IGC Steward Report 2008 WGC 15m, 18m and Open Class Lusse. 29th July to 16th August 2008.

The competition was well organised and safe. There were 8 contest days, and 5 days on which tasks were cancelled or not set due to un-flyable weather conditions. One of these days was designated as a rest day. The weather on the flying days provided a good mix of testing conditions, the longest distance flown was 507.0 km and the highest speed achieved 126.88 kph. There were a good number of out landings but only one glider that sustained serious damage, which was held not to be any fault of the pilot. Where there is criticism in this report, this is intended to be constructive and in no way devalues the tremendous amount of good work that has been done by the Contest organisers and the many other volunteers involved with the preparation for, and running of this competition which by any standards was a huge success.

1. Organisation.

1.1 Overall organisation

The structure and management of the organisation was excellent. The organisation involved a large number of people and they all provided an efficient and friendly service to the competitors and crews. A self briefing for pilots was provided for airfield procedures, this was comprehensive, clear and concise.

1.2 Airfield infrastructure and other facilities.

The airfield infrastructure is excellent. The glider tie down area provided water taps and electricity power points for all competitors along the entire length of the tie down area. The briefing hangar, event hangar, restaurant, control tower, administration offices and display screens were all in close proximity to each other and this created a central meeting point for pilots and crews after the days flying and created a good social atmosphere. Meals and refreshments were available at all times at reasonable prices.

1.2 Scrutineering.

Polite and efficient, but was done outside and the weights may have been affected by windy conditions and the process could have been delayed if the weather during the practice period had been wet. Ideally the operation should be done inside a hangar. We would suggest that IGC develop a standard form for the calculation of the tow out reference weight as there were two cases that we were aware of where gliders that could not possibly be overweight were asked to dump water at the weighing points.

1.3 Scoring.

The organisers were using a system developed by the StrePla team. The results were produced accurately and quickly for public display. On the days when speed tasks were set, provisional speeds and scores were computed as the gliders crossed the finish line.

Provisional scores were displayed on a large screen in the event centre and were available on the web site. The display was updated in real time as flight records were downloaded into the system, and web site results were refreshed every 2 minutes. Printed unofficial scores did sometimes take days before they were posted on the official notice board. This improved towards the end of the competition. Competitors who had complaints about their scores or penalties were dealt with fairly and efficiently. All scores were independently checked and occasionally minor discrepancies of not more than 1 point were found. (See 2.3)

1.4 Gridding and daily weighing.

All gliders were weighed on a daily basis. Overweight gliders allowed to dump down to their tow out reference weight calculated at scrutineering time. There were no significant delays for gliders going to grid. The well designed scale ramp and inset scale made it very easy for the car to tow the glider onto the scale. The scales proved accurate and the results were consistent. The gridding system of rotating rows was easy for competitors to understand and efficient to use. The large airfield allowed the grid to be well spaced that made access for the gliders easy.

1.5 Towing.

During the official practice period there were only 8 tugs available and the launch could take as long as $2\frac{1}{2}$ hours. This improved at the start of the competition when 11 tugs were available, but the launch was still taking between 90 and 100 minutes. Later in the competition an additional tug was added to the fleet and with modifications to the position of the release areas the overall launch time improved to 66 minutes. (See 2.5) Ideally there should have been more tugs available from the start of the practice period.

1.6 Tasks and weather.

Tasks were well set and made good use of the available soaring day. The weather forecasting was particularly accurate. Alternative tasks were set and used when the weather didn't develop as expected.

1.7 Team Captains Briefings.

The first Team Captains meeting was difficult and the directors did not seem willing to take on board the views of the captains. There were two contentious points, the speed limit at the start line (See 2.1.1) that was not part of the LP, and the use of the MOP to allow SLMG to "re-launch" without landing (See 2.1.2) which contradicts an Annex A rule but was approved as a LP. These points were all resolved before the start of the first championship day. There were several subsequent meetings with TC which were very productive.

1.8 Information dissemination.

The organization used the airfield PA system and an SMS "push" messages service to get messages to Team Captains and other officials. This worked well for people who had phones with local numbers. A WiFi system was available on the airfield including the camp site. During the practice period and the first few competition days this was

unreliable but thereafter it provided stable and fast internet access. All changes to the local procedures were committed to writing and displayed on the Official Notice board in a timely manner.

1.9 Ceremonies

The Opening ceremony was held in the Belzig town square. It was a well organised and colourful occasion that attracted a large crowd from the local community. The closing ceremony was dignified, well organised and accorded the winners due recognition for their performance. The challenge cups were not specifically mentioned when the prizes were awarded.

1.10 Media liaison

There was very good coverage from both the local print and electronic media. There was a mid point air show and press day. Reporters from 46 news gathering organisation attended. Despite poor weather conditions a crowd, estimated to be 17000 people attended the air show. A demonstration gliding event was arranged in place of the competition launch and finish. The web site maintained a running commentary throughout the period of the championships that conveyed the atmosphere of the competition to readers. During the course of the event there were 2.4 million hits on the web site.

1.11 Public and Internet display of real-time glider positions.

There was no tracking system installed, VPOS does not work in Germany and there was no other system available. During the first 7 days of the competition a commentator took an audience in the event centre through the flight records of the previous days flights giving them an analysis of the race and the pilots tactics. A live commentary, in the German language, was provided as the finishers arrived back at the airfield.

1.12 Social Events.

The organisers staged three social evenings, a Mid Term Party, a supper evening for TC, and the Final Party. All these events were very well organised, great fun and the food was of the highest quality. In addition, other entertainment was organised on most evenings and there were several National evenings all of which served to create a wonderful atmosphere and real camaraderie between the competitors themselves and of course the many people involved with the organisation.

1.13 International Jury.

There were two Jury members from the host nation, and one of whom was an officer of the German Aero Club and involved with the competition organisation. While we are sure that the integrity of these two individuals is beyond reproach, in the event of a protest that involved the host Nation there might be perceptions of bias. We understand that this situation was in part caused by Roland Stuck's unfortunate accident, but in the future we should try to avoid having a jury member from the host country in the opening line-up.

.

2 Rules.

- 2.1 There were two contentious issues that arose from the LP.
 - 2.1.1 The organisers wanted to impose both a start altitude and a speed limit for glider's crossing the start line to improve safety during the starts. They were very concerned that if there were no speed restriction that pilots would cross the start line at high speed. This rule had been used successfully at all the other competitions that had been held previously at Lusse. In their experience, pilots were able monitor their lateral position relative to the start line, their air speed and their altitude and keep a good look out. They did not accept that by setting the start altitude just below cloud base that the pilots would have no reason to start with excess speed and would have more capacity to keep a good look out. Consequently they insisted on introducing a speed limit into the starting procedure even though this procedure is not offered as an option in annex A, and was not in their LP. After email comment during the practice period and lengthy discussions with the Stewards and subsequently with the TC the organisers agreed to compromise. The compromise was that pilots should remain below the start height limit for 2 min before crossing the start line. This did not really solve the problem, pilots modified their start tactics and would maintain their altitude for 2 minutes by circling at high speed before leaving the thermal to cross the start line.
 - 2.1.2 The TC felt that the LP rule, 7.3.2, that allowed self launching gliders to use their engines to avoid a relight was severe disadvantage to competitors who didn't have an engine and would have to land to get a re-launch. Getting re-launched could take as long as 40 minutes. This rule was in the LP approved by the IGC Bureau, the Annex A committee, and the Chief Steward, but we overlook or accepted that it contradicted an existing rule in Annex A, 7.3.2 b. The Dutch TC had sent an email comment about this rule in the LP when they were initially published and asked for it to be discussed at the first TC meeting. Alternative options were discussed with the stewards prior to the first TC meeting, but no resolution was reached. The issue was not resolved in the TC meeting either and a complaint was served on the CD signed by 6 TC after the TC meeting. After further discussion with the Stewards and then with the TC a compromised was agreed that just allowed the open class to use their engines to re-launch on the basis that the majority of open class gliders had this capability, the other classes not. While the operational advantage of this rule is obvious the compromise did not address the disadvantage suffered by a competitor who did not have a MOP and in our view this rule would only be fair if all competitors in the class had an MOP.
- 2.2 Annex A 5.4 d describes the procedure that self launching motor gliders or gliders with sustainer engines must follow if they don't intend to run their MOP in flight prior to the opening of the start. The procedure assumes that a FR will record an ENL level when the glider is stationary on the ground with the engine running, but does not say that this the specific purpose of running the engine. Some FRs don't record any data unless the glider has forward speed, in which case even though the engine is run

on the ground, there is no ENL record. On one occasion a competitor followed the Annex A procedure unaware that the FR in his glider was not recording the ENL. He was penalised and though he did not contest the penalty he thought it was unfair. He was using an IGC approved FR and thought that this feature would have been required for its approval. We suggest an explanatory note should be added to Annex A to avoid future confusion.

- 2.3 When checking the scores we found a few instances where our figures differed from the StrePla system by one point. Some of these were due the rounding precision used by StrePla, others were because of distance differences when compared to the comparative scoring system, SeeYou. StrePla uses the FAI sphere to calculate distance and SeeYou WGS84. Annex A does not say which should be used and the General Section 7.3.1.1 gives the choice between the two methods. To avoid this situation we would suggest that Annex A prescribe the precision to be used in all calculations and which distance calculation should be used.
- 2.4 In an AA task StrePla gave a competitor a greater distance than he had actually flown because his flight record contained spurious fixes in one of the assigned areas. The system used these fixes to inflate the distance he had flown. The discrepancy was obvious when you looked at the plan view of the flight record but was not detected automatically by the system. The StrePla authors immediately implemented a check that raised a warning flag if the speed between two valid fixes exceeded a prescribed value. A point for the scoring sub committee to consider.
- 2.5 Release Zones. The position of the release zones can have a significant impact on the turn round times of each tug and thus the time for the overall launch if there are a limited number of tugs available. We would suggest that the wording of Annex A be reviewed to give organisers more flexibility to create efficient traffic patterns for the tugs.
- 2.6 Sponsors' Rights. The organisers had secured significant sponsorship from Lufthansa and the LP required all competing pilots to carry their advertising sticker, but no position was specified. At the start of the competition the organisers insisted that this sticker must be put on the left hand side of the fuselage just below the canopy line. In one case a pilot who had secured his own sponsorship, had his sponsor's advertisement in this position. The pilot was prepared to put the Lufthansa sticker anywhere else on his glider, where it didn't compromise the prominence his sponsors advertising. The organisers insisted that he had to comply on the basis that if they made an exception for him other competitors might want the same relaxation. This resulted in a standoff between the organisers and the pilot. After two days of mediation a compromise was agreed. While we understand the value of large corporate sponsorship to the economics of staging competitions, we would suggest that the Organisers Agreement specify that an organiser cannot conclude a sponsorship agreement with conditions that supersede those that an individual competitor may have agreed with their sponsor.

3. Safety.

3.1 General safety of the event.

This was a safe and disciplined competition with no serious incidents. There were isolated reports of poor airmanship made to the safety pilots which involved behaviour at the start line and in the gaggles on the one blue day. The safety steward addressed these issues at one of the daily briefings. There were also instances where pilots did not follow the continuously descending final glide profiles and did not observe the minimum height for speed finishes. The organisers were very vigilant during the finishes and pilots that didn't comply were penalised.

3.2 Occurrence of incidents and/or accidents.

There were only two incidents in which gliders were damaged. The first occurred during an out landing, as the glider was on its ground roll, a deer that was lying in the grass in the path of the glider got up and was hit by the gliders wing. The deer was killed and the gliders wing substantially damaged. The second incident occurred when the crew were filling the gliders wing with water ballast and over pressurised it substantially damaging the structure. After discussion with the TCs both pilots were allowed to continue flying using replacement gliders.

- 3.3 On the last contest day there were photographers and spectators in the undershoot area outside the boundary of the airfield that created a risk to themselves and the finishing gliders.
- 3.4 Suggestions for future safety enhancements.
 - 3.4.1 The start procedure as defined in Annex A is not regarded as safe by our largest and most active gliding nation. We would suggest that the Annex A committee open a limited debate with some of the current and experienced competition pilots to try and find a safer alternative that enjoys universal support.
 - 3.4.2 The integration of a speed finishers turning onto finals when there is a mass arrival of direct finishers has the potential to create a dangerous situation. We would suggest that only direct landings be allowed unless there is a clearly segregated part of the airfield that can be reserved for speed finishers to approach and land without having to integrate them into a landing pattern with direct finishers. This is a general comment and not a consequence of an actual incident at Lusse, though the potential did exist.

- 3.4.3. The circuit for speed finishers should be away from buildings and other ground obstructions and not over them.
- 3.4.4. Organiser should make provision to manage spectators under the final approach, even though this area may not be part of the airfield.
- 3.4.5 Flarm has proved to be a useful aid to reducing collision risks and it's fitment should be encouraged.

3.5, Emergency plan.

The organisers had a comprehensive Emergency Plan. It was partially exercised when the adjacent corn field caught fire and the flames threatened some of the structures on the airfield. The emergency services responded to the situation promptly.

.

Dick Bradley. Hannes Linke. Janusz Szczupak. 15/ 08/ 2008