

Proposals for amendments to FAI Section 10.



Editor's Note - management in the Plenary.

Proposals are numbered in the order they were received from delegates. As there are so many proposals this year the editor proposes to manage this in the plenary by asking all delegates to accept *en-bloc* all proposals which are marked as "Unanimously supported" by the S10 Sub-committee which has studied all proposals in detail and considers them uncontroversial. Any delegate may request any one of these to be 'withdrawn' from this bloc and then they will be discussed in the normal way, but it does offer the plenary the opportunity to deal with a large number of proposals in an efficient way. In order for this to work, ALL delegates are requested to study these proposals in advance: [1a](#), [1b](#), [1c](#), [2a](#), [2b](#), [5](#), [7](#), [9](#), [10](#), [16](#), [18](#), [19](#), [20a](#), [21](#), [22](#), [23](#), [24](#), [25](#), [32](#), [33a](#).

For the remainder, the editor will present a suggested "order of discussion" to the plenary meeting so that proposals are grouped together under common headings which might help to speed up the proceedings a little.

Sub committees

Of course sub-committees may discuss all proposals but some proposals affect all classes of microlight or are of an administrative nature, however in order to make faster decisions in the Plenary it is suggested each sub-committee consider proposals which directly affect them in advance of the plenary meeting. Suggested are at least:

Classic classes: Proposals: [4](#), [7](#), [11](#), [14](#), [15](#), [27](#), [33](#), [34](#), [37](#)

Soft wing classes: Proposals: [4](#), [6](#), [12](#), [13](#), [14](#), [15](#), [16](#), [17](#), [26](#), [27](#), [28](#), [29](#), [30](#), [33](#), [34](#), [36](#), [37](#), [38](#)

How amendments were submitted

This year, 2006, Richard Meredith-Hardy is the coordinating editor for Section 10 and its annexes.

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

The amendment scheme operated as it was done last year, all proposals from CIMA delegates should have been 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.

Each proposal will be put to the vote **in it's exact wording** at the CIMA Plenary meeting 9-11 November 2006 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.

The deadline for proposals for amendments was **23:59:59 UTC WEDNESDAY 20 SEPTEMBER 2006**.

Comment from the S10 Sub-Committee was inserted before the final agenda deadline when it was passed to the CIMA Secretary for inclusion in the agenda.

Changes

- This is the [FINAL draft](#): Draft 16, 26 September 2006, Addition of proposals 41 - 47 (which were received just before the deadline), the insertion of 20c by the S10 Subcommittee and insertion of comment by the committee to all proposals.
- [Draft 15, MIDNIGHT UTC 20 September 2006](#). Amendment to proposal 12, Addition of proposals 36, 37, 38, 39 & 40
- [Draft 14, 20 September 2006](#). Addition of proposals 34c & 34d, comment moved to reason.
- [Draft 13, 20 September 2006](#). Addition of comment to proposal 34.
- [Draft 12, 20 September 2006](#). Addition of proposal 35
- [Draft 11, 19 September 2006](#). Addition of proposal 34b
- [Draft 10, 19 September 2006](#). Amendments to proposals 19 & 32, Addition of proposals 33 & 34
- [Draft 9, 18 September 2006](#). Addition of proposals 20b, 28, 29, 30, 31 and 32.
- [Draft 8, 16 September 2006](#). Amendments to proposals 1, 25, 26. Addition of proposal 27.
- [Draft 7, 15 September 2006](#). Amendment to proposal 3. Addition of proposals 3b, 25 and 26.

- [Draft 6, 13 September 2006](#). Amendments to proposals 3, 4 and 8, addition of proposal 8b.
- [Draft 5, 12 September 2006](#). Amendments to proposals 4, 5 and 8.
- [Draft 4, 10 September 2006](#). Addition of Proposals 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 & 24.
- [Draft 3, 9 September 2006](#). Addition of Proposal 6.
- [Draft 2, 7 September 2006](#). Addition of proposals 2a, 4 & 5.
- [Draft 1, 2 September 2006](#)

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- [Proposal 9](#) **Clarification of what happens when an error occurs in FR analysis or scoring.** *from* Richard Meredith-Hardy, GBR Delegate
- [Proposal 10](#) **Clarification of score sheets.** *from* Richard Meredith-Hardy, GBR Delegate
- [Proposal 11](#) **To change precision landings to include bounces in the scoring.** *From* Joel Amiable, FRA Delegate.
- [Proposal 12](#) **New precision landing task for PL1 & PL2.** *From* Joel Amiable, FRA Delegate.
- [Proposal 13](#) **To delete tasks 3.C3 and 3.C10 from the task catalogue.** *From* Joel Amiable, FRA Delegate.
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- [Proposal 15](#) **Amendment to S10 4.24.3, task proportions.** *From* Jose Luis Esteban, ESP Delegate.
- [Proposal 16](#) **Homogeneous maximum value for slalom tasks.** *From* Jose Luis Esteban, ESP Delegate.
- [Proposal 17](#) **Amendment to S10 4.24.3, task proportions (if proposals 15 & 16 are accepted).** *From* Jose Luis Esteban, ESP Delegate.
- [Proposal 18](#) **Time of crossing points or gates using GNSS.** *From* Jose Luis Esteban, ESP Delegate.
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- [Proposal 20](#) **Number of stewards.** *From* Jose Luis Esteban, ESP Delegate and Carlos Trigo, PRT Delegate.
- [Proposal 21](#) **DNF and DSQ in score sheets.** *From* Jose Luis Esteban, ESP Delegate.
- [Proposal 22](#) **Deadline for issuing official scores.** *From* Jose Luis Esteban, ESP Delegate.
- [Proposal 23](#) **Publishing overall and team scores.** *From* Jose Luis Esteban, ESP Delegate.
- [Proposal 24](#) **Editorial change. Move S10 4.5.6 and 4.5.7 to S10 4.29 (scoring).** *From* Jose Luis Esteban, ESP Delegate.
- [Proposal 25](#) **Amendment to advice about maps.** *From* Jose Luis Esteban, ESP Delegate and Richard Meredith-Hardy, S10 Editor.
- [Proposal 26](#) **Alternative scoring for slalom tasks.** *From* Jose Luis Esteban, ESP Delegate.
- [Proposal 27](#) **Mandatory inspections.** *From* Joel Amiable, FRA Delegate.
- [Proposal 28](#) **Increase the number of windsocks near PF & PL decks.** *From* Carlos Trigo, PRT Delegate.
- [Proposal 29](#) **Increase the height of kicking sticks.** *From* Carlos Trigo, PRT Delegate.
- [Proposal 30](#) **Amendment to the Slow - Fast tasks.** *From* Carlos Trigo, PRT Delegate.
- [Proposal 31](#) **Creation of a Safety Officer.** *From* Carlos Trigo, PRT Delegate.
- [Proposal 32](#) **Tidy up Annex 5, 3 Stewards.** *From* Richard Meredith-Hardy, S10 Editor.
- [Proposal 33](#) **Define the minimum widths for gates.** *From* Richard Meredith-Hardy, FRAC Chairman.

- [Proposal 34](#) **Reduce the size of the scoring zone.** *From Joel Amiable FRA Delegate, Wolfgang Lintl, DEU Delegate, Jose Luis Esteban ESP Delegate.*
- [Proposal 35](#) **Championship director qualifications.** *From Jacek Kibinski, POL Delegate.*
- [Proposal 36](#) **Amendment to the slow-fast tasks.** *From Rene Verschuren BEL Delegate*
- [Proposal 37](#) **Amendment to S10 1.3, Inclusion of all powered weight shift control and paraglider control in S10.** *From Roy Beisswenger, USA Delegate*
- [Proposal 38](#) **Amendment to S10 4.23.3, Provisions for Precision Championship for classes PF and PL.** *From Roy Beisswenger, USA Delegate.*
- [Proposal 39](#) **Economy tasks based on weight of fuel used in flight.** *From Richard Meredith-Hardy, GBR Delegate.*
- [Proposal 40](#) **Scoring economy tasks taking into account pilots' bodyweight.** *From Richard Meredith-Hardy, GBR Delegate.*
- [Proposal 41](#) **Amendment to S10 4.24.3, task proportions.** *From Rene Verschuren BEL Delegate*
- [Proposal 42](#) **Number of stewards.** *From Rene Verschuren BEL Delegate*
- [Proposal 43](#) **Editorial change. Move S10 4.5.6 and 4.5.7 to S10 4.29 (scoring).** *From Rene Verschuren BEL Delegate*
- [Proposal 44](#) **Deleting S10, Annex 6. For all competition.** *From Rene Verschuren BEL Delegate*
- [Proposal 45](#) **Improve the description of ground markers in the local regulations.** *From Rene Verschuren BEL Delegate*
- [Proposal 46](#) **Annex 4 S 10 2 B 11 Economy to respect the weight of pilots.** *From Rene Verschuren BEL Delegate*
- [Proposal 47](#) **Director fly which you !!!** *From Rene Verschuren BEL Delegate*

Attachments

All attachments are included with this document. Otherwise they are available from the hyperlinks below.

Re. proposal 4 **Version 3, 13 Sept 2006:** [proposed S10 ch3 v3.pdf](#)

Re. Proposal 34 [gps errors.xls](#)

Re. Proposals 39 & 40 [proposals 39 and 40 tasks.pdf](#)

Re. Proposals 41 - 47 [proposals 41-47.pdf](#)

PROPOSAL 1

Proposal title

The Ann Welch Diploma, renaming & renumbering of S10 Chapter 2.

Proposal from

Richard Meredith-Hardy, CIMA S10 Editor.

Existing text

Proposal 1a Chapter title: Colibri Diplomas and Badges.

Proposal 1b Concerns the renumbering of sections 2.2, 2.3, 2.4 & 2.5

Proposal 1c None; Insert new addition to S10

New text

Proposal 1a

Chapter title: Diplomas and Badges.
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Proposal 1b

Renumber paragraph 2.2 to 2.3 COLIBRI PROFICIENCY BADGES and existing 2.3, 2.4 and 2.5 so they appear logically under the existing heading 2.3 COLIBRI PROFICIENCY BADGES.
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Proposal 1c None; Insert new addition to S10

2.2 Ann Welch Diploma (ref. FAI bye-laws 12.11.2)
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2.2.1 Ann Welch, having previously played leading international roles in the development of gliding and hang-gliding, was instrumental in creating the FAI microlight commission (CIMA) and formulating the microlight sporting code and worked tirelessly for many years in the cause of the sport.

2.2.2 One diploma may be awarded each year by the FAI Microlight commission (CIMA) to the pilot or crew of a microlight who, in the opinion of CIMA, made the most meritorious flight which resulted in a microlight World record claim ratified in the previous 12 months.

Reasons

Proposal 1a. Re-naming the chapter.

With the introduction of the Ann Welch Diploma, S 10 Chapter 2 does not just include Colibris. It would therefore be more sensibly re-named just "Diplomas and Badges".

Proposal 1b. Re-numbering.

In the new order of importance, it can be considered the order should be Colibri Diploma, then the Ann Welch Diploma and then Colibri badges, therefore the numbering of Chapter 2 should reflect this.

Both the existing 2.3, 2.4 and 2.5 are directly relevant to Colibri badges which are the subject of existing section 2.2, they should therefore be numbered as part of it, not as separate items.

In this proposal the Ann Welch Diploma is inserted at 2.2, the existing 2.2 becomes 2.3 and the existing 2.3, 2.4 and 2.5 are all dropped down a level so they appear logically under the new heading: 2.3 Colibri badges.

Proposal 1c. Introduction of the Ann Welch Diploma.

Subject to a FAI bye-law approved by the FAI Executive Board, the plenary agreed in 2005 the text to be included in S10. This vote is therefore NOT a discussion of the context of the award or its text, but simply to agree (in conjunction to the above two proposals) where it should be put in FAI Section 10.

Comments from S10 Sub Committee

1a Supported unanimously.

1b Supported unanimously.

1c Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 1a	ACCEPTED	DENIED
Proposal 1b	ACCEPTED	DENIED
Proposal 1c	ACCEPTED	DENIED

PROPOSAL 2

Proposal from

Richard Meredith-Hardy, S10 Editor

Proposal title

Amendment to S10, Annex 6 regarding calibration certificates for flight recorders.

Existing text

Proposal 2a

S10 Annex 6 2.2.1.1 The FR must have an Integral Pressure Altitude Sensor and be capable of recording atmospheric altitude and must have a valid calibration certificate.

Proposal 2b

S10 5.6.5 Where no height performance is involved no barograph calibration is required. For GNSS Flight Recorders, see Annex 6.

New text

Proposal 2a

AMEND: S10 Annex 6 2.2.1.1 The FR must have an Integral Pressure Altitude Sensor and be capable of recording atmospheric altitude.

Proposal 2b

AMEND: S10 5.6.5

Where no height or altitude performance is involved no barograph calibration is required.

Where height or altitude performance is involved, an atmospheric altitude calibration certificate for the Barograph or FR is required. It must be dated within the period 24 months prior to the flight to 2 months after the flight and show corrections to the ISA standard atmosphere across the full range of altitude relevant to the performance.

Reason

It is accepted that a pressure altitude calibration certificate is not required in distance or speed record claims as the proof is simply “did not land” during the flight .

Proposal 2a corrects an anomaly in respect of “type 2 FR’s” (ie IGC approved ones) where S10 Annex 6 says they MUST have a valid calibration certificate whatever type of record claim it is.

Proposal 2b states the requirements for all barograph and FR atmospheric altitude calibration certificates which although “understood” to be the practice has never actually been in S10 and it isn't in the general section. The reference to S10 annex 6 is no longer necessary.

Comments from S10 Sub Committee

Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 2a	ACCEPTED	DENIED
Proposal 2b	ACCEPTED	DENIED

PROPOSAL 3

Proposal title

Introduction of ‘absolute’ microlight records.

Proposal from

Richard Meredith-Hardy, GBR Delegate

Existing text

None.

New text

Proposal 3a

S10 3.3.4 Absolute records represent the best performance achieved in records across all microlight classes.

- 3.3.4.1 Absolute distance: The greatest distance achieved in any distance related record category.
- 3.3.4.2 Absolute altitude: The greatest altitude achieved in any altitude or height related record category.
- 3.3.4.3 Absolute speed: The greatest speed achieved in any speed related record category.

Proposal 3b

No new text, however if proposal 3a is accepted, the plenary should confirm that these three absolute records shall be filled with the performances as they exist at the moment this provision is promulgated (ie 1 Jan 2007)

Reason

People often ask “what’s the highest a microlight can fly?” The answer to this can be found on the FAI website at <http://records.fai.org/microlight/> but the user then has to trawl through many classes to find that it’s 9,720 m achieved by Serge ZIN (France) in 1994.

Absolute records are described in the FAI General section:

GS 6.2 ABSOLUTE RECORDS. The types of records recognised by FAI as Absolute records shall be determined by the Air Sport Commissions and shown in the specialised sections of the Sporting Code.

Within this there are various possibilities for absolute microlight records. One option would be to have one absolute microlight record for each record category representing the best performance in that category across all microlight classes, but as the purpose of these records is to be really simple, it could be confusing to have an absolute record for distance in a closed circuit and another for distance in a straight line. The alternative, presented in this proposal is to simply show the best performances across all distance, or altitude, or speed related performances, so in total there are only three absolute records for microlights.

An interesting by-product of introducing these records is that any microlight pilot who achieves one may (to be confirmed by FAI) automatically become eligible to join that rather elite group of people who have been awarded the FAI De La Vaulx Medal (see <http://www.fai.org/awards/award.asp?id=2> and FAI By-Laws 11.4).

Proposal 3b simply states what should happen once these records are created. The alternative would be for them to be blank until a new absolute record claim is ratified which could ruin the point of having them for some time.

As at 15 Sept 2006 the absolute microlights records would be:

Distance:

AL1, 1,369.00 km, 6 Sept 1988, Bernard d'OTREPPE (BEL), Fréjus La Palud (France), Aviasud Engineering - Albatros

Altitude:

WL1, 9,720 m, 18 Sept 1994, Serge ZIN (FRA), Saint-Auban (France), Air Création Norgil

Speed:

AL2, 274.78 km/h, 19 Oct 2005, Jiri UNZEITIG (CZE) and Vera VAVRINOVA (CZE), Horovice (Czech Republic), Vanessa Air Klenor VL-3

Note that the FAI De La Vaulx medal is only awarded to holders of absolute world records *established during the previous year* so even if FAI confirms that absolute microlight records are eligible for this medal then it cannot be awarded for these three ‘initial’ records.

Comments from S10 Sub Committee

Supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 3a	ACCEPTED	DENIED
Proposal 3b	ACCEPTED	DENIED

PROPOSAL 4

Proposal title

Simplification and clarification of the rules for microlight World records.

Proposal from

Richard Meredith-Hardy, GBR Delegate

Existing text

See S10 Chapter 3.

New text

See document Version 3, 13 Sept 2006 proposed S10_ch3_v3.pdf

Reason

General:

Basically the objectives of a record are rather simple; take *Speed over a closed circuit of 50 Km* for example, all a pilot has to do is blast round a 50km out and return or triangle as fast as he can. Of course complete proof has to be supplied to FAI in order to make a successful claim, but at its simplest all the official observer has to oversee is:

- 1) A weighing of the whole aircraft immediately before takeoff to prove it was a microlight at takeoff.
- 2) That a CIMA Type 2 FR was on board for the flight.

All other required evidence is derived from the secure FR track log or can be collected after the attempt.

Why then do we have to make it so complicated, for example by requiring the route to be declared in advance? Is this really necessary for a record? This proposal says pre-declaration is not necessary, and tries to make the whole business of making World records simpler but without devaluing the underlying 'worth' of each one.

The purpose of these proposals are:

- a) Given that the rules for records have not been amended for many years, to examine them in the light of the way they are most likely to be done these days using FR's of one kind or another.
- b) Given that there are rather few record claims every year, mainly because the paperwork associated with a claim is so complicated; to examine all the requirements and ask whether each is really necessary, but without devaluing the 'worth' of each particular record.
- c) To try to clarify the current 'maze' of requirements for each type of record.

In doing this revue, initially I tried to do the normal thing and try to achieve a) and b) above by amending the existing text as little as possible. The end result however simply did not satisfy c) at all. I have therefore taken the risk of totally rewriting a substantial section of S10 chapter 3 with the hope it will be accepted by the CIMA plenary as a single amendment.

It is intended that this re-write does NOT substantially change the rules for each record, however in the old rules, if you study them enough, there are a surprising number of exceptions, for example the general 'altitude – distance relationship' is 2% (S10 5.3). This applies to a record with limited fuel, but for a record without engine power it's 1% (S10 3.4.12.1). Why so complicated? Surely the logical thing to say, (for records where it matters) is "The altitude of the aircraft at the finish line shall not be less than its altitude at the start line" and leave it at that? This is slightly more severe than the old requirement, but much simpler to manage both from the pilot's point of view when he's actually flying the record attempt and from the NAC's and FAI's point of view when they check the claim against the rules. In fact with this simple provision we don't need the altitude – distance relationship thing in chapter 5 at all, the provision is already excluded from championships, isn't used in badge flights and isn't now required for records.

The attached document is colour coded. Black items are unchanged text, green items are basically unchanged text but moved to a better place, blue items are these slightly more controversial items.

According to the revised numbering, below is a brief discussion of every blue item.

3.6.2 Existing rules for records without engine power say the engine may not be restarted at all after the start line is passed. This practice of un-forced landing out is illegal in some countries. Why not then say the engine may be re-started after the finish line? It makes no difference to the final result.

3.6.3, 3.7.2, 3.10.3 & 3.11.3 The business of “altitude – distance relationship” is discussed above and a much simpler formula suggested here which is the same as the one used in speed over closed circuit records.

3.8 Existing rules say a closed circuit can be an out and return or a triangle and triangles must be quite equal in as much as no leg can be less than 28% of the total distance. In reality, while there is no problem with a 50 or 100Km triangle, pilots, especially those in smaller countries, may have difficulty in actually planning a triangle of 500 or 1000 Km without it being an international flight or going through controlled airspace or extending over the sea. This proposal therefore allows more turnpoints for closed circuits longer than 100 Km. Up to 6 turnpoints are proposed, but leg length must still be more or less equal. To prevent repeated legs along the same track, the course change must not exceed 145 deg which just permits a 5 point star. The length deviation of up to $\pm 5\%$ per leg is an insignificant 0.33% more severe than the existing 28% rule.

3.14.2 Existing rules say the 2 runs must be completed in 45 min. Given that the shortest course is 15km, it is impossible to complete the task in any aircraft which goes slower than a little more than 40 Km/h. Whilst most microlights are faster than this these days, it would seem more reasonable to change this to a ‘round number’ of one hour which is the standard for FIA land speed records and which then would permit any aircraft which can go a little over 30 Km/h the opportunity to attempt a record.

3.16.1 BMAA has for many years provided a standard form to assist pilots and observers complete all the requirements of a record. See <http://www.flymicro.com/records/index.cfm?record=claimfm> It is proposed CIMA has a set of claim forms (revised appropriately for these amended rules) which MUST be used in any record claim. Other FAI commissions do this, and by asking all the right questions pertinent to each record they make the job of making a valid claim easier for the observer, the pilot, the NAC controlling the claim and FAI office. Advice can also be included in these forms and their use also makes the requirement for a checklist in S10 obsolete; this is therefore deleted in the proposal above.

Rather than building these forms into S10, it is proposed they are separate documents available from the FAI website and maintained as necessary by the S10 editor so they are compatible with the requirements of S10. It is therefore proposed that work does not start on this until after the 2006 plenary meeting when [hopefully] these proposals are accepted and the forms can be edited to suit, and published on 1 Jan 2007 at the same time as the 2007 version of S10.

S10, Chapter 5, 5.3. Delete as discussed above.

PLEASE NOTE THAT AS THIS IS RATHER A COMPLEX PROPOSAL:

There is no doubt this needs to be done, but it would be a shame for it to fail as a result of technical argument or omission on my part. If you have any comment PLEASE address it to me (S10 editor) as soon as possible so any problems can be resolved before this proposal is inserted in the Agenda.

Comments from S10 Sub Committee

Supported.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED

DENIED

PROPOSAL 5

Proposal from

Richard Meredith-Hardy, S10 Editor

Proposal title

Amendment to S10 5.7.2 clarification of gates.

Existing text

5.7.1 Start and Finish consist of gates of maximum 1 km in length and maximum 1000 m in height. The gates are marked with lines on the ground. For Championships any dimensions shall be detailed in the Local Regulations or given at briefing.

New text

AMEND: 5.7.1 Start and Finish lines are gates of maximum 1 km in width and of unlimited height. For Championships any dimension or orientation shall be detailed in the Local Regulations or given at briefing.

Reason

Start and finish *lines* are clearly defined in the General section A8 & A12 as “A gateway of a designated width and height”, and goes on to describe how they should be oriented, what “Crossing a Start Line” or a finish line is Etc.

Given that GNSS flight recorders are most likely to be used in record attempts, it is not necessary to have the arbitrary limit of 1000m on gate height, this proposal therefore allows them to be of unlimited height the same as ‘scoring zones’ as used in championships. (Start and Finish lines are an important feature of records).

This provision gives the default size of gates which is important for records but *The gates are marked with lines on the ground* is clearly complete nonsense and should be deleted.

Comments from S10 Sub Committee

Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

ACCEPTED

DENIED

PROPOSAL 6

Proposal from

Richard Meredith-Hardy, S10 Editor

Proposal title

Amendment to the rules for Championship records.

Existing text

Proposal 6a

3.11.1 If performance in a task in championship can be directly compared to the performance in a task at a different championship, then World and Continental championship records in class may be established for that performance.

Proposal 6b

No existing text

New text

Proposal 6a

AMEND: 3.11.1 If performance in a task in championship can be directly compared to the performance in a task at a different championship, then World championship records in class may be established for that performance.

Proposal 6b

No new text, however, if proposal 6a is accepted the Plenary should confirm the Championship Records established at EMC2006 were indeed World 'Championship Records' and not Continental 'Championship Records'.

Reason

The concept of 'Championship Records' was introduced into S10 on 1 Jan 2006 so the 2006 season is the first time they have been tried. In practice, there was considerable debate at EMC 2006 in Chozas, Spain as to how a Continental 'Championship Record' is precisely defined, this being missing from S10. For example:

1. Can a World 'Championship Record' be established at a Continental Championship as well as at a World Championship? If so, why, where is the logic?
2. Can a Continental 'Championship Record' be established at a World Championship held outside that Continent? In other words, are Continental Records geographically dependent or dependent only on the country that issued the claimant's Sporting Licence?

Continental records of any kind are not a normal practice in other FAI commissions so there is no precedent to turn to and since they were tried for the first time this season it has become clear the whole subject is a bit of a minefield. Proposal 6a is therefore to simply delete the notion of Continental 'Championship Records' from S10. In future then, there are World 'Championship Records', and they may be claimed at any FAI Category 1 Microlight championship, whether Continental or World, or at a World Air Games. (S10 3.11.2)

Should proposal 6a be accepted by the plenary, then proposal 6b is something of a formality as there were no existing World 'Championship Records' to beat and the records claimed in Spain were consequently considered to be World 'Championship Records' at the time, but it tidies things up and makes it clear the records which were established were indeed World 'Championship Records' and that effectively Continental 'Championship Records' never existed.

Comments from S10 Sub Committee

6a Supported.

6b Supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 6a	ACCEPTED	DENIED
Proposal 6b	ACCEPTED	DENIED

PROPOSAL 7

Proposal from

Richard Meredith-Hardy, GBR Delegate

Proposal title

Improve the description of ground markers in the local regulations

Existing text

S10 An 3, 1.12.4 GATES, TURNPOINTS AND MARKERS

Gates are normally a straight line 250m wide 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 it's timing will be by Marshals report or GNSS flight recorder evidence, as briefed.

Control points may be: A geographical point, a ground marker, a landing marker or a kicking stick.

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:

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

The precise requirements will be described in the Task Description.

New text

S10 An 3, 1.12.4 GATES, TURNPOINTS AND MARKERS

Gates are normally a straight line 250m wide 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 it's timing will be by Marshals report or GNSS flight recorder evidence, as briefed.

Control points may be: A geographical point, a ground marker, a landing marker or a kicking stick.

Ground marker size, colour and shape must be pre-declared by the organiser. Each must be at least 1.5m in its smallest dimension and of a colour and shape not easily confused with existing features on the ground or any other marker in the catalogue.

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:

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

The precise requirements will be described in the Task Description.

Reason

In response to two areas of confusion at EMC2006 – Nordlingen.

1. – competitors incorrectly identified a letter I made up of farming equipment (pipes).

2. On a sequential task a letter “L” (again rogue symbol) was identified wrongly by a large number of competitors – it was adjudged to be a V and therefore was not in the original list of symbols given out by the competition director.

By having pre declared size / colour and orientation this would have been avoided.

Comments from S10 Sub Committee

Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 7

ACCEPTED

DENIED

PROPOSAL 8

Proposal from

Richard Meredith-Hardy, GBR Delegate & Jose Luis Esteban ESP delegate.

Proposal title

Tighten the rules for prohibited electronic equipment.

Existing text

Proposal 8a

S10 4.22.3 ELECTRONIC EQUIPMENT

Radios, GPS and similar electronic navigation aids are prohibited and may not be carried. CIMA approved GNSS flight recorders and ELTs without voice transmission capability are permitted. Sealed mobile phones may be carried for use after landing or in an emergency. Misuse of this rule may result in disqualification.

S10 Annex 3 1.10.11 ELECTRONIC APPARATUS:

Radios, VOR, GPS and similar electronic navigation aids are prohibited. The normal penalty is disqualification from the competition. CIMA approved GNSS flight recorders and ELT's without voice transmission capability are permitted. Mobile phones may be carried in a pre-declared sealed container for use solely in the event of an emergency. The director must be immediately informed if the seal is broken. (S10 Chapter 4, 4.22.3)

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

Proposal 8b

None, new text added to the two provisions S10 4.22.3 & S10 Annex 3 1.10.11

New text

Proposal 8a

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.

S10 Annex 3 1.10.11 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, the director must be immediately informed if the seal is broken. All other electronic devices with real or potential communication or navigation capabilities must be declared and approved for carriage by the Championship Director.

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

Proposal 8b

S10 4.22.3 ELECTRONIC EQUIPMENT

Existing text, plus:

The director will establish a document-based method for sealing and unsealing that will enforce seal checking after each task.

S10 Annex 3 1.10.11 ELECTRONIC EQUIPMENT

Existing text, plus:

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.

Reason

There are so many variations of electronic navigational or communication devices now available it is impossible to be prescriptive in any set of rules. Proposal 8a tightens the rules to now say ALL electronic equipment with real or potential navigational or communication capability must be approved by the competition director before it may be carried during a championship.

Proposal 8b deals with the practicalities of managing electronic equipment. It is very common in championships that electronic devices are sealed, but seals are never checked after the task. As a team leader I have found myself going to the main office asking for permission to break the seals, and permission was granted without making any kind of check.

This makes paragraph 4.22.3 totally useless. Therefore, the competition director must enforce this rule by establishing a systematic and documented procedure for sealing and unsealing electronic devices.

The method used during last EMC in Chozas is proposed for Annex 3 (master Local regulations).

Comments from S10 Sub Committee

8a Supported.

8b Supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 8a	ACCEPTED	DENIED
Proposal 8b	ACCEPTED	DENIED

PROPOSAL 9

Proposal from

Richard Meredith-Hardy, GBR Delegate

Proposal title

Clarification of what happens when an error occurs in FR analysis or scoring.

Existing text

S10 4.29.8 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 emanating from 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

S10 4.22.3
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.

Reason

This was a new provision inserted in 2006. It was however the subject of a protest in Nördlingen suggesting it could be interpreted as 'a failure due to a technical error emanating from the Competition Director, or a failure due to the scoring staff, or a failure due to the equipment being used for the GNSS flight analysis or scoring'. In Nördlingen, the Jury ruled that this interpretation was incorrect, but this proposal is a subtle change to the text to try to prevent such a protest in future.

Comments from S10 Sub Committee

Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 9

ACCEPTED

DENIED

PROPOSAL 10

Proposal from

Richard Meredith-Hardy, GBR Delegate

Proposal title

Clarification of score sheets.

Existing text

S10 4.29.1 The scoring system to be used shall be approved by the FAI Microlight Commission and attached to the Local Regulations. Score sheets shall state the Date when the task took place, and the Date and Time when the score sheet was issued, the Task description. Task number, classes involved in the Task, Competitor names, Country of the Competitors, the Competitors number and score. Score sheets shall be marked Provisional, and Official, or if a protest is involved, Final. The time of issue is the moment when a score sheet is posted on the official score board and carries the time when this is done, together with the signature of the Championship Director. The Provisional Score sheet must be posted within 6 hours after finishing the task. The Official score sheet must be posted before briefing the next day, except for the last task when the time limit is 2 hours after the posting of the Provisional score sheet.

New text

S10 4.29.1 The scoring system to be used shall be approved by the FAI Microlight Commission and attached to the Local Regulations.

Score sheets shall state the date when the task took place, and the date and time when the score sheet was issued, the task description, task number, classes involved in the task, competitor names, country of the competitor, the competitor number and score.

Score sheets shall be marked Provisional, and 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.](#)

The time of issue is the moment when a score sheet is posted on the official score board and carries the time when this is done, together with the signature of the Championship Director.

The Provisional Score sheet must be posted within 6 hours after finishing the task. The Official score sheet must be posted before briefing the next day, except for the last task when the time limit is 2 hours after the posting of the Provisional score sheet.

Reason

After experience at the 2006 championships, yet another attempt to clarify the way in which score sheets are issued. This proposal adds the points that a task score sheet can only become official after all complaints have been dealt with, and the official scores must be exactly the same as the last published provisional score sheet.

Comments from S10 Sub Committee

Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 10	ACCEPTED	DENIED
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PROPOSAL 11

Proposal from

Joel Amiable, FRA Delegate

Proposal title

To change precision landings to include bounces in the scoring.

Existing text

As this proposal is just deletions from the existing text, see the struck through items in *New text* below.

New text

S10 Annex 4 2.C1 Summary

This task simulates a landing on an aircraft carrier deck, the deck being a deck 100 metres long and 25 metres wide. The first 25-metre section of the deck is divided into five 5 metre strips which are scored from 250 to 50 points as shown. The remainder of the deck scores 25 points. In order to score the main wheels must touch down ~~and stay down~~ in a particular strip and the aircraft must come to a complete halt within the 100-metre deck, as close to the start of the deck as possible.

S10 Annex 4 2.C1 Scoring

The score will be the value of the strip in which both main wheels touch down ~~and remain in contact~~ with the ground (PS) plus the distance between the finish of the deck and the closest wheel, scored 1 point per whole metre (PD). ~~If the aircraft bounces the score will be the lowest value of the strips entered.~~ Touching down on a dividing line scores the higher of the two strips. The pilot will be scored zero if: [...]

S10 Annex 4 2.C2 Summary

This task simulates a landing on an aircraft carrier deck, the deck being a deck 100 metres long and 25 metres wide. The first 25-metre section of the deck is divided into five 5 metre strips which are scored from 250 to 50 points as shown. The remainder of the deck scores 25 points. In order to score the main wheels must touch down ~~and stay down~~ in a particular strip and the aircraft must come to a complete halt within the 100-metre deck, as close to the start of the deck as possible. Additional points may be scored if the scoring touchdown takes place at or near an exact full minute as indicated by the competition clock, eg 11:31:00 hrs is a full minute, 11:31 17 hrs is not.

S10 Annex 4 2.C2 Scoring

The score will be the value of the strip in which both main wheels touch down ~~and remain in contact with the ground~~ (PS) plus the distance between the finish of the deck and the closest wheel, scored 1 point per whole metre (PD). ~~If the aircraft bounces the score will be the lowest value of the strips entered.~~ Touching down on a dividing line scores the higher of the two strips. If the aircraft touches down on a full minute, the time being taken from the official clock, ± 5 seconds a further 100 points is scored (PT). This score will be reduced by 5 points for every second outside ± 5 seconds from a full minute. The pilot will be scored zero if: [...]

S10 Annex 4 2.C3 Summary

This task simulates a landing on an aircraft carrier deck, the deck being a deck 100 metres long and 25 metres wide. The first 25-metre section of the deck is divided into five 5 metre strips which are scored from 250 to 50 points as shown. The remainder of the deck scores 25 points. In order to score the main wheels must touch down ~~and stay down~~ in a particular strip and the aircraft must come to a complete halt within the 100-metre deck, as close to the start of the deck as possible.

S10 Annex 4 2.C3 Scoring

The score will be the value of the strip in which both main wheels touch down ~~and remain in contact with the ground~~ (PS) plus the distance between the finish of the deck and the closest wheel, scored 1 point per whole metre (PD). ~~If the aircraft bounces the score will be the lowest value of the strips entered.~~ Touching down on a dividing line scores the higher of the two strips. The pilot will be scored zero if: [...]

S10 Annex 4 2.C4 Summary

This task simulates a landing on an aircraft carrier deck, the deck being a deck 100 metres long and 25 metres wide. The first 25-metre section of the deck is divided into five 5 metre strips which are scored from 250 to 50 points as shown. The remainder of the deck scores 25 points. In order to score the main wheels must touch down ~~and stay down~~ in a particular strip and the aircraft must come to a complete halt within the 100-metre deck, as close to the start of the deck as possible. . Additional points may be scored if the scoring touchdown takes place at or near an exact full minute as indicated by the competition clock, eg 11:31:00 hrs is a full minute, 11:31 17 hrs is not.

S10 Annex 4 2.C4 Scoring

The score will be the value of the strip in which both main wheels touch down ~~and remain in contact~~ with the ground (PS) plus the distance between the finish of the deck and the closest wheel, scored 1 point per whole metre (PD). ~~If the aircraft bounces the score will be the lowest value of the strips entered.~~ Touching down on a dividing line scores the higher of the two strips. If the aircraft touches down on a full minute, the time being taken from the official clock, ± 5 seconds a further 100 points is scored (PT). This score will be reduced by 5 points for every second outside ± 5 seconds from a full minute. The pilot will be scored zero if: [...]

Reason

Precision landing: To remove the rebound and to integrate the stopping distance in the formula. Thus one will count the first touch the ground and the stopping distance. We will not thus have any more problems if the wheel bounced or not.

Comments from S10 Sub Committee

No decision.

Comments from CIMA delegates

None

CIMA decision

Proposal 11

ACCEPTED

DENIED

PROPOSAL 12

Proposal from

Joel Amiable, FRA Delegate

Proposal title

New precision landing task for PL1 & PL2.

Existing text

None.

New text

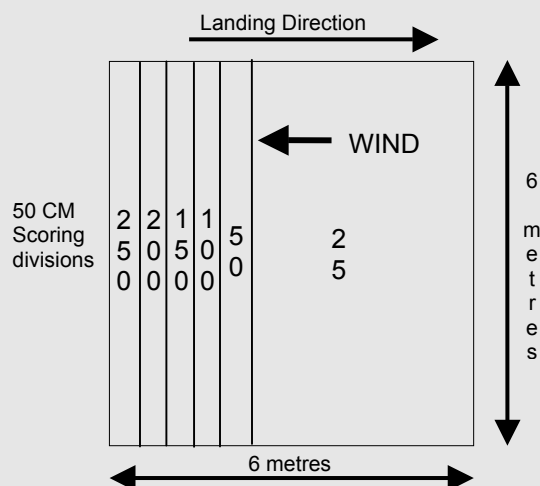
S10 Annex 4 3.C11 SPOT LANDING (PL1 & PL2 Only)

Objectives

The objective is for the aircraft to touch down within a marked deck, as close to the start of the deck as possible, coming to a halt in as short a distance as possible.

Summary

This task simulates a landing on an aircraft carrier deck, the deck being a deck 6 metres long and 6 metres wide. The deck is divided into a 0.5 m grid which are scored from 250 to 50 points as shown. The remainder of the deck scores 25 points. In order to score the main wheels must touch down in a particular strip and the aircraft must come to a complete halt within the 6 metre deck.



Takeoff

The takeoff order will be specified at the task briefing. The pilot must position his aircraft to the satisfaction of the marshal and must not take off until instructed to do so by the marshal. The form of signal to be used by the marshal for this purpose will be specified at the briefing.

Climbing Circuit

The procedure for the climbing circuit will be specified at the task briefing.

Engine to Stop or Idle

The aircraft must approach the deck in the landing direction at a height of 500 ft. Before passing over the start of the deck the engine must be switched off or the throttle must be closed and the engine set to idle, as specified in the briefing. The aircraft must then fly over the full length of the deck before starting the descending circuit.

Descending Circuit

The procedure for the descending circuit will be specified at the briefing.

Landing

Once the aircraft has started its final approach no deviation of over 90deg from the deck centre line either in the air or on the ground is permitted and the engine must remain at idle or may be switched off. The aircraft must come to a complete standstill and must not move until instructed to do so by a marshal.

Scoring

The score will be the value of the strip in which both main wheels touch down with the ground (PS) plus the distance between the finish of the deck and the closest wheel, scored 1 point per 10cm (PD). Touching down on a dividing line scores the higher of the two strips.

The pilot will be scored zero if:

- The aircraft commences takeoff before instructed to do so by the marshal
- The engine is not stopped or the throttle is not closed before passing over the deck
- The aircraft does not pass over the entire length of the deck before turning to descend.
- The engine does not remain at idle once final approach has started if engine idle permitted

- The aircraft turns by more than 90 degrees from the deck centreline between starting the landing approach and coming to a standstill
 - Any part of the aircraft touches the ground before the deck.
 - The aircraft does not stop within the limits of the deck.
 - The aircraft moves from the deck before instructed to do so by a marshal
 - The aircraft is unable to taxi or take off unaided following the touchdown although failure to start the engine will not incur a penalty.
- Thus the score calculation will be $(PS + PD) \times 250/310$ with a maximum score of 250

Reason

PL1: Precision landing, it is necessary to do a box of 6m * 6m with lines every 50 cm (as for the classic)

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 12 ACCEPTED DENIED

PROPOSAL 13

Proposal from

Joel Amiable, FRA Delegate

Proposal title

To delete tasks 3.C3 and 3.C10 from the task catalogue.

Existing text

3.C3. SLOW / FAST SPEED

Objective

To fly a course as fast as possible and then return along the course as slow as possible.

Description

A straight course between 250m and 500m long and 25m wide is laid out with gates at each end. The pilot makes a timed pass along the course as fast as possible, returns to the start, and makes a second timed pass in the same direction as slow as possible.

Special rules

- For each leg, the clock starts the moment the pilot passes the first gate and stops the moment he passes the second.
- If the pilot or any part of his PARAMOTOR touches the ground during the first leg: VP1 = zero and EP = zero
- If the pilot or any part of his PARAMOTOR touches the ground during the second leg: VP2 = zero and EP = zero
- If the pilot zigzags or if the body of the pilot overflies a side of the course or exceeds 2m above ground: Score zero.
- The maximum time allowed for a pilot to complete each leg of the course is 5 minutes.

Scoring

$$\text{Pilot score} = \left(125 \times \frac{V_{p1}}{V_{\max}}\right) + \left(125 \times \frac{V_{\min}}{V_{p2}}\right) + \left(250 \times \frac{E_p}{E_{\max}}\right)$$

Where:

Vmax = The highest speed achieved in the task, in Km/H

Vp1 = The speed of the pilot in Km/H in the first leg of the task
Vmin = The lowest speed achieved in the task, in Km/H
Vp2 = The speed of the pilot in Km/H in the second leg of the task
Ep = The difference between the pilot's slowest and fastest speeds, in Km/H
Emax = The maximum difference between slowest and fastest speeds, in Km/H

3.C10 SLOW / FAST SPEED (variant)

Objective

To fly a course as slow as possible and then return along the course as fast as possible.

Description

A straight course consisting of four equally spaced 'kicking sticks' between 250m and 500m long is laid out facing approximately into wind.

The pilot makes a timed pass along the first course as slow as possible, returns to the start, and makes a second timed pass in the same direction along the course as fast as possible and then returns to the deck.

Special rules

- A valid strike on any stick is one where the pilot or any part of the aircraft has been clearly observed to touch it.
- For each leg, the clock starts the moment the pilot kicks the first stick and stops the moment he kicks the fourth stick.
- The pilot may have 3 attempts at kicking the first stick on each run.
- If the pilot misses the second or third stick then he is considered 'too high', penalty 50% leg score for each stick missed.
- The maximum time allowed for a pilot to complete each leg of the course is 5 minutes.

In the slow leg;

- If the pilot or any part of his PPG touches the ground or the fourth stick is missed: VP1 = zero and EP = zero
- If the pilot zigzags: Score zero.

In the fast leg;

- If the pilot or any part of his PPG touches the ground: VP2 = zero and EP = zero
- The pilot may have three attempts at kicking the fourth stick.

$$\text{Pilot score} = \left(125 \times \frac{Vp_1}{V_{\max}}\right) + \left(125 \times \frac{V_{\min}}{Vp_2}\right) + \left(250 \times \frac{Ep}{EMax}\right)$$

Where:

Vmax = The highest speed achieved in the task, in Km/H
Vp1 = The speed of the pilot in Km/H in the first leg of the task
Vmin = The lowest speed achieved in the task, in Km/H
Vp2 = The speed of the pilot in Km/H in the second leg of the task
Ep = The difference between the pilot's slowest and fastest speeds, in Km/H
Emax = The maximum difference between slowest and fastest speeds, in Km/H

New text

S10 Annex 4, 3.C3 none (delete)

S10 Annex 4, 3.C10 none (delete)

Reason

The test mini/maxi does not have any interest, I propose to remove it.

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 13 ACCEPTED DENIED

PROPOSAL 14

Proposal from

Joel Amiable, FRA Delegate

Proposal title

To make emergency parachutes mandatory.

Existing text

See the struck through items in *New text* below.

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.~~

S 10 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~~ **mandatory**.

S10 Annex 3 2.1.5 PROTECTIVE EQUIPMENT
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 system is ~~highly recommended~~ **mandatory**. (S10 Chapter 4, 4.20.1)

S10 Annex 3, 3.1.6 ~~EMERGENCY EQUIPMENT~~
~~An emergency parachute is not to be considered as a part of the structural entity of a PF and may be removed or added during a competition.~~ [Delete entire provision]

S10 Annex 3, 3.1.7 PROTECTIVE EQUIPMENT
A protective helmet must be worn whenever the pilot is strapped into the harness of a PF. An emergency parachute system is ~~highly recommended~~ **mandatory**.

Reason

It is necessary to make the parachute of help obligatory (Classic and PPG)

Comments from S10 Sub Committee

Unanimously not supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 14	ACCEPTED	DENIED
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PROPOSAL 15

Proposal from

Jose Luis Esteban, ESP Delegate

Proposal title

Amendment to S10 4.24.3, task proportions

Existing text

S10 4.24.3 Tasks should, as far as practicable, conform to the following guidelines:

For Microlight aircraft classes AL, WL and WF

A Tasks for flight planning, navigation, etc with no fuel limit: 50% of the total tasks flown.

B Tasks for fuel economy, speed, duration, etc with limited fuel: 25% of the total tasks flown.

C Tasks for precision landing: 25% of the total tasks flown.

For Microlight aircraft classes PF and PL

A Navigation: 33% of total competition tasks.

B Economy: 33% of total competition tasks.

C Precision: 33% of total competition tasks.

New text

S10 4.24.3 Tasks should, as far as practicable, conform to the following guidelines:

For Microlight aircraft classes AL, WL and WF

A Tasks for flight planning, navigation, etc with no fuel limit: 60% of the total value of the tasks flown.

B Tasks for fuel economy, speed, duration, etc with limited fuel: 30% of the total value of the tasks flown.

C Tasks for precision landing: 10% of the total value of the tasks flown.

For Microlight aircraft classes PF and PL

A Navigation: 40% of the total value of the tasks flown.

B Economy: 40% of the total value of the tasks flown.

C Precision: 20% of the total value of the tasks flown.

Reason

When counting number of tasks to calculate task proportions, we get into some inconsistencies. For example, a paramotor championship with nine tasks having three precision tasks is perfectly valid. However, if they are "precision landing" tasks (3.C5), the total precision value is 750, but if they are "classic slalom" tasks (3.C2), the total precision value is 3000.

Each task in the catalogue has a maximum value, and this reflects the relevance of each task in the overall scoring. If there is any reason for giving specific maximum values to different kinds of tasks, this should be reflected in how the competition director selects them. In the present situation, a competition director could get a valid championship in just four flights: two navigations ending in precision landing (computed as independent tasks) and two economy tasks.

The proposed proportions are calculated with the objective of being consistent with the average distribution of tasks in past championships:

Classic classes:

Average points in a championship with 8 tasks:

Navigation 4*1000, Economy 2*1000, Precision 2*250

Total: 4000 + 2000 + 500 = 6500

Point proportions:

Navigation: 4000 / 6500 ~ 60%

Economy: 2000 / 6500 ~ 30%

Precision: 500 / 6500 ~ 10%

New classes:

Average points in a championship with 9 tasks:

Navigation 3*1000, Economy 3*1000, Precision 3*500

Total: 3000 + 3000 + 1500 = 7500

Point proportions:

Navigation: 3000 / 7500 ~ 40%

Economy: 3000 / 7500 ~ 40%

Precision: 1500 / 7500 ~ 20%

Basically, nothing changes with this proposal, but it forces directors to run a balanced set of precision tasks.

Comments from S10 Sub Committee

Supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 15

ACCEPTED

DENIED

PROPOSAL 16

Proposal from

Jose Luis Esteban, ESP Delegate

Proposal title

Homogeneous maximum value for slalom tasks

Existing text

S10 Annex 4, 3.C2. PRECISION CIRCUIT IN THE SHORTEST TIME
Pilot Score = $1000 * Q / Q_{max}$

S10 Annex 4, 3.C7. PRECISION CIRCUIT IN THE SHORTEST TIME ('Clover leaf slalom')
Pilot Score = $500 * Q / Q_{max}$

S10 Annex 4, 3.C8. PRECISION CIRCUIT IN THE SHORTEST TIME ('Japanese slalom')
Pilot Score = $500 * Q / Q_{max}$

S10 Annex 4, 3.C9 PRECISION CIRCUIT IN THE SHORTEST TIME ('Chinese slalom')
Pilot Score = $500 * Q / Q_{max}$

New text

S10 Annex 4, 3.C2. PRECISION CIRCUIT IN THE SHORTEST TIME
Pilot Score = $1000 * Q / Q_{max}$ [NOT CHANGED]

S10 Annex 4, 3.C7. PRECISION CIRCUIT IN THE SHORTEST TIME ('Clover leaf slalom')
Pilot Score = $1000 * Q / Q_{max}$

S10 Annex 4, 3.C8. PRECISION CIRCUIT IN THE SHORTEST TIME ('Japanese slalom')
Pilot Score = $1000 * Q / Q_{max}$

S10 Annex 4, 3.C9 PRECISION CIRCUIT IN THE SHORTEST TIME ('Chinese slalom')
Pilot Score = $1000 * Q / Q_{max}$

Reason

Classic slalom (3.C2) is seldom used because it has a very large pattern that makes it difficult to set up, not to talk about setting up two or three simultaneous slalom areas.

Newer slaloms were designed with a much simpler layout, but having the same complexity for a pilot (approximately the same number of strokes or turns). Therefore all slaloms should have the same value as the classic one.

Comments from S10 Sub Committee

Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 16

ACCEPTED

DENIED

PROPOSAL 17

Proposal from

Jose Luis Esteban, ESP Delegate

Proposal title

Amendment to S10 4.24.3, task proportions (if proposals 15 & 16 are accepted)

Existing text

See proposal 15.

New text

Proposal 17a:

S10 Annex 4, 4.24.3

For Microlight aircraft classes PF and PL

A Navigation: 35% of the total value of the tasks flown.

B Economy: 35% of the total value of the tasks flown.

C Precision: 30% of the total value of the tasks flown.

Proposal 17b:

S10 Annex 4, 4.24.3

For Microlight aircraft classes PF and PL

A Navigation: 33% of the total value of the tasks flown.

B Economy: 33% of the total value of the tasks flown.

C Precision: 33% of the total value of the tasks flown.

Reason

Average points in championships with 9 tasks:

Navigation 3*1000, Economy 3*1000, Precision 1000+1000+250

Total: 3000 + 3000 + 2250 = 8250

Point proportions:

Navigation: 3000 / 8250 ~ 35%

Economy: 3000 / 8250 ~ 35%

Precision: 1500 / 8250 ~ 30%

Otherwise, there will be less precision tasks than before.

Option B slightly increases the proportion of precision tasks. This is something many competitors want, and we get back to the original 1/3, 1/3, 1/3 easy to remember proportions (although meaning different things).

Comments from S10 Sub Committee

Supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 17a	ACCEPTED	DENIED
Proposal 17b	ACCEPTED	DENIED

PROPOSAL 18

Proposal from

Jose Luis Esteban, ESP Delegate

Proposal title

Time of crossing points or gates using GNSS

Existing text

S10 Annex 6, 6.3.3 A Start line, IP or gate time is taken from the fix immediately before the line is crossed. A Finish line or FP time is taken from the fix immediately after the line is crossed.

New text

S10 Annex 6, 6.3.3 Gate or point time is taken from the fix immediately before it is crossed.

Editor note: If this proposal is accepted then S10 Annex 3, 1.13.8 should be amended accordingly.

Reason

1. The proposed procedure is statistically unbiased. The old procedure increases flight time an average of 2.5 s (in a 5 s period logger).
2. Analysis programs can easily mark any well defined condition like a fix before or after a gate, but scorers need to pay special attention if end gates or points are treated in a different way.
3. A pilot may try to block the satellite view of his GNSS device so that the last valid fix is much before the gate. However, in this case the pilot will most probably miss the gate due to noisy fixes before and after the gate.

Comments from S10 Sub Committee

Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 18	ACCEPTED	DENIED
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PROPOSAL 19

Proposal from

Jose Luis Esteban, ESP Delegate

Proposal title

Definitions and criteria for flight analysis.

Existing text

None.

New text

S10 Annex 6, New section 8

8 Definitions and criteria for flight analysis.

Designers of track analysis programs and their users should follow these guidelines.

8.1 Flight log elements

Flight logs, also known as tracks are basically composed of a sequence of fixes. Each fix is composed of a pair of coordinates (latitude and longitude), altitude and a time mark.

The interval between two consecutive fixes is the logging period.

The track can be viewed as a sequence of points (track points), but for the purpose of its analysis it is also convenient to think of it as a sequence of segments (track segments) defined by pairs of consecutive points.

Speed can be calculated for each segment:

$$S = \text{segment length} / \text{logging period}$$

Acceleration can be calculated for every point (except the first and last ones)

$$A = \text{speed difference between adjacent_segments} / \text{logging_period}$$

(Note this is longitudinal acceleration, it doesn't include normal acceleration)

8.2 Invalid fixes

Checking acceleration at every fix is an easy way to detect noise due to signal reception problems. Longitudinal accelerations higher than 2 m/s are very strange in microlights or paramotors.

High acceleration points and adjacent segments should be discarded during flight log analysis.

8.3 Crossing gates

Gates are defined by two end points forming a segment.

When a track segment cuts the segment formed by the two gate ends, the gate is said to be crossed. This can be done in two different directions. When a task specifies a certain direction for crossing a gate, the inverse crossing is considered incorrect.

8.4 Timing in gates

Crossing time will be taken from the oldest point defining the track segment that crosses the gate. This is the track point just before crossing the gate.

When crossing time is to be checked against an estimation given by the pilot or calculated by the scoring team, a margin equivalent to the logging period (P) must be applied. If a pilot crosses the gate up to P seconds too early or too late, he gets a zero (0) time error in the gate. If a pilot crosses the gate one more second too early or too late, he gets 1 second error in the gate.

8.5 Crossing turn-points

Turn points are defined by a central point, referenced to a ground feature, and a certain radius forming a circle, this is known as the scoring zone.

When a track segment cuts, enters or exits the scoring zone or it entirely lies inside of it, the turn point is said to be crossed. Normally, more than one track segment crosses the scoring zone.

The scoring zone radius is a margin to absorb a number of error sources: GPS error when taking the fix by the organization, GPS error when pilot flies over the point, size of the ground feature, cartographic precision,...

If a pilot is flying to and from a certain turn-point, and he decides to turn back at some distance before the actual ground feature, he is taking chances. The only way for a pilot to be sure of flying through a turn-point scoring zone is to fly exactly above the reference ground feature.

8.6 Timing in turn-points

One of the segments that crosses the scoring zone is nearest to the centre. Crossing time will be taken from the oldest point defining this track segment. This is the track point just before reaching the nearest distance to the ideal centre of the turn-point.

When crossing time is to be checked against an estimation given by the pilot or calculated by the scoring team, a margin equivalent to the logging period (P) must be applied. If a pilot crosses the turn-point up to P seconds too early or too late, he gets a zero (0) time error in the turn-point. If a pilot crosses the turn-point one more second too early or too late, he gets 1 second error in the turn-point.

8.7 Take off and landing time or position

The best method for measuring start or finish times is by using a start or finish turn-points or gates. However, in the case that take-off or landing times or positions are needed, the following procedures can be used:

8.7.1 Classic classes

- Take-off time: A take-off gate is placed at the end of the take-off deck.
- Landing time: A landing gate is placed at the beginning of the landing deck.

Take-off and landing gates will be defined by a central point obtained from a GNSS fix and sufficient margin on both sides to avoid problems with noise. A total width of 100 m has been proven to be enough.

Basically, the idea is to make measurements while the microlight has a speed compatible with flight. Otherwise, random measurements are obtained with lower speeds.

8.7.2 Classes PF & PL

- Take-off: Time or position of the oldest fix in the first segment with a speed compatible with flight, which is maintained in the next segments.
- Landing: Time or position of the oldest fix in the last segment with a speed compatible with flight, which was maintained in the previous segments.

Reason

When coming to the fine detail in task analysis, strict, or at least reasonable criteria must be applied.

- Unbiased measurements.
- Measuring time must not be done with higher resolution than the logging period.
- Measurements in noisy situations must be avoided.

Designers of track analysis programs and their users should be encouraged to follow these guidelines.

Comments from S10 Sub Committee

Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 19

ACCEPTED

DENIED

PROPOSAL 20

Proposal from

Jose Luis Esteban, ESP Delegate, Carlos Trigo, PRT Delegate, Richard Meredith-Hardy, S10 Editor

Proposal title

Number of stewards

Existing text

S10, 4.9.1 The organisers shall appoint not less than 3 stewards of 3 different nationalities excluding that of the organiser, except that in the event of a last minute failure to attend a replacement steward of any nationality and acceptable to the other stewards may be invited. Stewards must be able to speak a common language, preferably English and have extensive experience of international microlight or other FAI competitions. One steward should if possible be able to speak the language of the organisers.

S10 Annex 5, 3.1 APPOINTMENT AND QUALIFICATIONS

Requirements for stewards at events sanctioned by CIMA are defined in paragraph 4.9 of Section 10 as follows:

The organisers shall appoint not less than 3 stewards of different nationalities excluding that of the organiser, except that, in the event of last-minute failure to attend, a replacement of any nationality, and acceptable to the other stewards, may be invited. Stewards must be able to speak a common language, preferably English, and have extensive experience of international microlight or other FAI competitions. One steward should, if possible, be able to speak the language of the organisers.

At least one steward shall be present at the championships site or contest area throughout all operational activities." (G.S. 4.3.4.2)

New text

Proposal 20a Jose Luis Esteban, ESP Delegate

S10, 4.9.1 The organisers shall appoint not less than 2 stewards. If classic and new classes are competing in the same venue at the same time, there will be a minimum of 3 stewards.

All stewards will be of different nationalities excluding that of the organiser, except that in the event of a last minute failure to attend a replacement steward of any nationality and acceptable to the other stewards may be invited.

Stewards must be able to speak a common language, preferably English, and have extensive experience of international microlight or other FAI competitions.

One steward should if possible be able to speak the language of the organisers.

S10 Annex 5: 3.1 APPOINTMENT AND QUALIFICATIONS

Requirements for stewards at events sanctioned by CIMA are defined in paragraph 4.9 of Section 10.

At least one steward shall be present at the championships site or contest area throughout all operational activities. (G.S. 4.3.4.2)

Proposal 20b Carlos Trigo, PRT Delegate

S10, 4.9.1 The organisers shall appoint not less than 2 stewards. If classic and new classes are competing in the same venue at the same time, there will be a minimum of 3 stewards.

All stewards will be of different nationalities excluding that of the organiser, except that in the event of a last minute failure to attend a replacement steward of any nationality and acceptable to the other stewards may be invited.

Stewards must be able to speak a common language, preferably English, and have extensive experience of international microlight or other FAI competitions.

One steward should if possible be able to speak the language of the organisers.

One steward **must** be a pilot of the type of aircraft being flown in the championships preferably with experience as a competitor in that type at an international level.

S10 Annex 5: 3.1 APPOINTMENT AND QUALIFICATIONS

Requirements for stewards at events sanctioned by CIMA are defined in paragraph 4.9 of Section 10.

At least one steward shall be present at the championships site or contest area throughout all operational activities. (G.S. 4.3.4.2)

Proposal 20c Richard Meredith-Hardy, S10 Editor

S10, 4.9.1 The organisers shall appoint not less than 2 stewards. If classic and new classes are competing in the same venue at the same time, there will be a minimum of 3 stewards.

All stewards will be of different nationalities excluding that of the organiser, except that in the event of a last minute failure to attend a replacement steward of any nationality and acceptable to the other stewards may be invited.

Stewards must be able to speak a common language, preferably English, and have extensive experience of international microlight or other FAI competitions.

One steward should if possible be able to speak the language of the organisers.

One steward **should if possible** be a pilot of the type of aircraft being flown in the championships preferably with experience as a competitor in that type at an international level.

S10 Annex 5: 3.1 APPOINTMENT AND QUALIFICATIONS

Requirements for stewards at events sanctioned by CIMA are defined in paragraph 4.9 of Section 10.

At least one steward shall be present at the championships site or contest area throughout all operational activities. (G.S. 4.3.4.2)

Reason

During some recent championships not all classes competed at the same venue or at the same time, and CIMA accepted that only two stewards should be appointed. So this should be written in S10.

Proposal 20b adds to the text of 20a because: With the separation of championships for Classic classes and New classes, 2 stewards are enough in each competition, but also it's becoming evident that at least one of the stewards must be specialised in the respective type of classes, therefore we should force that he must be a pilot of the competing type of aircraft and seek to nominate someone who has specific experience in previous competitions of that group of classes.

Proposal 20c. The S10 sub committee agreed that 'must' is a difficult requirement in this context as it is often difficult to find stewards at all, so "should if possible" is the better phrase compared to the "must" of 20b.

Comments from S10 Sub Committee

See also [Proposal 32](#) ref. an amendment to the text on this same subject in S10 Annex 5.

20a Supported unanimously.

20b Not supported.

20c Supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 20a	ACCEPTED	DENIED
Proposal 20b	ACCEPTED	DENIED
Proposal 20c	ACCEPTED	DENIED

PROPOSAL 21

Proposal from

Jose Luis Esteban, ESP Delegate

Proposal title

DNF and DSQ in score sheets

Existing text

S10, 4.29.5 A pilot who did not fly scores zero and is indicated DNF on the score sheet. A pilot who is disqualified will be indicated DSQ on the score sheet.

S10 Annex 2, 4.2 SCORE SHEETS

Task score sheets to have column for penalties, and to use DNF for a pilot who Did Not Fly (not zero), and DSQ for Disqualified.

S10 Annex 3, 1.14.1 GENERAL

A pilot who did not fly scores zero and will be marked DNF on the score sheet. A pilot who is disqualified will be marked DSQ (S10 Chapter 4, 4.29.5)

New text

S10 4.29.5 A pilot who did not fly scores zero and is indicated DNF or "Did Not Fly" on the score sheet. A pilot who is disqualified will be indicated DSQ or "Disqualified" on the score sheet.

S10 Annex 2, 4.2 SCORE SHEETS

Task score sheets to have column for penalties, and to display DNF or "Did Not Fly" for a pilot who Did Not Fly, and DSQ or "Disqualified" for Disqualified.

S10, Annex 3: 1.14.1 GENERAL

A pilot who did not fly scores zero and will be marked DNF or "Did Not Fly" on the score sheet. A pilot who is disqualified scores zero and will be marked DSQ or "Disqualified" (S10 Chapter 4, 4.29.5)

Reason

It is important to label a "Did Not Fly" or a "Disqualified" condition in a score sheet, and when score sheets were written by hand it was easy to write DNF instead of zero. However, when using spreadsheets this adds unnecessary complexity to the formulas.

It is easier to display a zero along with the specific text somewhere else like the "observations" column. Also, the value that has to be transferred to the calculation of overall scores is zero.

Comments from S10 Sub Committee

Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 21	ACCEPTED	DENIED
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PROPOSAL 22

Proposal from

Jose Luis Esteban, ESP Delegate

Proposal title

Deadline for issuing official scores.

Existing text

4.29.1 [...] The Official score sheet must be posted before briefing the next day, except for the last task when the time limit is 2 hours after the posting of the Provisional score sheet.

New text

S10 4.29.1 [...] The Official score sheet must be posted as soon as possible. In the case of the last task, the time limit is 2 hours after the posting of the Provisional score sheet.

Reason

The rule is completely unrealistic and no director has ever complied with it.

Comments from S10 Sub Committee

Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 22

ACCEPTED

DENIED

PROPOSAL 23

Proposal from

Jose Luis Esteban, ESP Delegate

Proposal title

Publishing overall and team scores

Existing text

None

New text

S10 New paragraph at the end of 4.29.1

Overall scores will be posted as soon as the provisional scores for the second task are available.

Team scores will be posted as soon as the provisional scores for the first task are available.

Overall scores and team scores will be updated at least:

- When the first provisional scores for a new task are posted.
- When a task scoring goes official or final.
- Once a day if there are changes in provisional scores.

Overall scores will reflect the status of each individual task (provisional, official, final).

Reason

Pilots and team leaders are always expecting overall and team scores. Both individual and team strategies depend on them, so it is very important for competitors to have them available and continuously updated.

At some moment, the scoring marshals will need to issue overall and team scores. If they do the job of preparing their scoring system *before* the championship starts, there is no reason against issuing overall and team scores along with individual tasks' scores.

Comments from S10 Sub Committee

Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 23

ACCEPTED

DENIED

PROPOSAL 24

Proposal from

Jose Luis Esteban, ESP Delegate

Proposal title

Editorial change. Move S10 4.5.6 and 4.5.7 to S10 4.29 (scoring).

Existing text

S10 4.5.6 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
- Classes PL1 and PL2
- Class PF

S 10 4.5.7 The task score for which a pilot was disqualified shall not count for team scoring. Other valid tasks flown by this pilot are not affected.

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
- Classes PL1 and PL2
- Class PF

S 10 4.29.4 The task score for which a pilot was disqualified shall not count for team scoring. Other valid tasks flown by this pilot are not affected.

Reason

Whenever I try to find the rule for team scoring I get lost. I always need to search the file!

It seems reasonable to have "team scoring" under "scoring" chapter, instead of having it under "general organisation" chapter.

Comments from S10 Sub Committee

Supported unanimously. There are a lot of proposals concerning S10 section 4.29. It would be logical to re-order the section after we have seen which proposals are accepted.

Comments from CIMA delegates

None

CIMA decision

Proposal 24

ACCEPTED

DENIED

PROPOSAL 25

Proposal from

Jose Luis Esteban, ESP Delegate & Richard Meredith-Hardy, S10 Editor.

Proposal title

Amendment to advice about maps.

Existing text

S10, Annex 2, 5.3 MAPS

All pilots must be supplied with air maps of approximately 1:250,000 scale to cover the whole task area. Jury Members and Stewards need copies of the same maps. A wall map of the same scale should be on permanent display.

The organisers should have larger scale maps for use in locating outlanding pilots.

New text

S10, Annex 2, 5.3 MAPS

All pilots must be supplied with air maps of between 1:100,000 and 1:250,000 scale ([classic classes](#)) or between 1:50,000 and 1:100,000 scale ([new classes](#)) to cover the whole task area. Jury Members and Stewards need copies of the same maps. A wall map of the same scale should be on permanent display.

The organisers should have larger scale maps for use in locating outlanding pilots.

[A glossary in English including frequent terms found on the official map is highly recommended.](#)

Reason

The map scale item simply brings this provision up to date with normal practice in championships.

Glossary: When writing tasks for last EMC I found myself translating a number of terms from the map into English, so I decided to compile them all in a glossary. The feedback from competitors was very good.

Comments from S10 Sub Committee

Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 25

ACCEPTED

DENIED

PROPOSAL 26

Proposal from

Jose Luis Esteban, ESP Delegate

Proposal title

Alternative scoring for slaloms.

Existing text

Scoring formulas in S10 Annex 4:

3.C2. PRECISION CIRCUIT IN THE SHORTEST TIME

3.C7. PRECISION CIRCUIT IN THE SHORTEST TIME ('Clover leaf slalom')

3.C8. PRECISION CIRCUIT IN THE SHORTEST TIME ('Japanese slalom')

3.C9 PRECISION CIRCUIT IN THE SHORTEST TIME ('Chinese slalom')

Scoring

$$Q = \frac{NQ^3}{Sp}$$

$$\text{Pilot score} = \left(1000 \times \frac{Q}{Q_{\max}} \right)$$

Where:

NQ = The number of targets struck by the pilot

Sp = The pilot's elapsed time in seconds between striking target 1 and target 10

New text

S10, Scoring formulas in S10 Annex 4:

3.C2. PRECISION CIRCUIT IN THE SHORTEST TIME

3.C7. PRECISION CIRCUIT IN THE SHORTEST TIME ('Clover leaf slalom')

3.C8. PRECISION CIRCUIT IN THE SHORTEST TIME ('Japanese slalom')

3.C9 PRECISION CIRCUIT IN THE SHORTEST TIME ('Chinese slalom')

Replace existing scoring in all 4 tasks with:

$$Q = \frac{NQ^3}{Sp}$$

Each pilot's rank R is calculated using Q (best pilot: R = 1)

$$\text{Pilot score} = 500 * Q / Q_{\max} + 500 * 0.8^{(R-1)}$$

Where

NQ = The number of targets struck by the pilot

Sp = The pilot's elapsed time between striking first and last targets

R = Pilot's rank using Q

Reason

During any high level competition, like EMC Chozas, time differences between the top pilots in slalom tasks are very small and inevitably the better the competitors become, the smaller the difference. It is very difficult for the winning pilot to achieve a one second difference these days and one second difference, which is a big difference, produced a score difference of only 9 points.

The winning pilot is known to be able to fly the task 3 seconds faster than he did, but there's a lot more risk and he would have been rewarded with just 34 more points. The consequence is that pilots prefer to fly conservatively to get a reasonable score because there is not the reward equivalent to the risk if they try harder.

The proposed solution is to establish a bonus based on a pilot's position (or rank) in the normal scoring for the task. This bonus calculation is based on a concept already presented to CIMA in the COMPS ranking system, the idea is that the winning pilot according to the regular scoring system gets a fixed bonus and every position below gets x% less bonus than the one in the position above.

A 500 point bonus with a 20% reduction for every place below is proposed, the bonuses for the first 10 places would thus be: 500, 400, 320, 256, 205, 164, 131, 105, 84, 67....

This bonus can be calculated with the formula $500 * 0.8^{(R-1)}$ rounded to an integer value.

This formula and the rank based on Q can easily be calculated using any spreadsheet program in the normal way.

Note this proposed formula is also written as: $\text{Pilot score} = \left(500 \times \frac{Q}{Q_{\max}} \right) + \left(500 \times 0.8^{(R-1)} \right)$

This proposal does not affect Championship records for these tasks as they are based on pure time taken to complete the task (corrected to ISA standard atmosphere).

Comments from S10 Sub Committee

Supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 26

ACCEPTED

DENIED

PROPOSAL 27

Proposal from

Joel Amiable, FRA Delegate.

Proposal title

Mandatory inspections.

Existing text

None

New text

S10, 4.25.4

Immediately before each navigation or economy task at least two aircraft chosen at random shall be subjected to a detailed inspection for the presence of prohibited equipment and, in the case of economy tasks, that they are carrying the correct quantity of fuel. This action shall not disadvantage the selected competitors in any way, any declared times Etc. may be amended by the competitors as a result of any delay caused by the inspection.

S10, Annex 3, 1.11.11 MANDATORY INSPECTIONS

Immediately before each navigation or economy task at least two aircraft chosen at random shall be subjected to a detailed inspection for the presence of prohibited equipment and, in the case of economy tasks, that they are carrying the correct quantity of fuel. This action shall not disadvantage the selected competitors in any way, any declared times Etc. may be amended by the competitors as a result of any delay caused by the inspection.

Reason

We never do that, but now we have to do it systematically to accustom the pilots and to avoid suspicions.

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 27

ACCEPTED

DENIED

PROPOSAL 28

Proposal from

Carlos Trigo, PRT Delegate.

Proposal title

Increase the number of windsocks near PF & PL decks.

Existing text

S10, Annex 3, 3.1.4 THE LANDING DECK

...

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

...

New text

S10, Annex 3, 3.1.4 THE LANDING DECK

...

- A landing deck will have four windsocks or wind streamers, one at each corner.

...

Reason

Due to local conditions, it has happened several times, like in the EMC2006, the winds being different across the big landing decks which are being established for the paramotor classes nowadays, therefore the adoption of this rule, with a little cost, will considerably improve safety, both on take-off and landings.

Comments from S10 Sub Committee

Supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 28	ACCEPTED	DENIED
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PROPOSAL 29

Proposal from

Carlos Trigo, PRT Delegate.

Proposal title

Increase the height of kicking sticks.

Existing text

S10, Annex 3, 3.2.4 FLIGHT ACCURACY MEASUREMENT; Kick sticks

...

- The stick should be approx. 2m in height, visible from a range of at least 250 meters, and of a construction such that it is unlikely to enter a PF's propeller once struck. (Standard ski slalom posts are recommended).

...

New text

S10, Annex 3, 3.2.4 FLIGHT ACCURACY MEASUREMENT; Kick sticks

...

- The stick should be approx. 3m in height, visible from a range of at least 250 meters, and of a construction such that it is unlikely to enter a PF's propeller once struck.

...

Reason

Making the sticks at least 1 meter higher will permit the pilots to fly a bit more away from the ground in this kind of tasks, which will surely improve flight safety.

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 29	ACCEPTED	DENIED
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PROPOSAL 30

Proposal from

Carlos Trigo, PRT Delegate.

Proposal title

Amendment to the Slow - Fast tasks.

Existing text

S10, Annex 4, 3.C3. SLOW / FAST SPEED

Objective

To fly a course as fast as possible and then return along the course as slow as possible.

Description

A straight course between 250m and 500m long and 25m wide is laid out with gates at each end. The pilot makes a timed pass along the course as fast as possible, returns to the start, and makes a second timed pass in the same direction as slow as possible.

...

S10 Annex 4, 3.C10 SLOW / FAST SPEED (variant)

Objective

To fly a course as slow as possible and then return along the course as fast as possible.

Description

A straight course consisting of four equally spaced 'kicking sticks' between 250m and 500m long is laid out facing approximately into wind.

The pilot makes a timed pass along the first course as slow as possible, returns to the start, and makes a second timed pass in the same direction along the course as fast as possible and then returns to the deck.

...

New text

S10, Annex 4, 3.C3. FAST / SLOW SPEED

Objective

To fly a course as fast as possible and then a course as slow as possible.

Description

A straight course of between 250m and 500m long and 25m wide is laid out approximately into wind with gates at each end.

The pilot makes a timed pass along the first course as fast as possible, returns to the start, and makes a second timed pass in the same direction as slow as possible.

There may be two courses but they must be of equal dimensions and orientation and separated by at least 200m flying distance.

...

S10 Annex 4, 3.C10 FAST / SLOW SPEED (variant)

Objective

To fly a course as fast as possible and then a course as slow as possible.

Description

A straight course consisting of four equally spaced 'kicking sticks' between 250m and 500m long is laid out facing approximately into wind.

The pilot makes a timed pass along the first course as fast as possible, returns to the start, and makes a second timed pass in the same direction along the course as slow as possible.

There may be two courses but they must be of equal dimensions and orientation and separated by at least 200m flying distance.

...

Reason

In the last championships, this task has been established, in order to speed up the procedures with many competitors, not complying with the present description, which states that the same course shall be used for the slow and fast speed. When setting the 2 courses in line and sequential, we shall prevent the courses from being dangerously near to one another, and also from making the slow speed first, which would lead, in the transition to the sequent fast speed, to a dangerous loss of altitude.

Comments from S10 Sub Committee

Supported

Comments from CIMA delegates

None

CIMA decision

Proposal 30

ACCEPTED

DENIED

PROPOSAL 31

Proposal from

Carlos Trigo, PRT Delegate.

Proposal title

Creation of a Safety Officer.

Existing text

See below, red text is deleted, blue is added.

New text

S10, Annex 2, 3.4 Key Officials:

A specialist key official is needed to take charge of the following departments:

- Completion of flying operations
- The airfield and ground services
- Office administration, including accounts
- Public relations and publicity
- Construction of championship equipment prior to the championships.
- **Safety officer.**

However the work is divided up, the key officials' responsibilities have to be covered. They include:

...

3.6 Airfield Manager:

The work and responsibilities will depend on whether or not there is an existing airfield management structure in operation. ~~In this case the championships airfield manager may not have to look after airfield security, public access and control, signposts and safety notices,~~ but none the less is responsible for liaison between the championship organizer and the airfield operator and with police and local authorities. He will, ~~however,~~ need to liaise on matters such as hangar and workshop space, camp sites and car parks.

3.10 Safety Officer

Responsible for the security of the facilities and for the safety of all ground and flight operations. Liaison with the Airfield Manager in matters such as airfield security, public access and control, signposts and safety notices and with the Competition Director and Chief Marshal in matters such as aircraft movement around the airfield, deck operations, and everything else concerning the safety of competitors, team members, officials or spectators.

...

[Existing 3.10, Conclusion, re-numbered to 3.11]

Reason

Very obvious, in the present global world conditions (security) and important as ever (safety).

Comments from S10 Sub Committee

Supported

Comments from CIMA delegates

None

CIMA decision

Proposal 31	ACCEPTED	DENIED
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PROPOSAL 32

Proposal from

Richard Meredith-Hardy, CIMA S10 Editor.

Proposal title

Tidy up Annex 5, 3 Stewards.

Existing text

S10, Annex 5, 3 THE STEWARDS OBJECTIVES

The role of the steward(s) is defined in the General Section paragraph 4.3.6 as follows:

"Stewards are advisers to the Event Director. They watch over the conduct of the event and report any unfairness or infringement of the Rules and Regulations or behaviour prejudicial to the safety of other competitors or the public or in any way harmful to the sport. They assemble information and facts concerning matters to be considered by the International Jury. They advise the Event Director on interpretation of the rules and regulations and on penalties."

3.1 APPOINTMENT AND QUALIFICATIONS

Requirements for stewards at events sanctioned by CIMA are defined in paragraph 4.9 of Section 10 as follows:

"The organisers shall appoint not less than 3 stewards of different nationalities excluding that of the organiser, except that, in the event of last-minute failure to attend, a replacement of any nationality, and acceptable to the other stewards, may be invited. Stewards must be able to speak a common language, preferably English, and have extensive experience of international microlight or other FAI competitions. One steward should, if possible, be able to speak the language of the organisers.

At least one steward shall be present at the championships site or contest area throughout all operational activities." (G.S. 4.3.4.2)

...

New text

S10, Annex 5, 3 STEWARDS

Appointment and qualifications; S10 4.9

3.1 THE STEWARDS OBJECTIVES

Stewards are advisers to the Event Director. They watch over the conduct of the event and report any unfairness or infringement of the Rules and Regulations or behaviour prejudicial to the safety of other competitors or the public or in any way harmful to the sport. They assemble information and facts concerning matters to be considered by the International Jury. (GS [4.3.4.2](#))

As stewards should be able to easily communicate with the organizers and should be experienced in competing themselves, preferably in the types of aircraft being flown in the championships, then they are expected to

provide independent advise to the organizers on 'normal practice' in the way tasks are designed and run and the interpretation of the rules, regulations and penalties.

...

Reason

This re-numbering makes this section on Stewards consistent with the layout of other sections in Annex 5.

Re. Appointment and qualifications, it is always a bad thing to repeat great blocks of text from elsewhere in S10. Better to have a cross reference instead.

The objectives section updates what is currently said in GS 4.3.4.2 and some new text expanding on this is added.

Comments from S10 Sub Committee

Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 32

ACCEPTED

DENIED

PROPOSAL 33

Proposal from

Richard Meredith-Hardy, Chairman FRAC

Proposal title

Define the minimum widths for gates.

Existing text

None.

New text

Proposal 33a

S10, Annex 6

6.3.6 The central point of all briefed turn-points and gates will be defined by a central point obtained from a GNSS fix and must correspond to features appearing both on the ground and on the official map.

6.3.7 Take-off and landing gates close to decks must be min.100m wide.

6.3.8 The width of other gates deployed in tasks is at the discretion of the competition Director, but must not be less than 200m. This should be increased if the ground feature the gate is fixed on is larger than 200m wide or when the task requires in-flight planning where lines are drawn in flight. In this case the equivalent of at least 1mm on the official map must be added to the minimum gate width (a gate would thus be min. 250m wide with a 1:50,000 map or min. 450m wide with a 1:250,000 map).

Proposal 33b

If proposal 33a is accepted it is proposed the editor re-orders and re-numbers all items in Annex 6 Section 6.3 so they appear in a logical order.

Reason

Item 6.3.6 is a reinforcement of existing 6.3.1: The pilot only uses a map, the scoring only uses a FR trace. There must always be some kind of physical 'reconciliation' between the two.

Recommended gate widths for use with FR's have never been defined in S10. Items 6.3.7 and 6.3.8 are now inserted as a result of several years experience. See the technical reasoning in proposal 19.

Proposal 33b is a simple housekeeping exercise to put the provisions about gates together and the provisions about turnpoints together in a logical order.

Comments from S10 Sub Committee

33a Supported unanimously.

33b Supported unanimously.

Comments from CIMA delegates

None

CIMA decision

Proposal 33a	ACCEPTED	DENIED
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Proposal 33b	ACCEPTED	DENIED
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PROPOSAL 34

Proposal from

Joel Amiable FRA Delegate, Wolfgang Lintl, DEU Delegate, Jose Luis Esteban ESP Delegate.

Proposal title

Reduce the size of the scoring zone.

Existing text

S10 Annex 6, 6.3.2 A scoring zone will normally be a cylinder of 250m radius and of infinite height. To score, a fix point must either be within this circle or the line connecting two sequential track fixes must pass through the circle. Additionally the task may require one of these fixes to be associated with a PEV "mark".

New text

Proposal 34a (Joel Amiable)

S10 Annex 6, 6.3.2 A scoring zone will normally be a cylinder of 50m radius and of infinite height. To score, a fix point must either be within this circle or the line connecting two sequential track fixes must pass through the circle. Additionally the task may require one of these fixes to be associated with a PEV "mark".

Proposal 34b (Wolfgang Lintl)

S10 Annex 6, 6.3.2 A scoring zone will normally be a cylinder of 100m radius and of infinite height. To score, a fix point must either be within this circle or the line connecting two sequential track fixes must pass through the circle. Additionally the task may require one of these fixes to be associated with a PEV "mark".
--

Proposal 34c (Jose Luis Esteban)

S10 Annex 6, 6.3.2 A scoring zone will normally be a cylinder of 150m radius and of infinite height. To score, a fix point must either be within this circle or the line connecting two sequential track fixes must pass through the circle. Additionally the task may require one of these fixes to be associated with a PEV "mark".
--

Proposal 34d (Jose Luis Esteban)

S10 Annex 6, 6.3.2 A scoring zone will normally be a cylinder of 200m radius and of infinite height. To score, a fix point must either be within this circle or the line connecting two sequential track fixes must pass through the circle. Additionally the task may require one of these fixes to be associated with a PEV "mark".
--

Editor note: If any of these proposals are accepted then S10 Annex 3, 1.13.7 should be amended accordingly.

Reason

Proposal 34a The Best pilot fly with the best precision, and I think that gates with 250 m are to big. Now we can fly with 50m radius. The objective is to fly above the ground feature, so competitors must fly with the highest degree of accuracy. 250m is too much. If we oblige the pilots to fly to the vertical of the centre (ground feature) with +/- 50m, we will have less problems to evaluate the time.

Proposal 34b: With help of FR planned task, competition director is able to set tasks with many gates (scoring zones). To reduce the pilots with the same result in one task it might be helpful to reduce the total width of a waypoint/gate/scoring zone from 500 to 200 m. The proposed reduction to 50 m radius as proposal 34a will force pilots to fly below minimum altitude for better precision.

Proposals 34c & 34d: To have all the options available to discuss in the meeting.

Some thoughts

- If a turn point corresponds to a precise ground feature (an antenna, for example).
- If the organiser has been able to get a fix exactly on the same place.
- If all pilots fly exactly above the ground feature.
- If dilution of precision is near the median of 2.5
DOP (Dilution Of Precision) is a measurement of degradation of accuracy due to unfortunate satellite positions (which change continuously). This number is displayed un common GPS units.

If we are using a 50 m radius for the turn point, then 2.7% of the pilots will be seen to fly outside the scoring zone. This can be calculated using my spreadsheet. [gps_errors.xls](#)

The consequences of a 2.7% probabilities are very important: Think of a turn-point hunt where a pilot flies to 10 TPs and crosses each one of them exactly over the ground feature. The probability of not missing any TP is $(1 - 0.027)^{10} = 0.76$, so the probability of missing at least one is 0.24.

So one out of 4 pilots will have a wrong score and will be complaining because they know they flew exactly over each TP, and they are right.

The above situation happens when both organisers and pilots do everything perfectly well.

But:

- Organisers almost never use such precise ground features,
- organisers almost never get a fix on the exact centre of the ground feature,
- pilots normally fly a few metres away,
- and sometimes DOP rises, increasing error for all competitors.

My opinion:

75 m is a good radius to absorb GPS errors PROVIDED pDOP IS SMALLER THAN 2.5 because this is not a random situation. If DOP rises, error will be increased for all pilots giving problems to organisers.

DOP can be monitored on a fairly local scale, but it would be quite a job to apply this continuously changing error to each track as a precursor to analysing it against the task. If we don't want to monitor DOP, 100 m may be enough.

We should add A = 25 m for the "feature radius", which allows a pilot to guess the centre of the feature.

We should add another B = 25 m for not getting the fix exactly over the centre. If fixes are taken in flight, this margin should be increased.

We get an accumulated distance of 150 m.

In any case, if the ground feature is larger than 50 m (it doesn't fit in a 25 m radius circle) the margin must be increased.

For hidden gates placed on lines drawn on maps while in flight, an additional distance must be added to the radius:

- At least 1 mm on the map. In a 1:250,000 scale map, this is 250m.
- So the margin of error on such kind of gates must be $250 + 150 = 400$ m (a total of 800 m wide).

This discussion is also affected by point 6.3.5:

"Complaints about the physical mis-positioning of a scoring zone relative to EVERY location which could affect the scoring (eg turnpoints, hidden gates, timing gates, IP or FP points..) will not be accepted unless it can be shown that the physical position of the location is outside a circle of radius $R = R_p/2$ where R_p = Radius or size of the scoring zone defined by the Organizers (ie the physical location must lie inside an inner circle half the width of a gate or radius of a scoring zone)"

Warning for organisers: If R is very small, they will get themselves into big trouble.

Comments from S10 Sub Committee

34a Unanimously not supported.

34b Not supported.

34c Supported.

34d Not supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 34a	ACCEPTED	DENIED
Proposal 34b	ACCEPTED	DENIED
Proposal 34c	ACCEPTED	DENIED
Proposal 34d	ACCEPTED	DENIED

PROPOSAL 35

Proposal from

Jacek Kibinski, POL Delegate

Proposal title

Championship director qualifications.

Existing text

S10, 4.4.2 Where the candidate competition director for a Cat. 1 championship has not previously organized a successful FAI Category 1 microlight championship he/she must as a minimum:

- 1) Have flown as a competitor in an FAI Category 1 microlight championship, and;
- 2) Have organized national competitions.

Evidence of this experience should be provided to CIMA in the form of a comprehensive CV supported by the National Aero Club presenting the bid and verified by the CIMA Bureau or a nominated CIMA representative.

New text

Proposal 35a

S10, 4.4.2 <i>Delete entire provision.</i>
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Proposal 35b

S10, 4.4.2 Where the candidate competition director for a Cat. 1 championship has not previously organized a successful FAI Category 1 microlight championship he/she must as a minimum:
1) Have actively participated in an FAI Category 1 microlight championship as a competitor, team leader or a key person listed in the Local Regulations, and;
2) Have organized national competitions.
Evidence of this experience should be provided to CIMA in the form of a comprehensive CV supported by the National Aero Club presenting the bid and verified by the CIMA Bureau or a nominated CIMA representative.

Reason

1. It is no logic relation between pilots and good manager's qualifications. Experience of several last Championships clearly show, that we have had excellent directors being no competitors and opposite - top competitor who failed as director.
2. Duty of the Director and relevant requirements are widely described in Annex 2, par. 3 and Annex 5 par. 1 - (more than one page). If all of this requirements and recommendations would be fulfilled, we would always have perfect championships. No new regulations are needed.

Comments from S10 Sub Committee

35a Unanimously not supported.

35b Not supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 35a ACCEPTED DENIED

Proposal 35b ACCEPTED DENIED

PROPOSAL 36

Proposal from

Rene Verschuren BEL Delegate

Proposal title

Amendment to the slow-fast tasks

Existing text

See S10, Annex 4, 3.C3 and S10, Annex 4, 3.C10 but the entire texts are repeated below, red is deletions and blue is insertions.

New text

S10, Annex 4, 3.C3 FAST SLOW SPEED

SLOW / FAST SPEED

Objective

To fly a course as fast as possible and then return along the course as slow as possible.

Description

A straight course ~~between 250m and~~ of minimum 500m long and 25m wide is laid out with gates at each end. The pilot makes a timed pass along the course as fast as possible, returns to the start, and makes a second timed pass in the same direction as slow as possible.

Special rules

- For each leg, the clock starts the moment the pilot passes the first gate and stops the moment he passes the second.

- If the pilot or any part of his PARAMOTOR touches the ground during the first leg: VP1 = zero and EP = zero

- If the pilot or any part of his PARAMOTOR touches the ground during the second leg: VP2 = zero and EP = zero
- If the pilot zigzags or if the body of the pilot overflies a side of the course or exceeds 2m above ground: Score zero **unless it is clear that the cause was exclusively meteorological, and the pilot is observed to have taken immediate action to return to the course.**
- The maximum time allowed for a pilot to complete each leg of the course is 5 minutes.

Scoring

Pilot score = $1000 / (\text{best pilot time (Time slow(in seconds) – time fast (in seconds))} = X \text{ time pilot (Time slow(in seconds) – time fast (in seconds))}$

$$\left(125 \times \frac{V_{p1}}{V_{max}}\right) + \left(125 \times \frac{V_{min}}{V_{p2}}\right) + \left(250 \times \frac{E_p}{E_{Max}}\right)$$

Where:

~~Vmax = The highest speed achieved in the task, in Km/H~~

~~Vp1 = The speed of the pilot in Km/H in the first leg of the task~~

~~Vmin = The lowest speed achieved in the task, in Km/H~~

~~Vp2 = The speed of the pilot in Km/H in the second leg of the task~~

~~Ep = The difference between the pilot's slowest and fastest speeds, in Km/H~~

~~Emax = The maximum difference between slowest and fastest speeds, in Km/H~~

3.C10 SLOW / FAST SPEED (variant)

Objective

To fly a course as slow as possible and then return along the course as fast as possible.

Description

A straight course consisting of four equally spaced 'kicking sticks' **between 250m and of minimum 500m** long is laid out facing approximately into wind.

The pilot makes a timed pass along the first course as slow as possible, returns to the start, and makes a second timed pass in the same direction along the course as fast as possible and then returns to the deck.

Special rules

- A valid strike on any stick is one where the pilot or any part of the aircraft has been clearly observed to touch it.
- For each leg, the clock starts the moment the pilot kicks the first stick and stops the moment he kicks the fourth stick.
- The pilot may have 3 attempts at kicking the first stick on each run.
- If the pilot misses the second or third stick then he is considered 'too high', penalty 50% leg score for each stick missed **unless it is clear that the cause was exclusively meteorological.**
- The maximum time allowed for a pilot to complete each leg of the course is 5 minutes.

In the slow leg;

- If the pilot or any part of his PPG touches the ground or the fourth stick is missed: VP1 = zero and EP = zero
- If the pilot zigzags: Score zero.

In the fast leg;

- If the pilot or any part of his PPG touches the ground: VP2 = zero and EP = zero
- The pilot may have three attempts at kicking the fourth stick.

Scoring

Pilot score = $1000 / (\text{best pilot time (Time slow(in seconds) – time fast (in seconds))} = X \text{ time pilot (Time slow(in seconds) – time fast (in seconds))}$

$$\left(125 \times \frac{V_{p1}}{V_{max}}\right) + \left(125 \times \frac{V_{min}}{V_{p2}}\right) + \left(250 \times \frac{E_p}{E_{Max}}\right)$$

Where:

~~Vmax = The highest speed achieved in the task, in Km/H~~

~~Vp1 = The speed of the pilot in Km/H in the first leg of the task~~

~~Vmin = The lowest speed achieved in the task, in Km/H~~

~~Vp2 = The speed of the pilot in Km/H in the second leg of the task~~

~~Ep = The difference between the pilot's slowest and fastest speeds, in Km/H~~

~~Emax = The maximum difference between slowest and fastest speeds, in Km/H~~

Reason

If you have a minimum of 500m you will see more the difference between the pilots. On our Belgian championship I've do it with a distance of 900m and you see directly the difference.

The 'thermals' provision used to be in the rules, where did it go?

For scoring, you don't must to calculate the speed, you have the time in seconds and it will more easy to calculate. It's only a rules of 3.

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 36	ACCEPTED	DENIED
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PROPOSAL 37

Proposal from

Roy Beisswenger, USA Delegate

Proposal title

Amendment to S10 1.3, Inclusion of all powered weight shift control and paraglider control in S10.

Existing text

S10, 1.3 DEFINITION OF A MICROLIGHT AIRCRAFT

1.3.1 A one or two seat powered aircraft whose minimum speed at Maximum Take Off Weight (MTOW) is less than 65 km/h, and having a MTOW of:

- 300 kg for a landplane flown solo
- 330 kg for an amphibian or a pure seaplane flown solo;
- 450 kg for a landplane flown with two persons
- 495 kg for an amphibian or a pure seaplane flown with two persons

Note. These definitions also apply to foot-launched microlight aircraft and microlight aircraft with wings of a non-rigid structure.

New text

S10, 1.3 DEFINITION OF A MICROLIGHT AIRCRAFT

1.3.1 A one or two seat powered aircraft [with a movable aerodynamic control system](#) whose minimum speed at Maximum Take Off Weight (MTOW) is less than 65 km/h, and having a MTOW of:

- 300 kg for a landplane flown solo
- 330 kg for an amphibian or a pure seaplane flown solo;
- 450 kg for a landplane flown with two persons
- 495 kg for an amphibian or a pure seaplane flown with two persons

[1.3.2 Any powered aircraft with either a weight-shift control system or paraglider control system.](#)

Reason

Currently, any weight-shift control or paraglider control powered aircraft that doesn't meet the definition of a microlight aircraft has nowhere else in the FAI system in order to establish records or compete. In the US, the regulations have changed to allow the building and piloting of aircraft in these categories with no limitations in weight, speed, or seating. Already, three seat machines have been produced and delivered for special purposes such as air tours in China.

With the change in rules, the US government has logically kept the management of pilot certification programs for all weight shift control and paraglider control within the same office that manages the US equivalent of microlight activity. This proposal follows that same logic since there is not another FAI commission that is better prepared to manage programs for this type of aircraft and the numbers of aircraft concerned don't justify their own commission.

Comments from S10 Sub Committee

Unanimously not supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 37	ACCEPTED	DENIED
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PROPOSAL 38

Proposal from

Roy Beisswenger, USA Delegate

Proposal title

Amendment to S10 4.23.3, Provisions for Precision Championship for classes PF and PL.

Existing text

S10, 4.24.3 Tasks should, as far as practicable, conform to the following guidelines:

For Microlight aircraft classes AL, WL and WF

- A Tasks for flight planning, navigation, etc with no fuel limit: 50% of the total tasks flown.
- B Tasks for fuel economy, speed, duration, etc with limited fuel: 25% of the total tasks flown.
- C Tasks for precision landing: 25% of the total tasks flown.

For Microlight aircraft classes PF and PL

- A Navigation: 33% of total competition tasks.
- B Economy: 33% of total competition tasks.
- C Precision: 33% of total competition tasks.

New text

S10, 4.24.3 Tasks should, as far as practicable, conform to the following guidelines [in standard championships](#):

For Microlight aircraft classes AL, WL and WF

- A Tasks for flight planning, navigation, etc with no fuel limit: 50% of the total tasks flown.
- B Tasks for fuel economy, speed, duration, etc with limited fuel: 25% of the total tasks flown.
- C Tasks for precision landing: 25% of the total tasks flown.

For Microlight aircraft classes PF and PL

- A Navigation: 33% of total competition tasks.
- B Economy: 33% of total competition tasks.
- C Precision: 33% of total competition tasks.

[In "Precision Championships" for Microlight aircraft classes PF and PL, 100% of the tasks will be Precision tasks.](#)

Reason

Currently, if someone wants conduct an FAI sanctioned Continental or World competition for paramotors, the competition has to have an equal proportion of navigation, economy, and accuracy tasks. In the United States, Australia, and other places, those types of competitions are seen as inappropriate contests for the canopy sports. Paramotors are almost never used as modes of transportation due to natural limits of speed and duration. Pilots instead prefer to "carve the sky", that is, to fly low altitude, precision tasks.

Navigation and Economy tasks are very unpopular since they are seen to be completely counter to the reason that people fly in the powered canopy sports. That unpopularity can be seen in the last two USA Nationals

where paramotors were invited, but only one or two participated. On the other hand, challenging competitions that focus on precision events are well attended by both pilots and spectators. CIMA should take advantage of this popularity and create a provisional venue for those wanting to compete in ways that their chosen form of equipment is naturally suited to do.

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 38	ACCEPTED	DENIED
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PROPOSAL 39

Proposal from

Richard Meredith-Hardy GBR Delegate

Proposal title

Economy tasks based on weight of fuel used in flight.

Existing text

S10 Annex 3 3.2.3 FUEL MEASUREMENT

Fuel will be measured by weight or volume but will be consistent for any given refuelling session. 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.

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

New text

S10 Annex 3

3.2.3 FUEL MEASUREMENT **IN TASKS WITH A STANDARD FUEL QUANTITY**

Fuel will be measured by weight or volume but will be consistent for any given refuelling session. 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.

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

3.2.4 FUEL MEASUREMENT IN TASKS BASED ON WEIGHT OF FUEL USED IN FLIGHT

This is an alternative method of flying and scoring fuel economy tasks in the PF1 class by:

- weighing pilot and machine (not the wing) before and after the flight to measure the amount of fuel used in the task.
- allowing pilots to carry as much fuel as they want, to ensure full task participation.

For the purpose of scoring: One litre of fuel = 0.74kg = 740 grams

3.2.4.1 Weighing of pilot and machine before launch.

The weighing scale(s) must be capable of an accuracy of +/-20g, and must be located next to the launch deck. The pilot should only get weighed when he/she is intending to launch.

The combined pilot + paramotor + all supplementary items is weighed, with the exception of the wing.

The wing must be detached from the paramotor unit, and can be already prepared in the launch deck. Wing bags, if used, must either be carried by pilots when weighed or not be taken on the flight.

The pilot should carry the paramotor on his/her back, as well as all equipment and accessories when stepping up onto the scale.

If the pilot is moving too much on the scale, the readout will fluctuate and the highest value will be recorded.

The pilot should then proceed to his/her wing with a view to launch as soon as possible.

Marshals should ensure that pilots spend as little time as possible between the weighing and the launching, and may demand for a pilot to be re-weighed if necessary. Any pilot (or equipment) leaving the deck must re-weighed before re-entering.

Marshals should ensure that pilots are not "ballasting" themselves by grabbing soil or stones as they get ready to launch.

Food and drink weigh the same whether in the pilot's pockets or consumed.

3.2.4.2 Weighing of pilot and machine after landing.

As soon as a pilot lands back on the deck, a Marshal will direct him/her to the scale, to be weighed immediately. The wing is detached and as before, the combined pilot + paramotor + all supplementary items is weighed, with the exception of the wing.

Once more, Marshals should be vigilant with pilots not "ballasting" themselves with stones etc.

If the pilot is moving too much on the scale, the readout will fluctuate and this time, the lowest value will be recorded.

If the pilot appears to be abnormally wet, then the Marshal may ask for the flying suit and boots to be weighed separately as well for investigation and possible later adjustment.

See attachment [proposals 39 and 40 tasks.pdf](#) for the new tasks associated with this proposal.

S10 Editor's note: Existing 3.2.4 is renumbered 3.2.5 if this proposal is accepted.

Reason

Current problems:

- Emptying machines of all fuel is a tedious exercise that often wastes precious flying time.
- An economy task cannot be set at short notice.
- There is inconsistency in the way pilots are supervising each other's fuelling and to get away with keeping some fuel in pipes (or priming bulb) is not really seen as cheating.
- Pilots have to modify their machines with complicated fuel systems and header tanks.
- Pilots with thirsty engines not only score badly but are also denied full task participation.
- Running out of fuel and landing out is a problem with retrieve.

The new proposal addresses all of these problems plus it allows an optional "Fuel in proportion to bodyweight" system (see separate proposal) to level the playing field.. It was tested very successfully in the 2006 UK National Championships and was popular with Pilots and Organisers alike. It is now expected to be adopted permanently in the UK.

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 39

ACCEPTED

DENIED

PROPOSAL 40

Proposal from

Richard Meredith-Hardy GBR Delegate

Proposal title

Scoring economy tasks taking into account pilots' bodyweight

Existing text

S10 Annex 3 3.2.3 FUEL MEASUREMENT

Fuel will be measured by weight or volume but will be consistent for any given refuelling session. 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.

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

New text

S10 Annex 3

3.2.3 FUEL MEASUREMENT IN TASKS WITH A STANDARD FUEL QUANTITY

Fuel will be measured by weight or volume but will be consistent for any given refuelling session. 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.

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

3.2.4 FUEL MEASUREMENT IN TASKS BASED ON WEIGHT OF FUEL USED IN FLIGHT

This is an alternative method of flying and scoring fuel economy tasks in the PF1 class by:

- weighing pilot and machine (not the wing) before and after the flight to measure the amount of fuel used in the task.
- allowing pilots to carry as much fuel as they want, to ensure full task participation.
- allows a "Fuel in proportion to bodyweight" system to level the playing field.

For the purpose of scoring: One litre of fuel = 0.74kg = 740 grams

3.2.4.1 Weighing of the pilot's bodyweight at registration

- The pilot should wear minimal attire: no shoes, light trousers and shirt only.
- No belt, no heavy jewellery. Pockets should be emptied.
- The pilot may choose to be weighed with full stomach and bladder.
- If the readout on the scale fluctuates, the lowest value is recorded.
- The pilot is then given a Bodyweight Index to be used in all scoring formulae and that corresponds directly to his/her bodyweight then divided by 100. (eg 110kg = 1.10 and 65kg = 0.65)

Scoring of economy tasks then give equal score to a 100kg pilot burning 1 litre and an 80kg pilot burning 0.8 litres.

3.2.4.2 Weighing of pilot and machine before launch.

The weighing scale(s) must be capable of an accuracy of +/-20g, and must be located next to the launch deck. The pilot should only get weighed when he/she is intending to launch.

The combined pilot + paramotor + all supplementary items is weighed, with the exception of the wing.

The wing must be detached from the paramotor unit, and can be already prepared in the launch deck. Wing bags, if used, must either be carried by pilots when weighed or not be taken on the flight.

The pilot should carry the paramotor on his/her back, as well as all equipment and accessories when stepping up onto the scale.

If the pilot is moving too much on the scale, the readout will fluctuate and the highest value will be recorded.

The pilot should then proceed to his/her wing with a view to launch as soon as possible.

Marshals should ensure that pilots spend as little time as possible between the weighing and the launching, and may demand for a pilot to be re-weighed if necessary. Any pilot (or equipment) leaving the deck must re-weighed before re-entering.

Marshals should ensure that pilots are not "ballasting" themselves by grabbing soil or stones as they get ready to launch.

Food and drink weigh the same whether in the pilot's pockets or consumed.

3.2.4.3 Weighing of pilot and machine after landing.

As soon as a pilot lands back on the deck, a Marshal will direct him/her to the scale, to be weighed immediately. The wing is detached and as before, the combined pilot + paramotor + all supplementary items is weighed, with the exception of the wing.

Once more, Marshals should be vigilant with pilots not "ballasting" themselves with stones etc.

If the pilot is moving too much on the scale, the readout will fluctuate and this time, the lowest value will be recorded.

If the pilot appears to be abnormally wet, then the Marshal may ask for the flying suit and boots to be weighed separately as well for investigation and possible later adjustment.

See attachment [proposals 39 and 40 tasks.pdf](#) for the new tasks associated with this proposal.

S10 Editor's note: Existing 3.2.4 is renumbered 3.2.5 if this proposal is accepted.

Reason

Pilots can choose which equipment they use but they cannot help greatly with their bodyweight. The heavier the pilot, the greater the fuel used.

This proposal takes a step towards levelling the playing field and giving all pilots a more equitable chance to perform well in economy tasks.

With traditional measuring of fuel by volume, you would need to use a measuring glass and give each pilot a different amount. In practice this method would be problematic.

It is easier with the other method of measuring fuel by weight, as used in EMC 2006.

With the proposed new fuelling procedure it is only a simple modification in the formulae to compute the amount of fuel used in proportion to the pilot's bodyweight.

n.b. There is a common belief that heavier pilots gain in speed. This is not true as clearly evidenced in both flight theory and actual competition results. Pilots can choose a wing to give them an acceptable launch speed and speed range to meet the needs of the various tasks.

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

Proposal 40

ACCEPTED

DENIED

PROPOSAL 41

Proposal from

Rene Verschuren BEL Delegate

Proposal title

Amendment to S10 4.24.3, task proportions

Existing text

See item 15x in attachment [proposals_41-47.pdf](#)

New text

See item 15x in attachment [proposals_41-47.pdf](#)

Reason

See item 15x in attachment [proposals_41-47.pdf](#)

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

See item 15x in attachment [proposals_41-47.pdf](#)

PROPOSAL 42

Proposal from

Rene Verschuren BEL Delegate

Proposal title

Number of stewards

Existing text

See item 20x in attachment [proposals_41-47.pdf](#)

New text

See item 20x in attachment [proposals_41-47.pdf](#)

Reason

See item 20x in attachment [proposals_41-47.pdf](#)

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

See item 20x in attachment [proposals_41-47.pdf](#)

PROPOSAL 43

Proposal from

Rene Verschuren BEL Delegate

Proposal title

Editorial change. Move S10 4.5.6 and 4.5.7 to S10 4.29 (scoring).

Existing text

See item 24x in attachment [proposals_41-47.pdf](#)

New text

See item 20x in attachment proposals_41-47.pdf
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Reason

See item 20x in attachment [proposals_41-47.pdf](#)

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

See item 20x in attachment [proposals_41-47.pdf](#)

PROPOSAL 44

Proposal from

Rene Verschuren BEL Delegate

Proposal title

Deleting S10, Annex 6. For all competition

Existing text

See item 2x in attachment [proposals_41-47.pdf](#)

New text

See item 2x in attachment proposals_41-47.pdf

Reason

See item 2x in attachment [proposals_41-47.pdf](#)

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

See item 2x in attachment [proposals_41-47.pdf](#)

PROPOSAL 45

Proposal from

Rene Verschuren BEL Delegate

Proposal title

Improve the description of ground markers in the local regulations

Existing text

See item 7x in attachment [proposals_41-47.pdf](#)

New text

See item 7x in attachment [proposals_41-47.pdf](#)

Reason

See item 7x in attachment [proposals_41-47.pdf](#)

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

See item 7x in attachment [proposals_41-47.pdf](#)

PROPOSAL 46

Proposal from

Rene Verschuren BEL Delegate

Proposal title

Annex 4 S 10 2 B 11 Economy to respect the weight of pilots

Existing text

See item Ex in attachment [proposals_41-47.pdf](#)

New text

See item Ex in attachment [proposals_41-47.pdf](#)

Reason

See attachment Ex

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

See item Ex in attachment [proposals_41-47.pdf](#)

PROPOSAL 47

Proposal from

Rene Verschuren BEL Delegate

Proposal title

Director fly whith you !!!

Existing text

See item xxx in attachment [proposals_41-47.pdf](#)

New text

See item xxx in attachment proposals_41-47.pdf
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Reason

See item xxx in attachment [proposals_41-47.pdf](#)

Comments from S10 Sub Committee

Not supported.

Comments from CIMA delegates

None

CIMA decision

See item xxx in attachment [proposals_41-47.pdf](#)