Position paper

on 2025 IGC Plenary agenda item 6.2.11 "New Turn Point Geometry", Year 1 proposal by France and Germany

submitted by Swedish IGC delegate Reno Filla *January 28th, 2025*

Background

The text below is a copy of an eleven-years old position paper that was originally published with the agenda of the 2014 IGC plenary (link). It addresses the 2014 Year 2 proposal "Change of the observation zone of turn points (Racing Task + Grand prix)" from UK, France and Germany – which got defeated in voting back then.

Now, eleven years later the IGC delegates find a virtually identical proposal as item 6.2.11 on the agenda of the 2025 IGC Plenary. Nothing in the arguments for or against this proposal has changed.

Below the original 2014 position paper from Sweden, in our opinion still valid in all points.

Position paper

on 2014 IGC Plenary agenda item 8.1.3 "Change of the observation zone of turn points (Racing Task + Grand prix)", Year 2 proposal by UK, Germany, France

submitted by Swedish IGC delegate Reno Filla *January 21st, 2014*

Summary

There are several reasons not to support this proposal, the most important ones being that:

1. The perceived safety increase might actually lead to a real *safety decrease* due to higher likelihood of (near-) collisions as pilots can meet head-on or cross paths perpendicular in an area and at a time where the cognitive workload is already high, not the least due to possibly bad weather.
2. This has the potential to change the tactics of the competing pilots in introducing flexibility that has never meant to exist in a Racing Task.
3. This might degrade the use of Assigned Area Tasks, which already gives the flexibility sought in the proposal.
4. This further increases the public's difficulty to understand the rules of our sport.
5. This is borne out of a misunderstanding of the SC3 Annex A rules, insofar as the purpose of these rules is to ensure task fairness, and not a certain level of task easiness. The latter is the job of the task setter.

Background

The year 2 proposal is to add an FAI 90° sector with maximum distance 20km to the currently used "beer can", i.e. the cylinder with 500m radius centered on a turn point. The argumentation is brief with a rather limited list of overlapping arguments, the validity of which (or in our view: lack thereof) will be discussed in the following:

- "The radius must be big enough to allow pilots to fly into the observation zone that is affected by a small storm."
- "Convergence between SC3 and SC3a"
- "Used with a lot of success for many years in Germany, UK, and France."
- "Very easy to manage with modern flying tools"
- "Better for safety when the weather is stormy"
- "Task are easier to complete when weather is poor, less outlandings = better safety"

Discussion

The proponent's main line of reasoning is that sometimes local weather developments prevent safe flying in the affected area. When that area happens to include the observation zone of a turn point the task suddenly becomes too difficult for the pilots, who nevertheless are determined to put finishing the task above their own safety, thus they fly unsafely into the weather-affected area. The only possibility to prevent said pilots from doing so is to change the official rules such that a turn point may also be *rounded* rather than *reached*. This, supposedly, had "a lot of success for many years" in some countries and is otherwise "easy to manage". No downsides are reported to exist.

To begin with, the proposal seems to be based on a four-fold misconception:

1. The misconception that the SC3 Annex A rules exist to ensure that competition tasks are easy and safe to accomplish.
2. The misconception that changing weather and the correct utilization of it is not the essence of our sport but rather presents an inherent unfairness to all competition pilots.
3. The misconceptions that there are no other means to introduce flexibility of task execution (read: AAT's are ignored)
4. The misconception that everyone choosing their own turn point in difficult weather somehow leads to increased safety for everyone.

The following comments regarding misconception #1 should come as no surprise to anyone, yet they warrant repeating: ensuring safety and fairness is the responsibility of the competition organizer (see 1.4.2 in SC3 Annex A 2013), yet ultimately the responsibility for one's personal safety lies with the individual pilot (see 4.1.1 in SC3 Annex A 2013). The purpose of the rules stated in the SC3 Annex A is to provide a clear framework around the competition task itself: setting, launching, starting and scoring. Fairness comes from clear and strict rules that apply to everyone in the same way.

We realise that there are safety issues in our sport and we recognise the great effort that goes into increasing safety, including modification of competition rules to avoid tempting the pilots to fly in an unsafe manner. One example is the introduction of the finish ring as the preferred alternative to the finish line. However, while the finish ring is believed to increase the likelihood of safe finishes due to its minimum altitude prescription (which by the way could also have been applied to a finish line) it does not significantly alter the task itself.

The proposal of putting an FAI 90° sector on top of the "beer can", however, does significantly alter the task itself, as the pilots have the choice to place their turn points anywhere within the observation zone and therefore optimize their track to a much greater degree than what is wanted in a Racing Task. This will be discussed in greater detail later on in this paper.

Item #2 in the list, i.e. the possible misconception that changing weather and the correct utilization of it is not the essence of our sport but rather presents an inherent unfairness to all competition pilots, stems from the oral discussion around the proposal and the frequent mentioning of how "unfair" it might be that bad weather can develop in parts of the competition area, and that competitors might find themselves at an advantage or disadvantage based on when they started.

As this has been characteristic for our sport ever since the beginning of time (as it also is for other weather-utilizing sports like, for example, sailing), the question arises why we suddenly are supposed to pass laws to minimize the impact of local weather conditions and the pilots' capability to correctly predict and exploit them. Is this a major shift in our understanding of the glider pilot from someone who skilfully utilizes local weather phenomena to someone who needs to be protected from "unfair" changes?

One such major shift occurred with the introduction of GNSS for navigational purposes. Suddenly, finding the turn point itself was no longer part of the task, which helped to level the playing field for all pilots. Instead of the pilot wondering where the turn point is and how to get there, GNSS has reduced the question to finding the optimal path. But since pilots in international competitions can rightly be assumed to possess good navigational skills the impact of GNSS has probably been less severe.

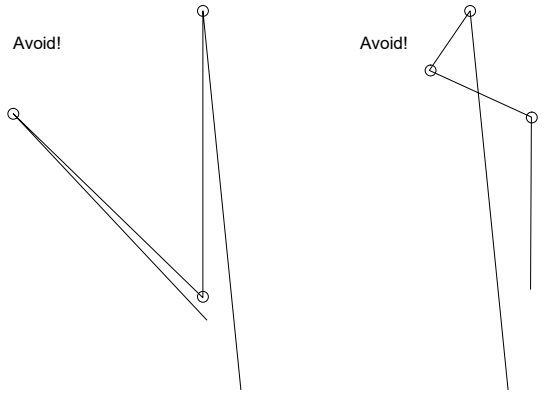
However, the now proposed change of the observation zone will likely have a much greater impact, as now the penalty for deviating from the original task leg becomes smaller since the leg no longer has to connect to the original turn point. The discussion has so far focused on bad weather, but who will prevent such "turn point optimization" from happening when there is an advantage to be gained from exceptionally good local weather, instead? Pilots can actually become encouraged to find other paths towards rounding the turn points, perhaps following a ridge or a cloud street far longer than what would otherwise have been practical, which then might put them onto a collision course with their competitors who have chosen another path. This will be discussed in more detail below.

Suffice to say, the general public will struggle even more to understand the rules of our sport when a Racing Task, which we use to compare to orienteering, now suddenly can be accomplished by never getting nearer the actual turn points than 20km. This might especially impact the Sailplane Grand Prix series, where everyone is supposed to start at the same time anyway, thus the level of "unfairness" is minimized already.

Item #3 in the list above might not actually be a misconception but rather a consequence of unfamiliarity with the Assigned Area Task (AAT, see 6.2.2 and 6.3.2 in SC3 Annex A 2013) or possibly the unwillingness to utilise AAT's when circumstances call for them. The advantages put forth by the proponents all apply to the Assigned Area Task which already exists in our rules, clearly separated from the Racing Task. Approving the proposal will introduce flexibility into the Racing Task that brings it closer to the AAT and degrades the

clear definition of the Racing Task as a “capture the flag” type of task (see orienteering) into a “round the buoy” task (see sailing). If bad or changing weather is a concern then the AAT should be chosen instead, where increased “creative course selection” is part of the game.

The perceived safety increase is the final misconception we want to discuss. One difficulty in setting a competition task in is finding a course that provides just the right challenge for the competing pilots of each glider class without setting up the scene for collision incidents. This means avoiding courses as shown below.



Giving the pilots the opportunity and incentive to choose their own turn point within the large observation zone behind the original turn point will significantly increase the likelihood of (near-) collisions, as pilots can meet head-on or cross paths perpendicular in an area and at a time where the cognitive workload is already high, not the least due to possibly bad weather. Safety comes also from predictability, which the proposed change of observation zone greatly reduces.

In the confined area of the currently used “beer can” with 500m radius (which calculates to 0.79km^2) everyone can expect everyone else to just enter and leave as fast as possible. However the area behind the original turn point might show favourable thermal activity that some pilots might want to exploit. When that area, which calculates to 314km^2 (quarter-circle of 20km radius) is also part of the observation zone, to be entered and exited at high speeds, then (near-) collisions with pilots thermalling in that area are far more likely. The counter-argument could be that the pilots might also spread out more, but who can know and guarantee this? Half of the pilots might actually decide to turn at a certain point in the observations zone, which the other half of the pilots might find just perfect to thermal in or pass in transit. Activity hotspots will probably emerge, but nobody can know precisely where a priori. In summary the support of the proposed change introduces a new level of uncertainty and might therefore actually lead to significantly *reduced* safety rather than increased safety.

Conclusion

Several reasons <u>not to support</u> this proposal have been discussed, covering most importantly the likelihood of the perceived safety increase actually turning out to be a *decrease in safety*, but also the significant impact on *task flying tactics*.

Reno Filla
IGC delegate Sweden

January 21st, 2014

republished:
January 28th, 2025