The software checks positions in relation with times.
3. The software is also able to check
 - a. Departure time during starts
 - b. Cylinder crossing for air start and turnpoints
 - c. Landing place
 - d. Arrival Time
 - e. The best position reached by the pilot during the flight
 - f. Best positions at a fixed time, and altitude over goal (stopped task)
 - g. Airspace infringements

14.4 Measurement of Distances

1. All geographical points (turnpoints and track log points) are projected onto a plane using the Transverse Mercator projection of the WGS84 ellipsoid with a scaling factor optimised for a task area 100km wide.

2. Distance between points is simply obtained by using Pythagoras's Theorem. This is within a metre of precise geodetic calculations over a 100km wide task area.
3. All other geometrical calculations are carried out using simple planar trigonometry.

14.5 GPS Checking Criteria

1. For the start cylinder, at or after the start time, the track log must show at least one point outside the cylinder in the case of an "Enter" cylinder, or at least one point inside the cylinder in the case of an "Exit" cylinder.
2. For each turnpoint claimed, the track log must show one of the following:-
 - a. At least one point inside the cylinder for "Enter" cylinders, or at least one point outside the cylinder for "Exit" cylinders
 - b. A pair of consecutive points (in a continuous track log) whose connecting line passes through the cylinder.
3. Manually marked waypoints (Mark + Enter on Garmin GPS receivers, for example) are not considered as track evidence.
4. A tolerance of 0.5% is applied to all cylinder radii to deal with different formulas used in GPS receivers and computer software to calculate distances.
Example: On a 400m cylinder, this gives a 2 m tolerance.

14.6 Best Position

1. Pilots will be scored for their best position reached in the task. The best position can be the landing place, or a better position reached in the air.
2. Definition of the Best Position: The track log point with the shortest optimal route through all remaining cylinders and to goal (not necessarily the one closest to the next turnpoint).
3. In the case of a stopped task, the altitude bonus for each track log point will be taken into account when determining the best position.

14.7 Pilot's Responsibility and Management of the GPS Receiver

1. Pilots can use multiple GPS receivers and data loggers. A maximum of 3 instruments will be accepted for download.
2. Pilots need to set their GPS receiver and data logger to the correct parameters.
3. In case of GPS receiver or data logger failure (software or hardware), dealing with this problem is the pilot's responsibility.
4. Each pilot certifies that he provides his or her own track log at GPS track download. The organisation may cross-check several track logs.
5. It is each pilot's responsibility to ensure that a track point is recorded to prove completing each portion of the task.

14.8 GPS Handling after Landing

1. If a pilot lands somewhere other than at goal, GPS receivers and data loggers must be switched off immediately after landing.
2. In case of a second flight, it is the pilot's responsibility to make sure he is not recording additional data in his GPS recording.

14.9 GPS Receiver Models

1. Only GPS receiver models listed in Appendix E: GPS Receivers are accepted by the ACPA.
2. GPS receivers used in the Asian Paragliding Tour must be capable of recording GPS altitude, and must include this information in the track download.

3. USB-based GPS receivers are only accepted if they comply with the USB Mass Storage standard and can produce a signed IGC track log.
4. Upon request, all pilots must be able to provide a cable for downloading tracks from their particular GPS receivers.

15 Penalty and Compensation

15.1 Penalties

1. Modified glider: zero points for the task, disqualification from the event on a second offence.
2. All-up weight outside certified weight range: zero points for the task, disqualification from the event on a second offence.
3. Equipment in excess of 33 kg: zero points for the task, disqualification from the event on a second offence.
4. Cloud flying: zero points for the task, disqualification from the event on a second offence.
5. Aggressive or dangerous flying: zero points for the task, disqualification from the event on a second offence.
6. Airspace infringement, horizontal or vertical: 10 points per metre of infringement up to 50 m; zero for the day after that.
7. Track log missing or non-continuous track log when continuous track log is required: zero points for the task.
8. Failure to report back, or late report-back after a task: up to disqualification from the event and possible recovery of S&R costs.
9. False "Assistance needed" report: If dismissed by the organisation, 1 point, otherwise up to disqualification from the event and possible recovery of S&R costs.
10. Failure to wear official sponsor logos or equipment: up to 100 points penalty per task.

15.2 Compensation Points

1. Pilots taking part in a rescue action will be awarded compensation points.
2. This compensation is evaluated by the MD according to the position of the pilot at the time of the rescue and what results he could have achieved.
3. In case this evaluation is not possible, for example at the beginning of the task, the pilot's ranking in the previous tasks (or eventually in the next tasks) will be taken into account. In any case, the pilot will not lose any ranking because of his rescue action.

16 Task Validation

16.1 Launch validity

A task is only considered valid if the launch window was open for more than one minute per competitor and per simultaneous take-off possibility (decided by MD and declared at the beginning of the competition).

16.2 Stopped Tasks

1. The MD and/or the SD can stop a task for safety reasons.
2. Task stopping is announced on the radio safety frequency.
3. The official Task Stop Time is either 5 or 10 minutes before the task stop announcement. This must be declared at the beginning of the competition.
4. For a stopped task to be scored the Task Stop Time must be at least one hour after the start for Race to Goal, or one hour after the Last Start Time for all other race types. The Last Start Time is the time that the last pilot started or the Last Start Time defined for the task, whichever is the earliest. If a Last Start Time is not defined, and some pilots have not started, then the task cannot be scored.
5. If a task cannot be scored correctly, it will be cancelled.
6. When a task is stopped, all competition rules still apply until each pilot is checked in at headquarters.

16.2.1 Stopped Clock Start, Elapsed Time or Free Distance Tasks

1. In the case of a Clock Start, Elapsed Time or Free Distance task, pilots will be scored with their best position after the “minimum available flying time”.
2. “Minimum available flying time” is the time between the last start time and the task stop time.

16.3 Cancelled Tasks

1. After the last landing time, a task can only be cancelled by a jury decision. The MD and/or the TD can ask for a jury decision on the validation of a task.
2. A complaint can be made to ask for task cancellation.

17 Score Sheets

1. The organiser publishes a score sheets for all competing pilots.
2. The score sheet must show at least:-
 - a. Name of pilot, nationality, glider, team (except in case of due invoices) and sponsors
 - b. Distance flown
 - c. Start time
 - d. Time when reached the End of Speed Section
 - e. Duration of flight inside the Speed Section (between Start and End of Speed Section)
 - f. Sum of points awarded
3. Score sheets will be produced in several categories including, but not necessarily limited to: Overall, Women and Teams.
4. Score sheets will be published promptly on the website as soon as they are available.

18 Prize Giving

It is mandatory for Asian Paragliding Tour pilots to be present at the prize giving ceremony if they achieve a top 10 position.

Appendix A: Registration and Selection

A.1 How to Enter a Asian Paragliding Tour Event

A.1.1 Registration

1. A pilot wishing to participate in an Asian Paragliding Tour Event must register and apply online on the ACPA website: <http://www.asianparagliding.org>
2. All dates and deadlines relating to an event are in UTC.
3. The registration deadline is exactly 1 month before each Asian Paragliding Tour Event.
4. Any pilot applying after the registration deadline will be placed in the waiting list.
5. A pilot can apply at the beginning of the season for all or any Asian Paragliding Tour event.

A.1.2 Cancellation of a Registration

1. Pilots who want to cancel their registration should do it as soon as possible.
2. A pilot who cancels at least 30 days before the event can ask for:
 - a. His entry fee to be used for the next event where he is selected.
 - b. A refund of the entry fee (an administrative fee of 25USD will be deducted).
3. Cancellations received less than 30 days before the event will be refunded 50% of the entry fee.
4. Cancellations received less than 2 weeks before the event will not be refunded.
5. Any cancellation is final.
6. In the case of injury, and where a medical certificate is supplied, refunds will be decided on a case-by case basis by the ACPA Committee.
7. Other circumstances beyond the pilot's control will be considered by the ACPA Committee when deciding on refunds.
8. If a cancellation is less than 7 days before the event, then the organiser part is not refundable under any circumstances.
9. It is the pilot's responsibility to claim the return of his entry fee. Requests for refunds for fees paid must be made before December 31st of the same year.

A.1.3 Entry Fee

1. The Entry fee for Asian Paragliding Tour Events is a maximum. USD250 per event.
2. The fee covers, but is not limited to:
 - a. Transport to all flying sites
 - b. Retrieval on main roads
 - c. A map of the area
 - d. GPS co-ordinates uploaded to the GPS
 - e. GPS track download and task scoring
 - f. Emergency rescue and first aid medical service
 - g. Lunch packets on all task or rest days.
 - h. Possible extras (events, dinners, parties...)

A.2 Selection Process for Asian Paragliding Tour Events

1. Only registered pilots who were selected and who confirmed their participation by paying will be accepted, even if fewer than the nominal number of pilots fulfils this requirement.
2. When new places become available due to cancellations of selected pilots, the first pilots in the waiting list are selected.

3. The selection process can be followed on the ACPA Web site at <http://www.asianparagliding.org>

A.2.1 Timings

2 months before the beginning of the event: Selection deadline for all pilots

1. Confirmation of selection will be sent by Email to each pilot 2 months before each competition and the selection lists are published on the web site <http://www.asianparagliding.org>
2. A selected pilot must pay his Registration fee to the Asian Continental Paragliding Association within 7 days.
3. Any selected pilot not paying within 7 days will be given a reminder, and will be able to keep his place by paying the entry fee plus an administration fee of 25USD within the next 2 days.
4. When the selected pilot has paid his Registration fee, he is considered a confirmed pilot.
5. The selection list on the ACPA website will show: confirmed pilots; pilots with payment in progress; waiting list; wildcard pilots

8 days later: Payment deadline

1. Pilots who have not paid their registration fee by this date are removed from the selection list.
2. The list will be filled up with the best-ranked pilots on the waiting list. Those pilots have 7 days (plus a further 2 days if they pay an administration fee of 25USD) to send their payment to the Asian Continental Paragliding Association.
3. If necessary, this procedure is repeated as many times as necessary.

A.2.1 Additional rules

1. If a pilot was injured, or was otherwise unable to compete, the previous year and submits appropriate documentation to the Asian Continental Paragliding Association, the committee may take into account results of the season previous to the one where the injury occurred.
2. ACPA Wildcards are granted by the ACPA Committee for the following reasons:
 - a. In recognition of outstanding service to the ACPA
 - c. If the applicant is acknowledged as a 'young up & coming'
 - d. In the case of special circumstances.

A.3 Eligible nations

Pilots who are citizens or legal residents of the following listed countries may apply for membership of the ACPA and register for ACPA events:

Afghanistan, Armenia, Australia, Azerbaijan, Bahrain, Bangladesh, Bhutan, Brunei, Cambodia, China, Federated States of Micronesia, Fiji, Hong Kong, India, Indonesia, Iran, Iraq, Israel, Japan, Jordan, Kazakhstan, Kiribati, Kuwait, Kyrgyzstan, Laos, Lebanon, Macau, Malaysia, Maldives, Marshall Islands, Mongolia, Myanmar, Nauru, Nepal, New Zealand, North Korea, Oman, Pakistan, Palau, Palestine, Papua New Guinea, Philippines, Qatar, Samoa, Saudi Arabia, Singapore, Solomon Islands, South Korea, Sri Lanka, Syria, Taiwan, Tajikistan, Thailand, Timor-Leste, Tonga, Turkey, Turkmenistan, Tuvalu, United Arab Emirates, Uzbekistan, Vietnam, Yemen.

Appendix B: Rescue Actions in Competitions

B.1 General

1. All pilots must pack their gliders immediately after landing: a glider lying open on the ground means "I need help!"
2. A pilot witnessing any kind of accident must inform the organiser as soon as possible on the safety frequency.
3. When reporting an accident, the following details should be given as accurately as possible:
 - a. pilot number of pilot reporting the accident
 - b. nature and location of the accident
 - c. position of the victim (if possible GPS coordinates in WGS84/UTM)
 - d. description of glider(s) involved in the accident
4. A pilot assisting an injured pilot will be granted compensation in scoring.

B.2 Objective

1. To propose a list of things to do when a pilot gives assistance to another pilot.
2. To propose to the organiser the procedure for the rescue service.
3. To encourage pilots to be responsible when an accident occurs.
4. This list can be used by the organiser and/or the jury in order to attribute compensation points to the pilots who gave assistance.

B.3 Organisation Duties

1. To provide a radio infrastructure that covers the whole course.
2. To make clear & precise decisions regarding the injured pilot and/or with the pilot who is giving assistance.
3. If possible put the rescue team in touch with the accident area.
4. Transmit all information to the rescue team (general state, location, etc.)
5. Cancel the rescue action if persons or organisations outside of the competition require it.

B.4 Rescue Procedure

If possible, an injured or rescuing pilot must:

1. Get in contact by phone or radio with the organisation or with a pilot who is in the air.
2. Give his geographical position, his altitude, GPS co-ordinates (UTM/WGS84), colour of his glider, his name, pilot number, his general condition.
3. Estimate the general help required (e.g. rescue action by helicopter or by land).
4. Stay in contact with the organisation and follow their instructions.

B.5 Pilot's Obligations

Pilots should follow the principle Alert – Protect – Rescue.

B.5.1 Alert

1. Before landing, the rescuing pilots should look for some landmarks, and record the altitude and GPS coordinates in order to facilitate the location of the accident zone.
2. First contact with the organisation should be from the air, by radio or mobile phone, since reception will most likely be better than once on the ground.
3. If possible, either from the air or once landed and close to the pilot, transfer the following additional information:

- a. Name and number of the rescued pilot
 - b. General state of the rescued pilot: Can he speak, can he move?
4. Wait for the organisation decision and then:
 - a. Land nearby.
 - b. Or stay in the air, close to the accident to help the rescue team to find the injured pilot.
 - c. Or go on with the task.
5. If radio contact with the organisation cannot be established, the accident witness should contact other pilots nearby and ask them to relay his information to the organisation.
6. In cases where no other pilots are nearby and can be of any assistance, the witnessing pilot must judge according to the area, the impact, the presumed state of the pilot, if it is better land near him or next to a telephone.
7. Further information to give to the organisation on reaching the injured pilot
 - a. Accessibility of the injured: distance to the closest road, trees, cliffs, etc.
 - b. State of the injured pilot: conscious / unconscious; pulse, breathing; mobility; fractures; internal/external bleeding

B.5.2 Protect

Pilots witnessing an accident should take extra precautions to stay safe, by avoiding turbulent areas and being very careful in picking a suitable landing spot nearby the accident scene.

B.5.3 Rescue

1. Approaching an injured pilot should happen as calmly as possible, from the side or below if possible, to avoid falling stones.
2. Once the injured is discovered by the rescue services, the rescuer should prepare the accident zone for a helicopter landing by folding up and securely packing away all gliders and reserve parachutes.
3. Protecting an injured pilot:
 - a. Do not move him.
 - b. Cover him with a safety blanket or a paraglider.
 - c. Speak to him even if he is unconscious.
 - d. Find out if his vital functions (pulse, breathing) are efficient and do not intervene if you are not competent.

Appendix C: ACPA Scoring System

The following text describes the scoring system used in ACPA events. It is generally referred to as “time-based scoring”.

C.1 General

The ACPA 2017 scoring is based on an idea developed by Maxime Bellemin and Joerg Ewald in order to simplify scoring for pilots and spectators. The basic idea is to use a simple measure for pilots’ performance: The time they needed to fly to goal. To rank pilots over multiple tasks, their individual task times are added up. Bonus time can be gained by reaching turnpoint cylinders and goal early.

C.2 Terminology

The following terms are used in the ACPA scoring:

Take-off: Place where pilots take off for the task.

Speed Section: A timed section of the task where Speed Points are awarded. The pilots that complete the speed section fastest receive the most Speed Points.

Start of Speed Section (SSS): The cylinder/line/point where timing of the task starts.

Race Start: The time when pilots are allowed to cross SSS and begin flying the Speed Section. In a Race to Goal task, this is also the Start Time for all pilots.

End of Speed Section (ESS): The cylinder/line/point where timing of the task stops.

Goal: The finish line or cylinder defining the task’s end. Can be identical to ESS, but is often a line or a smaller cylinder inside a bigger ESS cylinder for safety reasons.

Start Time: Time when a pilot starts flying the SSS.

Start Gate: A timing reference for SSS. Depending on the chosen task format, multiple Start Gates can be available; offering pilots a choice of different Race Start times.

Turnpoint (TP): A turnpoint is a geographical point, defined by coordinates and altitude above mean sea level.

Cylinder: A Cylinder is defined by a Turnpoint at its centre, and the cylinder’s radius.

Task Distance: The shortest possible distance a pilot has to fly to finish the task.

This means he has to fly to the boundary of each Cylinder, not the turnpoints at the cylinders’ centres.

Speed Section Distance: The shortest possible distance a pilot has to fly from the SSS to the ESS. As with Task Distance, he has to fly to the boundary of each Cylinder, not the turnpoints at the cylinders’ centres.

Window Open Time: The time when pilots are allowed to take off.

Task Deadline: The time until which a pilot’s flight is scored. All distance covered after this time will not be counted for scoring.

C.3 Scoring parameters

Before the first task, these scoring parameters must be defined by the MD

1. Nominal Speed
2. Sprint bonus percentage
3. Stopped task score-back time

C.3.1 Nominal Speed

Nominal speed is applied in situations where a pilot did not reach goal, to calculate his task time. Nominal speed should be set to the speed that average pilots are expected to achieve over a normal task in the competition area. Default is 15 km/h.

C.3.2 Sprint bonus percentage

This defines how much of the day winners' time is distributed as sprint bonus. Default is 10%

C.3.3 Stopped task score-back time

If a task is stopped, the task is scored based on pilots' positions a number of minutes before the actual stop time. Default is 5 minutes, but can be increased to 10 minutes.

C.4 Task scoring

1. Tasks are scored by the time each pilot takes to fly from SSS to ESS if they reach goal.
2. Pilots landing short of goal score the time of the last pilot to reach goal, plus the time required to fly the remaining distance to goal at nominal speed, rounded to the next full second.
3. The time a pilot scores in a task is capped at 300% of the day winners' time.
4. In tasks where no pilot reaches goal, the last turnpoint cylinder reached by at least one pilot serves as ESS and goal.
5. Penalties issued by the MD (e.g. for airspace infractions) are added to the penalized pilots' task time, and therefore have an effect on the task results.

C.4.1 Distance calculation

The distance considered for each pilot is that pilot's best distance along the course line, up until the pilot landed or the task deadline was reached, whichever comes first. In the case of a stopped task, this distance may be increased by an altitude bonus (see C.7.2).

C.5 Bonus time

1. The first 10 pilots to reach a turnpoint or goal are awarded bonus time.
2. The total amount of bonus time available in a task is calculated as day-winners' time times sprint bonus percentage.
3. 50% of the available bonus time are distributed amongst the top 10 pilots in goal. The remaining 50% are spread evenly over all turnpoints, and then distributed amongst the top 10 pilots to reach those turnpoints.
4. The first pilot to reach goal or a turnpoint is awarded the full amount of bonus time available at that point. The second ½ of that time, the third 1/3, etc., the tenth pilot is awarded 1/10 of the available time at that point.
5. Bonus times have no influence on task scores

C.6 Stopped tasks

1. When a task is stopped by the MD, pilots are scored based on their positions at a time that is calculated as follows: Stop time = Announced task stop time – stopped task score-back time.
2. A stopped task will be scored if the flying time was one hour or more. For race to goal tasks, this means that the task stop time must be one hour or more after the race start time. For all other tasks, in order for them to be scored, the task stop time must be one hour or more after the last pilot started.
3. Pilots still flying at Stop time are scored with an altitude bonus distance based on their altitude over goal. This may result in them being scored as "in goal" even if they were not in goal at Stop time.
4. If no pilot had reached goal yet at Stop time, even considering the altitude bonus distance, the task is scored like any other task with no pilots in goal (see C4, paragraph

4).

C.7.1 Altitude bonus distance

1. To compensate for altitude differences at or before the time when a task is stopped, a bonus distance is calculated, based on each pilot's altitude above goal, and added to the pilot's actual best distance along the course.
2. The glide ratio used to calculate altitude bonus distance is 4:1
3. All altitude values are GPS altitude values.
4. If adding the altitude bonus distance to a pilot's best distance results in a distance greater or equal to the task distance, the pilot is considered as having flown into goal. In that case that pilot's task time is calculated using nominal speed for the part of the speed section he had not yet flown at stop time.

C.7.2 Time Window

Stopped clock start or elapsed time races must be treated slightly differently from stopped Race to Goal tasks: Only the time window available to the last pilot started is considered for scoring. This means that if the last pilot started then flew for, for example, 75 minutes until the task was stopped, all tracks are only scored for the first 75 minutes each pilot flew after taking the start.

C.8 Competition scoring

1. Competitions are scored by adding up each pilot's task times, penalties and bonus times. The pilot with the lowest time is the overall competition champion.
2. A second ranking can be created, to award the best sprinters. For this, the pilots are ranked by the total amount of bonus time. The pilot with the most bonus time won over the course of the competition is the sprint champion.

Appendix D: Glider Checking Procedure

This procedure is for a two line glider. In the case of a three (or more) line glider the procedure is extended in a logical fashion with similar tolerances. In any case where different tolerances would be used, this is described.

In all line and riser checks, there are three possible outcomes:

1. The measurement is within the prescribed tolerance (OK),
2. The measurement is out of tolerance, with no advantage to the pilot (out-of-trim),
3. The measurement is out of tolerance with an advantage to the pilot (cheating).

D.1 Sail Checks

All canopy dimensions are made under a tension of 3daN. And are compared with the canopy dimensions provided by the manufacturer.

D.1.1 Span

The span is measured between the two outermost symmetrical attachment points that are closest to the rearmost span-wise internal band, provided that there are no stiffening elements, such as plastic, Mylar or tension tapes, outboard of those points.

If there are stiffening elements then the span is measured to the outermost points on them that are closest to the rearmost span-wise internal band. The tolerance for the span measurement is $\pm 2\%$.

D.1.2 Trailing Edge

The trailing edge is measured between the centre of the trailing edge and the point where the rib of the outermost, rearmost attachment point meets the trailing edge.

The tolerance for the trailing edge measurement is $\pm 1\%$.

D.1.3 Chord

The chord is measured between the trailing edge and the farthest point from it on the leading edge held without distorting the profile. The chords to be measured are of the first rib outwards from the centre of the glider that has line attachments on it, the furthest outwards rib of line group A2, and the furthest outwards rib carrying lines.

The tolerance for the chord measurements is $\pm 1\%$.

D.1.4 Inlet and Attachment Points

The distance from the trailing edge to the start and finish of the inlet and to the closest part of each tab is measured. These measurements are taken for each rib in E.1.3. The tolerance for each of these measurements is $\pm 10\text{mm}$.

D.2 Line Checks

Line lengths are measured from the inside of the main karabiner loop to the sail beside the tab, under a tension of 5daN and are checked against design line lengths provided by the manufacturer. All lengths will be measured and compared in integer millimetres.

D.2.1 Absolute Line Length (Arc Test)

The absolute tolerance for a single line is $\pm 50\text{mm}$.

$ABS(X_{\text{design}} - X_{\text{measured}}) > 50\text{mm}$: out-of-trim. Otherwise it is **OK**.

D.2.2 Relative Line Length (Angle of Attack Test)

The group average of all line lengths passing via each of the main riser lines (A1, B1, A2, B2, etc) is obtained. The differential tolerance for single pair of A and B group averages (B1-A1,

B2-A2, etc.) is from -20mm to +10mm. For a result of cheating to be valid the differential must be symmetrical.

$B_{design} - A_{design} - B_{measured} + A_{measured} > 10\text{mm}$: out-of-trim.

$B_{design} - A_{design} - B_{measured} + A_{measured} < -20\text{mm}$: cheating.

Otherwise it is OK.

D.2.3 Relative Line Length (Camber Test)

This test only applies to three-line gliders and is similar to E.2.2 except that the B and C groups are measured. The differential tolerance for single pair of B and C group averages (C1-B1, C2-B2, etc.) is from -20mm to +20mm. For a result of cheating to be valid the differential must be symmetrical.

$C_{design} - B_{design} - C_{measured} + B_{measured} > 20\text{mm}$: out-of-trim.

$C_{design} - B_{design} - C_{measured} + B_{measured} < -20\text{mm}$: cheating.

Otherwise it is OK.

D.3 Riser Checks

Riser lengths are measured from the inside of the main karabiner loop to the inside of the top maillon, in both their trim and fully accelerated state (no tension on risers, only on limiter straps), under a tension of 5daN and are checked against design riser lengths provided by the manufacturer. All lengths will be measured and compared in integer millimetres.

D.3.1 Absolute Riser Length

This test is only done in the trim setting. The tolerance for risers is ± 5 mm.

$ABS(R_{design} - R_{measured}) > 5\text{mm}$: out-of-trim.

Otherwise it is OK.

D.3.2 Relative Riser Length

The difference in length between the A and B risers is obtained from the absolute measurements of the A and B risers in both their trim and fully accelerated state. The differential tolerance for single pair of A and B risers (B-A, B-A') is $\pm 5\text{mm}$.

$ABS(B_{design} - A_{design} - B_{measured} + A_{measured}) > 5\text{mm}$: out-of-trim.

Otherwise it is OK.

D.3.3 Speed Bar Travel

The speed bar travel is obtained from the absolute measurements of the A, A' and B risers in both their trim and fully accelerated state and is checked against the design speed bar travel, S and S'. The tolerance for speed bar travel is $\pm 5\text{mm}$. For a result of cheating to be valid the error must be symmetrical.

$S - (B_{accel_measured} - A_{accel_measured} - B_{trim_measured} + A_{trim_measured}) > 5\text{mm}$: out-of-trim.

$S - (B_{accel_measured} - A_{accel_measured} - B_{trim_measured} + A_{trim_measured}) > 5\text{mm}$: cheating.

Otherwise it is OK.

Appendix E: GPS Receivers

E.1 Accepted GPS Receivers

The following GPS receiver models are accepted in Asian Paragliding Tour Events as task evidence.

- Aircotec: Top Navigator, XC Trainer (all variations)
- Bräuniger: Competino, Compeo, IQ-Basic-GPS, Competino+, Compeo+
- Compass Italy: C-Pilot PRO and variations
- DigiFly: Leonardo (all variations), Air
- Flymaster: F1, B1-NAV, GPS, NAV, LIVE, GPS-SD/SD+, NAV-SD, LIVE-SD
- Flytec: 5020, 5030, 6015, 6020, 6030, Element, Connect1
- Garmin: All models which record GPS altitude. Excluded are the models listed in F.2 below.
- MLR: SP24XC “Free Flight”
- Naviter Oudie
- Any instrument capable of producing a signed IGC file and supporting the Mass Storage Protocol.
- Smartphone Apps using Media Transfer Protocol are accepted, but only for backup purposes.
- Other instruments will be accepted if technically feasible and if logged data satisfies flight verification requirements.

E.2 Not Accepted GPS Receivers

The following GPS receiver models are not or no longer accepted in Asian Paragliding Tour events as task evidence; mostly due to lack of GPS altitude recording capability.

These devices may still be used for navigation.

- Older Garmin models (like the 12 series 48, 90, 90xl, II+, III)
- Garmin 38, 40, 45, II, eTrex “basic” models and eMap.