

CIVL Plenary 2020 proposal

From Bulgarian NAC

Summary of the proposal

Competition venues and tasks are very different and decision making in these different conditions has different importance. To account for this different importance – **we propose Leading Points - Time Points ratio to become definable parameter for every task.**

Current status of the rules

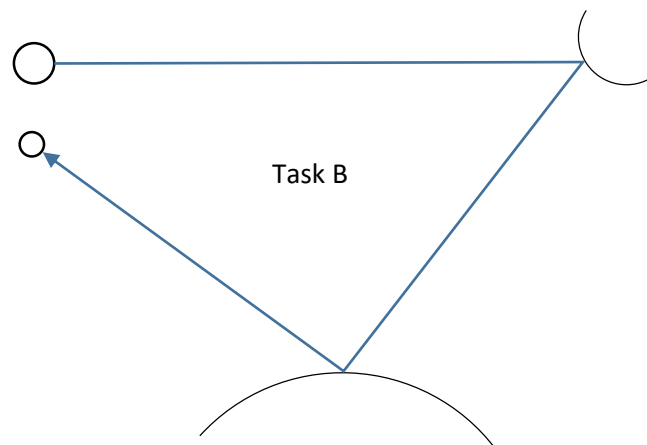
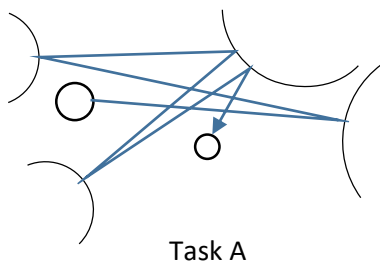
The Leading Points weight is defined as a constant ratio in Sporting Code Section 7F point 10. The current definition is:

In case of at least one pilot in goal: $\text{LeadingWeight} = (1 - \text{DistanceWeight}) * 1.4 * 2 / 8$

and $\text{TimeWeight} = 1 - \text{LeadingWeight} - \text{DistanceWeight}$

The above formula is making a constant ratio between LeadingWeight and TimeWeight (currently 35% : 65%)

In Section 7F the concept of scoring parameters is these parameters to be chosen and fixed before the competition start and stay the same for all tasks. Considering the huge variations of possible task configurations (see the drawing) we think that fixed LP-TP ratio is not always fair. In the example below Task "A" has more overlapping legs than Task "B" therefore in Task "A" speed is much more important than leading comparing to Task "B"



Motivation for change

1. Current LP – TP ratio is not perfect – it stimulates tight following of the optimized route.
2. Fairer task scoring in cases when speed is more important than leading (decision making).
3. Fairer task scoring in cases when leading (decision making) is more important than speed.
4. Better chance for MDs to experiment with leading in Category 2 events and gain experience that could help in future decisions for Category 1 events.

Proposed changes in the rules

1. In Section 7A point 5.2.3 to be added new bullet with the text “(for Paragliding only) Leading – Time points ratio”.
2. In Section 7F point 6.1.1 to be added sub-point 9 with the text “(for Paragliding only) Leading – Time points ratio”.
3. In Section 7F point 10 original formula for Paragliding “LeadingWeight = (1 – DistanceWeight) * 1.4 * 2 / 8” to be changed as “LeadingWeight = (1 – DistanceWeight) * LTR where LTR is Leading – Time ratio”.

Consequences of the proposed changes

If this proposal is accepted – the following will happen:

- Usually at the beginning of a Category 1 even there is a meeting of all Team Leaders. At this meeting are discussed and set scoring parameters that will be used during the event. If this proposal is accepted – Team Leaders will have to discuss and decide about the Leading – Time ratio (whether it will be fixed for the competition or it will be in some suitable limits according to the venue and possible task configurations, if fixed – on what proportion).
- Meet Director will have to think about what Leading – Time ratio is fair for the daily task.
- Meet Director will have to write on the task board the daily value of the ratio.
- Competition scorer will have to write one additional parameter when preparing daily task for scoring.
- Small changes in FS will be necessary to allow arbitrary definition of the ratio.

Date: 1st December 2019

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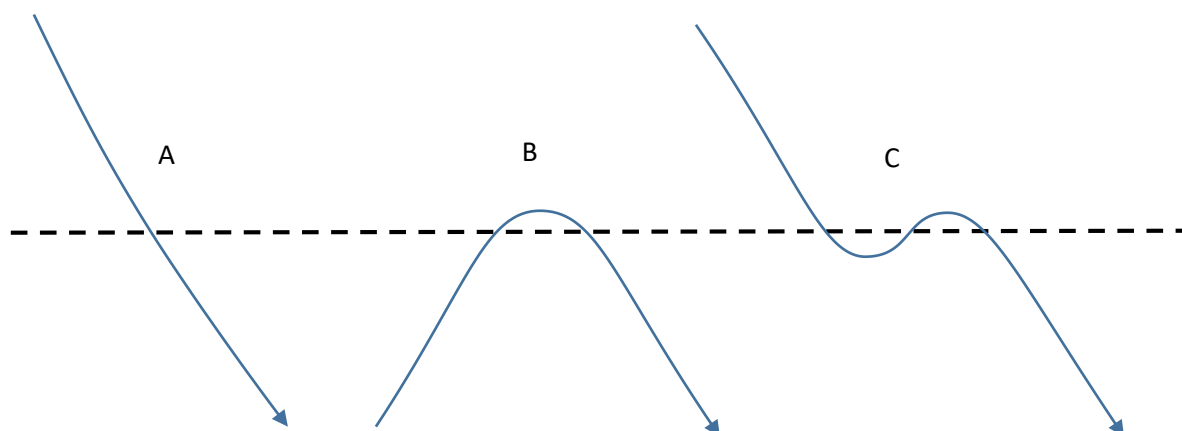
When flying a XC task – competitors must cross a sequence of cylinders in particular order. Practically there is no restriction on direction of crossing (from outside to inside or the other way around) for all cylinders in the task except the Start of Speed Section. **We propose this restriction for SSS to be discarded.**

Current status of the rules

The term “direction” (exit or enter) is mentioned in the rules:

- Sporting Code Section 7A points 5.2.1.3, 5.2.2.1 and 5.2.2.2
- Sporting Code Section 7F points 6.2.1, 6.3, 6.4.1, 6.4.2, 8.1.1, 8.3.2 and 12.2

The meaning of the term is direction of crossing the virtual cylinder wall defined by turnpoint center and radius. When direction for a cylinder is chosen – there are 3 cases for a pilot who is about to take the cylinder:



In case “A” the pilot is on the other side of the line comparing to the place he/she wants to go. In case “B” the pilot is on the same side of the line with the place he/she wants to go. In case “C” the pilot is again on the other side, but if the crossing direction is defined wrong for him/her – he/she must do the illustrated trajectory in order to cross the line properly. In the drawing cylinder wall is intentionally presented as straight line because the position of the center is irrelevant and on the smallest scale circle is almost like a straight line.

Motivation for change

1. The restriction to take SSS cylinder (and any other cylinder) only in one direction has no sportive value.
2. The restriction adds to the mental pressure on the pilots during task start.

3. The restriction is not explicitly set in the most popular scoring program, but implied by hidden internal logic of the program. When task-setter makes wrong assumption about this – pilots may be underscored.
4. Simplification of the rules; simplification of scoring programs; simplification of task boards; simplification of flight instruments.

Proposed changes in the rules

Note: in blue is the current wording of the rule, in red is proposed new wording

1. Section 7A point 5.2.1.3 current text “Finish time: Time when a pilot crossed the ESS boundary in the required direction (exit or entry) for the first time after completing all previous portions of the task.” to be changed as “Finish time: Time when a pilot crossed the ESS boundary for the first time after completing all previous portions of the task.”
2. Section 7A point 5.2.2.1 current text “Given a task definition, the pilots’ task then consists of launching at the take-off point within the launch time window, reaching all given control zones in the given order and direction (enter or exit), including the start of speed section cylinder at a time permitted by the start procedure. A task is concluded by crossing the goal line in the direction from the last cylinder before goal with a different centre point than goal towards goal.” to be changed as “Given a task definition, the pilots’ task then consists of launching at the take-off point within the launch time window, reaching all given control zones in the given order, including the start of speed section cylinder at a time permitted by the start procedure. A task is concluded by crossing the boundary of goal control zone (line or cylinder).”
3. Section 7A point 5.2.2.2 current text “In open distance tasks, the pilot’s task consists of launching from the take-off point within the launch time window, reaching all given control zones in the given order and direction (enter or exit), including, if one is defined, the start cylinder at or after the given start time, and then fly the maximum distance, either along a given direction, or in a free direction if none is given, away from the last given control zone.” to be changed as “In open distance tasks, the pilot’s task consists of launching from the take-off point within the launch time window, reaching all given control zones in the given order, including, if one is defined, the start cylinder at or after the given start time, and then fly the maximum distance, either along a given direction, or in a free direction if none is given, away from the last given control zone.”
4. Section 7F point 6.2.1 sub-point 3 to be removed and paragraph “Note that for start cylinders (SSS), “enter” only makes sense if the following turnpoint cylinder lies within the SSS cylinder. Likewise, an “exit” only makes sense if the first turnpoint lies outside of the SSS cylinder. Currently, the start direction can not be set within FS. Instead the program automatically scores according to this logic.” also to be removed.
5. Section 7F point 6.3 sub-point 1 original text “cylinder (enter or exit), see above, or” to be changed as “cylinder or”.
6. Section 7F point 6.4.1 original text “Race start is defined as the crossing of the start cylinder in the prescribed direction for the last time before continuing to flying through the remainder of the task.” to be changed as “Race start is defined as the crossing of the start cylinder for the last time before continuing to flying through the remainder of the task.”

7. Section 7F point 6.4.2 original text “A pilot’s start is registered when he exits this cylinder for the first time.” to be changed as “A pilot’s start is registered when he crosses this cylinder for the first time.”
8. Section 7F point 8.1.1 original text “A cylinder is considered “reached” by a pilot if that pilot’s track log shows the pilot crossing out of the cylinder in the case of an exit cylinder, or into the cylinder in case of an enter cylinder, by containing at least one track point closer to the cylinder’s centre than the cylinder radius (enter) or further away from the cylinder’s centre than the cylinder radius (exit). During task evaluation, only the x/y coordinates are considered, and a point must lie within (enter) or outside of (exit) the circle representing the turnpoint cylinder in the x/y plain. This is determined by measuring the distance between a track point and the turnpoint. This distance must be greater (exit) or smaller (enter) than the cylinder’s radius.” to be changed as “A cylinder is considered “reached” by a pilot if that pilot’s track log shows the pilot crossing the cylinder edge from inside to outside or from outside to inside. During task evaluation, position of the pilot in relation to the cylinder (inside or outside) is determined by the distance between the turnpoint (cylinder’s center) and the track point. This distance must be greater (outside) or smaller (inside) than the cylinder’s radius.”
9. Section 7F point 8.3.2 original text “To reach goal in the case of a goal line, the goal line must be crossed in flight. This is achieved when a line drawn between two adjacent points in the pilot’s tracklog crosses the goal line in the correct direction.” to be changed as “To reach goal in the case of a goal line, the goal line control zone must be entered in flight. This is achieved when a line drawn between two adjacent points in the pilot’s tracklog crosses the boundary of the congeal control zone from outside to inside.” and the subsequent texts “in the correct direction” to be removed.
10. Section 7F point 12.2 original text “An early start occurs if a pilot’s last SSS cylinder boundary crossing in start direction (enter or exit) occurred before the first (or only) start gate time.” to be changed as “An early start occurs if a pilot’s last SSS cylinder boundary crossing occurred before the first (or only) start gate time.”

Consequences from the proposed changes

If this proposal is accepted, the following will happen:

- At the task briefing – Meet Director will no longer have to state that Start is ENTER or EXIT.
- In the task board – direction of the Start will no longer be needed and may be removed from the template.
- In FS – small change must be made to detect crossing in both directions as valid start crossing (in FS there is no similar check for any of the subsequent cylinders).
- In competition instruments option for Start direction (ENTER or EXIT) must be removed. Pilots using older instruments that are no longer supported by their manufacturers in case of not detected Start will have to manually switch to next turnpoint in the task.

Date: 1st December 2019

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