

# Report of the President of the International Jury

**19<sup>th</sup> World Glider Aerobatic Championships**

**7<sup>th</sup> World Advanced Glider Aerobatic Championships**

**Matkópuszta, Hungary**

**20.7.2016 – 30.7.2016**



**Manfred Echter**

## **Venue and Local Organisers**

Matkópuszta airfield, south of the city of Kecskemét, is perfectly suited for an event of this kind and size. It is large enough to place nearly the entire aerobatic box within the airfield perimeter. The orientation of the main grass runway is 31/13 and the box was laid out parallel to the runway.

The box was very well marked and competitors commented favourably on the layout and the visibility of box markings.

The local organisers under the leadership of Contest Director Tamás Ábrányi were exceptionally motivated, helpful and friendly. There was always a sufficient number of volunteers available whenever they were needed.

The infrastructure was generally sufficient, although office space was limited. The scorer had to be placed in the main contest office and there was no dedicated room for the judges where they could hold meetings and video sessions. The I.J. was allowed to use the office of the airfield manager which offered an excellent view over nearly the entire airfield. Two tents had been erected, one serving as dining and briefing facility, the other as a hangar for the gliders. Sufficient space was available for all gliders and there was no need to disassemble overnight.

All officials and judges were accommodated in the same hotel in Kecskemét. Rooms were very comfortable and transit time to/from the airfield was ca. 20 Minutes.

## **Teams and Competitors**

In the Unlimited Championships there were 20 competitors from 8 nations, but only the minimum number of 5 complete teams.

The Advanced Championships saw 39 competitors from 13 nations and 6 complete teams.

## **Preparations**

Practice flying had started on Friday, 15 July, but due to heavy rain and low clouds over the weekend, no further practice flights were possible until Monday, 18 July. Afternoon of Tuesday, 19 July, demonstration flights for the judges had priority, but eventually all competitors had sufficient opportunities for practice flights before the official start of contest flying.

The opening briefing started 08.00 local on Wednesday, 20 July. After the briefing, selection of Unknown Figures was conducted, first for Unlimited then for Advanced. This was the first

time 35 figures in each category were required and with only 8 NACs represented in Unlimited, a fifth draw became necessary. With the sum K for five figures fixed at 105 in para 3.3.3.2 of Part 2 it was obvious that for the last figure minimum 10 K would be left, which would violate the minimum K of 15 per figure for UNL. With the agreement of all NAC representatives, the I.J. set the limit at 110 K and the selection of figures for the UNL could be completed.

## **The Free Known Programme**

This was the first time the new championship format agreed by CIVA in 2015 was applied internationally. There had been many debates in advance questioning the wisdom of replacing the Known and Free Programmes by the Free Known. Main argument against was the 2016 Known Figure selection for the Unlimited. With three out of five figures containing a high-G negative push, height loss was claimed to be excessive and the sequences were considered unsafe by a number of pilots.

As it turned out in practice, there were only five "Low"-penalties in Unlimited and the only pilot flying a standard Fox was not among them. On the other hand, watching the flights, it was only too obvious that pilots were attempting to save height. 45°-angles were generally flown shallow, the length of vertical lines was kept to a minimum and figures were entered with minimum speed.

From these observations it should be clear that there is no urgent need to modify the rules for the Glider Free Knowns. But it is also obvious that selection of Known Figures must be done very carefully in order to avoid figure sets which cause excessive height loss and/or unnecessary stress on pilots and gliders.

## **Boundary Judging**

As in previous years, boundary judging again became a "hot" issue.

The I.J. had inspected the aiming devices and found them satisfactory and correctly aligned. The records kept by the line judges were remarkably neat and easy to review. The volunteer at the judging line, however, only jotted down the times received from the line judges and it was not always clear that she had recorded and relayed it to the Chief Judge correctly.

The Polish PHMD team had integrated a GPS function in their height measuring equipment and they were able to print out the times flown outside the box as well as a trace of the flight overlaid on the box boundaries plus the 50-meter-buffer. Although the Polish system was still on test, the I.J. nevertheless was able to review the printouts from the GPS and compare them with the records from the line judges. Surprisingly, the records from one particular line showed the most significant differences between the two measurements. At first, we suspected that the Polish team had used an inaccurate coordinate for the box center as their reference. But a test with one of the onboard devices on the ground showed that the box boundaries measured by the Polish tracking system accurately matched the real boundaries on the ground.

The true cause for the discrepancies was trivial: One of the line judges used to attach his umbrella to the vertical pole of his aiming device using a rubber cord. This twisted the device out of alignment by several degrees.

A request by the competitors to go without the line judges and measure box outs with the electronic tracking system only was rejected by the I.J. because the electronic tracking was still on test and had not yet been approved by CIVA.

From our experience with the electronic tracking system developed by the team from Poznan University, we can only recommend to use this system from next year on and to keep line judges as a fallback option only, should the electronic system be inoperative or unavailable.

At the end of the championships, the I.J. and the Chief Judge had a thorough discussion with the developers of the Polish tracking system in order to define our requirements for a data output which can be interpreted easily and quickly and to develop a data printout from each flight, which can be filed together with the score sheets for use by the scorer and scrutiny by the competitors.

## **Meteorology**

Weather information was provided by the Hungarian Airforce from nearby Kecskemét airbase. Weather data and forecasts presented in the briefings were always accurate and complete.

Wind measuring was done by airborne GPS using an ultralight airplane. Wind data were provided in a timely manner. There were never any questionable measurements and upper winds remained quite weak throughout.

## **Judging**

Philippe KÜchler as Chief Judge performed as always: Perfectly!

He used the frequent video sessions not only to clarify specific questions but also to instruct his judges on how to do a better job. Some judges may feel that he is too critical, but I am convinced with his experience and attention to detail, his criticism helped to keep up a high standard of judging throughout the championships.

When cross-checking the boundary judge data, we noticed that only few judges apparently used the prescribed procedure for marking of positioning. If there are no annotations for positioning on the score sheet, the judge either does not apply the procedure or the positioning mark should be 10!

For more details on judging at this event, see the Chief Judge's report.

## **Scoring and Publication of Results**

Scoring was done by Sándor Molnár. He is an experienced scorer doing an excellent job. I had the impression, however, he had to do most tasks single-handedly.

Results were always accurate and available on time. Results were published on CIVA Results as they became available.

## **Communications**

For communications within the contest management professional quality handheld radios were used. The number of sets was not quite sufficient, so the Jury had to use their mobile phones most of the time.

Information to teams and competitors was primarily distributed via e-mail. After a few days and some prodding, the organisers also set up an SMS-distribution to key officials and team representatives. SMS distribution is inherently quicker and should always be used from the beginning to keep key personnel up to date on all important matters.

## **Contest Flying**

Flight Director throughout the contest was László Baku. The setup at the starting line was simple but efficient. There was an info board showing the next flight number, the current wind measurements and any other important information for the competitors. Spacing of flights was controlled in the usual manner on instructions from the Chief Judge. There were normally three towplanes in operation. Performance of the towplanes did not differ much and there were no apparent difficulties with the spacing.

Initially, during the practise flights, some pilots complained about slow towing speeds. This was brought to the attention of the Contest Director and there were no more complaints afterwards.

Due to generally favourable weather, three programmes had been completed in both categories by noon, Sunday, 24 July. The Contest Director decided to give the competitors a break and resumed contest flying not before Monday afternoon. This pause was probably the reason why only five instead of six programmes could be completed in both categories.

The Advanced Championship was declared complete after 5 Programmes in the afternoon of Thursday, 28 July. The Contest Director had decided to fly the 5<sup>th</sup> Programme of the Unlimited category on Friday and not to continue with the 6<sup>th</sup> Programme of the Advanced afterwards. Although the weather was perfect on Friday morning, it was decided to start flying Programme 5 of the Unlimited not before Friday afternoon. Towards noon low clouds formed and flying was only resumed later in the afternoon. By late afternoon Friday Programme 5 of the Unlimited was completed and contest flying ended.

For whatever reason, the Contest Director's decisions prevented six Programmes being flown in both categories, although time and weather would have probably allowed this. In other airports, they have rules when rest periods may be called in championships. CIVA should consider to introduce similar rules (see Jury President's recommendations below).

## **Technical Incidents**

Only one incident happened, when Jan Makula was unable to lock the wheel on his Solo Fox. Reason was a broken pushrod. The glider landed wheel-up without any damage and since a spare part was available, the repair could be speedily completed without delaying further flights with this glider.

## **Results**

When the protest deadline had passed, all results were declared final and published on Saturday morning, 30 July.

All the results can be found on <[www.civa-results.com](http://www.civa-results.com)>.

## **Protests**

One protest was received from Swedish Advanced pilot Gustav Salminen. He protested a "High"-penalty on the first figure in his Free Unknown sequence. The I.J. viewed the official video from his flight and found that the "High" was caused by the glider climbing immediately before entering the first figure, a spin. Since the the penalty was awarded in line with regulations, the protest had to be rejected.

## **Jury President's Recommendations**

For formal proposals see Appendix 1.

## **1. Replace Line Judges by Electronic Tracking**

Line Judges should in the future only be used if there is no electronic tracking system available. Organisers must be urged to secure the availability of an electronic tracking system for Glider Aerobatic World Championships.

### **Rationale:**

Use of line judges requires manpower and causes additional costs for the organisers. Line judges are humans and likely to make mistakes. In the worst case, line judges could adversely influence the outcome of a World Championship by incorrect recording of box-outs.

By next year, an accurate and reliable electronic tracking system for gliders will be available. CIVA should support further development of this system and make its use mandatory for Glider Aerobatic World Championships.

## **2. Minimum Number of Programmes for a valid Championship**

CIVA should consider to increase the minimum number of Programmes in each category from three to four with the option to cut the last Programme to the leading 50% of competitors. Rest periods should only be called with the agreement of at least two thirds of the competing NACs.

### **Rationale:**

Not in these championships, but in some of the championships of the last few years, organisers were slow to get started and time was wasted at the beginning which lacked later when for instance the weather turned bad. Increasing the minimum number of programmes would put pressure on organisers to really be ready when it is time to get started.

On the other hand in these championships, it was obvious that the organisers, when they had two valid championships after only four and one half days of the contest, did no longer try to get all six Programmes completed, even with time and weather permitting. Pilots come to championships to fly and the more programmes completed, the higher the value of the contest.

## **3. Increase Sum-K for 5 Unknown figures in Unlimited to 110**

### **Rationale:**

See remarks on selection of Unknown Figures above. If a team is to select five figures and has already the maximum of 95 K for four figures, only 10 K would be left for the last figure, which is less than the allowed minimum of 15 K for Unlimited.

## **Conclusion**

Overall, these were highly successful championships in a friendly atmosphere under highly favourable conditions. A big Thank You! to Tamás Ábrányi and his team for a smoothly running organisation which left nothing to be desired. Thank you to the many volunteers who made all this happen!

Congratulations to the Hungarian pilots who won all four Gold Medals in the Unlimited and two out of four Gold Medals in the Advanced Championships.

Thank you also to the International Judges and their Chief "Pik". And lastly, thank you to my Jury Members Mady and Kari for a tough job well done.

## Appendix 1 to

# Report of the President of the International Jury, WGAC/WAGAC 2016 Jury President's Proposals

**The following proposals refer to SC 6, Part 2 only.**

### **1. Electronic Position Tracking**

a) Amend sub-para 1.4.2.10 c) to read:

The operators of the height measuring and position tracking system and the boundary judges who will record infringements of the performance zone should the electronic tracking be inoperative or unavailable.

b) Amend para 1.4.2.14 to read:

The operation of the electronic position tracking system will be continuously monitored by a jury member or a neutral person assigned by the International Jury. If the electronic tracking system is not operated, the Boundary Judges are to be monitored in a similar manner.

c) Amend para 2.2.1.1 to read:

A CIVA-approved electronic position tracking system is mandatory at World Championships. Should the electronic tracking system be inoperative, infringements of the performance zone will be recorded by Boundary Judges.

d) Para 2.2.3.1 should be amended as per proposal NP2017-18:

If an electronic tracking system is used, the position of the aircraft will be tracked by the instrument and performance zone boundary infringements (including the 50 m buffer zone according to 2.6.2.1.a)) recorded. A member of the International Jury or a neutral person assigned by the I.J. will be present at the recording station to continuously monitor the operation of the system.

CIVA is urged to make the use of electronic position tracking mandatory at Glider World Championships. The operators of this system must have the same status as international judges. They must not be associated with one of the competing teams.

The electronic position tracking system developed by the team from Poznan University was successfully tested at WGAC/WAGAC 2016. The system is expected to be fully operational for WGAC/WAGAC 2017.

Boundary Judges should, from next year on, only be used as a fallback option if the electronic tracking becomes inoperative.

### **2. Minimum Number of Programmes for a valid World Championship**

a) Amend first sentence of para 1.3.1.4 to read:

If weather conditions or technical reasons prevent the completion of all six Programmes, at least 4 (four) Programmes must be completed for the event to be valid as a World Championship.

b) Add new para 3.3.1.3 i.a.w. proposal NP2017-3:

For the last Programme, if there is insufficient time to fly all six Programmes due to weather conditions or technical reasons, the International Jury is authorised to introduce a cut for the last Programme up to a maximum of 50% of the competitors, based on the combined standings up to this Programme.

Rest periods may only be called with the agreement of at least two thirds of the competing NACs.

Organisers should be urged to be ready when the Championships are to begin. Increasing the minimum number of Programmes will put pressure on organisers not to waste time at the beginning of the contest. Allowing a 50% cut for the last Programme gives the leading competitors a chance to compete in one more Programme. Requiring agreement of teams for rest periods should counter the (understandable) tendency to slow down when the home team is winning.

### **3. Increase the Sum-K for five Unknown Figures in Unlimited to 110**

a) Amend sub-para 3.3.3.2 c) to read:

In the case of teams which select two or more figures, one must be a reversing figure and the sum of coefficients of the figures proposed by a NAC must not exceed:

- 60 (“AG 55) for two figures
- 80 (“AG” 70) for three figures
- 95 (“AG” 85) for four figures
- **110** (“AG” 95) for five figures

With the current sum of 105 K for five figures, the minimum of 15 K per figure (see 3.3.3.2 a)) cannot always be fulfilled.