

# **IGC Steward Report**

## **6th FAI Women's World Gliding Championships 2011, Arboga, Sweden, June 11 to 26, 2011**

### **SUMMARY**

The purpose of this report is to collect information with the sole intention of helping the IGC and future championships to learn from the experience of this competition. By its nature the report will contain some criticism of the operation and the organization, but in all cases we have tried to be as objective as possible. We are very conscious of the fact that the organization is staffed by volunteers who have given up countless hours of their free time and holidays to organize and run this competition and make it a success. Without their contribution the competition would not have been possible.

The number of pilots completing the championship was 47, competing in the three classes, Club, Standard and 15 m. The available number of competition days was 11. The final results show that the championship was valid with 6 contest days in the 15 m class and 5 days in the Standard and Club Classes.

The weather in the competition area was dominated by a low pressure system ruling the Scandinavian areas for the entire period (except for one day with 1014 hPa, the recorded daily QNH values varied between 1000 hPa and 1010 hPa). The gliding conditions were characterized by relatively low cloud bases, weak thermals, and most of the time, relatively strong westerly winds. Except for the second last day where there were competition launches, and cancellation of the tasks in all classes, the competition directors are to be congratulated for achieving valid competition days in very challenging weather conditions.

The competition was organized by a small team which in some areas appeared less than adequately staffed and prepared, but measures were taken during the first days to achieve the necessary standard for the site and the operations. The team was receptive to input from the Stewards and had a good relationship with the pilots and TC's, but for a World Championship the general profile of the services and the operation could have been raised somewhat to meet the expectations of pilots and crews who have spent considerable resources in preparation, travelling and participation. There was limited support and involvement from the national federation.

## **1 ORGANISATION**

### **1.1 Overall organisation:**

The event was organized by the local club at Arboga. The club is a relatively small gliding club with enthusiastic and friendly people, but with a limited number of resources. For the task of organizing a world championship the number of qualified persons was not adequate and the club relied on external support. The competition organization was under resourced and suffered from lack of adequate preparation in some areas in the beginning of the event. The core organisers were very capable and they worked very hard to compensate for the lack of prior preparation but lacked proper procedures and administrative support.

There was also little evidence of support from the national federation except for the opening ceremony.

#### 1.2 Quantity of officials:

The quantity of officials was adequate but most of the organising team performed more than one function. Shortage of resources and time available caused mistakes at briefings and information to pilots. This had no known safety implications, but resulted in extra work with clarifications outside the briefings.

#### 1.3 Experience of officials:

- CD: Experience from National competitions.
- Deputy CD: Experience from international competition both as pilot and steward.
- Scorers: Experience from a number of national competitions, several international competitions (Eskilstuna Open), and WWGC 2006 Eskilstuna.
- Tug master: Experience from National competitions.

#### 1.4 Suitability of meetings and briefings:

Adequate, but could have been more systematically prepared and Quality Assured.

#### 1.5 Suitability of weather information:

Adequate. Local experienced pilot with good weather analysis skills supported by professional meteorologist during the weekends

#### 1.6 Suitability of facilities:

Marginal. The briefing hangar would have been inadequate for a higher number of pilots. The toilets and shower facilities were of modern standard and good quality, but hot water supplies were occasionally out of service.

#### 1.7 Transportation:

Adequate. One of the Stewards was collected from the local airports on her arrival in Sweden. All IGC officials were housed in a motel close to the airfield. Local transport for the jury and stewards was facilitated by their own cars.

#### 1.8 Information dissemination:

Internet and Web Site: The area in and around the club house, the briefing hangar and camp site was served by a set of wireless networks. Initially this did not have the capacity to cope with the number of users. The system was upgraded during the first week of the championship, but was overloaded on a regular basis during the morning and afternoon hours. The Website was used as the primary communication channel for communicating with teams and was backed up with cell phones for contact with officials.

Web updates were made on a regular basis and the website reflected the activity and mood of the competition but lacked any in depth articles such as interviews with daily winners or the weather situation.

The scoring system output updated scores to the completion web site and to Soaring Spot as new flight records came in.

1.9 Pilot assistance:

We are not aware of any situations where help was not provided to pilots.

1.10 Retrieval:

Most retrievals were done by car. Retrieval by tug was available on request.

1.11 Launch control for fair access and efficiency :

Adequate, but had little extra capacity for unforeseen events.

1.12 Opening and closing ceremonies including presentation of Jury and Stewards:

Adequate. The opening ceremony was held in the evening with possibilities for a regular a training day first. Both the opening ceremony and prize giving ceremony was organised by the core competition officials. Only limited prior planning had been performed, and luckily the weather caused cancellation of competition days allowing time to be spent on necessary preparation.

1.13 Other social events:

- Social evening organised by the Czeck and German teams
- Baba Yaga Ceremony (Combined Swedish, British, Italian and Danish evening)
- Appetizer offered by France
- Farewell Party by the organiser with gifts / souvenirs to the teams and IGC representatives.

1.14 Total number of scheduled days and number of contest days:

Scheduled days: 11

Number of contest days:

- Club Class: 5
- Standard Class: 5
- 15m Class: 6

There was one official rest day. 4 days in the 15m Class and 5 days in the Standard and Club classes were cancelled due to weather conditions.

1.15 Media liaison:

Done by the CD himself with support from the SO who is also the chairman of the board of the local club. Except for a German TV team, there was only limited local media coverage.

1.16 1.16 Public and Internet display of real-time aircraft positions and information:

None.

1.17 Other organisational comment:

Limited predefined / pre-planned procedures and training / coordination of the staff – large degree of improvisation on a daily basis.

## 2 RULES

2.1 Adequacy of local regulations:

Issues with opposite landings on grass and paved runway

2.2 Addendums or changes:

The following addendums and changes were approved by the IGC Bureau and implemented after TC meeting.

- On motor gliders having an MoP capable of being started in flight (including sustainer MoP) it is sufficient to prove correct function of the MoP once by testing it the first competition day.
- Length of the Start Line will be 10 km.
- Minimum altitude for crossing the Finish Ring will normally be 150 m MSL as defined at briefing.
- A sailplane entering the Finish Ring but landing outside the contest site boundary shall be deemed to have finished.
- Crossing below minimum altitude limit of finish ring as defined at briefing will be penalized by 1 penalty point per meter. Maximum penalty for one day shall be limited to the pilots actual speed points for the day. These modified finish ring penalties will apply for every competition day (no warning) and will apply the same at each offence regardless of multiple offences.

2.3 Fair applications of local regulations:

All rules were applied fairly.

2.4 Possible improvements of rule regulations:

Landing procedures – opposite landings should be avoided.

2.5 Task setting and operations:

Combined effort between the CD and Met Officer

Task setting: Weather briefing and task setting were done by the Championship Director in cooperation with the Met Officer. A weather analysis was prepared each morning by a non professional meteorologist on the basis of data available from SMHI, supported by information available on Internet. Tasks were set in accordance with the Sporting Code and the Local Rules, using a dedicated start point for each separate task (combined Std and 15 m and Club Class alone).

2.6 Scoring system (use and application):

SeeYou Competition was used for flight evaluations and scoring. Flight records were delivered to the scoring office via the internet and while the system worked, the delivery was sometimes delayed by internet congestion. This meant that the organisers did not control the download process.

SeeYou still has problems with functionality on presentation, printing and other functions. But due to the very experienced and efficient scoring team, potential problems were overcome. According to the scorers, numerous change notices have been filed to the SeeYou team with limited response.

Checks were conducted on daily scores (by the jurors); which were shown to be correct.

We also note that this remote process deprives the pilots of meeting while they hand their FR's into control. SeeYou automatically validates the FR record as soon as it is received and the results were continually updated and displayed on the web site. There were no permanent displays to show the results in the restaurant or other areas. Preliminary results were produced and posted on the notice board as soon as all records and/or outlandings were registered.

#### Issues with the Scoring

A number of flight recorders were found to deviate quite substantially from the official calibration chart. Roughly 10% of the units (6 of 63) deviated by more than 25.4m STD. This appears not be a new problem, as there now is even a function in SeeYou for this, where the limit is set to 50m by default, rather than the official 25.4m. As there is no predefined procedure for handling of this issue, the scoring office implemented a routine for correction of altitudes where necessary to perform individual checks of finish ring altitude warnings in SeeYou. See enclosed examples in attachment 1 and 2. The IGC is asked to consider whether official calculation guidelines should be developed and published.

#### 2.7 Protest handling and registration:

No protests were filed.

One complaint was launched which was dealt with by the CD with consultation from the Stewards. The issue was related to non-compliance of some pilots to the Annex A, 5.3.2, by not landing on the site after cancellation of the task. The rule is open for interpretation and should be reworded to avoid ambiguity.

### 3 SAFETY

#### 3.1 General safety of the event:

The general safety was found to be acceptable but there were limited margins during launching, re-landings, and during multiple landings with opposite landing directions of the direct and full circuit landings. This was discussed on several occasions, including a meeting in the safety committee, and found acceptable with some adjustments to the ground procedures. After a few competition days, the original procedure with opposite landings was abandoned and a new procedure with parallel landings was implemented.

#### 3.2 Occurrence of incidents and / or accidents:

There was one serious incident during launching involving two tug planes. Due to relatively large difference in the tugs performance, and the fact that they did not observe each other, their tracks were approaching towards a possible interference. This was observed by both glider pilots who gave warnings on the radio, released and turned to safe positions. A subsequent mid air collision between a Dynamic and a Pawnee caused only minor damage to the elevator of the Dynamic. Both landed safely on the field. Investigation by the Swedish authorities is in progress.

#### 3.3 Availability of medical personnel:

One med doctor on the field (chief scorer). Ambulance in Arboga city appr. 3 km away.

#### 3.4 Use of safety officers:

The Operation Officer acted as Safety Officer.

### 3.5 Launch safety:

Launching from two parallel grids with landings and taxing between the grids is not ideal and should be avoided where possible. With access to the grids from only one side of the airfield, crossings were unavoidable during the launching period, although car access was prohibited during launching.

There were limited margins for tug landing and glider re-landing – partly behind and partly in between the grids. On days with weak conditions, launching of one grid was done to ensure adequate space for re-landing.

Lack of predefined ground crew organisation in the beginning caused inadequate safety margins for public and crews on the grid and the edge of the runway (related to crossings, operation near tug line-up for take-off and risk for ground loop). This was improved on request from the stewards, but should have been part the original launch procedure / organisation.

### 3.6 Pilot skills relating to safety:

Good but variable.

### 3.7 Suggestions for future safety enhancements:

- Avoid opposite landings. The relevant procedures were in this case subject to discussion prior to approval of the procedures. The use of opposite landing circuits was mainly justified by the high antenna masts located in the north of the field, but after testing it in practise this was judged to pose less risk than opposite landings.
- It should be mandatory to test of full launch and landing procedures during the official training days
- Establish minimum requirement for backup procedures (what if's)
- Define minimum organisation and minimum number of staff
- Outline operation procedures to be included in the bid document to ensure minimum standards are met

## 4 GENERAL RECOMMENDATIONS

There should be stronger measures in the organiser agreement to ensure commitment and support from the national federation to cover cases with local clubs organising the events.

There should be a more precise definition of minimum standards for both the infrastructure and the organisation for a WGC in the organiser's handbook.

Common guidelines for calculation of altitude corrections should be considered.

1. October 2011

Arild Solbakken  
Chief Steward  
(sign)

Marina Vigorito Galetto  
Steward  
(sign)

## Appendix 1- Competition officials

### Organising team

- Competition: Director Mats Lundqvist
- Deputy Director: Åke Pettersson
- Met Officer: Gunnar Carlson
- Task Setter: Mats Lundqvist
- Chief Scorer: Páll Einarsson
- Scorer: Reno Filla
- Scorer: Mattias Hemborg (Part time)
- Competition Office: Åke Pettersson
- Technical Officer Torbjörn Olsson
- Safety Officer: Sven Robertsson
- Tug master: Bengt Friid

### The International Jury

- President: Tor Johannessen, Norway
- Member: Juha Silvennoinen, Finland
- Member: Robert Danewid, Sweden (remote)

### Stewards

- Chief Steward: Arild Solbakken, Norway
- Steward: Marina Vigorito, Italy

## Appendix 2- Changes to Local Procedures

### Control Procedures (5.4 d)

- d.** On motor gliders having an MoP capable of being started in flight (including sustainer MoP) the engine must be started and run for a maximum of two minutes either before the launch, or within 5 minutes after release if the motor glider is launched by aerotow. It is sufficient to prove correct function of the MoP once by testing it the first competition day.

### Types and definitions of starts that will be used (7.4.2)

- a. Start Line.** A straight line, perpendicular to the course to the first Turn Point, or centre of the first Assigned Area. Length of the Start Line will be **10 km**.

### Types and definitions of finishes that will be used (7.7.2)

- b. Finish Ring.** A circle centred on the runway midpoint with a radius of 3 km. Minimum altitude for crossing the Finish Ring will normally be 150 m MSL as defined at briefing. This may be altered at the discretion of the Competition Director, dependent on the wind forecast. In the event of strong tail wind forecasts (full landing circuit required), minimum altitude for crossing the Finish Ring will be 250 meters.

### Validity of Finishes (7.7.3)

A sailplane entering the Finish Ring but landing outside the contest site boundary shall be deemed to have finished.

### List of Approved Penalties (8.7)

Crossing below minimum altitude limit of finish ring as defined at briefing will be penalized by 1 penalty point per meter. Maximum penalty for one day shall be limited to the pilots actual speed points for the day.

These modified finish ring penalties will apply for every competition day (no warning) and will apply the same at each offence regardless of multiple offences