Scoring Testing Group Report to IGC Plenum

January 2009

The Scoring Testing group had its first full operating year. During 2008 multiple problems concerning scoring in FAI competitions were looked into. Also a parallel scoring with EGC in Luesse was carried out with a different scoring software from the one used by the organizers. Object of this was to find out possible differences in flight analyzing between the software. Differences discovered were mostly due to different ways of interpolation during start and finish.

The group has studied the need of an IGC approval for software used for scoring in FAI sanctioned competitions. As a result, no approval method is proposed at this stage. As an alternative a web based repository of sample scoring data with result templates is going to be created. From this website competition organizers (scorers) are able to load test data to evaluate their scoring before and during a competition.

This test data includes

- sufficient amount of IGC files in a form of competitions
- airspace files
- tasks
- results

This test data should include as many different evaluation and scoring scenarios as possible.

Evaluation of this data should include

1. Continuity of flight, i.e. proof that the glider did not land during the task.
2. Proof that the start was valid.
3. Determination of the start time (interpolation between two fixes).
4. Check that the turn points or areas were achieved correctly and in the correct order.
5. Check that there were no airspace infringements.
6. Check that altitude limits set by the Organisers were obeyed.
7. Determination of the real landing position.
8. In the case of an outlanding: determination of the virtual outlanding position (involves an optimization procedure).
9. Proof that the finish was valid.
10. Determination of the finish time (interpolation between two fixes).
11. Determination of the flight duration (for finishers).
12. Determination of the scoring distance: in the case of an AA task or a virtual outlanding, an optimization process is involved.
13. Calculation of the speed.
14. Detection of MOP
15. Detection of entering airspace

16. Cases with GPS failure (case Lusse)

The website will also act as an communication channel between Software Testing Group and software developers. The site can also be used by scorers to report problems with scoring software.

A joint meeting with Annex A working group will be arranged after the plenum to discuss Geometrical Standards used in flight analyzes.

Helsinki January 19th

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