LOCAL REGULATIONS

for the

3rd FAI ASIA-OCEANIA PARAMOTOR CHAMPIONSHIPS

and

10th World Paramotor Championship Test Competition

at

Pasak Jolasid Dam, Thailand

28 April to 7 May 2017

Organised by

The Royal Aeronautic Sports Association of Thailand

on behalf of the

FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE

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AUTHORITY

These Local Regulations combine the General Section and Section 10 of the FAI Sporting Code with regulations and requirements specific to this championship. The FAI Sporting Code shall take precedence over the Local Regulation wording if there is omission or ambiguity.

CLARIFICATION

Classes PF1 is “Paramotor”

A catalogue of tasks (and their scoring systems) to be implemented during the championship is attached to these local regulations.

CONTENTS

1 GENERAL

1.1 The purpose of the championships is to provide good and satisfying contest to determine the champion in each class and to reinforce friendship amongst pilots and nations (S10 4.2).

1.2 The event will simultaneously be the 3rd FAI Asia-Oceania Paramotor Championships (AOPC 2017) and the test event for the 10th World Paramotor Championship in 2018 (WPC 2018).

1.3 The WPC test event will be scored separately.

1.4 The WPC test event is an open competition and some places will be available to pilots from outside the Asia and Oceania regions, trophies will be awarded by the organiser.

1.5 Overall scoring in both events will be in the ABG scoring style as proven at the 3rd ABG in Haiyang 2012 as well as 1st and 2nd AOPC. Navigation tasks will be scored by 'traditional' methods but task results will be converted to the ABG style in the individual and team AOPC general scores.

2 PROGRAMME DATES

Training, aircraft inspection, registration	Fri 28 Apr – Sun 30 Apr 2017
Opening Ceremony	Mon 1 May 2017
First Competition briefing	Mon 1 May 2017
Contest Flying Days	Tue 2 May - Sat 6 May 2017
Closing Ceremony, Prize-giving	Sun 7 May 2017

3 OFFICIALS

Event Director	Veerayuth Didyasarin (THA)
Competition Director	Nayot Kurukitkoson (THA)
Monitor	Rohaizi Md Hussin (MAS)
International Jury	Rohaizi Md Hussin (MAS)
	Awaiting full name (TPE)
	Barney Townsend (GBR) – Remote

4 ENTRY

4.1 The 3rd Asia-Oceania Paramotor Championships are open to all Active and Associate Member countries of FAI in the Asia and Oceania regions who may enter five pilots plus one female pilot in the PF classes.

4.2 All AOPC entries are automatically included in the WPC Test event. Subject to a total limit of 100 pilot entries, the WPC Test event is also open to pilots from all FAI or OCA member nations.

4.3 These additional WPC Test event places are available on a first-come, first served basis (based on when entry fees were received). [1]

4.4 Entries must be made on the official Entry Form, to be provided in a supplimentary bulletin.

4.5 If applications, with fees paid, are not received by 18:00 local time 1 May 2017 the entry may be refused.

4.6 The AOPC entry fee is:

- THB 8,000 (approx. EUR 200) for each pilot in each class
- THB 4,000 (approx. EUR 100) for each Team Leader

4.7 The entry fee for additional WPC Test event places is:

- THB 4,000 (approx. EUR 100) for each pilot in each class.

4.9 Bank and hotel details will be provided in a supplimentary bulletin.

4.10 The entry fee includes:

- Competition operations (setting, controlling and evaluating the tasks)
- All competition materials (maps, task descriptions, control point atlases, etc.)
- Free use of the airfield and free entry to all official events.
- Team tent on the airfield with overnight security.
- Camping place for each team with water and electricity.
- Preferential prices to eat

5 INSURANCE

5.1 Third party insurance of minimum THB 200,000 is obligatory. Personal accident insurance for team members and insurance against damage to aircraft are highly recommended. Documentary proof of insurance as specified on the Entry Form must be presented to the Organisers at Registration. (GS. 3.9.6)

6 LANGUAGE

6.1 The official language of the Championships is English.

7 MEDALS AND PRIZES

FAI medals will be awarded to:

7.1 Pilots placed first, second and third in each class (including PF1f if in compliance with S10 4.3.2).

7.2 National teams placed first, second and third.

7.3 FAI Diplomas will be awarded for those placed first to tenth.

Other trophies will also be awarded in the WPC Test event:

7.4 Pilots placed first, second and third in the precision tasks.

7.5 Pilots placed first, second and third in the economy tasks.

7.6 Pilots placed first, second and third in the navigation tasks.

7.7 Male pilots placed first, second and third in the combined tasks.

7.8 Female pilots placed first, second and third in the combined tasks.

7.9 Teams placed first, second and third in the combined tasks.

[1] For example, if there are 60 AOPC entries then there will be 40 additional WPC test event entries available. However, if the AOPC entry list increases to 70, the number of additional WPC test event entries will reduce to 30.

8 AIRCRAFT CLASSES

8.1 Competing classes

8.1.1 The Championships will be held in the following classes (S10 1.5):

PF1m + PF1f

8.1.2 Each class is a championship in its own right and as far as possible interference of one class by another shall be avoided.

8.2.3 The WPC Test event shall be held in the same classes and simultaneously to the championship.

8.2 Class Viability

8.2.1 For a championship or WPC Test event to be valid there must be competitors from no less than 4 countries in a class, ready to fly the first task, and must start a minimum of one task. (S10 4.3.2)

8.3 Championship Validity

8.3.1 The title of Champion in any class shall be awarded only if there have been at least 6 separate tasks.

9 GENERAL COMPETITION RULES

9.1 Status Of Rules And Regulations

9.1.1 Once competition flying on the first day has started no rules or regulations may be changed. Any additional requirements within the rules needed during the event will not be retrospective. (S10 4.9.4).

9.2 Status of WPC Test Event

9.2.1 Except where stated, the rules and procedures for the WPC test event shall be identical to those for AOPC.

9.2.2 Any decision made in response to a complaint or protest in AOPC shall, if applicable, also be considered binding in the WPC Test event.

9.3 Registration

9.3.1 If not instructed otherwise in the bulletins issued prior to the event, the team leader and members shall report, upon arrival, to the Registration Office to have their documents checked and to receive supplementary regulations and information. The following documents are required:

- Pilot License and qualifications.
- Evidence of competitor's nationality.
- Valid FAI Sporting License for pilot
- Certificate of Insurance.
- Receipt for payment of entry fees.

9.3.2 The Registration Office will be open as indicated on the information board.

9.3.3 Registration forms may be inspected by Team Leaders on request prior to the start of competition flying.

9.3.4 Once competition flying on the first day has started Competitors may not be substituted, change to another class nor change their aircraft.

9.4 Pilot Qualifications

9.4.1 A competing pilot shall be of sufficient standard to meet the demands of an international competition and hold a valid pilot license or equivalent certificate. The pilot must hold an FAI Sporting License issued by his own NAC.

9.5 Aircraft And Associated Equipment

9.5.1 Aircraft and equipment provided by the competitor must be of a performance and standard suitable for the event.

9.5.2 The aircraft must comply with the FAI definition of a Paramotor at all times (S10 1.3).

9.5.3 The aircraft shall fly throughout the championships as a single structural entity using the same set of components as used on the first day except that propellers may be changed provided that the weight limit is not exceeded and the Certificate of Airworthiness or Permit to Fly is not invalidated. (S10 4.17.4)

9.5.4 All aircraft must be made available during the Registration period for an acceptance check in the configuration in which they will be flown. The organisers have the right to inspect for class conformity and airworthiness and, if necessary, ground any aircraft for safety reasons at any time during the event.

9.6 Range

9.6.1 All aircrafts will be expected to have a still air range of 100 km.

9.7 Contest Numbers

9.7.1 Aircraft shall carry the number centrally on the underside of the paraglider, top towards the leading edge.

9.8 Team Leader Responsibilities

9.8.1 The team leader is the liaison between the organisers and his team. He is responsible for the proper conduct of his team members, for ensuring that they do not fly if ill or suffering from any disability which might endanger the safety of others and that they have read and understand the rules.

9.9 Practice & Rest Days

9.9.1 An official practice period of not less than 2 and not more than 5 days immediately preceding the opening of the Championships shall be made available to all competitors. All the infrastructure for the competition (maps, offices, scoring...) shall be ready for the first day of the official practice period. If practicable, on at least one practice day a task should be flown under competition conditions to test the integrity of the organisation. The scores thus generated shall not be counted. (S10 4.7.3)

9.9.2 Rest days will only be held on account of bad weather or unforeseen emergency.

9.10 Complaints

9.10.1 A competitor who is dissatisfied on any matter may, through his team leader, make a complaint in writing to the Director.

9.10.2 Complaints shall be made, and dealt with, without delay but in any case must be presented not later than 6 hours after the respective Provisional Score sheet has been published, unless the remaining time is within 12 hours of the medals ceremony, in which case the time limit is half the remaining time. The night time between 22:00 and 07:00 is never included.

9.10.3 A complaint that could affect a task result must be dealt with and answered in writing before any official score sheet is issued. All complaints and their responses must be published on the official notice board. (S10 4.36)

9.11 Protests

9.11.1 If the competitor is dissatisfied with the decision about its Complaint, the Team Leader may make a protest to the Director in writing and accompanied by the protest fee of 50 EUR The fee is returnable if the protest is upheld or withdrawn before the start of the proceedings. A protest may be made only against a decision of the Championship Director.

9.11.2 A protest must be presented not later than 6 hours after the respective Official score sheet has been published, unless the remaining time is within 12 hours of the medals ceremony, in which case the time limit is half the remaining time. The night time between 22:00 and 07:00 is never included. (S10 4.36)

10 FLYING AND SAFETY REGULATIONS

10.1 Briefing

10.1.1 Briefings will be held for team leaders and/or competitors on each flying day. The time and place for briefing meetings and any postponements will be prominently displayed.

10.1.2 All briefings will be in English and be recorded in notes, by tape recorder or video. A Full task description, meterological information, flight safety requirements, penalties and details of any prohibited or restricted flying areas will be given in writing, as a minimum, to team leaders, Jury members and Stewards. (S10 4.21)

10.1.3 Procedures for flight preparation, takeoff, flying the task, landing and scoring together with any penalties will be specified in each task description. (S10 4.21)

10.1.4 Flight safety requirements given at briefing carry the status of regulations. (S10 4.21)

10.1.5 Team Leaders' meetings, in addition to briefings, may be called by the Director, but shall be held within 18 hours if requested by five or more team leaders. (S10 4.22)

10.2 Compliance With The Law

10.2.1 Each competitor is required to conform to the laws and to the rules of the air of the country in which the championships are held. (S10 4.23.1)

10.3 Fitness

10.3.1 A pilot may not fly unless fit. Any injury, drugs or medication taken, which might affect the pilot's performance in the air, must be reported to the Director before flying.

10.3.2 Every nation has the full responsibility to fight against doping. Anti doping control may be undertaken on any competitor at any time.

10.3.3 The decision to impose anti doping controls may be taken by the FAI, the organiser or the organiser's national authority.[2]

10.4 Airfield Discipline

10.4.1 Marshalling signals and circuit and landing patterns will be given at briefing and must be complied with. Non compliance will be penalised.

10.5 The Crowd Line

10.5.1 Is for safety purposes and is a line or area (not necessarily the fence separating spectators from the flying area) over which no part of a competitor's aircraft shall pass at any height at any time.

10.5.2 The exact location of the crowd-line will be briefed by the competition organiser. The normal penalty for infringement is instant disqualification.

10.6 Preparation For Flight

10.6.1 Each aircraft shall be given a pre-flight check by its pilot and may not be flown unless it is serviceable. (S10 4.23.3)

10.7 Flight Limitations

10.7.1 Each aircraft shall be flown within the limitations of its Certificate of Airworthiness or Permit to Fly. Any manoeuvre hazardous to other competitors or the public shall be avoided.

10.7.2 Aerobatics and manoeuvres such as stalls, B-line stalls, deep stalls and spins are prohibited. 'Big ears' is accepted.

10.8 Collision Avoidance

10.8.1 A proper look-out must be kept at all times. An aircraft joining another in a thermal shall circle in the same direction as that established by the first regardless of height separation.

10.8.2 A competitor involved in collision in the air must not continue the flight if the structural integrity of the aircraft is in doubt. (S10 4.24.5)

10.9 Cloud Flying

10.9.1 Cloud flying is prohibited and aircraft shall not carry gyro instruments or other equipment permitting flight without visual reference to the ground. (S10 4.24.6)

10.10 Test And Other Flying

10.10.1 No competitor may take-off on a competition day from the contest site without the permission of the Director. Permission may be given for a test flight but if the task for that class has started the pilot must land and make a competition take-off on the task. Practising prior to a task is not permitted. (S10 4.25)

10.11 External Aid To Competitors

10.11.1 Any help in navigation or thermal location by non-competing aircraft, including a competing aircraft not carrying out the task of their own class is prohibited. This is to ensure as far as possible that the competition is between individual competitors neither helped nor controlled by external aids. (S10 4.26)

10.12 Damage To A Competing Aircraft

10.12.1 Any damage shall be reported to the organisers without delay and the aircraft may then be repaired. Any replacement parts must be replaced by an identical part, except that major parts such as a wing for a paraglider controlled aircraft may be replaced by a similar model or one of lesser performance. Note. Change of major parts may incur a penalty. (S10 4.23.4)

10.12.2 An aircraft may be replaced by permission of the Director if damage has resulted through no fault of the pilot. Replacement may be only by an identical make or model or by an aircraft of similar or lower performance and eligible to fly in the same class.(S10 4.23.5)

10.13 Electronic Equipment

10.13.1 CIMA approved GNSS flight recorders and ELT's without voice transmission capability are permitted and may be carried. Sealed mobile phones, switched off, may be carried for use after landing or in an emergency, the director must be immediately informed if the seal is broken.

10.13.2 Unless otherwise briefed, then in the period between entering quarantine before flying a task and leaving quarantine after flying a task only materials issued by the organiser, mathematical calculators without any

[2] All relevant information can be found on the FAI Web site: http://www.fai.org/medical

capability for any data transfer, and clocks may be used for preflight preparation and flight control. No other electronic devices with real or potential communication and/or navigation capabilities shall be available to, or accessed by the pilot or crew. (S10 4.27)

10.13.3 All other electronic devices with real or potential communication or navigation capabilities must be declared and approved for carriage by the Championship Director.

10.13.4 A document describing the device will be signed by the competitor when it is being sealed, and the document will be retained by the organization. After the task, provided the seal is not broken, documents will be returned to each competitor when he comes to unseal the device. If a document is still in the possession of the organization at the time of issuing the scores, the competitor will get a 100% task penalty.

10.13.5 Before each task the Director will ask marshals to check for infringements. The penalty is disqualification from the competition.

10.14 Protective Equipment

10.14.1 A protective helmet must be worn whenever the pilot is strapped into the harness of an aircraft or wishes to start the engine.

10.14.2 An emergency parachute system is mandatory.

10.14.3 An emergency parachute is not to be considered as a part of the structural entity of an aircraft.

10.14.4 Some precision tasks involve flying over water, pilots or the paramotor must be equipped with an emergency floatable device.

10.15 Prohibited Equipment

10.15.1 In addition to those items detailed elsewhere: Disposable ballast & binoculars.

11 THE TASKS

11.1 General

11.1.1 To count as a valid championship or WPC test event task all competitors in the class concerned will be given the opportunity to have at least one contest flight with time to carry out the task.

11.1.2 A task for each class may be different and a task may be set for all classes. (S10 4.29.5)

11.1.3 A task may be combined with other tasks or set separately.

11.2 Types Of Tasks

Only tasks approved by CIMA or listed in S10 A4 will be used.

11.3 Task Proportions

11.3.1 The proportion of the tasks accumulated during the AOPC championship is approximately N:E:P = 1/3:1/3:1/3

11.4 Task Period

11.4.1 Times for take-off, closing of take-off windows, turn points and last landing will be displayed in writing. If the start is delayed, given times will be correspondingly delayed unless specifically briefed to the contrary.

11.5 Task Suspension or Cancellation

11.5.1 The Director may suspend flying after take-offs have started, if to continue is dangerous. If the period of suspension is sufficiently long to give an unfair advantage to any competitor, the task shall be cancelled. Once all competitors in a class have taken off or had the opportunity to do so, the task will not be cancelled except for reasons of force majeure. (S10 4.30)

12 TASK OPERATION

12.1 Assistants

12.1.1 Help from assistants is positively encouraged until a competitor enters the deck to start a task. From that moment onwards, all external assistance is forbidden except from marshals or those people expressly appointed by the Director, until the moment the competitor leaves the deck having finished a task, or otherwise lands according to the outlanding rules.

12.1.2 One assistant per team may be appointed by the Director to help pull-start the engine on the deck. Further helps, however, are prohibited.

12.1.3 A wheel-chair bound or disabled pilot flying in PL1 class may be assisted in pre-launch preparation by one authorised person. Once the pilot is ready to launch, the assistant shall report that fact to the marshal, and

will not help any more in the launch procedure. Either holding any part of Paramotor or wing canopy, or giving information about a canopy inflation is considered as a help.

12.2 The Secure Area

12.2.1 Is a clearly marked area where aircraft must be placed from time to time as instructed by the director. Once in the Secure Area and without the express permission of the director, no aircraft may be touched for any reason other than to remove it from the Secure Area.

12.2.2 Competitors who do not respect the rules of the Secure Area may be liable to penalty.

12.3 Quarantine

12.3.1 This is a clearly marked area to which aircraft and crew must go from time to time as instructed by the director, usually for the purposes of scoring, fuel measurement and scrutineering of fuel tank seals, fuel systems, telephone seals etc. Once in the Quarantine and without the expressed permission of the Quarantine Marshal, the crew may not communicate with anyone else and may not modify or otherwise change the configuration of their aircraft and items carried.

12.3.2 Competitors who do not respect the rules of the Quarantine area may be liable to penalty.

12.4 The Takeoff And Landing Deck

12.4.1 A deck is a clearly marked area defined at the briefing. A minimum of 100m x 100m is required.

12.4.2 There will be one deck provided for every 30 competitors.

12.4.3 A deck will have a windsock within 100m of its boundary.

12.4.4 There will be no significant obstacles within 200m of the boundary of a deck.

12.4.5 Unless otherwise briefed, penalties will be awarded to Pilots or any part of their aircraft touching the ground anywhere outside a deck during a task.

12.5 Signal Flags

12.5.1 The specific meaning of flags will be included in the task description, but generally:

- GREEN means 'Start'
- RED means 'Stop'
- WHITE means 'go back to start and wait for green (re-start)' [3]

12.5.2 To maintain momentum, if a pilot incurs a zero score penalty in a task it will be normal for the red flag to be waved, meaning the pilot must immediately abandon the task and leave the task area.

12.6 Take-Off

12.6.1 All take-offs, unless otherwise briefed, must be effected entirely within the takeoff deck, except for emergency provisions given at briefing.

12.6.2 No pilot may take-off without permission from the Director or a Marshal.

12.6.3 In all tasks A PF must be foot launched and a PL must take off on its wheels.

12.6.4 Open window or given order of take off may be applied to tasks. In the case where the take-off order is given the procedure will be briefed.

12.6.5 A competitor will generally be allowed only one take-off for each task and the task may be flown once only. A competitor may return to the airfield within 5 minutes of take-off for safety reasons. In this case a further start may in principle be made without penalty but equally the competitor must not benefit in any way from restarting. Exceptions and penalties will be specified in the Task Description. (S10 4.30)

12.6.6 Before departure, a pilot and/or his aircraft may be inspected at any time for contravention of any regulations. It is the duty of competitors to assist marshals as much as possible in expediting an inspection.

12.6.7 Except in specified tasks, an aborted take-off does not in principle attract any penalty, however the pilot must comply with any instruction from the marshals to expedite a re-launch or the pilot risks being relegated to the end of the queue.

12.7 A "Clean" Take Off

12.7.1 Is defined as a take off attempt in which the canopy does not touch the ground between the moment it first leaves the ground and the moment ten seconds after the entire aircraft including the pilot is airborne.

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[3] Typically used when there is a technical problem in the task, for example a slalom pole falls over.

12.8 Engine Off Height

12.8.1 In tasks where the pilot is asked to switch off his engine above specific heights, the heights will be determined by:

- 500 Ft: "The engine must be stopped & propeller stationary for a minimum period of 60 seconds before any part of the aircraft or the pilot touches the ground."

12.9 Landing

12.9.1 All landings, unless otherwise briefed, must be effected entirely within the landing deck, except for emergency provisions given at briefing. The pilot may be liable to penalty if he or any part of his aircraft touches the ground outside the deck before he has removed his harness.

12.9.2 Upon landing, pilots must immediately remove their aircraft from the deck.

12.9.3 Pilots 'abandoning' their aircraft on the landing deck will be liable to penalty.

12.10 Good and Bad Landings

In tasks where pilots are asked to make a precision landing:

12.10.1 **In PF**: The objective is for the pilot to make a good landing on his own two feet without falling over. "Falling over as a result of the landing" will be interpreted as:

- GOOD: If the pilot falls to ONE knee - landing score as achieved.
- BAD: If the pilot falls to TWO knees OR if any part of the power unit touches the ground during the landing process - zero landing score.

12.10.2 **In PL**: The objective is for the pilot to make a good landing after which the aircraft comes to rest the right way up and without any damage. Zero landing score if the aircraft comes to rest off all its wheels or is structurally damaged in any way, although failure to restart the engine will not incur a penalty.

12.11 Outlandings

12.11.1 Outlandings shall be scored zero, unless specifically stated at the briefing. If a pilot lands away from the goal field or from base he must inform the organisers by telephone, with the minimum of delay and at the latest by the closing time of the task. He may break the fuel tank seal and fly home or return by road.

12.11.2 Evidence of the landing place must be obtained from GNSS flight recorder evidence. On return to base he must go immediately to Control with his evidence. Failure to follow this procedure without good reason may result in the pilot not being scored for the task, or charged for any rescue services which have been called out, or disqualification. (S10 4.32)

12.12 Emergencies

12.12.1 All pilots must fold up their canopies immediately upon landing. A canopy that has not been folded within three minutes indicates the pilot is in need of help. Any pilot who observes such a situation is obliged to render assistance and contact the organization as soon as possible.

12.12.2 A competitor landing to help an injured pilot shall not, at the discretion of the Director, be disadvantaged by this action.

13 FLIGHT CONTROL

13.1 Timing

13.1.1 A task is deemed to have started the moment the first pilot to take-off is ready to take-off and ends the moment the last pilot has landed and has exited the landing deck.

13.1.2 In the case of a take-off time window, the precise time of take-off is entirely at the discretion of the pilot but shall be within the overall time window.

13.1.3 In the case where a particular take-off time is given, the clock will start running at that moment and the pilot may subsequently take-off at any time.

13.1.4 All times are given, taken and calculated in local time or simple elapsed time, rounded down to:

- 1/10th of a second in the case a manual timing system is in use.
- 1/100th of a second in the case an automatic timing system is in use.

13.1.5 As briefed for the task in question, timings may be taken when:

- a pilot's feet leave the ground
- any part of the pilot or aircraft touch the ground.
- The pilot kicks a stick

- The pilot flies through a gate
- The pilot flies overhead an observer

13.2 Distance Measurement

13.2.1 All distances not obtained from FR's shall be calculated from the same official map of a scale not smaller than 1:100,000, and rounded up to the next 0.5 km.

13.3 Fuelling

13.3.1 Fuel will be measured by weight or volume but will be consistent for any given refuelling session. Measured fuel quantities include oil where it is mixed with petrol. Fuel measured by volume shall be within ± 10°c of the ambient temperature.

13.3.2 Refuelling will be in the order and in accordance with the instructions given at briefing. Failure of the aircraft to be present on time may result in penalty for the pilot.

13.3.3 Competitors must be able to demonstrate that their entire fuel system is empty.

13.3.4 An official observer, or a team leader or competitor from a rival team must control fuelling.

13.3.5 Official observers will collect documentary evidence that all competitor's fuel systems are sealed immediately after fuelling, and that all competitor's fuel systems seals have been inspected after landing. Sealing of tanks is optional if aircraft are moved under supervision of officials directly to the take off place.

13.3.6 If there is no separate class for aircraft with electric engines there shall be no fuel limit for them in any task. (S10 4.17.9)

13.4 Accuracy Measurement

13.5 Takeoff or landing

13.5.1 Takeoff or Landing accuracy will be verified by official observer, video cameras or other precise means.

13.6 Slalom poles

13.6.1 Some tasks may involve the use of Slalom poles. A valid strike on a ~~stick~~ pole is one where the pilot or any part of the aircraft has been clearly observed to touch it OR when electronic sensors which have been shown to meet the standard tests are used, a valid strike is one which is recorded by the device.

13.6.2 Each pole must be min. 1.8m in height, visible from a range of at least 250 meters, and of a construction such that it is unlikely to enter a propeller once struck.

13.7 Inflatable pylons

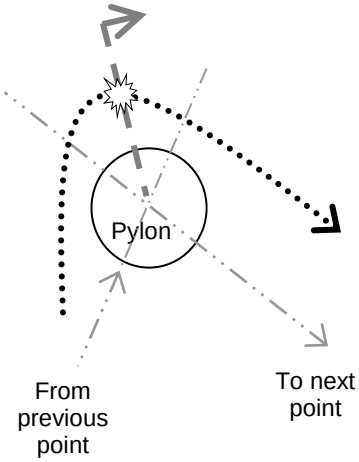
13.7.1 The purpose of an inflatable pylon is to clearly define a point. The point originates at the centre of the base of the pylon and extends vertically to an infinite height.

13.7.2 A pylon may be used to define a point to be turned, or if arranged in a pair, to define the extents of a gate.

13.7.3 If it is intended for a pylon to be turned at low level (any part of the aircraft below pylon height) then the pylon shall be minimum 8m tall.

13.7.4 Pylons shall be constructed and erected in a manner such that:

- They will not deform or fall over in any wind in which it is reasonable to expect the task could be safely flown.
- They will deform in the event of contact with an aircraft.
- There are no supporting lines, or if there are, they do not constitute a hazard.
- Stakes, inflation devices and other hard obstacles associated with a pylon are either buried, protected with padding or positioned to minimize accidental contact by a pilot or aircraft.



13.7.5 Unless otherwise briefed, the valid rounding of a pylon is when the pilot body is clearly observed to have rounded it.

13.7.6 Unless otherwise briefed, a pylon shall be deemed rounded when the pilot crosses in the correct direction the line on the ground with its apex at the pylon and orientated symmetrically to and remote from the two legs of the course at the pylon. (ref. GS A13.1 but without the 90 deg quadrant)

13.8 Gates, Turnpoints and Markers

13.8.1 Control points may be:

- Known control (turn) points. Their position and description will be briefed.
- Hidden control points. The track along which they will be found and their description will be briefed.

Proof of reaching a control point may be briefed as:

- by the competitor recording the symbol and position on the declaration sheet.
- by a Marshal's report.
- by flight recorder evidence.

13.8.2 Gates consist of two control points normally set 250m apart and perpendicular to the briefed track.

Gates may be:

- Known gates. Their position and height to be crossed will be briefed.
- Hidden gates. The height to be kept along the sections of the course where they are situated will be briefed.

Proof of passing a gate and its timing may be briefed as:

- by a Marshal's report.
- by flight recorder evidence.

13.8.3 A score will only be given for gates crossed in the briefed direction and there may be additional conditions such as the pilot score will be associated only with the first or last time a gate is crossed.

13.8.4 In all cases gates and control points must be defined either by a geographical point or feature unambiguously identifiable on the ground and on the official map, or by a physical device placed by the organiser on the ground such as a ground marker, inflatable pylon or a kicking stick.

13.9 Flight Boundaries

13.9.1 Flights terminating beyond the boundaries of the organiser's country shall score only to the point where a straight line between the start point or last turn point and the landing place last cuts the boundary, unless permission is given at briefing to cross such boundaries. (S10 4.33)

13.10 GNSS Flight Recorders

13.10.1 The status of GNSS flight recorder evidence in AOPC relative to other forms of evidence is as follows:

- All aircraft shall carry a FR which will be used as primary evidence.
- In the event of a failure of the primary FR, a second FR or observer's report may be used as secondary evidence.

13.10.2 Only CIMA approved FRs may be used and they must be operated in strict accordance with their approval documents. (S10 A6)

13.10.3 The FR to be used by a pilot in a championship will be supplied by the pilot. The FR case must be clearly labelled with the pilots name and competition number and (if applicable) this information must be entered into the memory of the FR.

13.10.4 The pilot must make a data transfer cable and a copy of the transfer software available to the organization if required.

Before the championship starts, each FR must be presented together with its CIMA approval document to the organization for inspection and recording of type and serial number. The pilot must be sure it fully complies with any requirements in the approval document e.g. that manufacturer’s seals are intact and it is equipped with a data-port sealing device if it is required or it will be rejected by the organization.

Once the championship has started the pilot must always use the same FR. In the event of a permanent failure, another FR may be used after it has been presented together with its CIMA approval document to the organization for inspection and recording of type and serial number.

All FR’s must be presented to the organization for inspection immediately before the start of each task. If secondary evidence is presented then both sets must be clearly marked 1 and 2. Only one set of evidence will be used to verify the flight.

13.10.5 It is the pilots responsibility to ensure that he is fully aware of the functions and capabilities of his FR eg. that it has sufficient battery power and that the antenna is correctly positioned etc.

13.10.6 Where FR data is to be used for scoring, the organiser must have visited every location which could affect the scoring and got a GNSS fix of that position. E.g. turnpoints, hidden gates etc. It is not acceptable to extract positions from a map in any circumstances. Points that will not require FR evidence for scoring (eg. because a marshal will be taking times at a hidden gate) must be specifically briefed.

13.10.7 The scoring zone for FR's is independent of any other zone or sector (eg. one with ground observers). A scoring zone will normally be a cylinder of 200m radius and of infinite height.

13.10.8 To score, a track fix point must either be within this circle, or the line connecting two sequential track fixes must pass through the circle.

13.10.9 Complaints about the physical mis-positioning of a scoring zone relative to a turnpoint will not be accepted unless it can be shown that the physical position of the location is outside a circle of radius R= Rp/2 where Rp= Radius or size of the scoring zone defined by the organisers [4]

13.10.10 Gate time is taken from the fix immediately before it is crossed.

14 SCORING

14.1 General

14.1.1 In Precision and economy tasks the decisive element in competition tasks is usually the elapsed time spent by each competitor to complete the task plus any time penalties incurred during the flight. Exceptions are described in the relevant task description.

14.1.2 In Navigation tasks the 'traditional' scoring method will be used.

14.1.3 The results from all tasks are translated into a points scoring system based on the position of each competitor in each task.

[4] ie the physical location must lie inside an inner circle half the width of a gate or radius of a scoring zone

14.2 Points allocation

14.2.1 At the end of each task points are awarded [5] according to the number of competitors who are registered at the start of the first task, and the final position of each competitor in the task - according to the following table [6]:

	Number of registered competitors in class																		
Pos	**22+**	**21**	**20**	**19**	**18**	**17**	**16**	**15**	**14**	**13**	**12**	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**
1	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
2	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7
3	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4
4	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
5	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	
6	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2		
7	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2			
8	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2				
9	15	14	13	12	11	10	9	8	7	6	5	4	3	2					
10	14	13	12	11	10	9	8	7	6	5	4	3	2						
11	13	12	11	10	9	8	7	6	5	4	3	2							
12	12	11	10	9	8	7	6	5	4	3	2								
13	11	10	9	8	7	6	5	4	3	2									
14	10	9	8	7	6	5	4	3	2										
15	9	8	7	6	5	4	3	2											
16	8	7	6	5	4	3	2												
17	7	6	5	4	3	2													
18	6	5	4	3	2														
19	5	4	3	2															
20	4	3	2																
21	3	2																	
22	2																		
23	2																		
24	2																		
25	Etc																		

14.2.2 A pilot who did not fly will be marked DNS or "Did Not Start" on the score sheet and scores no points in the task.

14.2.3 A pilot who did not finish a task will be marked DNF or "Did Not Finish" on the score sheet but shall score points as normal.

14.2.4 A pilot who is disqualified will be marked DSQ or "Disqualified" and scores no points in the task.

14.3 Individual scores

14.3.1 The winner shall be the pilot who has obtained the greatest total number of points in each individual medal category.

14.4 Team scores

14.4.1 The team prize shall be computed from the sum of the points of the top three pilots from each country in each task in valid medal category which has minimum of 8 pilots. The task points for which a pilot was disqualified shall not count for team scoring. Other valid tasks flown by this pilot are not affected. (S10 4.34.11)

14.5 Ties

14.5.1 In the event of a tie on points, the winner shall be the pilot or team who has been placed first in most tasks. If this does not resolve the tie, the winner shall be the pilot or team who has second place in most tasks, and so on until the tie is resolved. This shall also apply to ties for any other place in the competition.

14.6 Moderation

14.6.1 If less than 50% of pilots in class start a task then each pilot's points score for the task will be reduced on a pro-rata basis according to the following formula: [7]

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[5] Examples of points allocation:
- 25 Competitors registered at the start of the first task: The winner of each task receives 30 points, 2nd receives 25 points, 3rd 22 points, 4th 20 points Etc.
- 16 Competitors registered at the start of the first task: The winner of each task receives 24 points, 2nd receives 19 points, 3rd 16 points, 4th 14 points Etc.

[6] Points score may be calculated in a spreadsheet formula thus:
=MAX(IF(C2=1,30,IF(C2=2,25,IF(C2=3,22,24-C2)))-MAX(0,22-D$1),2)
where C2 is the pilot's rank in task and D1 is the number of registered competitors in class

Pilot final task score = ROUNDUP(Ps*(MIN(1,(Ts/Tc)*2)),0)

Where

Ps = Pilot task points score.

Ts = Total started; Total number of pilots in class who started the task (ie properly, beyond 5 minute rule).

Tc = Total class; Total number of pilots in class.

14.7 'Traditional' scoring in AOPC navigation tasks

14.7.1 A score given to a competitor shall be expressed to the nearest whole number, 0.5 being rounded up. (S10 4.34.13)

14.7.2 Deduction of penalty points shall be made after scoring for that task is completed. (S10 4.34.16)

14.7.3 If a pilot's score is for any reason negative including penalties his score for the task shall be taken as zero. Negative scores shall not be carried forward. (S10 4.34.18)

14.7.4 The following standard symbols will be used for scoring: V = Speed, D = Distance, T = Time

14.7.5 If a failure in GNSS flight analysis or scoring is discovered before the end of the championship and the failure is due to a technical error which emanates from the equipment being used for the GNSS flight analysis or scoring, this failure must be corrected regardless of time limits for complaints and protests. (S10 4.34.19)

14.8 Score Sheets

14.8.1 Score sheets shall be marked Provisional, Official, or if a protest is involved, Final. A Provisional score sheet may only become Official after all complaints have been addressed. Scores may not be altered when the Provisional sheet is made Official. (S10 4.29.1)

14.8.2 If a failure in scoring is discovered before the end of the championship and the failure is due to a technical error which emanates from either the Competition Director, or the scoring staff, or the equipment being used by them, this failure must be corrected regardless of time limits for complaints and protests.

14.9 Task score sheets

14.9.1 Shall state at a minimum:

- The event name, competition class, task number, description and type (precision or economy).
- Scoring status (Provisional, Official or Final).
- Competitors name, nation, competition number, performance, penalties, task score, position in task and points.
- The date and time the score sheet was issued.
- The date and time of applicable deadlines (Complaints or Protests).

14.10 General score sheets (individual)

14.10.1 Shall be produced for each medal category and shall state at a minimum:

- The event name and medal category.
- Competitors name, nation, competition number, points in each task in the category.
- Competitors total points and overall position.
- Scoring status (Provisional, Official or Final).
- The date and time the score sheet was issued.

14.11 General score sheets (team)

14.11.1 Shall be produced for each medal category and shall state at a minimum:

- The event name and medal category.
- Team points in each task.
- Team total points and overall position.
- Scoring status (Provisional, Official or Final).
- The date and time the score sheet was issued.

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[7] This provides for those rare cases when the opinion of the majority of pilots and the competition director differ as to the suitability of the weather for flying the task. It means that pilots will not receive a big score for just being 'brave'.

15 PENALTIES

In general, any infringement of any flying, safety or task regulation will result in penalty.

15.1 Task penalties

15.1.1 Penalties specific to each task are stated in the task description.

15.1.2 In economy and precision tasks these generally translate to time being added to the pilot's performance or the pilot being relegated to last place in the task.

15.1.3 In navigation tasks these are generally expressed as a percentage of the pilot's score.

15.2 General task penalties

In addition to the above, a general penalty of zero points in a task may be awarded when a competitor acts contrary to the brief [8] with potentially dangerous consequences [9], for example:

15.2.1 Running an engine in a public area.

15.2.2 Circulating in a holding pattern in a direction contrary to the brief.

15.2.3 Flying over the spectator area at low level.

15.2.4 Flying back across a 'line of no return'.

15.3 Disqualification from the event

Actions which will normally result in immediate disqualification:

15.3.1. Bringing the event, its organisers, the FAI or the FAI sporting code into disrepute.

15.3.2 The use of banned substances.

15.3.3 Multiple instances of a dangerous flying penalty.

[8] Competition directors should carefully brief the safety aspects precision tasks and must be rigorous in issuing penalties for violations as by definition these actions could have dangerous consequences.

[9] Pilots who realize they have started a task while someone is already in it, or taken the wrong route around a course would be wise to immediately abandon the task by climbing away from the course in a safe manner or there is a very real risk they will be awarded a dangerous flying penalty.

15.4 Glossary of penalty codes

The scoring system will use a system of unique codes to indicate penalties applied.

Penalty Code	Description in local regulations and/or task catalogue
1M	Engine off for less than one minute before first touch.
2B	Failure to touch at least two balls.
2S	Failure to achieve at least two other strikes.
DB	Delay of more than 30 sec between green flag and first attempt to touch a ball.
DL	Delay of more than 30 sec between green flag and first attempt to strike first target.
DV	Departure from view of the marshals or egress from the permitted flight area.
EO	Entering the course out of order.
FO	Falling over as a result of the landing.
LO	Land outside the deck.
MP	Failing to pass a pylon.
OA	Overly aggressive overtaking.
OO	Out of takeoff order.
RO	Running out of the takeoff deck.
SF	Failure to strike the first or last target.
TD	Unreasonable takeoff delay.
TG	Touch the ground at any point between strikes first and last target
TH	Flying too high.
TO	First touch outside the landing mat.
TT	Pilot or any part of his Paramotor touches the ground during the task and takes off again.
UT	Unobserved takeoff.
WT	Wing touches the ground during the task.
XC	Circulating in a holding pattern in a direction contrary to the brief.
XE	Running an engine in a public area
XL	Flying back across a 'line of no return'
XS	Flying over the spectator area at low level.
ZD	Bringing the event, its organisers, the OCA or FAI or the FAI sporting code into disrepute.
ZM	Multiple instances of a dangerous flying penalty.
ZS	The use of banned substances.