Proposals for amendments to FAI Section 10.

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

How to submit amendments

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

The amendment scheme will operate as it was done last year, all proposals from CIMA delegates should be sent to Richard Meredith-Hardy with:
1) The number of the affected paragraph (or where it should go, if it is something new).
2) The reason for the proposed change.

He will then assemble this into the document below, along with:
a) Comment from the S10 Sub-Committee
b) Comments any other CIMA delegates wish to make on the proposal.

Each proposal will be put to the vote **in it's exact wording** at the CIMA Plenary meeting 10-12 November 2005 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.

It is expected this document will change many times before the deadline so check it regularly. The deadline for proposals for amendments is **23:59:59 UTC MONDAY 26 SEPTEMBER 2005**. After that, you will have to wait until next year....

Changes

- This is the latest draft: Draft 15, 24 October 2005. No changes except for inclusion of S10 Sub committee comment.
- ~~Draft 14, 27 September 2005, amendment of proposal 10.~~
- ~~Draft 13, 26 September 2005, addition of proposal 19.~~
- ~~Draft 12, 26 September 2005, Addition of proposal 18~~
- ~~Draft 11, 26 September 2005, Amendment to proposal 8 offering two options.~~
- ~~Draft 10, 26 September 2005. Alteration to proposals 12 & 13, addition of proposal 17.~~
- ~~Draft 9, 24 September 2005, Addition of proposals 15 & 16~~
- ~~Draft 8, 24 September 2005 Addition of proposals 12, 13 and 14~~
- ~~Draft 7, 22 September 2005, Alteration of fuel loads, addition of provision 3.8.7 and additional comment in proposal 7. Added proposals 8, 9, 10 and 11~~
- ~~Draft 6, 9 September 2005, addition of measurement units and simplification of proposal 7.~~
- ~~Draft 5, 8 September 2005, addition of proposal 7~~
- ~~Draft 4, 7 September 2005, addition of proposal 6~~
- ~~Draft 3, 6 September 2005; addition of GAP formula for information to proposal 1.~~
- ~~Draft 2, 6 September 2005; addition of proposals 3, 4 & 5~~
- ~~Draft 1, 5 September 2005~~

Contents

- **Proposal 7** **Addition of championship records to S10** *from* Richard Meredith-Hardy GBR delegate.
- **Proposal 8** **Scoring when a technical flaw is discovered** *from* Tomas Backman SWE delegate.
- **Proposal 9** **Status of video evidence** *from* Richard Meredith-Hardy GBR delegate.
- **Proposal 10** **Clarification of 'default' penalties** *from* Richard Meredith-Hardy GBR delegate.
- **Proposal 11** **Addition of a variant of the slalom task to Annex 4, Part 3, the PF & PL task catalogue** *from* Richard Meredith-Hardy GBR delegate.
- **Proposal 12** **Better definition of the acceptable mistake of the Organizers in physical positioning the location of a scoring zone relative of a turnpoint or hidden gate or time gate** *from* Antonio Marchesi, Spanish delegate.
- **Proposal 13** **Establish a standard unit system** *from* Antonio Marchesi, Spanish delegate.
- **Proposal 14** **To have a provisional general classification updated along the championship, for individual and team scoring** *from* Antonio Marchesi, Spanish delegate.
- **Proposal 15** **Alteration of team scoring** *from* Jacek Kibinski, Delegate of Polish Aero Club.
- **Proposal 16** **Championship Director qualifications** *from* Jacek Kibinski, Delegate of Polish Aero Club.
- **Proposal 17** **Define a minimum size for scoring zones and gates** *from* Antonio Marchesi, Spanish delegate.
- **Proposal 18** **Rules for Fuelling when economy task is proposed** *from* René Verschueren, Belgian Paramotor Federation.
- **Proposal 19** **Alteration to the CIMA flight recorder data standard to indicate a date change in a track file**. *from* Richard Meredith-Hardy, Chairman of the CIMA FRAC (Flight Recorder Approval Committee.)

PROPOSAL 1

Proposal title

Addition of a 'Task Validity' formula to the para-classes scoring which will reduce pilot scores on a pro-rata basis if less than 50% of pilots in class actually start a task.

Proposal from

Richard Meredith-Hardy, GBR Delegate

Existing text

None. New addition to S10

New text

S10 4.29.8 and add to **S10 Annex 3, 3.4.1** In the PF and PL classes, if less than 50% of pilots in class start a task then after all penalties have been applied each pilot score for the task will be reduced on a pro-rata basis according to the following formula:

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

Where
Ps = Pilot task score after all penalties Etc are applied.
Ts = Total started; Total number of pilots in class who started the task (ie properly, beyond 5 minute rule).
Tc = Total class; Total number of pilots in class.

Reason

There was a difficulty at Levroux with the rule S10 4.25.3 on the first few days in classes PF1, PL1 and PL2 when we had some fairly difficult weather.

4.25.3 After take-offs have started the organisers may suspend flying if to continue is dangerous. If the period of suspension is sufficiently long to give an unfair chance to any competitor the Director shall cancel the task. Once all competitors in a class have taken off, or had the opportunity to take off, the task may not be cancelled other than for reasons of force majeure.

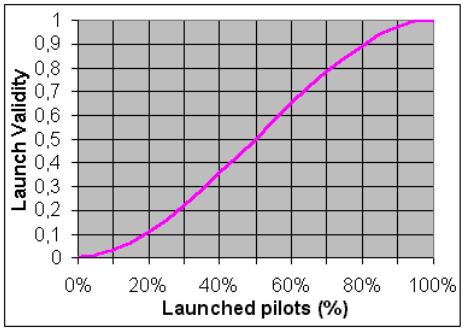
This is not a proposal to change S10 4.25.3. This serves everyone well but is lacking provision for potential situations which can and have arisen in the para-classes. When you have an 'open window' takeoff, and one person has taken off, it is difficult for other pilots to argue that a task should be cancelled on the grounds that they didn't have the opportunity to take off. They MUST take off, or score zero, unless the Director makes the further step of suspending operations for so long that it makes it unfair, or there is a 'force majeure' situation.

After one person has taken off there is a lot of pressure on all the remaining pilots to take off on a task in conditions they may well consider to be too dangerous. This year we had the situation in task four where 2 pilots flew, 77 didn't want to because of high winds and rain, but eventually nearly all decided they had to take off or there was a good chance they would score zero in the task which would put their final result in serious jeopardy.

It is possible for the director to delay the start of a task, but with large numbers of pilots this is always a very difficult thing to manage. The director doesn't actually have any other options except to cancel before the task starts but there is always a lot of pressure on him not to do this as the last thing anyone wants is to end up with less than the minimum required number of tasks and hence an invalid championship. The director is therefore inclined not to cancel in case the weather improves, if it doesn't then the 'brave' pilots win.

In the end, of course task 4 was cancelled for two out of the three classes by protest, but similar questions were also asked about task one which remained valid. A similar situation arose on the soaring day at WAG 2001 in Sevilla and on that occasion there was a serious accident. Ultimately there is a real risk someone will be killed by 'having' to fly in conditions they would rather not.

In HG & Paragliding championships they have a safety mechanism for just this situation. Their GAP system of scoring championships is supremely complicated and not really related to our sport, but they do have the concept of "Launch Validity", see page 3 of
http://www.metamorfosi.com/GAP02_en.PDF



It's a Coefficient depending on the percentage of pilots actually present in takeoff who launched. If everybody on takeoff launches, Launch Validity is 1 while if only 20% of the pilots present in takeoff launches, Lauch Validity goes down to about 0.1. Launch conditions may be dangerous, or otherwise unfavourable. If a significant number of pilots at launch think that the day is not worth the risk of launching, then the gung-ho pilots who did go will not get so many points. This is there as a safety mechanism.
The following is a reply from Angelo Crapanzano:
Formula:
Launch Validity (C.launch) 0<= C.launch <=1
Launch Validity is a function of number of pilots launched compared to pilots present on takeoff (Nfly/Npresent)
C.launch = 0.028(Nfly/Npresent) + 2.917*(Nfly/Npresent)2 - 1.944*(Nfly/Npresent)3*

To the right is the graph: you see it's a kind of proportional-majority formula. If 50% of the pilots launches then the task will be 50% valid but if 10% of the pilots launches then it will be 3% valid only. This formula works perfectly (is unchanged since 1988).

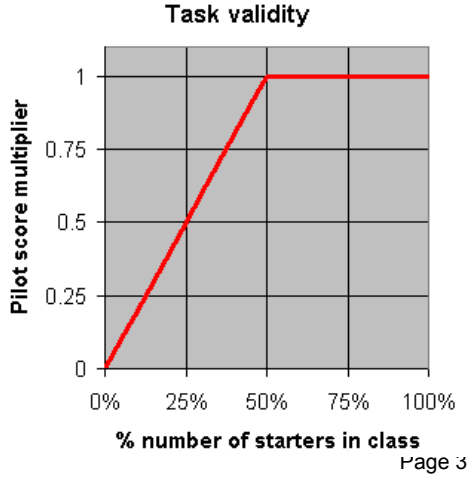
Please note you must not use the number of registered pilots but the number of pilots present on takeoff. Absent pilots (those who left, decided to keep sleeping an so on...) shall not affect the scoring.

This is a proposal to apply a similar thing to para-classes scoring.

If half of pilots in class start the task, it's very likely there's not a problem with the task, we therefore continue with normal scoring.
If less than half of pilots in class start the task, there probably was a problem with the task so a simple linear 'task validity reduction' is applied to everyone's scores directly proportional to the number of pilots who did start the task.

This is also fairly easy to administer:

- The total in class is known.



- The total who start a task should be something an organization usually collects anyway so it is possible to know if anyone is missing at the end of a task.
- The organizer would normally not have to bother applying it at all unless there were difficult conditions.

This proposal puts the final decision to fly much more firmly into the hands of pilots, but it's also incumbent on the director not to declare tasks when such a thing is extremely likely to happen - it's designed to be a safety valve only for marginal weather.

Comments from S10 Sub Committee

This proposal is supported.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 2

Proposal from

Richard Meredith-Hardy, S10 Editor

Proposal title

Alteration of S10 4.25.2 and S10 Annex 3 1.11.1 to include the '5 minute rule'.

Existing text

S10 4.25.2 A competitor shall be permitted more than one start for a task if specified in the Local Regulations. However each task may be flown only once. A failed take-off shall count as one of the permitted number of starts unless the cause was the fault of the organisers. In this case the Director shall authorise a further start before the last takeoff in the class. Pilots in PFs and PLs may have 3 attempts at take-off in tasks where the take-off order is given.

Annex 3 1.11.1 A competitor will generally be allowed only one take-off for each task and the task may be flown once only. However in the event of a mechanical or GNSS flight recorder failure occurring within 5 minutes of take-off, a further start may be made without penalty. Exceptions and penalties will be specified in the Task Description. (S10 Chapter 4,4.25.2)

New text

S10 4.25.2 A competitor shall be permitted more than one start for a task if specified in the Task Description however each task may be flown only once. A failed take-off shall count as one of the permitted number of starts unless the cause was the fault of the organisers. In this case the Director shall authorise a further start. A competitor may return to the airfield within 5 minutes of take-off for safety reasons or in the event of a GNSS flight recorder failure. In this case a further start may in principle be made without penalty but equally the competitor must not benefit in any way from restarting. Exceptions and penalties will be specified in the Task Description. Pilots in PFs and PLs may have 3 attempts at take-off in tasks where the take-off order is given.

S 10 Annex 3 A competitor will generally be allowed only one take-off for each task and the task may be flown once only. A competitor may return to the airfield within 5 minutes of take-off for safety reasons or in the event of a GNSS flight recorder failure. In this case a further start may in principle be made without penalty but equally the competitor must not benefit in any way from restarting. Exceptions and penalties will be specified in the Task Description. (S10 Chapter 4, 4.25.2)

Reason

The '5 minute rule' has been defined for many years in annex 3 (pro-forma local regulations) but never in Section 10 itself. As this is an important rule, it is proposed to amend S10 4.25.2 to include the substance of what is already contained in Annex 3.

It is suggested to include a change from the phrase "mechanical failure" to the more generic phrase "safety reasons" so that pilots may return within 5 minutes without penalty for any reason which may be safety related.

Comments from S10 Sub Committee

This proposal is supported.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 3

Proposal from

René Verschueren, Belgian Paramotor Federation

Proposal title

Alteration of task proportions for PF and PL Classes

Existing text

S10 4.24.3 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.

S10 An 3, 3.3.1 The proportion of the tasks accumulated during the Championships is approximately A:B:C = 1/3:1/3:1/3

New text

S10 4.24.3
For Microlight aircraft classes PF and PL
A Navigation: 40% of total competition tasks.
B Economy: 20% of total competition tasks.
C Precision: 40% of total competition tasks.

S10 An 3, 3.3.1
The proportion of the tasks accumulated during the Championships is approximately A:B:C = 40%:20%:40%

Reason

Heavy pilots are disadvantaged.

Comments from S10 Sub Committee

This proposal is NOT supported.

All things being equal, there are only two basic parameters which matter in cross-country tasks, economy, and speed. Changing the proportions as in this proposal puts an unequal emphasis on speed. Whilst it is

fundamental to championships that we should try to find the best pilot rather than the best machine, this is nevertheless a motor sport where technical equipment is, and always has been, a very important part of the equation. Paramotors have become radically faster in recent years, as they have become radically more economical. Both have been driven to a large extent by FAI competitions, it is probably safe to say that there would not be any 4 stroke paramotors if it was not for the important element of economy in our championships, and these machines have been proven to be less polluting and quieter and more reliable which must be a good thing for Paramotoring as a whole. Economy has also encouraged wing designers to not just find more speed, but an improved sink rate too, in other words a more efficient wing, which must also be a good thing for Paramotoring. FR's have enabled us to make new economy tasks which place more emphasis on pilot skill rather than equipment, for example "fly as far as you can with limited fuel". There is good evidence these tasks are won as often by pilots who don't appear to have the 'best' equipment as those who do.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 4

Proposal from

Richard Meredith-Hardy, S10 Editor

Proposal title

Alteration to team leader requirements.

Existing text

S 10 4.10.1 The organizers shall state in the Local Regulations the maximum number of microlight aircraft which may be entered by a NAC and the maximum number a NAC may enter in any class. Each National Team shall have a nominated Team Leader. With a Deputy team Leader to look after PF and PL entries, if any.

New text

S10 4.10.1 The organizers shall state in the Local Regulations the maximum number of microlight aircraft which may be entered by a NAC and the maximum number a NAC may enter in any class. Each National Team shall have a nominated Team Leader.

Reason

Editorial housekeeping. The last sentence of S10 4.10.1 is deleted; It is agreed that PF & PL are ‘equal’ and separate to the classics and it is normal for there to be a separate team leader in these classes. This proposal simply removes mention of a ‘deputy team leader’ in these classes.

No alteration necessary to S10 An 3.

Comments from S10 Sub Committee

This proposal is supported.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 5

Proposal from

Richard Meredith-Hardy, GBR Delegate

Proposal title

Addition of an optional extra reserved place in teams for Female competitors.

Existing text

None. New addition to S10

New text OPTION 1 (all classes)

S10 4.10.5 NAC's may enter one extra all female team crew per class above the maximum number stated by the organizer in the local regulations.

S10 Annex 3, 1.4 The Championships are open to all Active Member and Associate Member countries of FAI who may enter ..... (put number) pilots plus one all-female crew (no more) in each classic class and ..... (put number) pilots plus one all-female crew (no more) in the PF & PL classes.

New text OPTION 2 (PF & PL only)

S10 4.10.5 In the PF & PL classes, NAC's may enter one extra all female team crew per class above the maximum number stated by the organizer in the local regulations.

S10 Annex 3, 1.4 The Championships are open to all Active Member and Associate Member countries of FAI who may enter ..... (put number) pilots (no more) in each classic class and ..... (put number) pilots plus one all-female crew (no more) in the PF & PL classes.

Reason

The intention of this proposal is not to reduce the normal team size of max 6 per class. Instead it is intended that teams can have one EXTRA aircraft in a class so long as it is flown by a female pilot (or female pilot and co-pilot in the case of two seaters). The purpose is to encourage female participation in championships and try to end the discrimination which has been evident in the past where female pilots have been excluded from teams even when places have been available. Teams can only benefit from this proposal, there is no disadvantage.

Comments from S10 Sub Committee

This proposal is supported. (Option 1)

Comments from CIMA delegates

None at this time

CIMA decision

OPTION 1	ACCEPTED	DENIED
OPTION 2	ACCEPTED	DENIED

PROPOSAL 6

Proposal from

Richard Meredith-Hardy, GBR Delegate

Proposal title

Addition of a variant of the fast-slow task to Annex 4, Part 3, the PF & PL task catalogue.

Existing text

None. New addition to S10

New text

S 10 Annex 4, 3.C.10 SLOW / FAST SPEED

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.

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

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

Reason

Tested at the 2005 UK National Championships. This is offered as a variant to the standard slow-fast task (3.C.3) which has several problems; it requires a large number of marshals to operate (at least three per leg) and the pilot's height, particularly in the slow leg is very important, but enormously subjective. This variant is designed to make each leg manageable by one marshal and control of the pilot's height is indisputable. Arguably, it is also more interesting to spectators.

Comments from S10 Sub Committee

This proposal is supported.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 7

Proposal from

Richard Meredith-Hardy, GBR Delegate

Proposal title

Addition of championship records to S10

Existing text

None. New addition to S10

New text

S10 3.8 Championship records

3.8.1 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.

3.8.2 Championship records for microlights can only be established during valid competition tasks by bona-fide competitors at a FAI category 1 microlight championships or a FAI World Air Games.

3.8.3 A championship record can only be claimed for performances where no penalties or other adjustments were applied to the competitor's task score.

3.8.4 The International Jury must certify that all the conditions attached to a Championship record claim are satisfied and they must include all valid claims in their championship report to FAI. Information to be provided should include Pilot/co-pilot name, nation, competition class, aircraft type, the performance, type of record claimed, and whether it was a World or Continental claim.

3.8.5 If the value of the championship record is an elapsed time normalized to ISA sea level conditions then the elapsed time flown shall be normalized according to the following formula:

$$\text{Elapsed time normalised to ISA sea level conditions, in seconds} = \frac{T_1}{0.5331359\sqrt{\frac{P_1}{t_1 + 273}}}$$

Where
T_1 = Actual pilot performance in seconds
P_1 = Ambient pressure in mb
t_1 = Ambient temperature in degrees Celsius

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

3.8.7 When a change to the championship rules prevents an equal comparison to a performance in a previous championship then a new record shall be created and the old record retired.

3.8.8 Available Championship records

3.8.8.1 DISTANCE WITH LIMITED FUEL
- May be established in any task in the task catalogue where the fuel is measured before takeoff.
- Fuel load at takeoff must not exceed:
  Classes PF1 & PL1: 1.5 Kg

Classes WL1, AL1 & PL2: 4 Kg
Classes WL2 & AL2: 6 Kg
- Distance measured is from start gate to the point of maximum distance from start gate before first landing.
- Pilot performance is expressed as a distance in Km.

3.8.8.2 ENDURANCE WITH LIMITED FUEL
- May be established in any task in the task catalogue where the fuel is measured before takeoff.
- Fuel load at takeoff must not exceed:
Classes PF1 & PL1: 1.5 Kg
Classes WL1, AL1 & PL2: 4 Kg
Classes WL2 & AL2: 6 Kg
- Time measured is from start gate to finish gate or, if this is not defined in the task description, the time at point of maximum distance from start gate before first landing.
- Pilot performance is expressed as an elapsed time.

3.8.8.3 PRECISION CIRCUIT IN THE SHORTEST TIME ('Classical slalom')
- Task 3.C2 as defined in the current task catalogue.
- The sum of the straight line distance through all sticks 1 - 10 must be 792m (+-10m)
- Whilst the pilot is in the course the local wind speed must not have exceeded an average of 10Kt (18 Km/h) nor may the wind direction have varied more than 90° either side of the direction shown in the task description.
- A pilot only qualifies for a record if his scoring in the task includes NQ = 10.
- Pilot performance is expressed as an elapsed time normalized to ISA sea level conditions.

3.8.8.4 PRECISION CIRCUIT IN THE SHORTEST TIME ('Clover leaf slalom')
- Task 3.C7 as defined in the current task catalogue.
- The square pattern of the task must not be less than 75m
- Whilst the pilot is in the course the local wind speed must not have exceeded an average of 10Kt (18 Km/h)
- A pilot only qualifies for a record if his scoring in the task includes NQ = 9.
- Pilot performance is expressed as an elapsed time normalized to ISA sea level conditions.

3.8.8.5 PRECISION CIRCUIT IN THE SHORTEST TIME ('Japanese slalom')
- Task 3.C8 as defined in the current task catalogue.
- The grid pattern of the task must not be less than 50m
- Whilst the pilot is in the course the local wind speed must not have exceeded an average of 10Kt (18 Km/h)
- A pilot only qualifies for a record if his scoring in the task includes NQ = 9.
- Pilot performance is expressed as an elapsed time normalized to ISA sea level conditions.

Reason

The concept of records which can only be established at championships is not novel, it exists within other FAI commissions, notably the IPC, the Parachuting commission. This proposal was originally presented to CIMA in a very similar form in 2000 (but only with the task PRECISION CIRCUIT IN THE SHORTEST TIME) and it was accepted at the 2000 plenary meeting, it should have therefore been inserted into the January 2001 edition of FAI Section 10 but for editorial reasons it never was.

This proposal re-introduces the concept of Championship records to Section 10 but in a more expanded form possible now FR's are in use, so that in some cases these records are available in all competing classes.

The reason is simple: Consider an athletics championship; it is possible to make a World, European Etc. record at any qualifying championship. This is interesting both from the competitor's point of view and a media point of view. This proposal attempts to introduce the same concept where a performance is comparable between championships.

Some notes:

In the distance and endurance records; It is not intended that these records can be claimed using times based on takeoff or landing because start gate, finish gate and point of maximum distance are much more reliably and easily measured using FR analysis software. Championships directors should be aware of this and set start

and finish gates as a matter of routine in all tasks where 'takeoff' and 'landing' times are required anyway, they can be positioned at the end of the deck so there is not much real difference between the two.

The method of correcting elapsed time flown to standard temperature and pressure is mathematically identical to that used in S10 Annex 1 to establish aircraft minimum speed. A mathematical rationale may be found at http://www.flymicro.com/cima00/1-4b.htm and an online calculator at http://www.flymicro.com/cima00/1-4c.cfm These were both included as annexes to the original proposal accepted by the plenary in 2000.

The fuel load figures are based on normal practice, ie 1.5 Kg = c.2.03 L, 4 Kg = c.5.42 L and 6 Kg = c.8.13 L

This proposal intends that a Continental or a World record can be established at either a World or Continental Championships but of course in a World Championships, a continental record can only be set by a competitor competing for a nation of that continent. (The actual location of the World championships is irrelevant).

If this proposal is accepted, then a paragraph should be inserted in S10 Annex 5, section 2 reminding the International Jury of their duties and responsibilities in respect of Championship records.

Comments from S10 Sub Committee

This proposal is supported.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 8

Proposal from

Tomas Backman, SWE Delegate

Proposal title

Scoring when a technical flaw is discovered.

Existing text

None. New addition to S10

New text, OPTION 8a

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, OPTION 8b

S10 4.29.8 If a failure in GNSS flight analysis or scoring is discovered 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.

Reason

During the competition in Levroux one team was very upset about a correction of the scoring for one competitor from another team. They argued that the correction didn't follow the timetable for complaints and protests. As the correction was due to a technical flaw in one of the scoring computers and had nothing to do with the competitors actions, the competitor was later given his rightful scores for the task in question. The proposed sentence is a clarification of what must be regarded as an obvious case of fairness to the competitors. The idea of a flying competition is to come to a decisive result in the air caused by the skill of the pilots, not to gain points and medals from a failure caused by the scoring administration.

Note: The difference between Options 8a and 8b is the phrase *before the end of the championship* which is omitted from 8b. This phrase attempts to put a time limit up to when technical errors in calculation or flight analysis can be fixed. Given that everybody has plenty of time to spot errors but scoring and especially flight analysis is a very complex technical business, should it be possible for a detailed forensic analysis of flight tracks or scoring spreadsheet long after the event be capable of altering pilot positions or even medals? Option 8a says no, in the interests of continuity the scores are fixed at the end of the championship, Option 8b says yes, justice should be seen to be done at all costs, forever.

It is not intended that option 8a of this proposal could affect something like the EMC 2000 situation where a team medal was later swapped at the CIMA meeting. In that case, rather than the problem being a pure 'technical error' of calculation or flight analysis, a decision of the jury simply was not enacted in the scoring at the last minute and it was that which needed to be corrected.

Comments from S10 Sub Committee

This proposal is supported. (8a)

Comments from CIMA delegates

None at this time.

CIMA decision

Option 8a:	ACCEPTED	DENIED
Option 8b:	ACCEPTED	DENIED

PROPOSAL 9

Proposal from

Richard Meredith-Hardy, GBR Delegate

Proposal title

Status of video evidence.

Existing text

None. New addition to S10

New text

S10 5.1.4 In championship precision tasks, any conclusive video evidence may be used to verify a pilot's performance.

Reason

This is an attempt to clarify the position on video evidence.

Despite the fact that S10 An 3, 1.12.3 says *Landing accuracy will be verified by video cameras* it frequently isn't by the organization and in recent championships teams have been denied the opportunity to video their own

pilots performance on the grounds that the Director has said that the marshal's decision is final and video evidence will not be allowed. This is contrary to natural justice and has been based on the football referee principle. Such a comparison is unreasonable as football is a continuous game and video delays would become a logistical nightmare and influence the strategy of the game. Furthermore, football referees are well trained.

In microlighting we take anyone off the street and make them a marshal. Generally it works but when it does not there must be a mechanism to protect the competitor. In particular decisions on spot and precision landings are frequently improved by the use of video evidence. As pilots rarely know the official scores until some time later a delayed decision cannot alter strategy.

Comments from S10 Sub Committee

The subcommittee is undecided, though it is clear something must be done about this problem. It is thought there may be a proposal in the EMC 2006 local regulations to use an electronic method of measuring precision landings which, if continued in future championships, would solve the need for this proposal.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 10

Proposal from

Richard Meredith-Hardy, GBR Delegate

Proposal title

Clarification of 'default' penalties

Proposal 10a: Existing text

S10 4..27.1 Outlandings shall normally be scored zero, unless specifically stated at briefing…..

S10 An 3 1.11.6 Outlandings shall normally be scored zero, unless specifically stated at briefing…..

Proposal 10a: New text

S10 4.27.1 Outlandings shall be scored zero, unless specifically stated at briefing. [remainder of provision unchanged]

S10 An 3 1.11.6 Outlandings shall be scored zero, unless specifically stated at briefing. [remainder of provision unchanged]

Proposal 10b: Existing text

None. New addition to S10

Proposal 10b: New text

Addition at the end of **S10 An 3 1.14.2**

Actions which will result in 100% penalty to task score unless stated differently in the task brief:

a. Landing out
b. Returning after end of task
c. Local airspace infringement.
d. Competition prohibited area (no fly zone) infringement.
e. Failure to observe circuit and airfield rules.

Proposal 10c: New text

Addition at the end of **S10 An 3 1.14.2**

Actions which will result in 100% penalty to task score unless stated differently in the task brief:
a. Landing out
b. Returning after end of task
c. Local airspace infringement.
d. Competition prohibited area (no fly zone) infringement.

Reason

There was a problem in Levroux where some customary 'default' penalties were argued away on the basis that they were not actually stated in the task brief. It is often difficult for a championship director to include all possible penalties in a task description and some 'default penalties', notably 100% task score for 'landing out' are the accepted norm. Proposal a attempts to clarify this by simply removing the word 'normally' which lends ambiguity to an otherwise clear paragraph. It does not stop the Championship director from permitting landing out, all he has to do is state that it is permitted in the task sheet.

Proposal b attempts to add some other customary default 100% penalties to the local regulations.

Proposal c is a variant of proposal b, omitting provision e which it has been pointed out is rather wide ranging and perhaps better defined in the airfield rules.

Comments from S10 Sub Committee

The sub-committee is undecided.

Comments from CIMA delegates

None at this time

CIMA decision

10a:	ACCEPTED	DENIED
10b:	ACCEPTED	DENIED
10c:	ACCEPTED	DENIED

PROPOSAL 11

Proposal from

Richard Meredith-Hardy, GBR Delegate

Proposal title

Addition of a variant of the slalom task to Annex 4, Part 3, the PF & PL task catalogue.

Existing text

None. New addition to S10

New text

S 10 Annex 4, 3.C.9 PRECISION CIRCUIT IN THE SHORTEST TIME ('Chinese slalom')

Objective
To strike a number of targets laid out in a given order in the shortest possible time and return to the deck.
Description
Between 6 and 12 sticks 2m in height are laid out on a course not exceeding 3Km in length.
The pilot enters the course into wind and strikes stick 1. At this point the clock starts.

The pilot then flies the course to strike all the other sticks in the given order, a strike on the last one stops the clock.

Special rules

- A valid strike on a target is one where the pilot or any part of the paramotor has been clearly observed to touch it
- A strike on stick 1 starts the clock, a strike on the last stick stops the clock.
- Pilots may have only one attempt at striking each stick except for the first and last sticks where three attempts at each are permitted.
- Failure to strike the first or last stick or at least two of the intermediate sticks or touch the ground at any point between them: score zero.

Scoring

$$\text{Pilot Score} = Q = \frac{NQ^3}{Sp} \quad \text{Pilot Score} = \left(500 \times \frac{Q}{Qmax}\right)$$

Where:

NQ = The number of sticks struck by the pilot

Sp = The pilot's elapsed time in seconds between striking the first and last sticks.

Note to Director:

This task is ideally suited for sites where there are physical features which obscure a direct view from one stick to the next.

Reason

Due to the limitations of the site at the 2005 Shanghai Qingpu Paramotor Open we had to use this variant of the 'kicking sticks' as there was simply no open spaces large enough to accommodate any of the other ones in the catalogue. It was deemed a success by all the participants and suitable for inclusion in the International catalogue.

Comments from S10 Sub Committee

This proposal is supported.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 12

Proposal from

Antonio Marchesi, Spanish delegate.

Proposal title

Better definition of the acceptable mistake of the Organizers in physical positioning the location of a scoring zone relative of a turnpoint or hidden gate or time gate.

Existing text

S10 An 6, 6.3.5 Complaints about the physical mis-positioning of a scoring zone relative to a turnpoint will not be accepted unless it can be shown that the turnpoint is not inside the scoring zone.

New text

S10 An 6, 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= Rp/2 where

Rp= 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)

Reason

In levroux in Classic Classes there was some problems about the validation of some turnpoints overflow that were as easy as a water tower. This was due to the incorrect system of getting the turnpoints coordinates and to the fact of most fixed wing aircrafts don´t overfly the turnpoint at the vertical, they round it leaving the object to one side or another. This is due to the lack of visibility to the front and down of these aircraft when you are very close to a location or at the vertical. The typical situation of overflying a location is a combination of both (you are very closed and at the vertical) so many of these aircrafts need to overfly leaving the location to one side. As the point used by the organizers was inside the scoring zone by a few meters, many pilots that overflow the points only 50 meters from the physical point where not scored we must reduce the margin of error of the organizers to avoid this situation and to force the organizers to correctly collect the coordinates of the physical locations of the turnpoints or gates.

Comments from S10 Sub Committee

This proposal is supported. A editorial alteration to S10 An 3, 1.13.7 will need to be made so it conforms to this provision.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 13

Proposal from

Antonio Marchesi, Spanish delegate.

Proposal title

Establish a standard unit system.

Existing text

None. New addition to S10. Note: There is a paragraph for the GNSS unit format but it can remain as it is because there's no contradictions. (5.1 of the Annex 6) and there's no contradiction with General Section, 7.1.

New text

S10 5.2.6 Standard units of measurement

The unit system used in championships for any purpose (eg Task definition, pilot estimations, etc.) shall be as follows:

- Time: UTC adjusted to local time - HH:MM:SS
- Time interval: hours, minutes and seconds - HH:MM:SS
- Date: Day, Month, Year - DD:MM:YY
- Distance: Kilometres to two decimal places, meters and centimetres.
- Speed: Kilometres per hour to two decimal places.
- Altitude and Height: Metres and centimetres, or feet.
- Vertical Speed: meters per second or feet per minute.
- Heading: Degrees and decimal degrees geographic (measured on the official map) - DDD[ddd]
- Direction: Degrees and decimal degrees true - DDD[ddd]
- Latitude: Degrees, minutes and decimal minutes with N,S designators - DDMMmmmN
- Longitude: Degrees, minutes and decimal minutes with E,W designators - DDDMMmmmE
- Pressure: Millibars to two decimal places or hectopascal.
- Weight: Kilograms to two decimal places and grams.

- Volume: Liters to two decimal places.
- Temperature: Degrees Celsius.

Any other unit shall conform to FAI GS 7, the ICAO units system and the International Metric System in this order of relevance.

Reason

Every championship the Director changes some units and this is a nonsense extra work for pilots making flight plans and calculations on the ground, or flying, or giving estimations. So with this proposal everybody knows in advance what units are used, and those proposed units are coherent with the units used for the GNSS flight recorders.

Comments from S10 Sub Committee

None at this time except some editorial alterations to S10 may be required so it fully conforms to these units.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 14

Proposal from

Antonio Marchesi, Spanish delegate.

Proposal title

To have a provisional general classification updated along the championship, for individual and team scoring.

Existing text

S10 4.29.2 The overall results shall be computed from the sum of the task scores for each competitor, the winner having the highest total score in the class.

S10 4.5.7 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
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 4.29.2 The overall results shall be computed from the sum of the task scores for each competitor, the winner having the highest total score in the class. A provisional individual general classification sheet must be published every time a provisional or official scoring task sheet is published.

S10 4.5.7 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
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. A provisional team general classification sheet must be published every time a provisional or official scoring task sheet is published.

Reason

Every championship we can see pilots and team leaders making their own general scoring sheets to see what's going on. I think that for the scoring marshals this is a very easy and automatic job (of course if they have a minimum qualification) and it will make the development of the championship more interesting for the pilots and for the public in general. In the last championships, I heard people asking to a pilot "how are you doing the championship?" and pilot answering " I don´t know ". This cannot happen in the XXI century.

Comments from S10 Sub Committee

The subcommittee is undecided. If the proposal is accepted an editorial alteration to S10 An 3, 1.14.1 will need to be made to include this provision.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 15

Proposal from

Jacek Kibinski, Delegate of Polish Aero Club.

Proposal title

Alteration of team scoring

Existing text

S10, 4.5.7 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

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, 4.5.7 The team score shall be computed from the sum of the scores of the top three pilots of each country in each task, separately in classes: AL1 + AL2, WL1 + WL2, PL1 + PL2 and PF1.
Pilots of a team must be scored in both of two classes from pairs listed above.
Example: two pilots in AL1, one in AL2 or - but not all three pilots in AL1 or AL2.
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

- Fixed wing, weight-shift and soft wing microlights will be scored separately.
- Proposed method performs equal opportunity for all teams of 3 or more pilots.

According to the S10, par. 4.5.7, team scoring is computed from the sum of scores of the top three pilots of each country in each class WL1, WL2, AL1. AL2, it means from scores of 12 members of a team.
This method of calculation awards number of competitors in a team, not their qualifications. For example, team of 12 beginners, if each one of them earn even small amount of scores, can beat a team of 3 champions.
This scoring system, profitable for organizing country, was surprising and criticized by many participants of two last World Championships: in Long Marston and in Levroux 2005.

In the category of soft wings (called “new classes”): PF, PL1, PL2 team scoring was calculated separately for PF and PL1 + PL2. The idea is reasonable, because microlights of PF and PL are considerably different. Classes WL and AL are different as well.

Comments from S10 Sub Committee

Not supported.

It's not such a bad idea to split the classics into WL & AL but:

- The idea that you score zero team score without having at least one aircraft in each class is very unfair and discriminates against small (or even not so small) teams in a completely arbitrary way. Example is the Czechs at Levroux who still got the PL team Silver despite having no PL2's.
- It takes no account of the not uncommon situation where your sole team member in a class has to retire from competition, thereafter the team would unreasonably score zero in every task.
- In the PL classes, because domestic regulations, the expense of bringing them to a championship, or simply the unpopularity of them makes a PL2 entry unlikely or even impossible, (FRA or GBR are examples) it seems very unfair to say that the PL1 entries from those nations can't ever feature in the team scoring at all.

From a practical point of view, this team scoring scheme would be quite difficult to implement in a scoring system.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 16

Proposal from

Jacek Kibinski, Delegate of Polish Aero Club.

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

S10 4.4.2 *Delete entire provision*

Reason

A new paragraph 4.4.2 says, that the candidate competition director, who has not previously organized successfully FAI Cat.1 microlight championships, must as minimum:
- have flown as a competitor in FAI Cat.1 microlight championships, and
- have organized national competitions.

The rule is curious and unnecessary, because:

1. It is no logic relation between pilot's and good manager's qualifications. Experience of several last Championships clearly show, that we have had excellent directors being no competitors and 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 have absolutely perfect championships.
In my opinion CIMA should more strictly execute and carefully watch applying of existing rules. It is no need to introduce new ones, causing restrictions and problems for organizers of future championships.

Comments from S10 Sub Committee

Not supported.

Now we're using FR's there are an increased number of 'technical' traps for competition directors. It is absolutely vital a director has organized domestic competitions and at least competed in one major international championship so he has a chance of understanding the problems involved. When you have competitors coming at great personal expense from all over the World it is simply not good enough for a candidate to be said to 'be a good administrator". Without practical experience, what does he know to administrate, how can he really understand the (many) intricacies of task setting and the other work of a director? This existing provision isn't even very rigorous; how difficult is it to have run a nationals and have competed once as co-pilot? Co-Pilots don't even need a pilot licence, but they will still get good practical first-hand experience of what major championships are all about. If this sport is to progress then it must be unacceptable to have totally inexperienced personnel in charge of our international championships.

If anything, there is a case for expanding this provision to include something about the flight analysis & scoring manager. The 'Baker' problem at Levroux was directly attributable to there being little prior experience of scoring or flight analysis in the classics scoring team, it was saved only after Jose Luis heard about the problem (several days later). It may be worth considering a future requirement that the flight analysis & scoring manager of a Cat 1 championship shall have been at least once in the flight analysis & scoring team of a previous Cat 1 championship.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 17

Proposal from

Antonio Marchesi, Spanish delegate.

Proposal title

Define a minimum size for scoring zones and gates

Existing text

S10 5.9.3 The scoring sector for GNSS flight recorders is independent of any other sector (eg. photo sector). The size shall be stated in the local regulations and task briefing sheets.

New text

S10 5.9.3 The scoring sector for GNSS flight recorders is independent of any other sector (eg. photo sector). The size shall be stated in the local regulations and task briefing sheets. At the scale of the official map the minimum size of scoring sectors shall be 1mm radius for circular sectors and 2mm width for gates.

Reason

With the FR is easy to forget that the pilots still use maps and we are riding on a plane, so it is important to limit the minimum size of scoring zones in relation with the precision of the official map to avoid Directors asking for impossible precision by the pilots. In charts, there is a concept of precision of 0.1 mm measured on the map, because this is the minimum distance that a human eye can distinguish on a paper, so nothing smaller to this (eg. a road width) can be truly represented on the chart. As 0.1 mm is still very strict for pilots, I propose 1 mm on the map that is 100 meters for 1:100.000, 50 meters for 1:50.000, 200 meters, for 1:200.000 and 250 meters for 1:250.000.

Comments from S10 Sub Committee

This proposal is supported. An editorial alteration to S10 An 3, 1.13.6 will need to be made so it includes this provision.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 18

Proposal from

René Verschueren, Belgian Paramotor Federation

Proposal title

Rules for Fuelling when economy task is proposed

Existing text

None. New addition to S10.

New text

S10 5.5.3 In championship economy tasks in the PF & PL classes, fuel quantity shall be proportioned according to the following formula:

$$\text{Pilot fuel} = \left(\text{Fmin} \times \frac{\text{Wp}}{\text{Wmin}} \right)$$

Where
Fmin = the volume or weight of fuel given to the lightest pilot (or crew) in class.
Wp = The pilot's (or crew's) body weight in Kg
Wmin = The body weight in Kg of the lightest pilot (or crew) in class.

Pilot body weight is weight in underclothes (t-shirt and light shorts) nothing else.

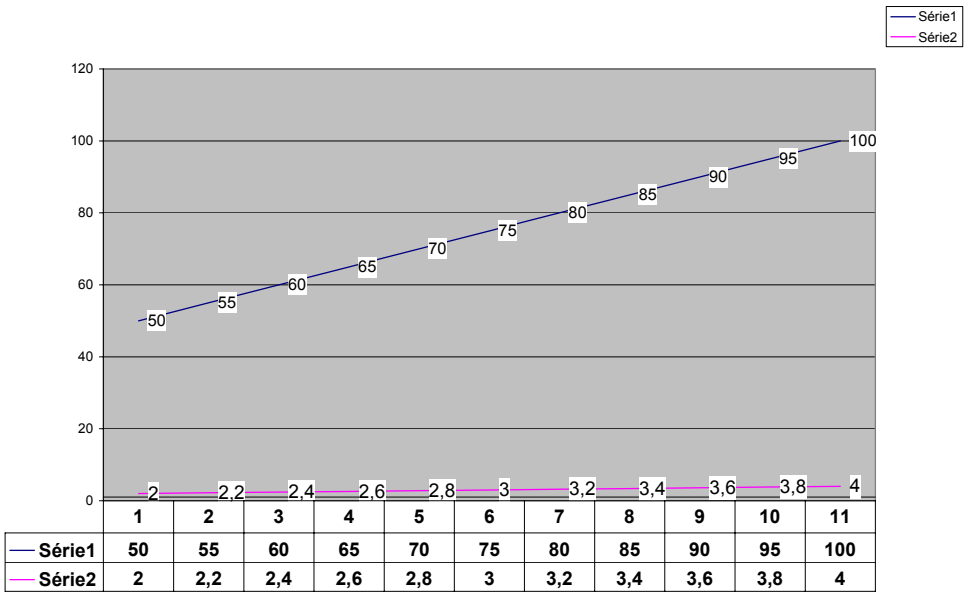
Not less than one weight or volume measuring device will be provided per 20 competitors.

Reason

A pilot of 50 kg needs less power to take off than pilots of 100 kg

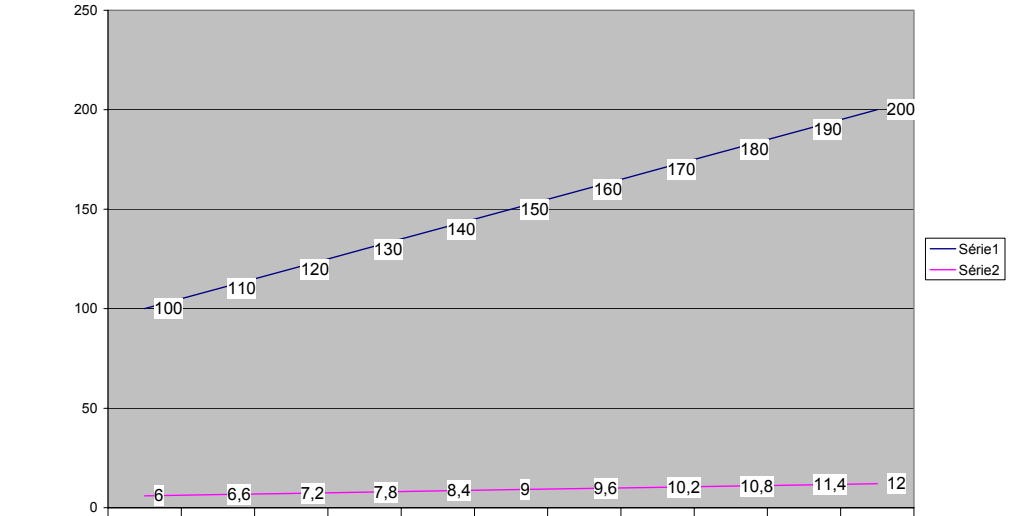
A pilot of 50 kg may have a small motor and even if the pilot of 100 kg use a same engine, he need the full power to take off and to climb. The pilots of 50 kg need nearly only 50 % of the power to climb.

PF1 and PL1



	1	2	3	4	5	6	7	8	9	10	11
Série1	50	55	60	65	70	75	80	85	90	95	100
Série2	2	2,2	2,4	2,6	2,8	3	3,2	3,4	3,6	3,8	4

PF2 & PL2



	1	2	3	4	5	6	7	8	9	10	11
Série1	100	110	120	130	140	150	160	170	180	190	200
Série2	6	6,6	7,2	7,8	8,4	9	9,6	10,2	10,8	11,4	12

Comments from S10 Sub Committee

Not supported

To the sub-committee's knowledge this is an entirely untested handicapping scheme which is potentially so influential to a pilot's championship score it must be shown to work by use in National or Open competitions before it is adopted by FAI. As for the actual proposed ratio, aerodynamic theory does not support the assumption that a pilot will use twice as much fuel as a pilot half his weight even if they were both using identical aircraft, which they rarely are. In reality, equipment differs such a lot that pilots of the same weight but with different engines can experience a two or even three times difference in fuel consumption so for any fuel handicapping scheme to be fair it must take account of not just pilot weight, but all significant variables including the specific fuel consumption of the engine and the performance of the wing. This would soon develop into an extremely complex system which could only be adjusted against empirical evidence once annually at Cat. 1 events. Given that the pace of development is such that new wings and engines are coming out all the time, most handicaps would have to be based on a complete guess of an aircraft's performance by a committee. It is likely most people would NOT accept this as being reasonable or fair and would have the simple effect of driving them away from FAI competition.

In practical terms, it takes long enough to measure out constant weights or volumes of fuel. It would take much longer to measure out individual fuel quantities. With everyone having different quantities of fuel for an eco task it would promote accusations of cheating and generally be much more difficult to manage. The best you could do instead is to keep yourself fit, which has other benefits in life too.

An editorial alteration to S10 An 3, 3.2.3 will need to be made so it includes this provision.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED

PROPOSAL 19

Proposal from

Richard Meredith-Hardy, Chairman of the CIMA FRAC (Flight Recorder Approval Committee.)

Proposal title

Alteration to the CIMA flight recorder data standard to indicate a date change in a track file.

Existing text

S10 An 6, 5.7 L RECORDS (Comments)

The L Record (Logbook) is used to specify comments in the file. For the general specification, see IGC-FR-TS. In the case of the CIMA specification several L records in a specific format are mandatory and should be placed in the .IGC file before the first fix (B) record and after the A, H and I records.

The format is L - CMA – Source code – Data TLC – Description : Data

5.7.1 Required L records

```
LCMAZTSNDATATRANSFERSOFTWARENAME:TEXTSTRING CRLF
LCMAZTSVDATATRANSFERSOFTWAREVERSION:TEXTSTRING CRLF
LCMAZTSDDATATRANSFERDATE:DDMMYY CRLF
LCMAZTSTDATATRANSFERTIME:HHMMSS CRLF
LCMAZTSKTASKNUMBER:NNNN CRLF
LCMAZPRSPRESSALTFILL:GNSSALT CRLF
LCMAZTZNTIMEZONEOFFSET:NNNNN CRLF
```

L record - Description	Size	Element	Remarks
IGC manufacturer's designation	3 Bytes	CMA	Normally bytes 2, 3 and 4 of L records should contain the IGC manufacturer's designation TLC, but mandatory CIMA L records should always contain CMA.
Data source	1 Byte	Z	Byte 5 of every LCMA record should reflect the true source of the data, see Data Source Codes above.
Transfer Software name	As required	TEXT STRING	TSN = Name of the software which did the transfer from FR to PC, Alphanumeric.
Transfer Software version	As required	TEXT STRING	TSV = Version number of the software which did the transfer from FR to PC, Alphanumeric.
Transfer date	6 bytes	DDMMYY	TSD = Date the data was transferred from FR to PC; Valid characters 0-9
Transfer time	6 Bytes	HHMMSS	TST = Time the data was transferred from FR to PC; Valid characters 0-9
Task number	4 bytes	NNNN	TSK = Task number, Valid characters 0-9

Pressure altitude fill	As required	TEXT STRING	PRS = GNSSALT Not required unless the transfer software has substituted the pressure altitude data with GNSS altitude data.
UTC Offset	5 bytes	NNNNN	TZN = Time Zone offset from UTC; First byte, either + or – Remainder: HHMM Valid characters 0-9 Not required unless the transfer software has altered all times in the file to this UTC offset.
Inserted task file name	As required	TEXT STRING	TIN = Task Inserted Name, Name of "C" record task description file inserted by the operator. Alphanumeric. Not required unless the transfer software operator has inserted a task description file.

5.7.2 Optional L records

Any optional records allowable in the IGC specification are permitted.

New text

S10 An 6, 5.7 L RECORDS (Comments)

The L Record (Logbook) is used to specify comments in the file. For the general specification, see IGC-FR-TS. In the case of the CIMA specification several L records in a specific format are mandatory.
The format is L - CMA – Source code – Data TLC – Description : Data

5.7.1 Required L records

Should be placed in the .IGC file before the first fix (B) record and after the A, H and I records.

```
LCMAZTSNDATATRANSFERSOFTWARENAME:TEXTSTRING CRLF
LCMAZTSVDATATRANSFERSOFTWAREVERSION:TEXTSTRING CRLF
LCMAZTSDDATATRANSFERDATE:DDMMYY CRLF
LCMAZTSTDATATRANSFERTIME:HHMMSS CRLF
LCMAZTSKTASKNUMBER:NNNN CRLF
LCMAZPRSPRESSALTFILL:GNSSALT CRLF
LCMAZTZNTIMEZONEOFFSET:NNNNN CRLF
LCMAZDTETRACKDATE:DDMMYY CRLF
```

L record - Description	Size	Element	Remarks
IGC manufacturer's designation	3 Bytes	CMA	Normally bytes 2, 3 and 4 of L records should contain the IGC manufacturer's designation TLC, but mandatory CIMA L records should always contain CMA.
Data source	1 Byte	Z	Byte 5 of every LCMA record should reflect the true source of the data, see Data Source Codes above.
Transfer Software name	As required	TEXT STRING	TSN = Name of the software which did the transfer from FR to PC, Alphanumeric.
Transfer Software version	As required	TEXT STRING	TSV = Version number of the software which did the transfer from FR to PC, Alphanumeric.
Transfer date	6 bytes	DDMMYY	TSD = Date the data was transferred from FR to PC; Valid characters 0-9
Transfer time	6 Bytes	HHMMSS	TST = Time the data was transferred from FR to PC; Valid characters 0-9
Task number	4 bytes	NNNN	TSK = Task number, Valid characters 0-9
Pressure altitude fill	As required	TEXT STRING	PRS = GNSSALT Not required unless the transfer software has substituted the pressure altitude data with GNSS altitude data.

UTC Offset	5 bytes	NNNNN	TZN = Time Zone offset from UTC; First byte, either + or – Remainder: HHMM Valid characters 0-9 Not required unless the transfer software has altered all times in the file to this UTC offset.
Inserted task file name	As required	TEXT STRING	TIN = Task Inserted Name, Name of "C" record task description file inserted by the operator. Alphanumeric. Not required unless the transfer software operator has inserted a task description file.
Track date	6 bytes	DDMMYY	DTE = Date of the first B (fix) record in the file. Valid characters 0-9

5.7.2 Required embedded L records

If the date of a fix (B) record differs from the date of the previous fix (B) record, then an L record shall be inserted between the two containing the new date.

```
LCMAZDTETRACKDATE:DDMMYY CRLF
```

5.7.3 Optional L records

Any optional records allowable in the IGC specification are permitted.

Reason

This looks like a much more complicated proposal than it is. The IGC data format we use in FR track files is not suited to tracks spanning more than one day. The date is included in a H header record at the top of the file and this date is usually taken from the first track fix point in the FR's memory. Of course it is unlikely a task will be set in a championship spanning more than one day either, but we have had problems identifying which day a track, or part of a track was made if the user has forgotten to wipe the memory of his FR before takeoff, an all too common occurrence.

All CIMA approved FR's do actually record the date of each fix point, this proposal inserts the requirement into Annex 6 for a simple L (Logbook) record containing the new date to be inserted in between track segments recorded on different days.

Note: There is no dispute within FRAC that this requirement is needed but there is an ongoing discussion as to how best to achieve it. Should FRAC find a better way of doing the same thing it would be pleased if it could present it to the Plenary meeting in place of this proposal.

Comments from S10 Sub Committee

This proposal is supported.

Comments from CIMA delegates

None at this time

CIMA decision

ACCEPTED DENIED