

SIMPLIFYING THE SPORTING CODE – Part 2

A single Observation Zone

In order to direct feedback to the committee in an organized way, the committee is offering sections of draft code for comment, each containing the areas of potential simplification.

The committee's original paper to the IGC described how each of the two types of OZs (sector and cylinder) were added to the Code as new methods of verifying position evidence evolved. A third type of OZ, used in some competitions, is the "keyhole", which is an amalgam of the sector and cylinder OZ

This paper's main recommendation is to use a single type of OZ, a cylinder having some variation in size depending on the way point.

On the attached page is sample Code defining this OZ and some pertinent thoughts related to it.

We thank responders for the thoughtful comments that we are getting. We assure you that all suggestions are being considered. Suggestions should be sent to igc-sporting-code@fai.org

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PROPOSED SPORTING CODE TEXT RELATED TO A SINGLE OZ

<i>COURSE</i>	1.2.4	All the LEGS of a SOARING PERFORMANCE. A CLOSED COURSE has the START and FINISH at the same WAY POINT.
<i>OBSERVATION ZONE</i>	1.2.5	The Observation Zone (OZ) is a vertical cylinder of airspace centred on declared WAY POINTS having a radius of 2 km at a TURN POINT and 500 metres at START and FINISH POINTS.
<i>RELEASE POINT</i>	1.2.6	The point on the ground vertically below where the glider releases or ceases using a MoP.
<i>FIX</i>	1.2.7	A single data point selected from recorded flight data giving latitude, longitude, time, and from a FLIGHT RECORDER, pressure altitude.
<i>START POINT</i>	1.2.8	The WAY POINT that marks the beginning of a SOARING PERFORMANCE. This may be the RELEASE POINT or a declared START POINT.
<i>TURN POINT</i>	1.2.9	A WAY POINT between two LEGS of a flight.
<i>FINISH POINT</i>	1.2.10	The WAY POINT that marks the end of a SOARING PERFORMANCE. This may be a FIX established by starting a MoP, the START POINT of a closed course, a FIX selected as a FINISH POINT, or the point at which the glider stops on landing.
	1.3	DEFINITION of SOARING MEASUREMENT TERMS
<i>START TIME and ALTITUDE</i>	1.3.1	Start time and altitude (msl) for all SOARING PERFORMANCES may be taken either at release or the glider's exit from the START OZ.
<i>FINISH TIME and ALTITUDE</i>	1.3.2	Finish time and altitude (msl) are determined by the type of SOARING PERFORMANCE and the type of FINISH POINT claimed: <ol style="list-style-type: none">For an airborne finish at a declared FINISH POINT, FINISH TIME and ALTITUDE may be taken at the glider's entry into the FINISH OZ or a FIX within the FINISH OZ.When a declared FINISH POINT is not claimed, FINISH TIME and ALTITUDE may be taken at starting the MoP or any FIX selected as the FINISH POINT, and for a finish at landing, FINISH TIME is the time of landing and FINISH ALTITUDE is the landing site msl elevation.
<i>DURATION</i>	1.3.3	The elapsed time between the START TIME and the FINISH TIME.
<i>LOSS OF HEIGHT</i>	1.3.4	The START ALTITUDE minus the FINISH ALTITUDE. If positive, the penalty in 4.3.3 applies for records, and in 2.3.5 for badges.
<i>GAIN OF HEIGHT</i>	1.3.5	The greatest altitude difference between a recorded high point and a previous low point during a SOARING PERFORMANCE.
<i>OZ CORRECTION</i>	1.3.6	Each time a LEG crosses a CYLINDER OZ boundary, the radius of that OZ shall be subtracted from the LEG length. This correction does not apply where a FIX is used as a WAY POINT.
<i>OFFICIAL DISTANCE</i>	1.3.7	The sum of the LEGS, less any OZ CORRECTION and LOSS OF HEIGHT penalty.

Considerations

- 1 First, these changes to the Code text for a single OZ also presume the proposed set of new courses.
- 2 All record TPs are fixes so an OZ radius doesn't apply. Only the proposed Diamond Goal badge flight requires a declared TP, and a 2 km radius has been offered to avoid localized weather. Larger radii could be chosen, while recognizing that the leg length must accommodate the greater OZ correction distance. Other suggestions welcome.
- 3 Another possible option for the Diamond Goal pilot (not in the text) is that the OZ correction distance could be waived provided that the glider's track clearly goes around the TP. This would be the pilot's choice in planning the task, and comment on this option welcome.
- 4 The maximum 1000m finishing from the start point to satisfy the completion of a goal flight is deleted. This distance was set years ago as being the equivalent of the old rule that landing anywhere back on the home airfield was sufficient to complete a closed course flight. Given that the vast majority of these flights are now completed in the air on entering the start/finish OZ, the rule is obsolete. Pilots that intend to land as a finish just need to choose an airfield start point that makes a safe landing within 500m of it possible.
- 5 The determination of start time and altitude is much simplified to being taken at the exit from the start OZ (except when the task allows taking the data from the release).
- 6 Given that there are a lot more unknowns at the conclusion of a task, finish time/altitude options remain broad. It is assumed that the pilot has more time and probably better soaring conditions to optimize the start rather than the finish.
- 7 Some consideration was been given to having a single "keyhole" OZ at TPs, but it is too complicated a structure (any mathematician would call it "inelegant") and unnecessary for most tasks that would now use TP fixes.