

Report

Scoring Software Testing Group

Jan. 9th 2008

The IGC Plenary 2007 approved Austrian proposal to define a committee for the test of scoring software.

After the Plenary suitable group members were looked for and the group was organized. The members are:

Visa-Matti Leinikki (chairman)

Peter Ryder

Angel Casado

Hans Trautenberg

Tim Shirley

Peter Platzer

All gliding competitions are scored with computer based scoring software. At the moment it is not required by the rules to use certain software for this purpose. It is possible that any organizer could use their own scoring software without any guarantee for correctness of the results or flight evaluation. Even with the few commercial software used, the results can vary mainly because of differences in scoring scripts and algorithms used for flight evaluation.

At the moment no organized evaluation has been made to ensure that the results from even the most commonly used software are in compliance with the Sporting Code.

So far the group has identified following tasks to be carried out:

To define guidelines for testing software

- document the requirements for sanctioned software including usability and essential technical solutions
- define methods to guarantee integrity of the software including the validity of scripts used for scoring
- with the software industry, create a method for version control
- define requirements for data presentation, especially for screens and internet, including preliminary results and handout material for Jury and Stewards
- study the need for Annex to define the requirements for Scoring Software

To test accuracy of scoring software

- by developing and using virtual test competitions to check the flight evaluation correctness and scoring
- airspace infringement detection

- correct start / finish and rounding of all turn points
- determination of the scoring distance, especially with area tasks, virtual outlandings etc.
- determination of the scoring time

To study the need of changes to Sporting Code

- together with Sporting Code Section 3 and Annex A working groups to study the changes required to Sporting Code caused by the IGC approval
- propose changes to Sporting Code to eliminate definitions which are difficult to implement in the navigation software

To develop an IGC approval for Scoring Software used in IGC sanctioned competitions

- study the need and for such approval
- study the technical and logical problems involved in such approval
- define requirements and methods for Software developers to receive an IGC approval for their scoring software
- create and update list of approved software and their versions

Helsinki, January 9th 2008

Visa-Matti Leinikki