01 - CZE - Championship information system

Proposal from

Vladimir SILHAN (CZE)

Proposal title

Chamionship information system, allowing for electronic system

Existing text

none

New text

4.7.7 Championship Information System
4.7.7.1 For Championship Information System is responsible Championship director.

4.7.7.2 Championship Information System must assure permanent publication of relevant information at least for team-leaders, competitors, jury members and stewards.

4.7.7.3. Championship Information System shall inform about:

4.7.7.3.1 Any rules not specified in Local regulations (take off and landing procedures, prohibited area and so on)

4.7.7.3.2 Times of briefings

4.7.7.3.3 Planed tasks inclusive task sheets

4.7.7.3.4 Results of tasks

4.7.7.3.5 Complaints

4.7.7.3.6 Protests

4.7.7.4. Information system may be established in two forms:

4.7.7.4.1 Official board, where shall be printed and signed information and files boxes-- "pigeon holes" - where will be available printed information about task sheets, briefings and daily plans and results at least for each team-leader, jury member and steward and task sheets for each competitor (crew), team leader, jury member and steward;

4.7.7.4.2 Electronic information system – intranet, where shall be published the same information as shall be distributed by pigeon holes. Electronic systems don't supply Official board and may altered only pigeon holes. Documents and information issued by intranet needn't be signed by competition director and shall be published in electronic editable format.

4.7.7.4.3 Electronic information system may be used only, when IT infrastructure assures not interrupted availability of information at least for 1 computer for each team-leader. In local regulations must be published requirements for technical parameters of computers for connection into the intranet. In the case, when not interrupted availability of information will be not assured, shall be used only the information system by article 4.7.7.4.1.

4.7.7.5. Publishing of new information shall be or announced by sound signal in the camp or publishing shall be organized in pre defined hours.

4.7.7.5.1 No information may be published from 22:00 to 06:00 local time and in the time, when tasks runs. Task runs from the first take off time from domestic airfield – 1 hour up to time of last landing at domestic airfield + 30 minutes.

Reason

In EMC 2010 was used electronic information system. Current section 10 is intended to be used the classical board and pigeon holes and new electronic system isn't supported by the S10. For accordance of competitions with the S10 is a new rule for electronic information system needed. The new electronic system doesn't alter a classical official board. Some documents MUST be signed by competition director or jury. From this point of view, no any results in EMC 2010 were valid and results of the championship might be infirmed from formal reasons.

System worked well in the organizers server in EMC 2010 and probably future will be in electronic, but IT infrastructure was very forceless, connection was permanently interrupted and was too slow. This affect made information system difficult for use. Publishing of new information was announced only by message in the system and there was no independent announcement, that new information is available. For good information teams should have a special guy for permanent checking, if something new is published in the intranet. Announcing of issuing of new information is easy for competition organizer and having of some amplifier or siren isn't a big cost.

Some teams haven't a special team-leader, some pilot or a crew member is team-leader. In this case the great disadvantage arises for like this team, when new information is published, when tasks runs.

02 - CZE - role of Monitor

Proposal from

Vladimir SILHAN (CZE)

Proposal title

The role of the Championships monitor

Existing text

4.5.1 At the time a bid is accepted CIMA shall nominate a monitor to ensure preparations are complete and on time. The monitor shall be a jury member, steward, or person with specialised knowledge of championships. The monitor shall be invited to visit the championship site approximately 6 weeks before the start of the event and any prior rehearsal competition held prior to the event.

New text

4.5.1 At the time a bid is accepted CIMA shall nominate a monitor to ensure preparations are complete and on time. The monitor shall be a jury member, steward, or person with specialised knowledge of championships. ~~The monitor shall be invited to visit the championship site approximately 6 weeks before the start of the event and any prior rehearsal competition held prior to the event.~~ Monitor doesn't be a member of organizers team. The monitor's responsibility is to provide inspection, if all key items of the championship were taken into mind and if its preparation is assured.

4.5.2. Organizer shall send in written to a monitor, no later than 3 month before championship:

a) Layout of the airfield and camp and its facilities (at least place for camp, parking place for airplanes, parking place for cars, number and location of toilets, wash rooms, showers, pilot office, scoring room, jury room, official board, briefing room), description of assurance of utilities(drinking water, hot water, electricity, Internet connection) and list of contracts for deliveries and services

b) List of personnel (marshals, scoring staff, pilot office staff - at least numbers of staff)

c) Description of the Information system inclusive procedures, description of IT infrastructure and its performance and limitations.

d) Description of the Scoring system inclusive quarantine and debriefing procedures, system of recording of precision landings, system of loading, saving and backup of data and relevant administration procedures (filling and archiving)

e) List of measurement tools and equipments and its test certificates

f) Task sheets

g) Competition map

h) Flying restrictions which may be applied during championship, air space reservations etc. and applicable flying procedures (departures, arrivals, final approaches etc)

i) Ground movement procedures and schemes

4.5.3. The monitor shall be invited to visit the championship site approximately 6 weeks before the start of the event and organizer shall arrange test of information system and scoring system and shall provide inspection of contracts for the deliveries and services, tools and equipment.

4.5.4. The Monitor shall prepare report from the inspection in written and shall send this report to Jury President, CIMA President and organizer. In this report will be described his comments and evaluation of risks. Monitor´s report will be distributed to team leaders via competition (championship) organizer. Only authorised person for a decision, if comments will be received or rejected, is competition director.

Reason

Reason – Existing text describes, who may be the Monitor, but purpose of the monitor isn't described and no results of Monitors work are defined.

Monitoring of the airfield in time, when facilities aren't installed hasn't any sense. Shall be clearly defined, what organizer must introduce for

inspection and what will be privileges and scope and result of monitors work.

03 - CZE - Inspection of aircraft

Proposal from

Vladimir SILHAN (CZE)

Proposal title

Advance notice for inspections

Existing text

none

New text

4.17.6.1. Any inspection of the airplane provided by organizers mustn't be provided in period from start of planning time – 5 minutes up to finishing of debriefing after landing. Organizer shall specify in the briefing duty for presence of competitors and their aircrafts in quarantine zone 20 minutes before the planning time as maximum for inspections of aircrafts and equipment. Start list order shall be not changed for inspection reasons.
4.17.6.2. If a special Inspection for which the aircraft must visit a specified place (for example hangar for weighing) is necessary, must be competitor and team leader invited for this inspection at least 1 hour in advance. In this case, competitor is obliged to carry his airplane to the specified location with empty fuel tank and with all equipment needed for the following task. Inspection must be finished at least 15 minutes before relevant planning time. Organizer may decide, that airplane will be under oversight of marshals and pilot mustn't make anything with his airplane up to start of planning time excluded refuelling by approved amount of fuel, pre-flight check, and warm up of the engine under marshals supervision. Marshals are authorized for personal check of the pilot (crew), that no any additional fuel or equipment was brought. During planning period pilot (crew) can make pre-flight preparation and taxi for takeoff under supervision, but marshals doesn't disturb crew from planning and preparation of the flight.

Reason

Reason – changing of the starting list and starting order makes risks and disadvantages for pilots, which must overfly slower aircrafts at the track. This may make collision situations in the track and gates and can make bad concentration of pilots for the task. This is a big disadvantage for competitors. Any checks and inspections shouldn't generate disadvantages or additional loading for any competitor.

04 - CZE - Basic rules for tasks

Proposal from

Vladimir SILHAN (CZE)

Proposal title

4.29.2 Basic rules for construction and designing of the competition tasks

Existing text

4.29.2 The tasks to be used shall be approved by CIMA (S10 A4) and precisely set out in the local regulations together with the method of scoring.

New text

4.29.2 Basic rules for construction and designing of the competition tasks

The first liability of the task designer and championship director is to assure the safety of the task. There shouldn't be requested any unsafe procedures and initiations of collision situations between competitors and competitors and any other aircraft.

Any incidents and collision situations must be avoided as possible. Preferable solution is reservation of relevant part of airspace for competition flights and sufficient steps between following competitors.

Starting lists shall be set from fastest to slowest airplanes and if some change in starting order will be needed, sufficient distance preventing of a collision situations or/and team cooperation must be respected. The minimal time distance between two following airplanes is two minutes.

Diversion of a collision situation shall be no reason for loosing of score or penalisation of competitor, if no advantage had arisen by this diversion and diversion of collision situation was announced to competition director immediately after landing and manoeuvre will be visible and checkable in the track log.

*(**Reason - pilots mustn't be motivated for risky decisions and flying)***

Navigation tasks:

4.29.2.1 Competition maps and detail instructions with specifications of locations of turn points and gates, legs distances, photos and marker catalogue and all other detail instructions will be given to competitor in the aircraft in the pre-flight quarantine in the beginning of planning time.

4.29.2.1.1 All distances used in the evaluation process must be measured from the same map, which will be given to competitors for flight. Calculation of distances (by mathematic methods from latitudes and longitudes) is possible only in the case, when lengths of legs are written in instruction for competitors. Measuring will be made with precision for 0,5 mm in the map and rounded to one decimal of kilometre. Methods of measuring of the lengths of a track described in chapter 5 are valid only for records, no for competitions and championships.

Reason: competitors shall have the same possibility for measuring as task designer had. Pilots haven't possibility to get latitudes and longitudes with accuracy for meters and they haven't computers for calculation of the correct distance. Because only maps are given to competitors, or distances must be announced to competitors, or measuring must be provided by simple method feasible in limited time with limited equipment and comfort. This is something absolutely other than records, where pilot haves non limited time and equipment for pre-flight preparation.

4.29.2.1.2 Gates and turn points shall have following dimensions and tolerances:

- Starting gate and finish gate shall have radius 2 mm in the map.
- Known time and track gates and known turn points shall have radius at least 1 mm in the map.
- Known gate or known turn point must be located in the place, which is drawn in the map. The centre of the gate or turn point don't be defined as large object, for example castle, cathedral, large traffic ring, pond, lake etc. If using of like this object is necessary, shall be given sufficient tolerances (100% score will be given to each flight over any part of the defined object in correct time).

Explanation: if dimension of some object is over (for example) 50 m and is impossible or very difficult to observe from an aircraft, where the centre really is, some problems with evaluation maybe based and origin of disputes may be initiated.

- Hidden gates, constructed turn points and gates and turn points with influence for 30 or more % of overall score shall have radius at least 2 mm in the map.
- For time gates must be set tolerances for covering of natural mistakes of the measurement method (accuracy of the GPS measuring equipments, rounding of tens and hundredths in latitudes and longitudes etc.), the minimal tolerance is ± 2 s for known gates and hidden gates at known track, ± 5s for gates at legs constructed during the flight.
- In analyzing programme shall be set tolerances for covering of the natural mistakes of measurement method 10% in the radius (200 m radius will be set as 220 m radius).

Reason and explanation - GPS and FR records position of aircrafts are recorded in whole seconds. If the first competitor will be in a gate 0,001 second before correct time (and is a good question, what is correct time after rounding for whole seconds), he will be penalized, because recorded will be previous second. If the second competitor will be late 0,999 sec, he will be not penalized. This is not fair principle. Some mistakes of loggers must be taken into the mind. By my experiments, Amod´s logger mistake of position is round 10 – 15 m and two loggers in the same place in the same time had recorded some small differences – this is almost 1 sec. These mistakes must be covered by tolerance.

4.29.2.1.3 Ground features

- Photography's, which shall be found and drawn in the competition map, should be made from an airplane from the heading of flight from distance at least 200 m. Deviation of the heading shall be less than 30° and vertical axes shall be sloping, not more than 45°. In tasks, where ground features should be discovered in specified space without specified track or heading of flight in this space, may be photographed from any position lying in the specified space. Photography's shall be photographed in the same vegetation period as championship has to be flown. Natural look and colours mustn't be changed. If in photography is more than one object, the relevant object must be highlighted by circle in contrast colour. Correct photos may be in map as maximal 1 mm from the axis of the track and don't be hidden behind trees, buildings or terrain obstacles from 200 m of height of flight at least last 250 m. False photography's may be not nearly than 2 mm, from the axis of the track in the map. The minimal dimension of the photography is 70 x 70 mm.
- Markers, which shall be found and drawn in the competition map, will be made from strips of dimensions 4 m x 0, 8 m and shall be in contrast colour. Markers must be described in markers catalogue, using of markers – letters T, X,I,H and L is prohibited for prevention of changing with aviation signs. Markers shall be oriented in the heading of flight. Correct markers may be in map as maximal 1 mm from the axis of the track and don't be hidden behind trees, buildings or terrain obstacles and must be visible from 200 m of height of flight at least last 250 m. False markers may be in the map not nearly, than 2 mm from the axis of the track.
- Ground features mustn't be located at least 1 km before and behind turn point and known gate, but using of turn point or gate photography is approved.
- Interval between ground features is not limited.

4.29.2.1.4 Balancing of the goals - Keeping of the track, keeping of the times (speed) and observing of the ground features shall have about 1/3 of the maximal achievable score of navigation task each.

Economy tasks

4.29.2.2. Tasks with limited fuel shall be created with special care for safety. Areas for flying or specified tracks shall be designed with reference to possibility of emergency landing. If terrain isn't safe for safety landing, request for sufficient amount of remaining fuel shall be applied in the task sheet.

4.29.2.2.1. If amount of remaining fuel will exceed 2 kg, must be this requirement specified in the Local regulations or bulletin no later, than 60 days before start of championship. *(Notice and explanation – aeroplanes with fuel tanks in wings are usually equipped by a special tanks susceptible check of remaining fuel visually. These additional tanks are usually from 5 to 10 litres. Application of requirement for 5 or more litres of remaining fuel requires a technical change in fuel system of an aircraft, which must be realised before the championship. In some countries exists rule, that flying without reserve of fuel for ½ hour of flight is prohibited. In like this case requirement for bigger amount of remaining fuel is necessary, but competitors shall receive this information in advance.)*

4.29.2.2.2. Take off for economy task may be organized or by starting list or in the frame of opened flying window.

4.29.2.2.3. Landing from the task with limited fuel shall be allowed in the specified space (whole airfield or specified runway or other marked space of dimension at least 300x25 m)

4.29.2.2.4. Requirement for landing into the deck after task with limited fuel is possible only in the case, when more than one landing deck is available. If no deck will be free for landing, pilot may land everywhere in the airfield and no penalty for this landing will be applied. The deck isn't free for landing, if any airplane, any equipment or any people are in the deck in the moment, when final approach is started.

Precision landings

4.29.2.3 Landing deck should be located at the runway with or hard surface or short grass, 20 mm as maximum. Before the deck and behind the deck must be free space 100x25 m at least of the same quality of surface, as the deck is.

4.29.2.3.1. Depending on altitude of the airfield length of the deck will be prolonged 1m for each finished hundred meters of altitude. If supposed temperature will be over 20°C, length of the deck will be prolonged 1m for each °C over the limit. The deck dimension will be the same for whole championship. **(Comment and explanation – The minimal speed is defined for ISA conditions, this is air pressure 113,25 HPa in zero altitude and 15°C temperature. The air density diminishes depended on air pressure and temperature. The short deck in conditions of high altitude and/or high temperature is a big advantage for strong engines (R 912) and disadvantage for light two stroke engines- 20% penalty for takeoff deck)**

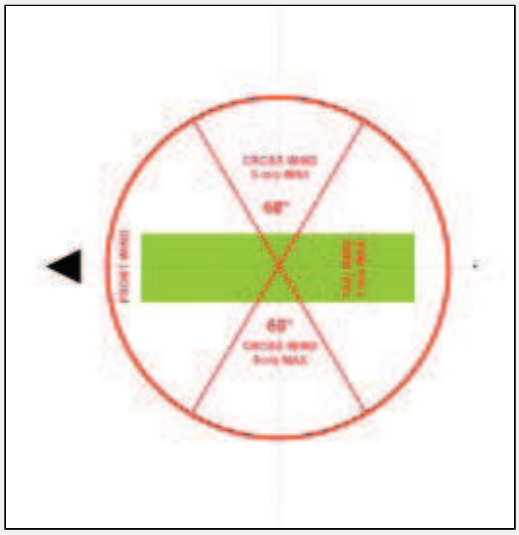
4.29.2.3.2. Threshold of the deck must be well visible from the aircraft during all final approach procedure.

4.29.2.3.3. Short take off and short landing over the tape.

4.29.2.3.3.1. Short take off and short landing tasks may be applied only, if the weather makes it possible to give the same chance to each competitor. The tape must be in the same height for all competitors and must be straight. Deviations generated by wind don't exceed 20 mm.

4.29.2.3.3.2. Short landing and landing with measuring of remaining distance may be only organized in the domestic airfield of the championship. **(Comment and explanation – short landing over a tape and very strong braking are types of tasks, where risks of small damages are higher. Destroyed or damaged tyre or wheel, broken brake pipe or brake string in some another airfield may make impossible to follow in the next task for example because isn't possible to carry spare parts and needed tools in aircraft during competition flight.)**

4.29.2.3.3. The measuring of the wind during precision landing task must be assured at the deck. The precision landing tasks may be provided only if cross wind is 10 kt (5m/s) or less and tail wind don't exceed 2 kt (1m/s). If wind exceeds these limits, task will be or interrupted or cancelled. If interruption is longer than 1 hour, will be task cancelled. If landing follows or is a part of navigation or economy task, will be in the case of wind over limits installed into the landing deck marker X and pilots shall provide free landing everywhere in the airfield.



Reason

In last 6 championships (WMC 2005, EMC 2006, WMC 2007, EMC 2008, WMC 2009, and EMC 2010) weren't navigation tasks strictly in accordance with the S10 A4 and no anyone new task sheet was approved by CIMA in advance. CIMA hasn't some defined body and procedures for this work and this article is formal and was broken in each past championship. The better way is to ask organizers for publication of the task sheets in advance and set procedure of commenting these task sheets by CIMA monitor, competitors and team leaders before championship.

Some restrictions and limitations shall be established by S10 rule for task designers, because competitors mustn't be object of experiments and at once shall have chance for training before competitions and the same rules shall be used in general for NAC. Above are described some very basic rules and limitations.

05 - CZE - Publish tasks 60 days in advance

Proposal from

Vladimir SILHAN (CZE)

Proposal title

Publish championship tasks in detail 60 days in advance

Existing text

4.29.1 On each flying day a task shall be set chosen from A4, unless prevented by the weather. A precision task may be combined with a cross-country task or set separately as specified at briefing. If possible, two tasks should be set on each day for each class.

New text

New text:
4.29.1 Each task description must be published in Task sheet catalogue in Local regulations. Task sheet must describe clearly flight, goals, penalties and scoring formula of the task and what information and instructions will be given to a competitor for pre-flight preparation.

4. 29.1.1. All task sheets must be published in local regulation no later, than 60 days before opening ceremony. Team leaders are responsible for making of comments in written no later than 30 days before opening ceremony. Questions and comments, which weren't sent to organizer in previous period, will be inadmissible.

4. 29.1.2. Task sheets may be changed only by general briefing before the first competition task. Organizer is responsible for arrangement of the general briefing, where all questions, comments and requests will be clarified and/or projected into the task sheets.

4.29.1.3 In the relevant briefing will be given only detail information about taxi procedure, take of procedure, landing procedure, departure and approach procedures and time and location details and overall distance to be flown from take off to landing for planning of the fuel.

Reason

Reason --

Changing (or creating or finishing) of the task sheets in the briefing creates risks of misunderstanding and mistakes. Competitors haves right for clear explanation, what should they do and what will be goals and what will be penalized. Finishing of the task sheets in the briefing is the biggest mistake of organizer, because understandable task sheet plays the crucial role for fair competition. Task sheets shall be prepared with the maximal possible care in advance, when task designer isn't under pressure of time and sufficient time will be available for competitors and team leaders for making of comments and questions. Changes in the task sheets (if any) shall be made no latter, than in general briefing before championship. Background from competitors and team leaders is very important for task designer and championship director, but they must have a sufficient time for clarifying, explanation and repairing of potential mistakes and this is impossible under time pressure and excited atmosphere in the briefing. The preparation of task sheets and its compatibility with scoring software should be checked by CIMA monitor before other items. 60 days limit is prevention before failure of its preparation.

Reason for change --

Existing text isn't rule, this is some description of custom practice, but no obligation or restriction is set by this article. Is not understandable, what the A4 is. If, this is reference for Annex 4 - Task catalogue from Master Local regulation, there aren't details needed for task sheet and usually only precisions and soaring follows descriptions from this document.

06 - ESP - Change in task proportions (Microlights)

Proposal from

Antonio Marchesi, Spanish Alternate Delegate.

Proposal title

Change in task proportions in Microlights.

Existing text

S10

4.29.3 Tasks shall, as far as practicable, conform to the following guidelines in standard championships:
For Microlight aircraft classes AL, WL WF and GL
A Tasks for flight planning, navigation, etc with no fuel limit: 50% of the total value of the tasks flown.
B Tasks for fuel economy, speed, duration, etc with limited fuel: 20% of the total value of the tasks flown.
C Precision tasks: 30% of the total value of the tasks flown.

Annex 3

2.3 SCORING

2.3.1 The total value of tasks flown in each class during the championships must as far as possible be very close to:
A Tasks for flight planning, navigation, etc with no fuel limit: 50% of the total value of the tasks flown.
B Tasks for fuel economy, speed, duration, etc with limited fuel: 20% of the total value of the tasks.
C Precision tasks: 30% of the total value of the tasks flown.

New text

S10
4.29.3 Tasks shall, as far as practicable, conform to the following guidelines in standard championships:
For Microlight aircraft classes AL, WL WF and GL
A Tasks for flight planning, navigation, etc with no fuel limit: ~~50%~~ A% of the total value of the tasks flown.
B Tasks for fuel economy, speed, duration, etc with limited fuel: ~~20%~~ B% of the total value of the tasks flown.
C Precision tasks: ~~30%~~ C% of the total value of the tasks flown.

Annex 3

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A Tasks for flight planning, navigation, etc with no fuel limit: ~~50%~~ A% of the total value of the tasks flown.
B Tasks for fuel economy, speed, duration, etc with limited fuel: ~~20%~~ B% of the total value of the tasks.
C Precision tasks: ~~30%~~ C% of the total value of the tasks flown.

Options

	A%	B%	C%
Option 1	55%	25%	20%
Option 2	55%	30%	15%
Option 3	60%	30%	10%

Reason

Current task proportions require that a championship with 7 cross-country tasks must have 12 precision tasks. This implies that every landing must be a precision landing (7), and 5 additional precision tasks have to be flown.

- In a time where finding volunteers gets harder and harder, precision landing requires the largest proportion of the manpower during a championship.
- This is probably the hardest job for marshals, who have to stay under the sun (or rain) for the duration of each and every task.
- If the Director decides to join two navigation tasks in the same flight, then he must schedule an additional precision task.
- Precision tasks run independently take plenty of hours when only one or two aircraft are flying. Most pilots would like to be flying rather than queuing while wasting nice flyable weather.

This is the proportion of precision tasks flown in the last championships:

	Navigation tasks	Economy tasks	Precision tasks	Precision %
WMC 2007, CZE	3	1	5	24%
EMC 2008, POL	3	1	8	33%
WMC 2009, CZE	4	2	8	25%
EMC 2010, GBR	5	1	9	27%

And the following table shows the required number of precision tasks in a championship with 7 cross-country tasks for different values of the precision proportion.

Precision %	Cross Country tasks	Precision tasks
30% (current)	7	12
25%	7	9
20% (option 1)	7	7
15% (option 2)	7	5
10% (option 3)	7	3

07 - ESP - Validity of a championship

Proposal from

Antonio Marchesi, Spanish Alternate Delegate.

Proposal title

Change of requirements for the validity of a championship.

Existing text

S10

4.3 VALIDITY OF A CHAMPIONSHIP

4.3.3 The title of champion shall be awarded only if there have been at least 6 separate valid tasks in the class.

New text

S10

4.3 VALIDITY OF A CHAMPIONSHIP

4.3.3 The title of champion shall be awarded only if there have been at least 6 separate valid tasks in the class, and at least one task of each type (navigation, economy, precision) has been valid.

Reason

A feeling of panic arises when we talk about the validity of a championship, but with our current rules a championship with only 6 precision tasks would be valid, as long as there is no way to enforce the task proportions.

Strong limits could be imposed, like +/-5% of the established percentage of each task type, but this proposal only tries to avoid nonsense championships.

08 - ESP - Spot landing scoring (Microlights)

Proposal fro

José Luis Esteban, Spanish Delegate.

Proposal title

Spot landing scoring

Existing text

Annex 4

2.C1 SPOT LANDING

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 whole metre (PD). Touching down on a dividing line scores the higher of the two strips.

[...]

Thus the score calculation will be (PS + PD) x 250/350 with a maximum score of 250.

2.C3 POWERED PRECISION LANDING

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

[...]

Thus the score calculation will be (PS + PD) x 250/350 with a maximum score of 250.

New text

Annex 4

2.C1 SPOT LANDING

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 whole metre (PD). Touching down on a dividing line scores the higher of the two strips.

[...]

Thus the score calculation will be (PS + PD) ~~x 250/350~~ with a hypothetical maximum score of ~~250~~ 350.

2.C3 POWERED PRECISION LANDING

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

[...]

Thus the score calculation will be (PS + PD) ~~x 250/350~~ with a hypothetical maximum score of ~~250~~ 350.

Reason

The wording for the scoring formula is misleading. Some believe it has to be normalised and others don't. That is probably the reason why the scores in some championships are further normalised to give 250 points to the best pilot, and the fraction 250/350 simply doesn't appear in the formula.

So there are two problems:

- If the scores are not normalised to 250, then no pilot would ever get 250 points as long as nobody will ever land in less than 1 m
- If the scores are normalised to 250, then some pilot would get 250 points, even in a case where all pilots are very bad and the best one lands on the 100 pt strip and barely manages to stop in the deck.

This proposal has three effects:

- To simplify and clarify the scoring system
- To make the scoring always absolute, an individual value independent from what other pilots achieve, as it happens when the stopping distance is not measured.
- To increase the task value to 350, accounting for the fact that a short stop is inherently more difficult than simply stopping in the deck.

09 - ESP - Spot landing-timed scoring (Microlights)

Proposal from

José Luis Esteban, Spanish Delegate.

Proposal title

Spot landing (timed) scoring

Existing text

Annex 4

2.C2 SPOT LANDING - TIMED

The score will be the value of the strip in which both main wheels touch down (PS) plus the distance between the finish of the deck and the closest wheel, scored 1 point per whole metre (PD). 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.

[...]

Thus the score calculation will be (PS+PD+PT) x 250/450 with a maximum score of 250

2.C4 POWERED PRECISION LANDING - TIMED

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 whole metre (PD). 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.

[..]

Thus the score calculation will be (PS+PD+PT) x 250/450 with a maximum score of 250

New text

Annex 4

2.C2 SPOT LANDING - TIMED

The score will be the value of the strip in which both main wheels touch down (PS) plus the distance between the finish of the deck and the closest wheel, scored 1 point per whole metre (PD). 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.

[...]

Thus the score calculation will be (PS+PD+PT) ~~x 250/450~~ with a maximum hypothetical score of ~~250~~ 450.

2.C4 POWERED PRECISION LANDING - TIMED

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 whole metre (PD). 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.

[..]

Thus the score calculation will be (PS+PD+PT) ~~x 250/450~~ with a maximum hypotetical score of ~~250~~ 450.

Reason

The wording for the scoring formula is misleading. Some believe it has to be normalised and others don't. That is probably the reason why the scores in some championships are further normalised to give 250 points to the best pilot, and the fraction 250/450 simply doesn't appear in the formula.

So there are two problems:

- If the scores are not normalised to 250, then no pilot would ever get 250 points as long as nobody will ever land in less than 1 m
- If the scores are normalised to 250, then some pilot would get 250 points, even in a case where all pilots are very bad and the best one lands on the 100 pt strip, way off the round minute and barely manages to stop in the deck.

This proposal has three effects:

- To simplify and clarify the scoring system
- To make the scoring always absolute, an individual value independent from what other pilots achieve, as it happens when neither stopping distance nor time is measured.
- To increase the task value to 450, accounting for the fact that a short stop at at the right time is inherently more difficult than simply stopping in the deck at any moment.

10 - ESP - Use the Task Catalogue

Proposal from

José Luis Esteban, Spanish Delegate.

Proposal title

Use the Task Catalogue

Existing text

S10

4.29 CHAMPIONSHIP TASKS

4.29.1 On each flying day a task shall be set chosen from A4, unless prevented by the weather. A precision task may be combined with a cross-country task or set separately as specified at briefing. If possible, two tasks should be set on each day for each class.

4.29.2 The tasks to be used shall be approved by CIMA (S10 A4) and precisely set out in the local regulations together with the method of scoring.

New text

S10

4.29 CHAMPIONSHIP TASKS

4.29.1 On each flying day a task shall be set chosen from ~~A4~~ the Task Catalogue, unless prevented by the weather. A precision task may be combined with a cross-country task or set separately as specified at briefing. If possible, two or more tasks should be set on each day for each class.

~~4.29.2 The tasks to be used shall be approved by CIMA (S10 A4) and precisely set out in the local regulations together with the method of scoring.~~

4.29.2 The tasks to be used shall be chosen from the Task Catalogue defined by the Director, based on the Master Task Catalogue, S10 A4. The Task Catalogue shall be approved by CIMA and precisely set out in the local regulations together with the method of scoring.

Reason

This proposal does not introduce any real change in the rules. It simply clarifies that the tasks run during a championship must be present in the Task Catalogue approved by CIMA. This implies that the task catalogue has to be prepared well in advance so that the plenary can approve it (idealy), or a committee can be established by the plenary to approve it later along with the LR.

11 - ESP - Scoring for cross-country tasks

Proposal from

José Luis Esteban, Spanish Delegate.

Proposal title

Scoring for cross-country tasks

Existing text

Annex 3

2.3 SCORING

2.3.4 CROSS COUNTRY TASKS

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

P = Q/Qmax x 1000

where: Q = pilot score, Qmax = best score for the task, P = Total score

New text

Option A

Annex 3

2.3 SCORING

2.3.4 CROSS COUNTRY TASKS

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

~~P = Q/Qmax x 1000~~

~~where: Q = pilot score, Qmax = best score for the task, P = Total score~~

Option B

Annex 3

2.3 SCORING

2.3.4 CROSS COUNTRY TASKS

The maximum score ~~may be up to 1000~~ will be between 500 and 1500 points per task. ~~and is calculated as follows:~~

~~P = Q/Qmax x 1000~~

~~where: Q = pilot score, Qmax = best score for the task, P = Total score~~

Reason

Option A tries to solve the discussions arising with the scoring of tasks like Speed Triangle Out&Return (2.B1), Speed Triangle & Turnpoint Hunt (2.B2) or similar ones which are designed not to be normalised to 1000 points.

Option B goes a bit further. Limiting the maximum value to 1000 points is unnecessary, as long as:

- There is no reason why a simple short task can't have a value of 500 points, or a complex long one can't have a value of 1500 points.
- Task proportions are based on task value, not on the number of tasks.
- The task design and its scoring system must be approved by CIMA for their inclusion in a specific Task Catalogue, so any weird proposal by a Competition Director can be corrected by CIMA.

12 - ESP - Director's signature on electronic score sheets

Proposal from

José Luis Esteban, Spanish Delegate.

Proposal title

Director's signature on electronic score sheets

Existing text

S10

4.34 SCORING

4.34.4 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.

New text

S10

4.34 SCORING

4.34.4 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. In the case of an electronic score publishing system, the director's signature won't be necessary as long as the publishing system is directly managed by the director and his scoring team.

Reason

A piece of paper posted on a publicly accessible board may be replaced by anyone, so the director's signature is necessary to authenticate documents such as score sheets.

If we need to see the director's signature when using an electronic score publishing system, the director would have to print a document, sign it, scan it and then upload it back to the score publishing system. This would require much more effort than older systems, and would be against the agility achieved by new systems like the one used during the last microlight championship, in which the scores were published in a fraction of a second.

As an alternative, an electronic signature system could be used, but then every team would need some additional infrastructure to verify the authenticity of a document.

But, in the end, the director's signature is not relevant in an electronic scoring system, so long as the system is under his control.

13 - ESP - Planning in quarantine

Proposal from

José Luis Esteban, Spanish Delegate.

Proposal title

Planning in quarantine

Existing text

S10

4.26.3 Pilots must be qualified for flight planning in navigation or economy tasks. Competition directors are encouraged to run some of the navigation or economy tasks in a way that pilots must prepare their flight plans individually.

Annex 3

1.11.10 QUARANTINE

This is a clearly marked area to which aircraft and crew must go from time to time as instructed by the director, usually for the purposes of scoring, fuel measurement and scrutineering of fuel tank seals, fuel systems, telephone seals etc. [...]

New text

Option A

S10

4.26.3 Pilots must be qualified for flight planning in navigation or economy tasks. Competition directors are encouraged to run ~~some of~~ the navigation or economy tasks in a way that pilots must prepare their flight plans individually.

4.26.4 Individual planning is mandatory for tasks where photos of ground features are used.

Option B

S10

4.26.3 Pilots must be qualified for flight planning in navigation or economy tasks. Individual planning in quarantine is mandatory for all tasks needing a flight plan.

Common to A and B

Annex 3

1.11.10 QUARANTINE

This is a clearly marked area to which aircraft and crew must go from time to time as instructed by the director, usually for the purposes of flight planning, scoring, fuel measurement and scrutineering of fuel tank seals, fuel systems, telephone seals etc. [...]

Reason

In this time of high quality land images provided by Google, Bing and other services it becomes necessary to avoid their intense use trying to spot pictures before next morning's flight. Pilots feel forced to do so when they have the opportunity, but this practice doesn't improve airmanship at all, and takes plenty of time for pilots who would rather be resting or maintaining their aircraft.

Option A enforces planning in quarantine for any photo spotting task.

Option B extends the quarantine for all tasks where a flight plan is needed, as long as pilots do fly their planned route in Google Earth several times. Not only this is irrelevant as airmanship is concerned, but this also imposes the necessity of a broadband Internet connection. If each team has to care for its own broadband connection, this leads to a difference of opportunities among teams. Otherwise, if a broadband connection has to be supplied by the organiser, it will always become a source for problems.

14 - ESP - Publication of track logs

Proposal from

José Luis Esteban, Spanish Delegate.

Proposal title

Publication of track logs

Existing text

None.

New text

S10

4.34 SCORING

4.34.20 The track logs used to score a task should be made available to all competitors as soon as possible.

Reason

Many competitors expect track logs to be published and request that service from the organiser. Also, championships where track logs have been published had a reduced number of complaints.

Tracks can be made available as computer files in the original IGC format or in any other popular formats such as KML (Google Earth). Or the organiser can provide some computers where competitors can view their tracks.

However, at this moment there is no rule about the availability of tracks to competitors, making it mandatory, recommended or forbidden. CIMA should take a position on this.

15 - ESP - Clock starts when you start planning (Paramotors)

Proposal from

José Luis Esteban, Spanish delegate.

Proposal title

Clock starts when you start planning (Paramotors)

Existing text

Annex 4

1.2.1 GENERAL

New text

Annex 4

1.2.1 GENERAL

Add:

In Paramotor tasks where the task time is limited, the director may include planning as part of the total task time by starting the clock when the pilot starts his planning.

Reason

This proposal allows pilots to decide whether they make a rough flight plan and start flying soon, or they design a careful plan but then they have less time to follow it.

This is only suitable for paramotors as long as the take-off procedures for microlights are more rigid.

16 - POL - Continental Paramotor League Cup

Proposal from

Wojtek Domaski, Polish alternate delegate

Proposal title

Continental Paramotor League Cup

Existing text

None

New text

A wish to have a kind of Paramotor League Cup has been expressed several times already by various people from many countries. This proposal is a compilation of those various ideas, into a somehow homogeneous project presented in a table below.

The intention of this proposal is that the league should be started immediately, ready for the 2011 season. League rules will eventually need to go in Section 10, but for the first year should be maintained separately under the control of a new CIMA working group.

The WG will initially have to produce a simple set of working rules and application forms based on the concepts proposed below. It will also have to work out procedures for payments, FAI Licence checking, maintaining the league tables etc., some of which will need to be agreed in cooperation with FAI secretariat. Ideally, all this should be in place by the end of January 2011 so organizers have plenty of time to integrate their events into the league, and pilots have plenty of time to organize their FAI licences.

The WG should also have the power to alter rules during the course of the season (though not retrospectively) if it sees, or anticipates, things happening contrary to the agreed concepts.

The WG should be prepared to present a report to the 2011 CIMA Plenary. The report should include a proposal for a definitive set of rules to be permanently included in FAI Section 10.

There is no reason to believe this league concept would not work equally well for microlights, however, to avoid the risk of it all getting too complicated too quickly, this proposal is just for Paramotors in the first year. The WG should include in its report a recommendation regarding the inclusion of microlights in future years.

Name	Continental Paramotor League Cup, e.g.: • European Paramotor League Cup • Asian Paramotor League Cup • etc. It is important that name contains two significant words: 1. the continent name 2. the word 'cup' These both describe a sport event that is recognised by Ministry of Sport in various countries. Recognition of MoS-es implies possibility to subsidize a national team participation.
League Cup validity	At least 4 valid League Cup events in a season. Each class is validated separately. League Cup season starts at October the 1st every year, and finishes September the 30th next year.

Valid League Cup event

1. Event must be open to foreign pilots. A minimum of 20% of pilots/crews must come from nations other than that of the organiser (for each class separately).
2. Minimum number of participating pilots to validate the class:
    - PF1: 10 pilots
    - PF2: 4 crews
    - PL1: 7 pilots
    - PL2: 4 crews
3. 50% of tasks from official FAI CIMA catalogue
4. Minimum 6 tasks in the normal proportions of points to win:
    - 1/3: economy
    - 1/3: navigation
    - 1/3: precision
5. An event has to be registered in CIMA Wiki Calendar at least 45 days before the competition. Event is considered registered since two conditions are fulfilled:
    - an application form is properly filled and published on a proper CIMA Wiki space by an authorised CIMA delegate,
    - a sanction fee is delivered into an FAI account
6. The scores are published on a proper CIMA Wiki space by am authorised CIMA delegate within 14 days after closing the League Cup event.

Application form

The organiser must provide the following at a minimum of 45 days before the event:

- A completed application form to a proper CIMA Wiki space by authorised CIMA delegate from organizer country
- The sanction fee (one pilot entry fee, minimum of €50) is received by the FAI. This will enable the event to appear on the FAI calendar and be publicised as a Category 2 event.
- Events must have the approval of the National Aero Club (NAC) of the organiser in order to be sanctioned as Category 2. If the event is to be held in the territory of another NAC then the organiser must also obtain authorization from that NAC.
- Organizers must report results of pilots, marking every pilot that holds valid FAI sporting licence.

Individual ranking

Upon each League Cup event final results, a pilots scoring in League Cup is calculated using a French style scoring system:

1 st	30 pts.
2 nd	25 pts.
3 rd	22 pts.
4 th and further	(24 - pilot position) pts. but not less then 2 pts.

In the case there is less then 22 pilots or crew participating, each pilot result is decreased by the difference between 22 and a number of pilots participating. For example for a competition of 7 crews points for positions from 1st to 7th are applied as follows: 15, 10, 7, 5, 4, 3, 2.

All participating pilots who at least finished 1 task are scored in the event, however in CPLC ranking system only pilots with a valid FAI licence are scored.

Final pilot score is a sum of maximum X best pilot results, where X is a rounded up half of the number of League Cups events run in a certain season (i.e. 4->2, 5->3, 6->3, 7->4, etc.)

National ranking

A score of a national team is a sum of best three pilots/crews from each class that was declared valid. There is one national ranking summarizing scores from all classes.

Elective teams ranking

Any firm or private person can register an elective team by:

- placing a properly filled registration form in a proper space of CIMA Wiki, through an authorised CIMA delegate,
- delivering a sanction fee of €75 into an FAI account

The idea is meant to allow manufacturers to form their factory teams, but also to allow pilots to form their own social teams. Pilot registers an optional "team" name at every event, which is scored the same way as national team (or not at all if pilot has not registered as part of a team). Pilots are allowed to change their elective team before each League Cup event.

Results publication:

The results are continuously maintained on the CIMA Wiki. Final trophies (diplomas) are granted during annual CIMA meeting at November. The following awards may be granted:

- individual - for three best pilots/crews in each class
- national - for three best countries
- team - for three best elective teams

Reason

Paramotor League Cup run as a FAI category 2 competitions, will bring two basic benefits:

1. will increase pilots motivation to take part in international competitions
2. in case there are no FAI category 1 competition (like this year), will allow to apply for government sport subsidy

Documents

Name	Size	Creator	Creation Date	Comment
continental league cup scoring.xls	22 kB	Richard Meredith-Hardy	25 Oct, 2010 09:00	Spreadsheet showing how the scoring works

17 - GBR - Penalty for attempting to start a task overweight

Proposal from

GBR

Proposal title

17 - GBR - Penalty for attempting to start a task overweight

Existing text

S10 Annex 3 (Model Local Regulations)

Existing text

2.1.3

CONTROL OF CLASS CONFORMITY:

All aircraft will be weighed before the event, and any aircraft may be weighed again at any time in the championships. The take-off weight is the weight of the aircraft ready to fly including pilot(s), fuel, and any supplementary equipment. The take-off weight must not exceed the FAI definition of a Microlight for the class in which it is flown.

New text

2.1.3 CONTROL OF CLASS CONFORMITY:
2.1.3.1 Weighing equipment shall be made available to competitors during the practice period. All ~~aircraft will be weighed before the event, and any~~ aircraft may be weighed at any time in the championships. The take-off weight is the weight of the aircraft ready to fly including pilot(s), fuel, and any supplementary equipment. The take-off weight must not exceed the FAI definition of a Microlight for the class in which it is flown.

2.1.3.2 Any competitor attempting to start a task overweight will be disqualified from that task.

Reason

There is no penalty for starting a task overweight. Currently, competitors can fill their fuel tanks and not worry about being caught, since they receive no penalty if they are shown to be overweight. This is not a deterrent.

18 - GBR - Accuracy of weighing equipment

Proposal from

GBR

Proposal title

Accuracy of weighing equipment increased to 472.5kg

Existing text

S10

5.2 MEASUREMENT

5.2.1 Weighing equipment. The scales used to establish the weight of an aircraft entering a competition, shall have an accuracy of not less than 0,2% when weighing up to 450 kg. The calibration of the scales shall have taken place within a year from the date of the weighing. All scales used shall carry a certificate indicating weighing accuracy and the time of the latest calibration of the scales. For records it is sufficient that the weighing rules of the airworthiness certifying body, of the country where the aircraft is registered, are followed.

New text

5.2 MEASUREMENT

5.2.1 Weighing equipment. The scales used to establish the weight of an aircraft entering a competition, shall have an accuracy of not less than 0,2% when weighing up to ~~450~~ 472.5 kg. The calibration of the scales shall have taken place within a year from the date of the weighing. All scales used shall carry a certificate indicating weighing accuracy and the time of the latest calibration of the scales. For records it is sufficient that the weighing rules of the airworthiness certifying body, of the country where the aircraft is registered, are followed.

Reason

This should have been amended when the definition of a microlight was changed to add 5% for ballistic recovery systems.

19 - GBR - Cancel 2009 change to Clover Leaf scoring

Proposal from

GBR

Proposal title

To cancel last year's proposal to change the scoring formula for slalom tasks

Existing text

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

...

Scoring

Where

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

m = the number of missed targets

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

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

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

Q = the task value before normalization

Note: Spreadsheet formulas:

t_{pen}: = _t_pil + m * v_pen_

Q: = *LOG(3 * t_best / (t_pen – t_best – 1))*

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

New text

Delete existing text and replace with:

Scoring

N = number of targets

T = time from first to last target

Q = N^3 / T

Pq = 500 * Q / Qmax

Ps = 500 – 30 * (T – Tpmin). Minimum Ps = 0; if N < 9, Ps = 0.

P = Pq + Ps

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

Reason

The current scoring formula for slalom tasks that was voted in last year is in my view too complicated and too radical.

Fortunately, there was no FAI Championship in 2010 in which to use this new formula, and it is therefore possible to change it back before it has to be used.

In 2006, a new radical formula was voted in and at the following Worlds in China, the Team leaders tried unsuccessfully to revert to the previous formula.

In 2007, another formula was voted in and used in 2008 and 2009. It was not perfect and there must be a better way to score slalom tasks, but the new current one is not an improvement in any way or shape.

At the 2009 World Championship, the Clover Leaf slalom task showed the top 5 scores in PF1 class as follows:

1=1000, 2=852, 3=844, 4=817, 5=816

With the new current equation, the scores would have been much more punishing:

1=1000, 2=685, 3=676, 4=649, 5= 648

I therefore propose to revert to the previous formula that anyone could use with a simple calculator until a better one can be debated and demonstrated to be an improvement.

20 - ESP - Refine the slalom scoring

Proposal from

José Luis Esteban, Spanish delegate.

Proposal title

Refining the slalom scoring

Existing text

Annex 4

3.C5, 3.C6, 3.C7, 3,C9, 3.C10

Scoring:

Tpen = Tpil + m * Vpen
Q = Ln (3 * Tbest / (Tpen - Tbest + 1)

Where

Tpil = the measured pilots time (seconds)
m = the number of missed targets
Vpen = the time penalty for each missed target (seconds)
Tpen = the pilots time (after penalties for missed targets)
Tbest = the best time (after penalties for missed targets)
Q = the task value before normalization

Note: Spreadsheet formulas:
tpen: = t_pil + m * v_pen
Q: = LOG(3 * t_best / (t_pen – t_best – 1))

New text

Annex 3

3.C5, 3.C6, 3.C7, 3,C9, 3.C10

Scoring:

Tpen = Tpil + m * Vpen
Q = Ln(3 * Tbest / (Tpen - Tbest + ~~1~~ 3)

Where

Tpil = the measured pilots time (seconds)
m = the number of missed targets
Vpen = the time penalty for each missed target (seconds)
Tpen = the pilots time (after penalties for missed targets)
Tbest = the best time (after penalties for missed targets)
Q = the task value before normalization

Note: Spreadsheet formulas:
tpen: = t_pil + m * v_pen
Q = LOG(3 * t_best / (t_pen – t_best ~~– 1~~ + 3))
or
Q = LOG(3) + LOG(t_best) - LOG(t_pen - t_best + 3)

Note: a value of **Vpen = 5 s** is recommended.

Reason

This scoring formula was introduced in 2009 but, unfortunately, there has been no opportunity to use it in any international championship.

During the last Nationals in Spain the formula was applied and a long discussion followed. The conclusions were:

- Replace +1 by +3 in the formula
- The recommended penalty for missing a target (Vpen) is 5 seconds

A typographical error in the spreadsheet formula is also corrected.

21 - EST - Precision ParaBall

Proposal from

Paap Kolar, Estonian delegate.

Proposal title

Precision ParaBall

Existing text

None

New text

Annex 4

Add:

3.C12 Precision ParaBall

Objective

To deliver the balls to the target (basket or hole) or as close to the target as possible, either by carrying or hitting with feet, as fast as possible.

Description

3-5 balls (soft or half empty) in different sizes are located to the exact and marked positions (fluo-spray) downwind from the target, which is a hole or basket with 0,5 – 2 m. diameter.
The distance between the balls and the target should be 20 – 50 m.
The most suitable target is the hybrid of a hole and a basket. The hole should not be level with the ground but edges should be 20 – 50 cm higher. Construction should be light for safety reasons but strong enough to hold the force of flying ball and to keep balls inside.

Pilot is approaching to the balls near the ground, takes the ball with feet and carries to the basket. Same with other balls, until all the balls are in the basket or time is up.
Alternatively the pilot can kick the balls closer to the basket or into the basket.
Timing will start with passing first ball on first approach (or with the touch of the first ball).
Timing will end with the last ball entering the basket.

Time from touching the first ball (or passing) to the last ball in the basket will be measured for scoring
or
when time limit is over, all balls in the basket will be counted and the distances of remaining balls from the basket will be measured.

Special rules

There will be time limit assigned to this task, depending on the amount of balls, distances, ball's properties, basket size and weather conditions. For example with 3 balls a suitable time limit is 3 or 4 minutes.

There are no limitations to the number, angle, speed or height of approaches to the balls and the technique for hitting or carrying the balls, except the time limit.
Ball should stay in the basket. Bouncing out from the basket will give the result according to the distance from the basket.
Contact with the ground and moving on the ground is allowed to the pilot but the wing cannot touch the ground before time is up.
If the wing will touch the ground before the end of the time limit = score 0 for time.
After interruption of the task by the pilot, all equipment must be removed from the task area immediately.

Ending of the time limit will be signalled by marshal with appropriate (red) flag and whistle and results will be measured from this state.
In case time limit will be over while pilot already carries a ball, the pilot has right to deliver the ball to the target (in reasonable time)

Landing into the landing deck must be performed immediately after the task is performed.
Details and changes will be briefed.

Scoring

Balls delivered into the basket will score maximum points
Balls inside the radius of 5 m from the edge of the basket: 50 %
Balls moved from it's original location but outside of the 5 m radius: 20 %
Balls not moved from their original position will give no points

N = balls carried into the basket minus penalties depending on the ball's position.
T = time in seconds from the start signal to the finishing the task
Pq = 700 * N / Nmax
Ps = 300 * (180 – T + Tmin)/180
P = Pq + Ps

Formula = x*330

Reason

We have been testing ParaBall now in different competitions and it is probably one of the most interesting tasks for pilots and definately the most attractive task for the public and media.
The exact scoring formula here is not maybe sufficient and can be modified to the best balance of time and balls.
Video available!

22 - POL - Inflatable pylon

Proposal from

Wojtek Domaski, Polish alternate delegate

Proposal title

Inflatable pylons

Existing text

1.2.1 GENERAL
Tasks fall into Three Categories:
A Flight planning, navigation estimated time and speed. No fuel limitation.
B Fuel economy, speed range, duration. Fuel limited to maximum 15 kg for aircraft flown solo and 22 kg for aircraft flown with two people.
C Precision
The proportion of each task to be used is stated in S10, 4.29.3
Any task may be set more than once, either identically or with variations.
Distances should be as long as possible referring to the recommended still air range of the competing aircraft stated in S10 4.17.7.
In any task requiring pre-declaration of speed or elapsed time the Director may set up hidden gates through which the pilot would fly if on the correct flight path. Pilots failing to be checked through such gates or who are observed flying a devious path to adjust timing/speed errors may be penalised. No information will be given at briefing on the existence or whereabouts of hidden gates, or the method by which they are controlled.
The Director may set a time period for completion of a task in addition to the last landing time.

New text

1.2.1 GENERAL
Tasks fall into Three Categories:
A Flight planning, navigation estimated time and speed. No fuel limitation.
B Fuel economy, speed range, duration. Fuel limited to maximum 15 kg for aircraft flown solo and 22 kg for aircraft flown with two people.
C Precision
The proportion of each task to be used is stated in S10, 4.29.3
Any task may be set more than once, either identically or with variations.
Distances should be as long as possible referring to the recommended still air range of the competing aircraft stated in S10 4.17.7.
In any task requiring pre-declaration of speed or elapsed time the Director may set up hidden gates through which the pilot would fly if on the correct flight path. Pilots failing to be checked through such gates or who are observed flying a devious path to adjust timing/speed errors may be penalised. No information will be given at briefing on the existence or whereabouts of hidden gates, or the method by which they are controlled.
The Director may set a time period for completion of a task in addition to the last landing time.
Where 2m Pylons are defined in tasks, at the discretion of the Competition Director these may be replaced by 12m (+- 1m) inflatable pylons.

Reason

Inflatable pylons have already been used in various competitions. It is good to declare them officially valid, and to standardize their size.

23 - GBR - Deletion of 4.34.17 (paramotors)

Proposal from

GBR

Proposal title

Deletion of rule 4.34.17

Existing text

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

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

Where

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

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

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

New text

> Delete the entire paragraph.

Reason

This is, in my view, a very undesirable rule, that allows Meet Directors to launch a task in potentially unsafe conditions, falling back onto the arguments that it is up to the pilots to fly if they wish, and let a formula devalue the points.

There are always a few pilots desperate for points who would be prepared to fly in dangerous conditions.

I prefer the idea of a Meet Director who has to make a judgement on the suitability of a task in the prevailing and forecasted weather conditions, and cancel the task, whether some pilots have launched or not, in the interest of safety.

24 - GBR - Changes to team scoring (paramotors)

Proposal from

GBR

Proposal title

Changes to Team scoring for Paramotor classes

Existing text

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

- Classes AL1, AL2, WL1, and WL2

- Each valid Paramotor class which has a minimum of 8 pilots.

New text

4.34.11 The team score for Paramotor classes shall be computed from the sum of the scores of the top three aircraft of each country in each task ~~grouped together in~~ **across all** the classes (PF1, PF2, PL1, PL2) which have at least 20 competing aircraft.

- Pilots in valid Paramotor classes with less than 20 aircraft can compete for individual medals but cannot score for their Team.

- For a task to count towards the Team score, half or more of the qualifying Classes must have flown that task, with the same potential maximum score.

Reason

It is a bit silly to award Team medals for Classes that are undersubscribed, when often you know the results in advance, purely based on the number of aircraft some nations have entered.

Having only one Team score across all the Paramotor classes would be more meaningful, as long as only the Classes that are well subscribed do score towards it.

A similar proposal for Classic Classes has been put forward

Option B

Same proposed text as Option A but replacing “top three aircraft of each country" by “top five aircraft of each country”.

25 - GBR - Changes to team scoring (microlights)

Proposal from

GBR

Proposal title

Changes to team scoring for microlights

Existing text

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

- Classes AL1, AL2, WL1, and WL2

- Each valid Paramotor class which has a minimum of 8 pilots.

New text

4.34.11 The team score for Classic classes shall be computed from the sum of the scores of the top three aircraft of each country in each task ~~grouped together in~~ **across all the classes** (AL1, AL2, WL1, WL2) which have at least 12 competing aircraft.

- Crews in valid Classic classes with less than 12 competing aircraft can compete for individual medals but cannot score for their Team.

- For a task to count towards the Team score, half or more of the qualifying Classes must have flown that task, with the same potential maximum score.

Reason

The current way of scoring Teams in Classic classes often means that the results are know before the competition starts in advance, purely based on the number of aircraft some nations have entered.

It would be more meaningful to reward the Teams' performance by quality rather than quantity, with more nations fighting for a place on the podium.

This change would accommodate the new Gyro classes as and when they become approved

Option B

Same proposed text as Option A but replacing "top three aircraft of each country" by "top five aircraft of each country".

26 - GBR - Validity of a championship

Proposal from

GBR

Proposal title

Reduce the number of tasks required to validate a championship

Existing text

4.3.3 The title of champion shall be awarded only if there have been at least 6 separate valid tasks in the class.

New text

4.3.3 The title of champion shall be awarded only if there have been at least ~~6 separate valid tasks~~ 3 tasks (1 economy, 1 navigation and 1 precision) ~~in the class.~~

Reason

No one wants to see a championship fail to be validated.

Often, Meet Directors faced with poor weather forecast, will do anything they can to get 6 tasks in, and lose track of the meaningfulness of those tasks.

The current rule is intended to make the event more meaningful, but in fact it can lead to the exact opposite.

Why should an event with 3 good tasks that have an element of economy, precision and navigation not get validated?

27a - GBR - description of tasks

Proposal from

GBR - 2010 EMC Competition Director

Proposal title

Renaming the task categories

Existing text

Annex 4 1.2.1:

GENERAL
Tasks fall into Three Categories:
A Flight planning, navigation estimated time and speed. No fuel limitation.
B Fuel economy, speed range, duration. Fuel limited to maximum 15 kg for aircraft flown solo and 22 kg for aircraft flown with two people.
C Precision

New text

Annex 4 1.2.1:

GENERAL
Tasks fall into Three Categories:
A ~~Flight planning, navigation estimated time and speed. No fuel limitation.~~ Primarily navigation based tasks.
B ~~Fuel economy, speed range, duration. Fuel limited to maximum 15 kg for aircraft flown solo and 22 kg for aircraft flown with two people.~~ Primarily performance based tasks - speed and/or fuel limited tasks.
C Precision

Reason

A true championship should be about pilot skill and ability rather than aeroplane performance, or at least a mix of the two in which pilot skill is more important.

This way we move a bit more towards separating 'man from machine' in task classification - which I believe was the aim in setting up the categories.

The example is a 'race' task with no fuel limit. Under the current categories, this would be a navigation tasks, where in reality it is a performance task.

This may mean adjusting the task balance for microlights, to allow slightly more B tasks. See proposal 27b.

27b - GBR - ratio of tasks (microlights)

Proposal from

GBR

Proposal title

(In relation to proposal 27a) adjust the ratio of tasks to reflect the new category names

Existing text

4.29.3 Tasks shall, as far as practicable, conform to the following guidelines in standard championships:

For Microlight aircraft classes AL, WL WF and GL

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

B Tasks for fuel economy, speed, duration, etc with limited fuel: 20% of the total value of the tasks flown.

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

New text

4.29.3 Tasks shall, as far as practicable, conform to the following guidelines in standard championships:

For Microlight aircraft classes AL, WL WF and GL

A ~~Tasks for flight planning, navigation, etc with no fuel limit~~ Primarily navigation based tasks: ~~50%~~ 40% of the total value of the tasks flown.

B ~~Tasks for fuel economy, speed, duration, etc with limited fuel~~ Primarily performance based tasks: ~~20%~~ 30% of the total value of the tasks flown.

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

Reason

In relation to proposal 27a. The new category names require a change in the ratio of tasks flown in order to retain a similar ratio to the old category names.