INTERNATIONAL GLIDING COMMISSION (IGC) - PROPOSAL FORM

Submit the proposal via email to IGC Secretary.

Date: *30. September 2018*

Proposal submitted by: *Aero Club of Poland*

This proposal is a:

Year-1	X	Year-2		Other	

mark the boxes with X as appropriate

Type the text changes in the space below *(show deletions as ~~strike-through~~ and additions as* **<u>bold underlined</u>***):*

8.4.1 Racing Task

a. Day Parameters:

Pm = the least of: 1000 or: 1250 x (Do/D1) - 250 or: (400 x To) – 200

F = the lesser of 1 and (1.25 x n1 / N)

~~FCR = the lesser of 1 and (1.2 x (n2/n1) + 0.6)~~

Pvm = 2/3 (n2 / N) x Pm

~~Pdm = Pm – Pvm~~

b. Competitor's Score:

(i) For any finisher:

Pv = Pvm x (Vh - 2/3 Vo) / (1/3 Vo)

~~Pd = Pdm~~

Except: If Vh < 2/3 Vo then Pv = 0

<u>Pd = Do</u>

(ii) For any non-finisher:

Pv = 0

~~Pd = Pdm x (Dh / Do)~~

<u>Pd = Dh</u>

(iii) S = F x FCR x (Pv + Pd)

8.4.2 Assigned Area Task

a. Day Parameters:

Pm = the least of: 1000 or: 1250 x (Do/D1) - 250 or: (400 x To) – 200

F = the least of 1 and (1.25 x n1 / N)

~~FCR = the lesser of 1 and (1.2 x (n2/n1) + 0.6)~~

Pvm = 2/3 (n2 / N) x Pm

~~Pdm = Pm – Pvm~~

b. Competitor's Score:

(i) For any finisher:

Pv = Pvm x (Vh - 2/3 Vo) / (1/3 Vo)

~~Pd = Pdm~~

Except: If Vh < 2/3 Vo then Pv = 0

<u>Pd = Do</u>

(ii) For any non-finisher:

Pv = 0

~~Pd = Pdm x (Dh / Do)~~

<u>Pd = Dh</u>

(iii) S = F x FCR x (Pv + Pd)

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Type the reasons in the space below:

In the present system the speed score (Pvm) is calculated independently. The distance part (Pdm) is only completing to 1000 points or any lower maximum score. This means distance itself has no direct influence on distance score calculation. This is only to assure that max points looks nice and is not substantive element. Moreover distance score decreases with distances less than 250 km and decreases as well for distances more than 250 km too (this statement is true for 13.5M and Club Class, for other Classes this specific value is at 300 or 350 km). Such a characteristic has no logical sense. The biggest problem is that in tasks with a few finishers or no finishers at all distance points yields too much difference between competitors contrary to difference yielded in “normal” tasks in not so tricky weather conditions. In speed tasks one better thermal means only a few points more or less but in distance tasks (or with few finishers) one thermal could produce tens of points (sometimes more than 100).
This proposal changes philosophy of Pdm calculation. Instead of calculating Pdm first, then Pvm and finally Pdm as the result of subtraction, calculation is as follows: independent calculation of Pvm and Pdm, then maximum score available in the task (the winning score) is the sum of Pvm and Pdm.
The most important in this concept is changing philosophy of Pdm calculation, not the exact proposed scoring formula.
Pvm element remains unchanged in comparison to existing rules. The difference between two pilots who have completed the task and in each task in competition gained speed points remains unchanged in comparison with 1000-points system.
The proposal simplifies calculation and removes all above mentioned systemic drawbacks.

The proposal has been developed when FCR factor was not in use, so it is not included in above formula, but it could be taken into account with slightly different Pd formula.

There is also an issue with AAT task which was not eradicated from above formula for sake of simplicity and clarity. This is exactly the same problem as in current rules. On some days it could be not clear if a pilot should try to optimize his speed or his distance, he has to answer the question: try to finish at home or fly as far as possible, doesn’t matter where. We believe that pilot should have a simple goal: first of all – finish the task, and secondary – finish with the best speed possible. Below are options how to deal with this issue which may be considered if the proposal is accepted for Year 2 process:

1. For AAT competitors score calculation (8.4.2.b):
b. Competitor's Score:
(i) For any finisher:
Pv = Pvm x (Vh - 2/3 Vo) / (1/3 Vo)
~~Pd = Pdm~~
Pd = Do
Except: If Vh < 2/3 Vo then Pv = 0
(ii) For any non-finisher:
Pv = 0
~~Pd = Pdm x (Dh / Do)~~
Pd = Dh
If there are no Task finishers at the Class, Pd must not be more than Dmin. Where Dmin is the minimum Task Distance achievable via the Assigned Areas.

2. For AAT competitors score calculation (8.4.2.b):
b. Competitor's Score:
(i) For any finisher:
Pv = Pvm x (Vh - 2/3 Vo) / (1/3 Vo)
~~Pd = Pdm~~
Pd = Dmin
Except: If Vh < 2/3 Vo then Pv = 0
(ii) For any non-finisher:
Pv = 0
~~Pd = Pdm x (Dh / Do)~~

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Pd = Dh
Pd <= Dmin. Where Dmin is the minimum Task Distance achievable via the Assigned Areas.

Analogically existing rules could be corrected.

Provide supporting data or reference to external documents for the proposed technical amendments in the space below:

Simulation of the application of proposed rules can be found at https://sailplane.racing/

The proposal should be applicable from: October 2020

Sporting Code Volume: Annex A to Section 3 – Gliding

Version/Edition: 2018

Heading of section: PART 8 SCORING AND PENALTIES

Number & heading of the paragraph: 8.4 CALCULATION OF SCORES

Page number(s) if appropriate: NIL

See the next page!

Approved Amendment (if applicable):

Final Wording of Proposal:

Overall Votes Cast: ☐ For: ☐ Against: ☐ Abstain: ☐

ADOPTED: Yes: ☐ No: ☐

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