

Proposals for amendments to FAI Section 10.

This year, 2009, Richard Meredith-Hardy is the coordinating editor for Section 10 and its annexes.



How to submit amendments

Only CIMA delegates may submit proposals for inclusion here. Anyone else should submit their proposal to their delegate first. The full list of delegates is on the [FAI website](#).

The amendment scheme will operate as it was done last year, all proposals from CIMA delegates should be sent to [Richard Meredith-Hardy](#) with:

- 1) The number of the affected paragraph (or where it should go, if it is something new).
- 2) The reason for the proposed change.

He will then assemble this into the document below, along with:

- a) Comment from the S10 Sub-Committee
- b) Comments any other CIMA delegates wish to make on the proposal.

The 2009 CIMA plenary meeting is **13 - 14 November 2009**.

The deadline for additions to the plenary agenda is **29 September 2009** (45 day rule; FAI bylaws 5.6.4)

But as in 2008 a special notice was placed in the plenary meeting agenda to set the deadline for proposals for S10 amendments later than usual at **23:59:59 Monday 19 October 2009**. We have now passed that, so for new proposals you will have to wait until next year.

All proposals were then re-ordered according to the layout of S10 and subjected to Sub-committee review and this is the FINAL set of proposals which will be put to the CIMA Plenary meeting.

Each proposal will be put to the vote **in its exact wording** at the CIMA Plenary meeting 13 - 14 November 2009 on the basis of a YES or a NO. It is not usual for the wording of proposals to be amended at the meeting itself.

S10 Sub committee (4 members) review was as follows:

- *Supported 4/4* means "unanimously supported"
- *Supported 3/4* means one sub-committee member did not support the proposal.
- *Supported 3/3* means one sub-committee member did not have a view, but three did.
- The same applies for "*Not supported*" in the 3 cases above.
- *Undecided* means less than 3 sub committee members were of the same opinion.

Document availability

This document is also available as a standalone pdf

http://www.flymicro.com/cima09/S10_Proposals_2010_FINAL_Draft_12.pdf

Or, together with all attached documents in

http://www.flymicro.com/cima09/S10_Proposals_2010_FINAL_Draft_12.zip

Changes

- This is the [FINAL draft](#). Draft 12, 1 November 2009. Addition of S10 Sub-committee comment.
- [Draft 11](#), 23 October 2009. Proposals re-ordered and re-numbered according to the layout of S10. (The original proposal numbers are in the "Orig No" column). Added Proposal 44.

- [Draft 10](#), 19 October 2009. Addition of proposal 43, addition of attached document 10
- [Draft 9](#), 18 October 2009. Addition of proposal 42, addition of attached document 9
- [Draft 8](#), 18 October 2009. Addition of proposal 41, addition of attached document 8
- [Draft 7](#), 18 October 2009. Addition of proposal 40, amendment to Proposals 34 & 36.
- [Draft 6](#), 16 October 2009. Addition of proposal 39, amendment of proposal 6.
- [Draft 5](#), 14 October 2009. Added proposals 37 and 38, amended proposal 32, added editorial correction 6, added attachment 7.
- [Draft 4](#), 5 October 2009. Amended proposals 29, 32
- [Draft 3](#), 3 October 2009. Added attachment 2. Amended proposals 19,22. Added proposals 34-36 Removed editorial correction 1. Added editorial correction 5. Added attachments 2-6
- [Draft 2](#), 2 October 2009. Added proposals 6-33 and editorial corrections 1-4
- [Draft 1](#), 15 August 2009. Original version.

Contents

- [Editorial corrections for 2010](#)

Proposals

Proposal	Chapter	Orig No.	Title	From	Affects	S10 Sub-Committee conclusion
1	1.3.2	26	Change to the Definition of a microlight or Paramotor aircraft	The Czech Delegate	All	Supported 4/4
2a	1.4	43a	Autogyro classes	Jose Luis Esteban, ESP Delegate	Microlights	Supported 4/4
2b	1.4	43b	Autogyro classes	Jose Luis Esteban, ESP Delegate	Microlights	Not supported 3/4
3	3.2.12	38	New World record: Greatest difference in speed.	Patrice Girardin, FRA Delegate	All	Not supported 3/4 No proposed control on weaving, circling or strong crosswinds in the slow speed which would be technically difficult to achieve.
4	3.3.3	1	Delete provision S10 3.3.3, no separate records for men / women	Richard Meredith-Hardy CIMA S10 Editor	All	Supported 4/4
5	3.8.7 and elsewhere	4	Delete photographic evidence from S10	Richard Meredith-Hardy CIMA S10 Editor	All	Supported 4/4
6	3.14	37	Change rules for paramotors in speed over a straight course records	Patrice Girardin, FRA Delegate	Paramotors	Not supported 3/4
7	3.15	42	Change rules for paramotors for speed over a closed circuit (Three new closed circuit records)	Patrice Girardin, FRA Delegate	Paramotors	Not supported 4/4
8	3.17.6 and	6	Change to rounding in	Joel Amiabile, FRA alt	All	Not supported 3/4

Proposal	Chapter	Orig No.	Title	From	Affects	S10 Sub-Committee conclusion
	elsewhere		timings	Delegate		
<u>9</u>	3.17.8	7	Delete all maximum fuel loads in Distance with limited fuel Championship records	Joel Amiable, FRA alt Delegate	All	Not supported, 4/4. Makes the record incomparable from one year to the next.
<u>10a</u>	3.17.8.1	40a	Make distance and endurance championship records more accessible.	Richard Meredith-Hardy, GBR Delegate	All	Supported 4/4
<u>10b</u>	3.17.8.1	40b	Make distance and endurance championship records more accessible.	Richard Meredith-Hardy, GBR Delegate	Microlights	Supported 4/4
<u>10c</u>	3.17.8.2	40c	Make distance and endurance championship records more accessible.	Richard Meredith-Hardy, GBR Delegate	All	Supported 4/4
<u>10d</u>	3.17.8.2	40d	Make distance and endurance championship records more accessible.	Richard Meredith-Hardy, GBR Delegate	Microlights	Supported 4/4
<u>11</u>	4.3.2	8	Class viability	Joel Amiable, FRA alt Delegate	All	Not supported 3/4
<u>12</u>	4.6.1	34	Approval of local regulations	Richard Meredith-Hardy CIMA S10 Editor	All	Supported 4/4
<u>13</u>	4.13.10	27	Two seater aircraft flown solo in championships	The Czech Delegate	Microlights	Undecided
<u>14</u>	4.13.4	9	Mandatory emergency parachutes	Joel Amiable, FRA alt Delegate	Paramotors	Not supported 4/4
<u>15</u>	4.15.1	28	Contest numbers	The Czech Delegate	All	Not supported 3/4 Don't want to lose number on the wing.
<u>16</u>	4.22.3	29	Electronic equipment	The Czech Delegate	All	Undecided
<u>17</u>	4.29.1	10	Shorten the time before publishing official scores	Joel Amiable, FRA alt Delegate	All	Not supported 4/4. Shall the task be cancelled when there are no results after the deadlines? Nothing changes by shortening the deadlines if the organiser doesn't comply.
<u>18</u>	4.29.11	5	Technical errors	Richard Meredith-Hardy CIMA S10 Editor	All	Supported 4/4
<u>19</u>	4.29.3	11	Change to team scoring	Joel Amiable, FRA alt Delegate	All	Undecided
<u>20</u>	4.29.5	12	Delete rounding of total scores.	Joel Amiable, FRA alt Delegate	All	Not supported 4/4. Notwithstanding any proposed changes to Paramptor scoring, this proposal also affects microlight scoring where it is entirely

Proposal	Chapter	Orig No.	Title	From	Affects	S10 Sub-Committee conclusion
						possible to get decimal numbers and they must be rounded to an integer!
<u>21</u>	4.29.9	13	Delete the 'marginal weather escape clause'.	Joel Amiable, FRA alt Delegate	Paramotors	Not supported 3/3
<u>22</u>	4.30.3	19	Director's response to complaints must be published.	Joel Amiable, FRA alt Delegate	All	Supported 4/4
<u>23</u>	4.31.2	14	Shorten the time for protests	Joel Amiable, FRA alt Delegate	All	Not supported 4/4. Impossible to manage both for competition directors and for team leaders during an international event.
<u>24</u>	4.31.2	15	Delete maximum fuel requirement in all economy tasks.	Joel Amiable, FRA alt Delegate	All	Not supported 3/3
<u>25</u>	5.5.2	30	Amendment to fuel control	The Czech Delegate	All	Supported 4/4
<u>26</u>	5.9.4	31	Errors in GPS FR Data	The Czech Delegate	All	Not supported 3/3. So many different possibilities make it difficult to establish definitive rules. Pilots are permitted to carry secondary loggers.
<u>27</u>	A1	32	Add compliance with national airworthiness system as a proof of minimum speed.	The Czech Delegate	All	Undecided, But ambient air pressure should be added as this has been missing in the formula
<u>28</u>	A1	16	Remove all Paramotors from the requirement to prove conformity with the definition.	Joel Amiable, FRA alt Delegate	All	Supported 3/4
<u>29a</u>	A1 1.3	39a	Proof of minimum speed in paramotors and foot-launched aircraft.	Richard Meredith-Hardy, GBR Delegate	Foot launched	Supported 4/4
<u>29b</u>	A1 1.3	39b	Proof of minimum speed in paramotors and foot-launched aircraft.	Richard Meredith-Hardy, GBR Delegate	All	Supported 4/4
<u>30</u>	A2	36	Complete revision of S10 Annex 2	Richard Meredith-Hardy CIMA S10 Editor	All	Supported 3/3
<u>31</u>	A2 4.2	35	Ban publication of score sheets at night	Joel Amiable, FRA alt Delegate	All	Not supported 4/4 Since the complaints time is not counting between 22h and 07h, publishing can be made anytime
<u>32</u>	A3 1.4	17	Change to phraseology in who can compete in championships.	Joel Amiable, FRA alt Delegate	All	Undecided
<u>33</u>	A3 1.7	18	Create a separate PF1f	Joel Amiable, FRA alt	All	Not supported 3/3

Proposal	Chapter	Orig No.	Title	From	Affects	S10 Sub-Committee conclusion
			class for female pilots in championships.	Delegate		
<u>34</u>	A3 3.1.4	20	Change to paramotor landing decks	Joel Amiable, FRA alt Delegate	Paramotors	Supported 4/4
<u>35</u>	A3 3.2.1	21	Redefining a takeoff	Joel Amiable, FRA alt Delegate	Paramotors	Not supported 4/4 Confuses what a takeoff is and crossing a gate is. There is no requirement to take a take-off time in a task when a gate time might be better. It's whatever the task description says.
<u>36</u>	A3 3.3.5	22	Clarification of 'falling over' in the PL classes	Joel Amiable, FRA alt Delegate	Paramotors	Supported 4/4
<u>37</u>	A3 3.3.5	23	Delete minimum height specification for precision tasks.	Joel Amiable, FRA alt Delegate	Paramotors	Supported 4/4 But recommend guidance to the two heights is still included for people not familiar with common practice.
<u>38</u>	A3 3.4.1	24	Change to principles of scoring.	Joel Amiable, FRA alt Delegate	Paramotors	Not supported 3/3
<u>39</u>	A4	25	New task catalogue for paramotors	Joel Amiable, FRA alt Delegate	Paramotors	Not supported 3/3
<u>40</u>	A4 3.C5	41	Slalom scoring	Richard Meredith-Hardy, GBR Delegate	Paramotors	Supported 3/3
<u>41</u>	A4 3.C9	2	Inconsistency in S10 A4 3.C9 Round the triangle	Richard Meredith-Hardy CIMA S10 Editor	Paramotors	Supported 4/4
<u>42</u>	A4 3.C10	3	Modification of S10 A4 3.C10 The Eight	Richard Meredith-Hardy CIMA S10 Editor	Paramotors	Supported 4/4
<u>43</u>	A6 2.3.2.2	33	Delete the requirement for IGC file printouts in record claims.	Richard Meredith-Hardy CIMA S10 Editor	All	Supported 4/4
<u>44</u>	Various	33	Precision Paramotor Championships	Roy Beisswenger, USA Delegate	Paramotors	Not supported 3/3, although it is valid as a working draft.

Attachments to these proposals

1. [French proposals for SECTION 10 amendments.pdf](#)
2. [raisons_of_proposals.pdf](#) Explanation of French proposals.
3. [Projet CIMA 10 1.pps](#) a new philosophy for PPG compétition
4. [Czech proposals for S10.pdf](#)
5. [Proposed revision of S10 A2.pdf](#) Version 2
6. [Checklist of items for CIMA championships.pdf](#)
7. [French request for Paramotor 14.pdf](#)
8. [slalom_scoring_options.xls](#)
9. [Proposal N42CIMA.pdf](#)
10. [Spanish gyros proposal.pdf](#)
11. [Precision Championships.pdf](#)

PROPOSAL 1

Proposal from

The Czech Delegate

Proposal title

Change to the Definition of a microlight or Paramotor aircraft

Existing text

S10 4.13.4

An emergency parachute is excluded from the aircraft gross mass requirements and in the case of a PF or PL aircraft is not to be considered as a part of the structural entity and may be removed or added during a competition.

S10 5.4.5

An emergency parachute is treated as if it has no weight.

New text

S10 1.3.2 New provision

The MTOW described in 1.3.1. may be increased by 5% if the aircraft is equipped with a parachute system designed to bring the entire aircraft to the ground if it is deployed.

S10 4.13.4 An emergency parachute ~~is excluded from the aircraft gross mass requirements and in the case of a~~ **in** PF or PL aircraft is not to be considered as a part of the structural entity and may be removed or added during a competition.

S10 5.4.5 *Delete entire provision*

Amend equivalent text in S10 A3 2.1.3

Reason

4.13.4 An emergency parachute is excluded from the aircraft gross mass requirements and in the case of a PF or PL aircraft is not to be considered as a part of the structural entity and may be removed or added during a competition.

Problem is, what the weight of an emergency parachute is. In microlights it is not only weight of a canopy and rocket, weight of all cables, ropes, fittings, exhaust and reinforcing of the whole structure incl. anchorage points should be included too. In this case, only manufacturer of the aircraft, no manufacturer of the parachute, may confirm additional mass. In this situation organizer will be not able to check received information correctly.

In European Union countries are in the community law established 5% of the additional mass for rescue systems. It makes MTOM for land one-seaters 315 and for two-seaters 472, 5 kg. Direct application of the article (4.13.4) may exceed these limits, because a maximal additional weight of the rescue system is not defined.

Article 4.13.4 is specially used for championships. That is a question, if is this article applicable for records too.

Proposed solution can avoid doubts about applicability for records, can reduce administration for competitions organizers, competitors and team leaders and can assure keeping of the European Community regulation.

Article 4.13.4 should be deleted, because if is used normal rescue parachute fitted to the pilots body, it is not part of structural entity. If is rescue system fitted to the aircraft and is activated by a pyrotechnic or rocket system, is illegal any manipulation with the system

without a special qualification and official state authority approval. From safety reasons should be any manipulation with a pyrotechnic systems in camp, parking place or apron strictly prohibited.

PROPOSAL 2

Proposal from

José Luis Esteban, ESP delegate

Proposal title

Autogyro classes

Existing text

S10 1.4 *None*

S10 1.5.1 Organisation of class names.

First character: FAI class	Second character: Type of control system	Third character: Type of landing device	Fourth character: Number of persons	Fifth character: Power source	Sixth character: Gender
R	A = Movable Aerodynamic Control System W = Weight-shift Control System P = Paraglider Control System	L = Landplane S = Seaplane M = Amphibian F = Foot-launched	1 = Flown solo 2 = Flown with two persons	E = Electric engine T = Thermal engine	m = Male f = Female

S10 1.5.2 Table of Microlight and Paramotor classes
[Class table]

S10 A3 1.8 CHAMPIONSHIP CLASSES

The Championships may be held in the following classes (S10 1.5):
WL1, WL2, AL1, AL2, F1m + PF1f, PF2, PL1 and PL2

S10 A4 CLARIFICATION

Classes AL1, AL2, WL1 and WL 2 are "Microlights" and classes PF1, PF2, PL1 and PL2 are "Paramotors"

Proposal 2a new text

S10 1.4

...

A Paramotor is a powered aircraft which has a wing without any rigid structure and is controlled via movable aerodynamic surfaces and pilot weightshift.

An Autogyro is a powered aircraft, which in flight, derives most of its lift from an autorotating rotor system not provided with any form of direct power drive.

A landplane is an aircraft only capable of taking off and land on land, ice or snow.

...

S10 1.5.1 Organisation of class names.

First character: FAI class	Second character: Type of control system	Third character: Type of landing device	Fourth character: Number of persons	Fifth character: Power source	Sixth character: Gender
R	A = Movable Aerodynamic Control System W = Weight-shift Control System P = Paraglider Control System G = Autogyro	L = Landplane S = Seaplane M = Amphibian F = Foot-launched	1 = Flown solo 2 = Flown with two persons	E = Electric engine T = Thermal engine	m = Male f = Female

S10 1.5.2 Table of Microlight and Paramotor classes

Microlight description	Class name
...	
Autogyro / Landplane / Flown solo	RGL1
Autogyro / Landplane / Flown with two persons	RGL2

S10 A3 1.8 CHAMPIONSHIP CLASSES

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

WL1, WL2, AL1, AL2, GL1, GL2, PF1m + PF1f, PF2, PL1 and PL2

S10 A4 CLARIFICATION

Classes AL1, AL2, WL1, WL2 GL1 and GL2 are "Microlights" and classes PF1, PF2, PL1 and PL2 are "Paramotors"

Proposal 2b new text

S10 1.4

...

A Paramotor is a powered aircraft which has a wing without any rigid structure and is controlled via movable aerodynamic surfaces and pilot weightshift.

An Autogyro is a powered aircraft, which in flight, derives most of its lift from an autorotating rotor system not provided with any form of direct power drive.

A landplane is an aircraft only capable of taking off and land on land, ice or snow.

...

S10 1.5.1 Organisation of class names.

First character: FAI class	Second character: Type of control system	Third character: Type of landing device	Fourth character: Number of persons	Fifth character: Power source	Sixth character: Gender
R	A = Movable Aerodynamic Control System W = Weight-shift Control System P = Paraglider Control System G = Autogyro	L = Landplane S = Seaplane M = Amphibian F = Foot-launched	1 = Flown solo 2 = Flown with two persons	E = Electric engine T = Thermal engine	m = Male f = Female

S10 1.5.2 Table of Microlight and Paramotor classes

Microlight description	Class name
...	
Autogyro / Landplane / Flown solo / Thermal engine	RGL1T
Autogyro / Landplane / Flown solo / Electric engine	RGL1E
Autogyro / Landplane / Flown with two persons / Thermal engine	RGL2T
Autogyro / Landplane / Flown with two persons / Electric engine	RGL2E

S10 A3 1.8 CHAMPIONSHIP CLASSES

The Championships may be held in the following classes (S10 1.5):
WL1, WL2, AL1, AL2, GL1, GL2, PF1m + PF1f, PF2, PL1 and PL2

S10 A4 CLARIFICATION

Classes AL1, AL2, WL1, WL2 GL1 and GL2 are "Microlights" and classes PF1, PF2, PL1 and PL2 are "Paramotors"

Reason

Light autogyros fall into CIMA's definition of microlight, and they are considered microlights in many countries.

There is experience of microlight autogyro competition as members of the AL classes in certain national championships. However, autogyros have a clear disadvantage against fixed-wing aircraft in economy tasks while they have a clear advantage in most precision landing tasks. A specific class will encourage autogyro pilots to participate in FAI competitions.

Option a proposes the inclusion of RGL1 and RGL2 (any engine) categories for competition and records.

Option b adds the electric counterparts, but this might be too early for this kind of aircraft.

PROPOSAL 3

Proposal from

Patrice Girardin, FRA Delegate

Proposal title

New World record: Greatest difference in speed.

Existing text

none

New text

S10 3.2.12 GREATEST DIFFERENCE IN SPEED

=====

S10 3.16 Special rules for greatest difference in speed.

- 3.16.1 The course shall be straight with a minimum length of 15 kilometres . or minimum 5 kilometres in classes P.
- 3.16.2 Before crossing the start line the aircraft shall fly level for the last 1,000 metres (500 metres in classes P) within a tolerance of 100 metres.
- 3.16.3 The altitude of the aircraft at the finish line shall not be less than its altitude at the start line.
- 3.16.4 The aircraft shall fly four runs over the same course. The fast speed shall be the average of two consecutive runs in opposite directions and the slow speed shall be the average of two consecutive runs in opposite directions. The speed adopted shall be the difference between the fast speed and the slow speed. All four runs must be completed within a maximum elapsed time of 1 hour with no landing between runs.
- 3.16.5 The altitude at which the aircraft crosses the start line on all four runs must be within 100m of each other.

Editorial note: Existing S10 3.16 and 3.17 are renumbered to 3.17 and 3.18

Reason

Specificity of microlight is not only to fly as fast as possible but is also the capacity to fly slowly.

PROPOSAL 4

Proposal title

Delete provision S10 3.3.3, no separate records for men / women

Proposal from

Richard Meredith-Hardy, CIMA S10 Editor.

Existing text

S10 3.3.3 There are no separate records for men / women.

New text

DELETE the provision

Reasons

As from 1 Jan 2009 there are some separate records for women. This provision should have been deleted then.

With thanks to Edina Szabo (HUN) and Marcel Meyer (FAI staff) who both spotted this inconsistency.

PROPOSAL 5

Proposal from

Richard Meredith-Hardy, S10 Editor.

Proposal title

Delete photographic evidence from S10

Existing text

S10 3.8.7 A turn point is reached when **a photo is taken of the turnpoint from the correct photo sector (S10 5.8.4) or** the FR trace is observed to pass through that sector.

S10 4.26.3 Control at turn points should normally be by GNSS flight recorder **or photographic evidence.**

S10 4.27.1 Evidence of the landing place must be obtained **from photographs and the name and address of a witness other than a member of the pilots' national team or** 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 5.1.3 In Championships, verification of outlanding places may be made by **independent witnesses or by photographs or** flight recorder evidence.

S10 5.8 PHOTOGRAPHIC EVIDENCE

5.8.1 Status of evidence. If a barograph and photographic evidence is used in records no other evidence is admissible except that evidence of crossing a start or a finish line may be from ground observers.

5.8.2 The camera must be of focal length between 30-60 mm and take 35 mm film. A digital camera of equivalent focal length is permitted in championships provided it is said so in the local regulations.

A film used for evidence must remain uncut. A digital camera must be handed over to the marshals immediately after finishing the task.

5.8.2.2 Data back cameras should be used, and sealed.

5.8.2.3 If it is possible to alter the order in which exposures are made or change the time shown on the pictures during the flight, the camera must be sealed before take-off.

5.8.2.4 Two cameras may be used, but only one set of pictures from one of the cameras will be used to verify the flight. Both films (digital camera see above) shall be handed in after landing, marked 1 and 2.

5.8.3 Photos. The photographic evidence on each film (set of pictures) must show as a minimum:

1) For records and badges; the declaration board showing date, pilot's name, place, time and flight declaration.

For championships; the complete task board showing date, task, official clock and pilot's competition number. Alternatively the pilot's number can be shown on the wing on the following photo.

2) Photograph of the start point or clock if applicable.

3) Photographs of turn points or control points in the correct or pre-declared sequence.

4) Photograph(s) of the same aircraft after landing with its number or identity together with identifiable evidence of the landing place.

5.8.4 Photo Sector. The photo sector is a quadrant (90°degree sector) on the ground with its apex at the turn point and orientated symmetrically to and remote from the two legs of the course which meet at the turn point. In Championships the Director may vary the sector centreline at the briefing to lie between two unmistakable linear surface features on the ground provided that the sector is not extended beyond 150 degrees.

The photograph may be taken from higher or lower than the turn point provided that the turn point feature is clearly visible in the picture.

5.9.2 The status of GNSS flight recorder evidence relative to other forms of evidence (eg. from photos or observers) must be detailed in the local regulations.

5.9.3 The scoring sector for GNSS flight recorders is independent of any other sector (eg. photo sector). The size shall be stated in the local regulations and task briefing sheets. At the scale of the official map the minimum size of scoring sectors shall be 1mm radius for circular sectors and 2mm width for gates.

New text

S10 3.8.7 A turn point is reached when the FR trace is observed to pass through a quadrant (90°degree sector) on the ground with its apex at the turn point and orientated symmetrically to and remote from the two legs of the course which meet at the turn point.

S10 4.26.3 Control at turn points shall be by GNSS flight recorder.

S10 4.27.1 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 5.1.3 In Championships, verification of outlanding places shall be made by flight recorder evidence.

S10 5.8 DELETE ENTIRE PROVISION

5.9.2 The status of GNSS flight recorder evidence relative to other forms of evidence (eg. observers) must be detailed in the local regulations.

5.9.3 The scoring sector size shall be stated in the local regulations. At the scale of the official map the minimum size of scoring sectors shall be 1mm radius for circular sectors and 2mm width for gates.

Editorial

RENUMBER existing S10 5.9 to 5.8

DELETE equivalent references to photographic evidence in S10 Annexes

Reason

It is a long time since photographic evidence of turnpoints was used in championships, but it is still possible in record attempts. In practice, no microlight or paramotor record claim has been presented to FAI using solely photographic evidence for at least ten years, indeed finding someone to process photographic film in a way acceptable to FAI is not so easy any more. GPS evidence is more definitive, far easier to obtain, and the rules for this are well established in S10 A6.

All references to photographic methods of evidence collection should therefore be deleted from FAI S10.

The 'classical' FAI turnpoint sector must nevertheless still exist for closed circuit records because pilots may use GPS information in flight and merely have to round a turnpoint (at any distance) to provide proof of the distance flown. The description of this is therefore moved to S10 3.8.7 It is important to note that this type of turnpoint is NOT the same as the cylinder turnpoint used in championships which is for use when the pilot does not have access to real-time GPS information.

These amendments have no effect on photographic or video evidence which may be presented to support a complaint in a championship claiming a marshal did not observe something correctly. We are only deleting obsolete stuff which was once used as an alternative to GPS logger evidence.

With thanks to Marcel Meyer (FAI Staff) for the suggestion.

PROPOSAL 6

Proposal from

Patrice Girardin, FRA Delegate

Proposal title

Change rules for paramotors in speed over a straight course records

Existing text

S10 3.14 Special rules for speed over a straight course.

- 3.14.1 The course shall be straight with a minimum length of 15 kilometres.
- 3.14.2 Before crossing the start line the aircraft shall fly level for the last 1,000 metres within a tolerance of 100 metres.
- 3.14.3 The altitude of the aircraft at the finish line shall not be less than its altitude at the start line.
- 3.14.4 The speed adopted shall be the average of the two speeds from two consecutive runs over the same course in opposite directions. The two runs must be completed within a maximum elapsed time of 1 hour with no landing between runs.
- 3.14.5 The altitude at which the aircraft crosses the start line on the second run must be within 100m of the altitude at which it crossed the start line on the first run.

New text

S10 3.14 Special rules for speed over a straight course.

- 3.14.1 The course shall be straight with a minimum length of 15 kilometres, **or minimum 5 kilometres in classes P.**
- 3.14.2 Before crossing the start line the aircraft shall fly level for the last 1,000 metres **(500 metres in classes P)** within a tolerance of 100 metres.
- 3.14.3 The altitude of the aircraft at the finish line shall not be less than its altitude at the start line.
- 3.14.4 The speed adopted shall be the average of the two speeds from two consecutive runs over the same course in opposite directions. The two runs must be completed within a maximum elapsed time of 1 hour with no landing between runs.
- 3.14.5 The altitude at which the aircraft crosses the start line on the second run must be within 100m of the altitude at which it crossed the start line on the first run.

Reason

It is not appropriate to require the same distance for a RA which flies at 300 km/h and a Paramotor which flies at 60 km/h .

A distance requirement adapted to the speed must be considered.

PROPOSAL 7

Proposal from

Patrice Girardin, FRA Delegate

Proposal title

Change rules for paramotors for speed over a closed circuit (Three new closed circuit records.)

Existing text

S10 3.15 Special rules for speed over a closed circuit.

3.15.1 Records may be claimed for speed over closed circuits of 50, 100, 500 and 1000 Km.

3.15.2 The length of the closed circuit shall not be less than the record distance being claimed.

3.15.3 Before crossing the start line the aircraft shall fly level for the last 1,000 metres within a tolerance of 100 metres.

3.15.4 The altitude of the aircraft at the finish line shall not be less than its altitude at the start line.

3.15.5 The speed adopted shall be calculated as the speed over the record distance being claimed, not the length of the closed circuit flown.

New text

S10 3.15 Special rules for speed over a closed circuit.

3.15.1 Records may be claimed for speed over closed circuits of 50, 100, 500 and 1000 Km **and 25 Km for classes P**

3.15.2 The length of the closed circuit shall not be less than the record distance being claimed.

3.15.3 Before crossing the start line the aircraft shall fly level for the last 1,000 metres **(500m in classes P)** within a tolerance of 100 metres.

3.15.4 The altitude of the aircraft at the finish line shall not be less than its altitude at the start line.

3.15.5 The speed adopted shall be calculated as the speed over the record distance being claimed, not the length of the closed circuit flown.

Reason

It is not appropriate to require the same distance for a RA which flies at 300 km/h and a Paramotor which flies at 60 km/h .

A distance requirement adapted to the speed must be considered.

Ref. attachment [Proposal N42CIMA.pdf](#)

PROPOSAL 8

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Change to rounding in timings

Existing text

S10 3.17.6

Elapsed times (after normalization, if required), if less than five minutes shall be rounded down to the nearest 0.01 second, otherwise to the nearest second. Distances shall be rounded down to the nearest 0.01 Km. A new championship record must simply exceed the previous record.

S 10 5.2.7 Exceptional units of measurement.

Timed precision tasks in championships shall be rounded down to an accuracy of 1/10th of a second if manual timing is used, or rounded down to an accuracy of 1/100th of a second if an approved electronic timing system is used.

S10 A3 1.12.1 TIMING

All times are given, taken and calculated in local time or simple elapsed time, rounded down to the most accurate permitted precision. (S10 5.2.6 and 5.2.7)

New text

S10 3.17.6

Elapsed times (after normalization, if required), if less than five minutes shall be rounded ~~down~~ to the nearest 0.01 second (**0.005 is 0.01**), otherwise to the nearest second. Distances shall be rounded down to the nearest 0.01 Km. A new championship record must simply exceed the previous record.

S10 5.2.7 Exceptional units of measurement.

Timed precision tasks in championships shall be rounded ~~down~~ to an accuracy of 1/10th of a second if manual timing is used (**0.05 is 0.1**), or rounded ~~down~~ to an accuracy of 1/100th of a second if an approved electronic timing system is used (**0.005 is 0.01**). **In the case of manual timing 3 times shall be made, both extremes are removed and the third time is retained.**

S10 A3 1.12.1 TIMING

All times are given, taken and calculated in local time or simple elapsed time, rounded ~~down~~ to the most accurate permitted precision. (**0.5 is 1**) (S10 5.2.6 and 5.2.7)

Reason

17.6 – in all activities the normal rounded is :
from 0 to 0.4 = 0
from 0.5 to 0.9 is 1

2.7 - in all activities the normal rounded is :
from 0 to 0.4 = 0
from 0.5 to 0.9 is 1

To be accurate in case of manual timing we need to have 3 marshalls – it's a minimum

1.12.1 – already treated

PROPOSAL 9

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Delete all maximum fuel loads in Distance with limited fuel Championship records.

Existing text

3.17.8.1 DISTANCE WITH LIMITED FUEL

- May be established in any task in the task catalogue where the fuel is measured before takeoff.
- Fuel load at takeoff must not exceed:
Classes PF1 & PL1: 1.5 Kg
Classes WL1, AL1, PF2 & PL2: 4 Kg
Classes WL2 & AL2: 6 Kg
- Distance measured is from start gate to the point of maximum distance from start gate before first landing.
- Pilot performance is expressed as a distance in Km.

New text

S10 3.17.8.1 DISTANCE WITH LIMITED FUEL

- May be established in any task in the task catalogue where the fuel is measured before takeoff.
- ~~Fuel load at takeoff must not exceed:~~
~~Classes PF1 & PL1: 1.5 Kg~~
~~Classes WL1, AL1, PF2 & PL2: 4 Kg~~
~~Classes WL2 & AL2: 6 Kg~~
- Distance measured is from start gate to the point of maximum distance from start gate before first landing.
- Pilot performance is expressed as a distance in Km.

Reason

17.8 – is not necessary to write Must not exceed, because in previous championships Fuel exceeded the weights mentioned.

PROPOSAL 10

Proposal from

Richard Meredith-Hardy, UK Delegate

Proposal title

Make distance and endurance championship records more accessible.

10a Existing text

S10 3.17.8.1 DISTANCE WITH LIMITED FUEL

...

Distance measured is from start gate to the point of maximum distance from start gate before first landing.

...

10a new text

S10 3.17.8.1 DISTANCE WITH LIMITED FUEL

...

Distance measured is the distance flown without any intermediate landing in a straight line or around a course, and used in calculating the scoring.

...

Amend the Championship Record claim form.

10b Existing text

S10 3.17.8.1 DISTANCE WITH LIMITED FUEL

...

Fuel load at takeoff must not exceed:

Classes PF1 & PL1: 1.5 Kg

Classes WL1, AL1, PF2 & PL2: 4 Kg

Classes WL2 & AL2: 6 Kg

...

10b new text

S10 3.17.8.1 DISTANCE WITH LIMITED FUEL

...

Fuel load at takeoff must not exceed:

Classes PF1 & PL1: 1.5 Kg

Classes ~~WL1, AL1~~, PF2 & PL2: 4 Kg

Classes WL1 & AL1: 9 Kg

Classes WL2 & AL2: 13 Kg

...

Amend the Championship Record claim form.

10c Existing text

S10 3.17.8.2 ENDURANCE WITH LIMITED FUEL

...

Time measured is from start gate to finish gate or, if this is not defined in the task description, the time at point of maximum distance from start gate before first landing.

...

10c new text

S10 3.17.8.2 ENDURANCE WITH LIMITED FUEL

...

Time measured is the time flown by the pilot without any intermediate landing, and used in calculating the scoring.

...

Amend the Championship Record claim form.

10d Existing text

S10 3.17.8.2 ENDURANCE WITH LIMITED FUEL

...

Fuel load at takeoff must not exceed:

Classes PF1 & PL1: 1.5 Kg

Classes WL1, AL1, PF2 & PL2: 4 Kg

Classes WL2 & AL2: 6 Kg

...

10d new text

S10 3.17.8.2 ENDURANCE WITH LIMITED FUEL

...

Fuel load at takeoff must not exceed:

Classes PF1 & PL1: 1.5 Kg

Classes ~~WL1, AL1~~, PF2 & PL2: 4 Kg

Classes WL1 & AL1: 5 Kg

Classes WL2 & AL2: 8 Kg

...

Amend the Championship Record claim form.

Reason

Neither of these two records are really asking for quite the right thing at the moment, which should be either a time or a distance which is used in the scoring, and a fuel load commonly used in championships. Presently, they both ask you to take another specific detailed look at the flight to find the actual value for a record claim, which ultimately means it is difficult to put *WR* against a performance without a load of extra work analysing the flight. The net result is claims are rare, not because anyone hasn't beaten them, but because nobody bothers to look to see if anyone has beaten them. Claims have never been made by microlights in either of these records.

The distance record is written in a way you can only fully exploit it in a "fly-away" task. Although fun to do, the fact is that for all sorts of reasons "fly-away" tasks are rare. Even in paramotor championships, and these records are supposed to be available to all classes which fly in championships. There is no reason why distance can't be measured in tasks which return to the airfield, eg a distance cats cradle task.

Proposal a: This change to the distance record would not affect any existing records because the best way to do it is still to go off downwind, but it would significantly increase the number of tasks in which pilots would have the ability to make a claim.

Proposal b: No record has ever been claimed by microlights, the intention is to simply alter the max fuel quantities for microlights to something resembling common practice.

Proposal c: This change to the endurance record would not affect any existing records because the best way to do it is still in a pure endurance task, but the proposal means it could be claimed in other eco tasks where total flight time is scored.

Proposal d: No record has ever been claimed by microlights, the intention is to simply alter the max fuel quantities for microlights to something resembling common practice.

For guidance, weight to volume is approximately:

1.5 Kg: 2.0L 4 Kg: 5.5L 5 Kg: 6.9L 8 Kg: 11.1L 9 kg : 12.5L 13 kg: 18.0L

PROPOSAL 11

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Class viability

Existing text

S10 4.3.2 For a World or Continental Championship to be valid there must be competitors from no less than 4 countries in a class, ready to fly the first task.

New text

S10 4.3.2

For a World or Continental Championship 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.**

Amend equivalent text in S10 A4 1.8.1

Reason

1.8.1 - to avoid the bad arrangements (équipages phantoms), pilot registered have to be on the deck and take off

PROPOSAL 12

Proposal from

Richard Meredith-Hardy, S10 Editor

Proposal title

Approval of local regulations

Existing text

S10 4.6.1

Local regulations are the rules for a specific event prepared by the organisers for submission to CIMA for approval at least one year before the event. They must use the master document format in S10 A3 with any modification being approved by CIMA. The Local Regulations and entry form shall be sent to NACs not less than 6 months before the event stating the amount of the entry fee and what it covers.

S10 A3 On the first page

MASTER LOCAL REGULATIONS

...

New text

S10 4.6.1

Local regulations are the rules for a specific event prepared by the organisers for submission to CIMA for approval at least one year before the event. They must use the master **model** document format in S10 A3 ~~with any modification being approved by CIMA.~~ **and any differences shall be listed separately and submitted to CIMA for approval at least one year before the event.** The **CIMA Approved** Local Regulations and entry form shall be sent to NACs not less than 6 months before the event stating the amount of the entry fee and what it covers.

S10 A3 On the first page

MODEL LOCAL REGULATIONS

...

Also amend the reference from Master to Model where it is referenced elsewhere.

Reason

Annex 3 to S10 is intended to be used as an implementation of the rules for championships contained in S10, it is a model, but there may be many reasons why a bidder wants to make changes.

It is often difficult to identify changes in a draft Local Regulations, and in any case the underlying Annexes 3 and 4 usually change between the presentation of a final bid and the championships.

It would therefore be much easier to properly assess a bid if a bidder simply lists proposed changes from the model in the bid rather than including them in a copy of the model which is likely to become obsolete before the championships anyway.

Ultimately, the requirement that final local regulations are distributed at least 6 months before the championship still exists.

PROPOSAL 13

Proposal from

The Czech Delegate

Proposal title

Two seater aircraft flown solo in championships

Existing text

None; new provision.

New text

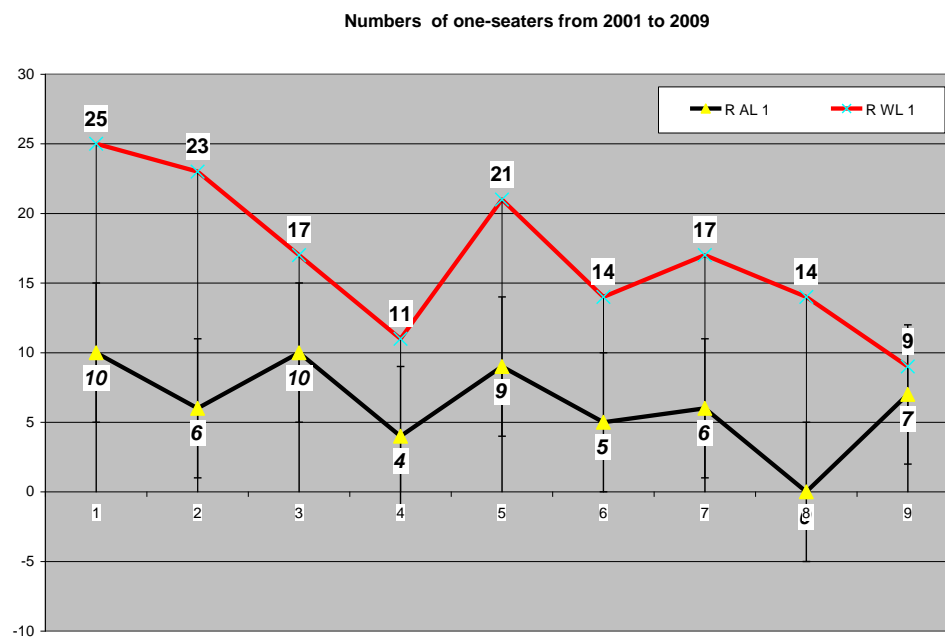
S10 4.13.10

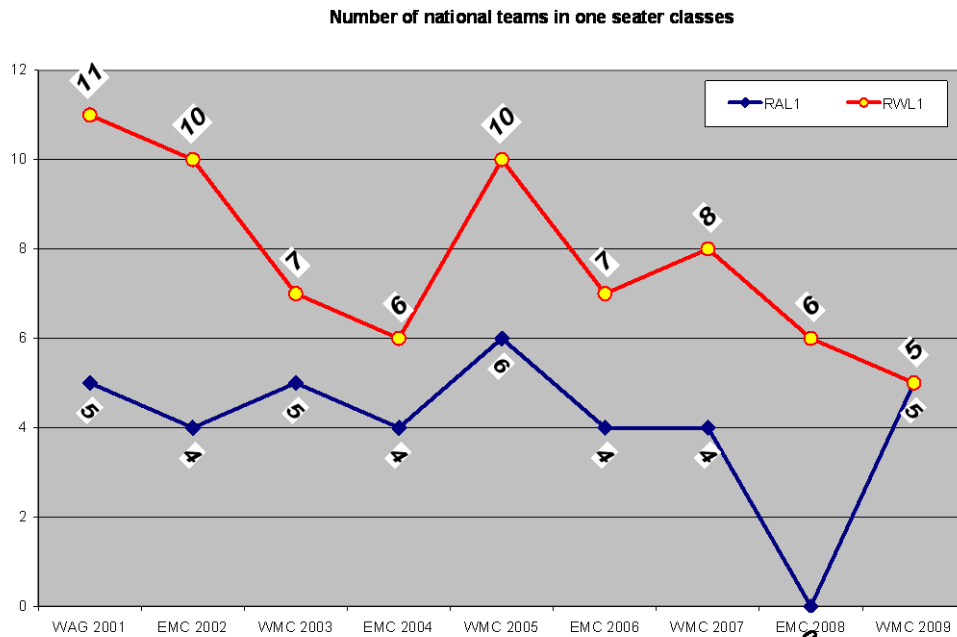
Aircraft certified in the state of registration as a two seat aircraft may be flown solo in classes AL1 and WL1 so long as they remain within the MAUW specified for an aircraft in the respective AL2 and WL2 class.

Add equivalent provision to S10 A3 2.1.3

Reason

Following graphs describes numbers of competitors and national teams in one-seater classes from 2001 to 2009.





In previous graphs is demonstrated, in AL 1 class was only one year without problems in number of nationalities and competitors (WMC 2005), 3 times was only one ACFT reserve (WAG 2001, WMC 2003 and WMC 2009) 4 times was number of nationalities at the boundary (EMC 2002, EMC 2004, EMC 2006, WMC 2007) and in EMC 2008 was not valid championship, because only 4 pilots from 3 nationalities were registered.

(In this class was stopped any technical evolution and neither flight of Sluka and one old timer FK 7 doesn't be serious rivals for lonely Jan Lukes's Alpin Junior - how is visible in result sheet - with only 55% success in precision tasks and 20% penalty in soaring Jan achieved jump over 1500 points. In other classes are differences in tens of points. Jan is excellent pilot, but big share on this leading role has technological advantage).

IN WL 1 class are from year to year less and less competitors and nationalities. In WMC 2009 were only 9 competitors from 5 countries, only Czech and Polish teams had more than one competitor (3 each) and 3 countries had only 1 (GBR, LTU, RUS), but Iliya Orlov from Russia competed in WL1 with WL2 aircraft, because his navigator did not arrived. Very easy may will come situation; championship will be not valid in WL 1 class.

(From the Czech WL 1 pilots Lukas Hynek will compete with glider in soaring competitions, Jan Rehak will compete in AL2 and Ota Hynek, if Lukas (his son) will finished competing, Ota will follow him. Spanish had no competitor after Manuel Rey, Hungarians had no WL 1 from France 2005 and only Rees Keene and Jan Rehak are new young faces in last 6 years.)

Aircraft is expensive machine and only few of people will or buy or built one-seater. Opening of the space for two-seaters to compete in solo may have several results, before other:

- a) Lot of aircrafts for competition might be available
- b) Heavy pilots will get a chance to compete. Currently they doesn't, MTOM limits are set more for "jockeys" than for "American football players".

To have a heavier aircraft is no advantage; mainly it is disadvantage.

PROPOSAL 14

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Mandatory emergency parachutes

Existing text

S10 4.13.4 An emergency parachute is excluded from the aircraft gross mass requirements and in the case of a PF or PL aircraft is not to be considered as a part of the structural entity and may be removed or added during a competition.

S10 4.20.1 Safety systems. A protective helmet must be worn on all flights unless this restricts vision from within an enclosed cockpit canopy with supine seating. An emergency parachute is highly recommended.

New text

S10 4.13.4 An emergency parachute is excluded from the aircraft gross mass requirements and in the case of a PF or PL aircraft is not to be considered as a part of the structural entity ~~and may be removed or added during a competition.~~

S10 4.20.1 Safety systems. A protective helmet must be worn on all flights unless this restricts vision from within an enclosed cockpit canopy with supine seating. An emergency parachute is highly recommended, **and in Paramotors is mandatory.**

Amend equivalent text in S10 A3 3.1.6 and S10 A3 3.1.7

Reason

3.1.6 – we want an emergency parachute mandatory so in this case it's not allowed to remove it

3.1.7 – Emergency parachute MANDATORY

PROPOSAL 15

Proposal from

The Czech Delegate

Proposal title

Contest numbers

Existing text

S10 4.15.1

The organisers shall allocate numbers or letters to each competing aircraft which shall normally be displayed on the underside of the right wingtip with the top of the numbers or letters towards the leading edge. The same numbers or letters should also be displayed on the pilot's helmet. For PFs, and PL's the number shall be placed centrally on the underside of the canopy, top towards the leading edge.

S10 4.15.2

The size of the figures and the area on the wing to be kept clear for this purpose shall be not less than 0.5m tall. National registration letters or numbers shall not be obscured.

New text

S10 4.15.1

The organisers shall allocate numbers or letters to each competing aircraft **in advance of the competition. Competitors are responsible for creating these contest numbers in a contrasting colour to the background, and maintaining them so they are highly visible at all times.**

On Microlights: One placed on each side of the fuselage.

On Paramotors: One placed centrally on the underside of the canopy, top towards the leading edge, and one on the pilots helmet.

S10 4.15.2

The size of the figures shall be minimum 25cm tall on a microlight or 50cm on a paramotor. National registration letters or numbers shall not be obscured.

Amend equivalent text in S10 A3 2.1.4 and S10 A3 3.1.5

Reason

The loggers, no by ground observers, check flights. Contest numbers at the wing so have no any sense. Transfer of the obligation from organizer to competitors may make easy these agenda to a organizer and can avoid situations, when aircraft (canopy) can be damaged by the unsuitable organizers materials.

PROPOSAL 16

Proposal from

The Czech Delegate

Proposal title

Electronic equipment

Existing text

S10 4.22.3 ELECTRONIC EQUIPMENT

CIMA approved GNSS flight recorders and ELT's without voice transmission capability are permitted and may be carried. Sealed mobile phones may be carried for use after landing or in an emergency. All other electronic devices with real or potential communication or navigation capabilities must be declared and approved for carriage by the Championship Director. Failure to declare such devices or misuse of this rule may result in disqualification.

...

New text

S10 4.22.3 ELECTRONIC EQUIPMENT

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. Only materials issued by the organizer, mathematical calculators without any capability for any data transfer, and clocks may be used for preflight preparation and flight control.

Unless otherwise briefed, then in the period between entering quarantine before flying a task and leaving quarantine after flying a task no other electronic devices with real or potential communication and/or navigation capabilities shall be available to, or accessed by the pilot or crew. Breaking of this rule may result in disqualification.

...

Amend equivalent text in S10 A3 1.10.11

Reason

During the WMC 2009 were used by some pilot's small computers for preflight preparation. Is impossible for organizers check all competitors if these computers are used only for calculations of time.

Mobile internet is very easy available for these computers and is possible, it can be used for searching for the photos in web or for navigation, if they are connected to internet by blue tooth technology, for example through sealed mobile phone.

If purpose of sealing of a device is to make the device unusable, no understandable reason does exist for carrying of it's on board of the aircraft. To make special procedures, rules, documents and evidence for sealing and checking of the seals of unusable devices are only escalation of competition director's and competition staff loading.

Because electronics development is too fast, only two ways are available: or allow using of the electronic equipment without any restrictions, or this equipment must be forbidden without any exceptions. No sealing can assure, it will be not used for navigation or communication.

PROPOSAL 17

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Shorten the time before publishing official scores.

Existing text

S10 4.29.1

... The Provisional Score sheet must be posted within 6 hours after finishing the task. The Official score sheet must be posted as soon as possible thereafter. In the case of the last task, the time limit is 2 hours after the posting of the Provisional score sheet. ...

4.30.2

Complaints must be presented not later than 6 hours after the respective Provisional Score sheet has been published, not counting the time between 22:00 and 07:00, except for the tasks of the last competition day, or for Provisional Score sheets published on or after the last competition day, when the time limit is 2 hours

New text

S10 4.29.1

... The Provisional Score sheet must be posted within 6 hours after finishing the task. The Official score sheet must be posted as soon as possible thereafter. In the case of the last task, the time limit is ~~2 hours~~ **1 hour** after the posting of the Provisional score sheet. ...

S10 4.30.2 Complaints must be presented not later than ~~6 hours~~ **1 hour** after the respective Provisional Score sheet has been published, not counting the time between 22:00 and 07:00, ~~except for the tasks of the last competition day, or for Provisional Score sheets published on or after the last competition day, when the time limit is 2 hours~~

Amend equivalent text in S10 A3 1.9.7

Reason

29.1 – 1 hour is enough

30.2 – complains must be managed as quick as possible 6 hours is too long – One hour is enough and team leader have to be vigilants.

1.9.7 – 1 hour for complain

PROPOSAL 18

Proposal from

Richard Meredith-Hardy, S10 Editor.

Proposal title

Technical errors

Existing text

4.29.11 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 **either the Competition Director, or the scoring staff, or** the equipment being used for the GNSS flight analysis or scoring, this failure must be corrected regardless of time limits for complaints and protests in S10 and the Local Regulations.

New text

4.29.11 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 in S10 and the Local Regulations.

Amend equivalent text in S10 A3 1.14.1

Reason

Technical errors are such things as formula or rounding errors in a spreadsheet or mathematical errors in flight analysis. They are NOT such things as the orientation of a gate or a miscount of the number of times someone has flown around a circuit, which dissatisfied competitors should complain about within the normal complaints deadline for a task.

At WPC 2009 there were a number of claims of 'technical error' which were NOT technical errors but which were submitted after the normal complaints period for a task, to the extent that these complaints amounted to an abuse of process.

This amendment seeks to make it clearer that a technical error is just that, an internal technical error and not a typing error or some other type of human error which are usually easily solved within the normal complaints period.

PROPOSAL 19

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Change to team scoring

Existing text

S10 4.29.3

The team score shall be computed from the sum of the scores of the top three pilots of each country in each class in each task grouped together in:

- Classes AL1, AL2, WL1, and WL2
- Each valid paramotor class which has a minimum of 8 pilots.

New text

S10 4.29.3

The team score shall be computed from the sum of the scores of the top three pilots of each country in each class in each task grouped together in:

- Classes AL1, AL2, WL1, and WL2
- Class PF1: If the class has at least 4 nations each with a minimum of 3 pilots.
- Classes PF2, PL1 and PL2: If the class has at least 4 nations each with a minimum of 2 pilots or crews.

Amend equivalent text in S10 A3 3.4.1

Reason

3.4.1 - to refer to the presentation « a new philosophy for PPG competition »

PROPOSAL 20

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Delete rounding of total scores.

Existing text

S10 4.29.5 A score given to a competitor shall be expressed to the nearest whole number, 0.5 being rounded up.

New text

Delete whole provision

Also delete equivalent text in S10 A3 1.14.1

Reason

1.14.1 – with the new scoring, no 0.5 points

PROPOSAL 21

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Delete the 'marginal weather escape clause'.

Existing text

S10 4.29.9

In the PF and PL classes, if less than 50% of pilots in class start a task then after all penalties have been applied each pilot score for the task will be reduced on a pro-rata basis according to the following formula:

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

Where

Ps = Pilot task score after all penalties Etc are applied.

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.

New text

Delete entire provision

Amend equivalent text in S10 A3 3.4.1

Reason

this case was never apply.

PROPOSAL 22

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Director's response to complaints must be published.

Existing text

S10 4.30.3

Complaints shall be made and dealt with without delay. A complaint that could affect a task result, must be dealt with and answered in writing before any Official score sheet is issued.

New text

S10 4.30.3

Complaints shall be made and dealt with without delay. A complaint that could affect a task result, must be dealt with and answered in writing before any Official score sheet is issued.

The complaint and its response must be published on the official notice board.

Amend equivalent text in S10 A3 1.9.7

Reason

1.9.7 – all complains and protest have to be published (also answers).

PROPOSAL 23

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Shorten the time for protests.

Existing text

S10 4.31.2

A protest must be presented not later than 6 hours after the respective Official score sheet has been published, except for the tasks of the last competition day, or for Official Score

sheets published on or after the last competition day, when the time limit is 2 hours. The night time between 22:00 and 07:00 is never included.

New text

S10 4.31.2

A protest must be presented not later than ~~6 hours~~ **1 hour** after the respective Official score sheet has been published, ~~except for the tasks of the last competition day, or for Official Score sheets published on or after the last competition day, when the time limit is 2 hours.~~
The night time between 22:00 and 07:00 is never included.

Amend equivalent text in S10 A3 1.9.8

Reason

31.2 – same raison and jury have to be ready at any moment. [Editor's note: refers to the amendment to S10 4.30.2]

PROPOSAL 24

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Delete maximum fuel requirement in all economy tasks.

Existing text

S10 5.5.1

The maximum amount of fuel, which may be carried for records, is stated in S10 Chapter 3. Fuel shall be measured by mass, or volume. For Championships, the maximum amount of fuel permitted for limited fuel consumption tasks is 15 kg for aircraft flown solo and 22 kg for aircraft flown with two people, or the equivalent in litres, although lesser amounts may be stated at briefing.

New text

S10 5.5.1

The maximum amount of fuel, which may be carried for records, is stated in S10 Chapter 3. Fuel shall be measured by mass, or volume. ~~For Championships, the maximum amount of fuel permitted for limited fuel consumption tasks is 15 kg for aircraft flown solo and 22 kg for aircraft flown with two people, or the equivalent in litres, although lesser amounts may be stated at briefing.~~

Amend equivalent text in S10 A4 1.2.1

Reason

1.2.1 – no indication on fuel limit – The director decides

PROPOSAL 25

Proposal from

The Czech Delegate

Proposal title

Amendment to fuel control

Existing text

5.5.2 The permitted amount of fuel shall be put into the aircraft tank when it is empty. An official observer must control fuelling and seal the tank.

New text

S10 5.5.2 The permitted amount of fuel shall be put into the aircraft tank when it is empty.

An official observer must control fuelling. **In championships this may also be done by a competitor or team leader from a rival team.**

An official observer must seal the tank. **In championships, sealing of tanks is optional if aircraft are moved under supervision of officials directly to the take off place.**

Reason

The emptying, refuelling and sealing procedures are very long, boring and tired. During this procedure is not sufficient time for checking and well sealing of all fittings, pipes, valves, filters and other devices in fuel system of the aircrafts. So it is only military exercising without any real effect. FR devices check flights and potential landing for refuelling will be recorded. In many of the past championships were these procedures solved by method "team checks team". Other way, these procedures will take for 60 aircrafts 6 or more hours, when organizer will have 10 or more people for this process. If organizers marshals will not be mechanical engineers or similar experts, this check doesn't bring any positive result. Some fittings will be sealed and some not. Who is responsible in this case?

PROPOSAL 26

Proposal from

The Czech Delegate

Proposal title

Errors in GPS FR Data

Existing text

None

New text

S10 5.9.4

If the championship task evaluation is based on the GNSS flight recorder record, and no data will be loaded in GNSS flight recorder recorded, will be not given any score to the competitor for the whole task.

If only minor part of FR data is lost, may championship director allow giving the score for recorded part of the task only in the case, if no doubt exists, the flight was correctly flown and no advantage for competitor will be given. In any case, when competitor could have landed and again take off or could make a back track flight in time period from end of record to following start of the record, will be score 0 for whole task.

If data will be not available by the standard program and standard device, organizer will announce this reality to affected competitor or team leader. Competitor will be given chance for 60 minutes to extract data from his FR in scoring room and under supervision. If competitor will be unsuccessful, his score will be zero.

Reason

In WMC 2009 two competitors forget to switch on their FR. They asked for scoring photos. Task was based on limited time for searching for a photo in specified sectors. To have a more time for observing these sectors could be potentially an advantage. No rule for this or similar situation is established in the section 10.

One competitor had problems with his logger and was not possible to load data from logger to the organizers computer. This situation took 2 hours, and delayed issuing of the results.

PROPOSAL 27

Proposal from

The Czech Delegate

Proposal title

Add compliance with national airworthiness system as a proof of minimum speed.

Existing text

S10 A1 CONFORMATION REQUIREMENTS

Aircraft shall be demonstrated to comply with the Microlight and Paramotor definition (S10 1.3) as follows:

1. AIRCRAFT MINIMUM SPEED

- 1.1 The aircraft may be required to demonstrate the minimum level speed at MTOW by a flight demonstration over a 500 m course. The aircraft must be flown level at a safe height in opposite directions. The speed will be measured during each run by the use of GNSS and the average of the two speeds shall be calculated. The component of the wind perpendicular to the course must not exceed 10 km/h. The measured speed will be corrected for air density (15°C, 1013.2 hPa, AMSL)

Note: Pilots wishing to attempt Records or compete in championships should obtain a minimum speed declaration for their aircraft (sample on following page).

- 1.2 Correction to standard conditions is calculated as follows.

$$\text{Speed in Km/h normalized to ISA conditions} = 3.6 \times \frac{D_0}{\left(\frac{T_1}{0.5331359 \sqrt{\frac{P_1}{t_1 + 273}}} \right)}$$

Where

D0 = Leg length in metres

T1 = Actual leg time in seconds

P1 = Ambient pressure at test altitude in Mb

t1 = Ambient temperature at test altitude in degrees Celsius

=====

MANUFACTURER'S DECLARATION OF MINIMUM FLIGHT-SPEED CHARACTERISTICS OF THE MICROLIGHT OR PARAMOTOR

The above type of aircraft, of our design and manufacture, has been flight tested and has demonstrated the following minimum flight-speed characteristics:

Minimum Flying Speed: Km/h

MTOW: Kg

Air temperature °C

Altitude: m

New text

S10 A1 CONFORMATION REQUIREMENTS

1 AIRCRAFT MINIMUM SPEED

The aircraft shall be demonstrated to comply with the Microlight and Paramotor minimum speed definition (~~S10 1.3~~) as follows by one of the following methods:

- 1.1 The national airworthiness system of the nation in which the aircraft is registered requires the aircraft to have been demonstrated to have a minimum level speed, corrected to standard conditions, at MTOW, equal to or less than that required in S10 1.3.1
- 1.2 The manufacturer of the aircraft provides a Declaration of Minimum Flight Speed stating the aircraft has a minimum level speed, corrected to standard conditions, at MTOW, equal to or less than that required in S10 1.3.1

1. ~~1.1~~ AIRCRAFT MINIMUM SPEED

- ~~1.1~~ 1.3 The aircraft ~~is may be required to demonstrate~~ shown to have a the minimum level speed at MTOW, equal to or less than that required in S10 1.3.1 by a flight demonstration over a 500 m course.

The aircraft must be flown level at a safe height in opposite directions. The speed will be measured during each run by the use of GNSS and the average of the two speeds shall be calculated. The component of the wind perpendicular to the course must not exceed 10 km/h. The measured speed will be corrected for air density (15°C, 1013.2 hP, AMSL)

Note: Pilots wishing to attempt Records or compete in championships will need one of these proofs. ~~should obtain a minimum speed declaration for their aircraft (sample on following page).~~

- ~~1.2~~ 2 Correction of speed to standard conditions is calculated as follows.

$$\text{Speed in Km/h normalized to ISA conditions} = 3.6 \times \frac{D_0}{\left(\frac{T_1}{0.5331359 \sqrt{\frac{P_1}{t_1 + 273}}} \right)}$$

Where

D0 = Leg length in metres

T1 = Actual leg time in seconds

P1 = Ambient pressure at test altitude in Mb

t1 = Ambient temperature at test altitude in degrees Celsius

=====

MANUFACTURER'S DECLARATION OF MINIMUM FLIGHT-SPEED CHARACTERISTICS OF THE MICROLIGHT OR PARAMOTOR

The above type of aircraft, of our design and manufacture, has been flight tested and has demonstrated the following minimum flight-speed characteristics:

Minimum Flying Speed: Km/h
MTOW: Kg
Air temperature °C
Ambient pressure Mb

Altitude: m
...

Reason

Microlights are or manufactured by industrial manner or homebuilt from bought kit or self designed and made. Problem is, when manufacturer is bankrupt or liquidated or don't communicate.

Each aircraft should have or airworthiness certificate or permit to fly (see art. 4.13.2 Sec 10) issued by some official authority in the state of registration. These documents are checked during entry technical check and registration procedure. Minimal flight speed should be recalculated to the ISA in any case in every state. (In the current form is missing basic information, air pressure, and so barometric formula doesn't be calculated and Air density doesn't be expressed), so column, Air temperature will be 15 degrees of Celsius and Altitude will be 0 m sea level anyway (Air pressure will be 1013,25 HPa). Because this mistake was not discovered a several years, is visible, that no seriously work was provided with this paper. The best check of the low minimal speed is take-off and landing deck and these forms are only papers for papers.

Please, we have to take a more care for good tasks and good organization of flying than for administrative procedures. Loading of the championship staff by the no useful procedures takes lot of energy, what can miss for good scoring and organizing of the championship. If we shall do something for competition flying, the most easy and most useful step may be deleting of some papers.

PROPOSAL 28

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Remove all Paramotors from the requirement to prove conformity with the definition.

Existing text

Title: none

...

MICROLIGHT & PARAMOTOR PERFORMANCE DECLARATION

...

MANUFACTURER'S DECLARATION OF MINIMUM FLIGHT-SPEED CHARACTERISTICS OF THE MICROLIGHT OR PARAMOTOR

...

New text

S10 A1 *title: For MICROLIGHTS*

...

~~MICROLIGHT & PARAMOTOR~~ PERFORMANCE DECLARATION

...

~~MANUFACTURER'S DECLARATION OF MINIMUM FLIGHT-SPEED CHARACTERISTICS OF THE MICROLIGHT OR PARAMOTOR~~

...

Reason

Annex 1 is only available for MICROLIGHTS and not valid for PARAMOTOR

Minimum flying speed is not adapted for Paramotor

Manufacturer's declaration of minimum flight-speed is not adapted for Paramotor.

PROPOSAL 29

Proposal from

Richard Meredith-Hardy, UK Delegate

Proposal title

Proof of minimum speed in paramotors and foot-launched aircraft.

Existing text

none

Proposal 29a new text

S10 A1 1.3

Aircraft which were foot-launched on a flight are deemed to meet the minimum speed requirement.

Amend the Record claim form.

Depending on other proposals, numbering may not be exactly as shown.

Proposal 29b new text

S10 A1 1.3

Aircraft which were foot-launched on a flight, and all Paramotors, are deemed to meet the minimum speed requirement.

Amend the Record claim form.

Depending on other proposals, numbering may not be exactly as shown.

Reason

A minimum speed declaration is required for all microlights and non-foot launched paramotors in championships and records, and for all foot launched paramotors in records.

In proposal a, there is no reason to doubt that all aircraft which were foot launched also meet the minimum speed requirement of 65 Km/h and it is therefore not necessary for a proof of this to be included in record claims.

In proposal b, it is also currently reasonable to assume all Paramotors (ie classes P) are capable of meeting the minimum speed requirement, so this is included too, but canopy speeds are increasing at a remarkable rate so a careful watch must be kept on this, and it may have to be deleted when paramotors with wheels and very small canopies start getting close to a performance akin to modern trikes.

PROPOSAL 30

Proposal from

Richard Meredith-Hardy, S10 Editor

Proposal title

Complete revision of S10 Annex 2

Existing text

See current entire S10 Annex 2

New text

See attachments Proposed revision of S10 A2.pdf version 2 And Checklist of items for CIMA championships.pdf
--

Reason

S10 Annex 2 is primarily an advice document. While there has been the occasional modification to keep it in line with the rules in S10, it has not been subjected to a review for many years. While it contains much valuable advice it has become quite outdated in comparison with modern practice.

One of the most significant problems CIMA has is the lack of bids for championships in the longer term and it is vitally important we try to improve our calendar so we know where we will be going at least three years in the future. While Annex 2 does ask for this, it is possible to postulate that one of the reasons why bidders for championships have generally ignored its deadlines is because some of them were quite unreasonable, for example it asks for the Local regulations to be produced at a time when most of the required information simply would not be known two years before the event.

The key points of the proposed revision are:

- 1 A three stage bid process: **Preliminary**, three or more years before the event; **Firm**, two years before the event, and when the sanction is granted by the CIMA plenary, and **The final presentation**, made at the plenary meeting immediately preceding the event.
- 2 The requirements in each stage are intended to be realistic in not asking for too much detail too far in advance while at the same time forcing potential bidders to think about key issues they perhaps haven't been thinking about far enough ahead up until now.
- 3 It introduces the [Checklist of items for CIMA championships.pdf](#) which has been built up over a period of years by experienced competition directors.
- 4 It attempts to bring a number of other methods and procedures more up to date.

As this is quite a complex revision, delegates are asked to review it and comment in time for it to be amended to a form acceptable to the Plenary.

PROPOSAL 31

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Ban publication of score sheets at night

Existing text

S10 A2 4.2

...

It is strongly recommended that no score sheet is issued earlier than 0700 in the morning and not later than 2200 in the evening.

New text

S10 A2 4.2

...

~~It is strongly recommended that no score sheet is~~ **Score sheets shall not be** issued earlier than 0700 in the morning and not later than 2200 in the evening.

Reason

4.2 – it's not recommended it is mandatory

PROPOSAL 32

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Change to phraseology in who can compete in championships.

Existing text

S10 A3 1.4

The Championships are open to all Active Member and Associate Member countries of FAI who may enter (*put number*) pilots plus one all-female crew in each microlight class and (*put number*) pilots plus one all-female crew in the PF & PL classes, plus one wheelchair bound pilot in class PL1.

New text

S10 A3 1.4

The Championships are open to all Active Member and Associate Member countries of FAI who may enter :
For Microlight championship (*put number*) pilots plus one all-female crew in each class.
For Paramotor championship (*put number*) pilots plus one all-female crew in the PF & PL classes, plus one wheelchair bound pilot in class PL1.

Reason

1.4 – from 2006 championship are separated

PROPOSAL 33

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Create a separate PF1f class for female pilots in championships.

Existing text

S10 A3 1.7 MEDALS AND PRIZES

FAI medals will be awarded to:

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

...

S10 A3 1.8 CHAMPIONSHIP CLASSES

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

WL1, WL2, AL1, AL2, PF1m + PF1f, PF2, PL1 and PL2

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

New text

S10 A3 1.7

MEDALS AND PRIZES

FAI medals will be awarded to:

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

...

S10 AN3 1.8

CHAMPIONSHIP CLASSES

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

WL1, WL2, AL1, AL2, PF1m, PF1f, PF2, PL1 and PL2

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

Reason

1.7 – Fai medal will be awarded for all classes mentioned in 1.8

1.8 - A comma

PROPOSAL 34

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Change to paramotor landing decks

Existing text

S10 A3 3.1.4

A landing deck is a clearly marked area 100m x 100m.

...

New text

S10 A3 3.1.4

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

...

Reason

3.1.4 – in the past Director used area instead of deck and it was better.

PROPOSAL 35

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Redefining a takeoff

Existing text

S10 A3 3.2.1 TIMINGS

Normally, take-off times are taken at the moment a pilot's feet leave the ground.

New text

S10 A3 3.2.1 TIMINGS

Normally, take-off times are taken at the moment a pilot's feet leave the ground **Or cross a start gate.**

...

Reason

for some task time is taken when pilot croos a strat gate.

PROPOSAL 36

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Clarification of 'falling over' in the PL classes

Existing text

S10 A3 3.3.5

...

In tasks where pilots are asked to make a precision landing or to land on a marker, 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.

...

New text

S10 A3 3.3.5

...

In tasks where pilots are asked to make a precision landing or to land on a marker:

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.

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 start the engine will not incur a penalty.

...

Reason

The examination is valid for PF and not PL

PROPOSAL 37

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Delete minimum height specification for precision tasks.

Existing text

S10 A3 3.3.5

...

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."
- 15 ft: "The engine must be stopped & propeller stationary for a minimum period of 2 seconds before any part of the aircraft or the pilot touches the ground."

...

New text

S10 A3 3.3.5

...

In tasks where the pilot is asked to switch off his engine above specific heights, the heights will be defined at the briefing ~~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."~~
- ~~— 15 ft: "The engine must be stopped & propeller stationary for a minimum period of 2 seconds before any part of the aircraft or the pilot touches the ground."~~

...

Reason

The heights will be defined at the briefing and it's to the Director to explain how he will judge the height and how he will inform the pilot if he can stop his engine. (Flag...)

PROPOSAL 38

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

Change to principles of scoring.

Existing text

S10 A3 3.4.1 ALL TASKS

The maximum score may be up to 1000 points per task and is generally calculated as follows:

$$P = Q/Q_{\max} \times 1000$$

Where: Q = pilot scores, Q max = best score for the task, P = Total score

but, depending on the task, absolute scores for pilots' performance may also be awarded either in combination with the above or exclusively. Where a combination is used the total available absolute score shall not be more than 50% of the total available score.

e.g.: $P = Q/Q_{\max} \times 750 + y$ (where the maximum value of y would be 250)

OR $P = y$ (where the maximum value of y could be 1000)

In all cases: P = Total score, Q = pilot score, Q max = best score for an element of the task, y = an absolute score

The winner of the class shall be the pilot gaining the highest total points in the class

...

New text

S10 A3 3.4.1 ALL TASKS

All scores are explained in the Task Catalogue.

After having applied the penalties, the best pilot scores 35 points, the second : 30 points, the third: 27 points, the fourth: 25 points, the sixth: 24 points the twenty fifth: 4 points and after that all pilots who flew the task score 2 points.

~~The maximum score may be up to 1000 points per task and is generally calculated as follows:~~

~~$$P = Q/Q_{\max} \times 1000$$~~

~~Where: Q = pilot scores, Q max = best score for the task, P = Total score~~

~~but, depending on the task, absolute scores for pilots' performance may also be awarded either in combination with the above or exclusively. Where a combination is used the total available absolute score shall not be more than 50% of the total available score.~~

~~e.g.: $P = Q/Q_{\max} \times 750 + y$ (where the maximum value of y would be 250)~~

~~OR $P = y$ (where the maximum value of y could be 1000)~~

~~In all cases: P = Total score, Q = pilot score, Q max = best score for an element of the task, y = an absolute score~~

The winner of the class shall be the pilot gaining the highest total points in the class.

...

Reason

3.4.1 - to refer to the presentation « [a new philosophy for PPG compétition](#) »

PROPOSAL 39

Proposal from

Joel Amiable, FRA alt Delegate

Proposal title

New task catalogue for paramotors.

Existing text

The whole of S10 A4 Part 3

New text

See Annex 4 Part 3 in attachment [French proposals for SECTION 10 amendments.pdf](#)

Reason

New task catalogue – new scoring – the spirit of this task catalogue is to simplify objectives of tasks – simplify scoring to make it easier and faster so it will be more comprehensible and interesting for pilots, public, medias. This catalogue is a generic catalogue, the Director must apply the simple bases of tasks.

PROPOSAL 40

Proposal from

Richard Meredith-Hardy, UK Delegate

Proposal title

Slalom scoring

Existing text

S10 A4 3.C5 PRECISION CIRCUIT IN THE SHORTEST TIME ('Clover leaf slalom')

...

Scoring

N = number of targets

T = time from first to last target

Q = N^3 / T

Pq = $500 * Q / Q_{max}$

Ps = $500 - 30 * (T - T_{pmin})$. Minimum Ps = 0; if N < 9, Ps = 0.

P = Pq + Ps

And similar in S10 A4 3.C6, S10 A4 3.C7, S10 A4 3.C9, S10 A4 3.C10

New text

S10 A4 3.C5 PRECISION CIRCUIT IN THE SHORTEST TIME ('Clover leaf slalom')

$$t_{pen} = t_{pil} + mv_{pen}$$

$$Q = \ln \left(\frac{3t_{best}}{t_{pen} - t_{best} + 1} \right)$$

Where

t_{pil} = the measured pilots time (seconds)

m = the number of missed targets

v_{pen} = the time penalty for each missed target (seconds)

t_{pen} = the pilots time (after penalties for missed targets)

t_{best} = the best time (after penalties for missed targets)

Q = the task value before normalization

Note: Spreadsheet formulas:

$t_{pen} = t_{pil} + m * v_{pen}$

$Q = LOG(3 * t_{best} / (t_{pen} - t_{best} - 1))$

And same in S10 A4 3.C6, S10 A4 3.C7, S10 A4 3.C9, S10 A4 3.C10

Reason

At WPC 2009 we discovered a fundamental flaw in current slalom scoring when there is a small number of competitors in class.

This formula generates an asymptotic curve which:

- Encourages pilots to fly for the fastest time rather than be conservative; not excessive risk to miss a stick.
- Works equally well with a large class or a small class.

For a full explanation see Option 6 in the attachment [slalom_scoring_options.xls](#)

PROPOSAL 41

Proposal from

Richard Meredith-Hardy, S10 Editor

Proposal title

Inconsistency in S10 A4 3.C9 Round the triangle

Existing text

S10 A4 3.C9

...

The distance from stick 1 to 2 is 80 m, the side of the equilateral triangle is 60 m, and the distance between stick 2 to turnpoint 6 is 50 to 200 m.

...

New text

S10 A4 3.C9

...

The distance from stick 1 to 2 is 70.71 m, the side of the equilateral triangle is 60 m, and the distance between stick 2 to turnpoint 6 is 50 to 200 m.

...

Reason

The diagram shows 70.71m and the text says 80m. 70.71m is the preferred distance as it then fits in with the standard stick positioning scheme.

Thanks to Mark Ingham (GBR Paramotor team leader) for spotting this.

PROPOSAL 42

Proposal from

Richard Meredith-Hardy, S10 Editor

Proposal title

Modification of S10 A4 3.C10 The Eight

Existing text

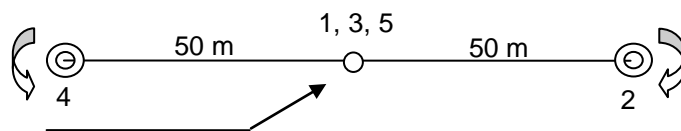
...

Flying the course

The pilot enters the course as indicated by the arrow and kicks the stick (strike 1). At this point the clock starts. The pilot flies around the pylon ahead of him counter clockwise (strike 2), then kicks the stick (strike 3), then the other pylon clockwise (strike 4) and finally the kicks the stick for the last time (strike 5). The clock stops on strike 5.

If briefed, the course can be repeated twice, accumulating a total of 9 possible targets.

○ Stick ⊙ Pylon



...

New text

...

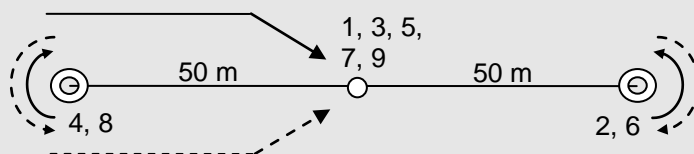
Flying the course

The pilot enters the course as indicated by the arrow and kicks the stick (strike 1). At this point the clock starts. The pilot flies around the pylon ahead of him **clockwise** (strike 2), then kicks the stick (strike 3), then the other pylon **counter clockwise** (strike 4) and kicks the stick (strike 5). The course is repeated twice, the clock stops on strike 9.

The course may be flown in a mirror image pattern consistent with the description above.

If briefed, the course may be flown only once, accumulating a total of 5 possible targets.

○ Stick ⊙ Pylon



...

Reason

1 Fixes an inconsistency between the description and the drawing (clockwise / counterclockwise). Thanks to Mark Ingham (GBR Paramotor team leader) for spotting this.

2 There is no particular reason why the course cannot be flown in any of the four senses, this makes the task more equal on days with variable winds and encourages a certain pilot skill in choosing the optimal start direction with reference to the wind of the moment.

3 A good PF1 pilot flies the 9 target version in under one minute so it is reasonable to make this the default.

PROPOSAL 43

Proposal from

Richard Meredith-Hardy, S10 Editor

Proposal title

Delete the requirement for IGC file printouts in record claims.

Existing text

S10 A6 2.3.2.2

The record claim must include:

- Confirmation that the FR was in the aircraft throughout the record attempt flight.
- A printout of the FR data in pseudo-IGC format countersigned by the OO that it is a perfect representation of the data obtained from the FR after the flight.
- A precise description, countersigned by the OO, of the software used to transfer and convert the recorded data into Pseudo-IGC format.

New text

S10 A6 2.3.2.2

The record claim must include:

- Confirmation that the FR was in the aircraft throughout the record attempt flight.
- ~~- A printout of the FR data in pseudo-IGC format countersigned by the OO that it is a perfect representation of the data obtained from the FR after the flight.~~
- An electronic copy of the original data as immediately extracted from the FR and a statement countersigned by the OO that that this original data is unadulterated.
- An electronic copy of that data converted into Pseudo-IGC format.
- A precise description, countersigned by the OO, of the software used to transfer and convert the recorded data into Pseudo-IGC format.

*Similar instructions in all type 1 FR approval documents must also be amended to this.
Amend the Record claim form.*

Reason

This refers to the procedure for making microlight and paramotor record claims using CIMA Type 3 flight recorders, which are ordinary GPS's.

When these provisions were introduced in 2002 it was not always simple to convert data from miscellaneous native GPS data formats to the IGC format, so the original data was not required as part of the submission, but the claimant had to convert it to IGC format, and as proof it was an exact copy of the original had to print it out and the observer had to countersign it.

For long flights this is rather a lot of paper! With resources such as GPSTabel it has also become much easier to convert almost any GPS data to IGC format so it is much simpler to simply submit the original data as well as the .igc file and this can be checked by the NAC and FAI quite easily.

Thankyou to Marcel Meyer at FAI for the suggestion.

PROPOSAL 44

Proposal from

Roy Beisswenger USA Delegate

Proposal title

Precision Paramotor Championships

Existing text

None

New text

See attached document Precision_Championships.pdf

Reason

See attached document [Precision_Championships.pdf](#)

Editor comment: The document contains a number of proposals for S10, but as they amount to a single item, they are kept in their separate document rather than scattered amongst the other proposals above.

Editorial corrections for 2010

1. Deleted and moved to a proposal
2. S10 A3 Review references to "PF" and replace with "Paramotor" where necessary.
[credit to Joel Amiable for spotting this]
3. S10 A4 1.2.1 needs to be amended to reflect the maximum permitted fuel quantities in economy tasks as stated in S10 5.5.1
4. Check and revise numbering of all of S10, notably S10 4.22.3
5. S10 A3 1.9.7: spelling; effect = affect.
6. Alter all pressure measurements in S10 A1 to mb (some are hPa, some are mb)