IGC STEWARD REPORT

33rd FAI World Gliding Championships

Räyskälä, Finland. 22nd June-5th July 2014

1 ORGANISATION

1.1 Overall organisation

The organisation was efficient and professional. They created an atmosphere which was supportive and encouraging to the teams and pilots, and gave confidence about their decisions.

They were consistent in their application of the rules, and yet were flexible in responding to questions and concerns. They listened to suggestions from the stewards and the team captains and responded in an appropriate manner.

All days possible for flying were flown, and serious attempts made on a couple of other days which had some potential for flights but proved not possible.

1.2 Quantity of officials

During the practice period they were rather short staffed in particular with the CD and his deputy taking on responsibility for too many actions. They responded within a couple of days and ensured that they had sufficient help in the morning to complete the tasks required for the remainder of the competition.

There are a number of clubs operating from this site, and the organisers appeared willing and able to seek appropriate support when needed. There was a good supply of competent and enthusiastic volunteers. As an example, when they needed additional support to distribute the Trackers, 5 towpilots were recruited to assist with this task.

The list of people involved was quite extensive. They stated that in the 1976 world comps at Rayskala that they had some 200 volunteers, in this competition they “made do” with just under 80 people. This was sufficient.

[See list of roles and people below]

WGC2014 Organisation

Directors

Heikki Pohjola
Kaj Vesterbacka

Weather

Jarkko Hirvonen
Janne Ylläsjärvi

Competition Office

Kirsti Salonen
Aulikki Määttänen
Irma Lehtola
Pia Vesterbacka
Marketta Munde
Tuula Helve
Pia Ukonaho
Nea Kapanen-Niemi
Pekka Puhakka
Otso Mattila

Public Relations

Katja Soikkeli
Visa Hietalahti
Jyri Raivio
Kimmo Sundström
Pekka Ylipaavalniemi
(kuvat)

Scoring

Hannu Niemi
Esko Ollikka

Field Marshals

Wille Mäkinen
Kimmo Pulkki
Jukka Munde
Jani Pietilä

Scrutineering

Kari I Lappalainen
Kari II Lappalainen

Weighing

Timo Pankka
Vesa Lainio
Pauli Lainio
Riku Pennanen
Lauri Mattila

Towings

Martti Sucksdorff
Reijo Mäkeläinen
Juha Lahdenperä
Jari Lyytinen
Jorma Laine
Juha Kuuri
Kari Lappalainen
Markku Väisänen
Petri Sucksdorff
Varalla: Tero Leppänen ja
Matias Sucksdorff

Facilities

Vesa Airaksinen
Hansa Hansa
Arto Mäkisalo
Veikko Tolvanen
Ilkka Tervonen
Pentti Saaristo
Tatu Danska
Reijo Mäkeläinen

Events

Jukka Rastas
Jere Selonen

Safety

Sami Rissanen
Markku Rissanen

Field Runners

Jesse Mathlin
Teemu Rissanen
Pyry Kuosmanen
Tom Saarnimo
Aki Nyberg
Alex Sarpola
Oskari Andersson
Janne Kivinen
Lauri Sucksdorff
Aleksi Vesterbacka
Ilyas Zaglaoui

As usual, there was a lot of work prior to the event with airfield preparation. Work on the briefing hangar/social centre was completed during the practice period – stage, lighting, wall lining, etc

Meetings of the organisation commenced prior to Christmas. Sub groups took responsibility for various tasks. Similar people ran the pre-worlds.

Facilities – they brought in office and toilet buildings (sponsored).

Weighing system took some time to develop and prepare, but was very efficient and automated.

Scrutineering preparation – developed a new form which worked well.

1.3 Experience of officials

The CD and his deputy did not have experience with running a major competition, but through a lot of preparation and advice from their colleagues, they did an excellent job. Both have previously been comp pilots, and have been CD at national championships.

Many of the other officials had previous experience in the 2009 Juniors and 2005 Europeans, plus other major events, and this resulted in an effective operation with minimal gaps.

They learned quickly with regular daily team meetings, and improved performances. E.g. marshall and weighing and launching.

1.4 Suitability of meetings and briefings

The briefing hangar was well set up with plenty of space, tables for all pilots and captains, good sound system and lighting, large screen etc.

A Team Captain briefing was held each morning typically at 9:30am with the main briefing at 10am. There were very few questions as the information provided was thorough. The use of SMS to advise of meeting times and changes to meeting times, meant that attendance was very good.

Most information was given to team captains. During the main briefing, many pilots are not listening or watching the screen, but at least the TC knows the requirements.

All information was written, which helped if some could not understand spoken English. The briefing was also published on web site and people could watch a video of the briefing.

1.5 Suitability of weather information

This was a strength for the organisation. Sponsorship from Vaisala included a weather station on site. Finnish meteorological institute sponsored a number of models, including an overlay of airspace info etc. There was extensive data available from across Finland and neighbouring countries, with some excellent models. The CD Heikki is a meteorologist and was the met man at junior worlds in 2009. He had 3 other meteorologists working with the organisation during the 2 competition weeks. Predictions were accurate, even the bad news was accurate.

Professional, skilled people presenting easy to understand information. Presenting weather information to the team captains was intentional, letting the met man practice their English.

1.6 Suitability of facilities

Facilities included the briefing hangar and bar area, which included movies and world cup football matches on the large screen, and of course live tracking during the day.

Another large hangar was used for scrutineering and this worked well.

There was a portable office for the CD and his staff, and another for the competition office.

There was an Information hut – which handled many of the normal questions

Stewards and Jury had a private office

There was a restaurant “Café 26” which served meals and drinks

1.7 Transportation

The organisers arranged a car for use by the Stewards and Jury

They provided bicycles for Stewards and jury

1.8 Information dissemination (Pronouncements, schedules and decisions)

The web page and facebook page provided regular and consistent information for teams

Effective use of SMS to alert Team Captains and stewards. Some technical issues towards the end with the SMS server/web page – they were sending SMS from computer.

An official notice board in the briefing hangar was maintained, and official notices met FAI/IGC requirements and were signed by the CD.

The briefing materials were well presented and were available on the web page for later review, and in pigeon holes .

Instagram and twitter were used – facebook went auto to web page and twitter.

1.9 Pilot assistance

Pilots received quick and efficient service and advice from the competition office and the Info hut.

Technical assistance from local organisations – workshop, advice.

When WIFI was not working effectively they allowed people to download igc files in the office.

1.10 Retrieval

Restaurant worked extended hours to accommodate late retrieve.

Only a few occasions where TC did not submit retrieve info.

Provided info on direction to get to the glider, using the Polish (Voytek) Outlanding Package.

Some pilots had problems with a couple of unhappy farmers, and the organisation intervened on the phone and in one case called the police. This was a big help.

1.11 Launch control for fair access and efficiency

Launching was well managed, with typically two parallel runways in use each day.

9 tow planes were sufficient although launching took 90-70 minutes (98 gliders). Previous experience shows that more tow planes creates bottlenecks with the close release points.

A launch controller ensured there was no conflict between the launching on the two strips.

Vehicle and pedestrian traffic was managed well so that there was no danger from towropes and propellers.

Engine warm up for motor gliders in 20m class created some concern. The motor gliders were part of the normal launch line, and care had to be taken to ensure they did not move forward under power. There were some people walking behind the gliders, a little too close to the propellers for my comfort.

Motor gliders (approx. half of the 20m class) fitted in with the normal launch, and followed the required launch pattern and release areas.

1.12 Opening and closing ceremonies including presentation of Jury and Stewards

Jury and Stewards were presented at the initial safety briefing.

The opening ceremony was short with little fanfare, but met all necessary requirements. There is no local town at Rayskala, so no real opportunity to parade the competitors. Most of the visitors for the opening ceremony were volunteers and other club members holidaying at the site.

The FAI flag was delivered by an old time Pik glider.

The Jury President opened the event.

There were two representatives from Finnish sport (Finnish aeronautical association chairman, and President of the Finnish Olympic committee, patron of the event) who welcomed competitors and made (short) speeches in English. FAA also attended. A former president of FAI also attended

Closing ceremony:

Again, quite low key but efficient and met all requirements.

Finnish aeronautical association donated the trophy for the new 20m two seat class.

Day prizes were glass design tea light (candle) holder (votive) - representative of typical Finnish glass design. A conscious decision to not use alcohol for prizes.

Top 25% of competitors were paraded and provided with prizes and certificates.

1.13 Other social events

There were a number of social events organised, these included:

- Finish evening
- Opening party
- International evening
- Wednesday music and entertainment (X2)
- Closing party

1.14 Total number of scheduled days and number of contest days

13 possible days, 7 contest days were flown in all classes.

1.15 Media liaison

A good web page, with press releases to the media.

A small amount of media interest with Television and newspaper involvement on a couple of days.

Nice coverage in large Finnish newspaper, wide coverage in the local area and southern Finland, television news item which can be used immediately and also for the closing of the competition. A Retired journalist, glider pilot managed to help arrange this coverage.

Articles in the main newspaper.

Radio interviews.

Web live streaming of interviews after briefing each morning proved popular.

Due to the isolated location, it was difficult to encourage a strong, regular media presence

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

The organisers paid for 27 trackers from DSX, a Swiss/Italian company. One person available on site for 2 days, plus a staff member on site for the whole event. Support from the provider was also provided via phone/email.

On the competition-flying days, tracking was shown on the large screen in the briefing hangar. A flight instructor was giving information about the competition and the on going tasks to the visitors which created a nice atmosphere at the audience.

The Tracker boxes were large and this created some concerns in particular for smaller gliders (Discus a). Both from a space perspective and also from a pilot visibility perspective. This was overcome by separating the box from the aerials and only having the aerials in the cockpit area.

Handing out and installing daily was a problem early in the comp, but help was provided by 5 tug pilots which solved this problem.

It was reported by the provider that pilots were turning the trackers off in flight, or covering the aerials, but it was later revealed that this was in fact a technical issue with the equipment. The tracker used both GSM and satellite communication, and the box had trouble in switching cleanly from one to the other. This was resolved by only using the satellite communication. This appeared to be effective. It seemed that although there was good GMS coverage, but this fails when you try to send.

There was some discussion about the value of using trackers in a world championships, but quite a few commented that glider pilots from around the world were keen to follow the races, even if the general public were not that interested.

The trackers cost something like 8 000,- euro including transmission fees which is approx. 80 euro per pilot. There needs to be continued work to reduce this cost or the participants will really start to question the value that it provides.

If IGC wishes to support tracking at world events, we should check on available brands and their suitability for the task and cost impacts.

1.17 Other organisational comment

Scrutineering was well run, but there were some questions around the visual observation of documents. Pilot registration, relied on pilot declaration rather than physical checking of documents. Many countries use this approach, but others query the efficacy of it.

Query, what is IGC view on this approach? – is it pilot responsibility or organiser responsibility to validate documents?

Finnish CAA attended on one day and checked licences, aircraft registration of some competitors. The organisers arranged for this to take place around the briefing, rather than on the launch grid which was appreciated.

WADA drug testing

This took place on the last day, and they tested the 'potential' winner in each class. This was well arranged by Marina as Jury President with the competition organisers.

It created some concern because the winner was not identified until a majority of traces were submitted, and of course there is then potential for pilots to drink alcohol in the intervening period.

The major problem with this timing is that if there is a positive test then what do the organisers do? Do they then have to test the next placed pilot? Who gets the trophy?

It would make more sense to negotiate different timing, say 2 days before the end of the event?

2 RULES (Comment only where appropriate)

2.1 Adequacy of Local Procedures

Local procedures were well presented and clear, with good use of diagrams and aerial photographs.

Some concerns expressed about the height of the finish ring, in particular for standard and 20m class. There were a number of finish height penalties issued on day 1, but this quickly reduced. In retrospect, we should have had different heights for different classes. The 500ft AGL at 3km proved workable for club class, but created some concerns for the heavier classes.

We introduced the new start height rule, but airspace and weather limitations meant that this was never used.

2.2 Addendums or changes

A number of updates to the Local Procedures were issued, primarily related to clarity of the finish and weighing procedures.

Airspace files were updated many time before the first contest day. The major problem related to the definition of height. Finland uses Flight Levels from 6500 feet (based on an air pressure of 1013.5HPa) but they expressed this in metres rather than feet, and then there was a local amendment to this definition to describe FL65 as 2000m rather than the actual value of approx. 1980m. Throw into this mix some pilots talking QNH which the scoring system uses (and which is given on the task sheet each day), and other heights given as QFE (AGL at the airfield). Translation issues added to the complication, but this was finally sorted with airspace file F.

2.3 Fair applications of Rules and Local Procedures

Rules and procedures were applied fairly, and penalties clearly explained.

2.4 Possible improvements of Rules and/or Local Procedures

Airspace violations

Annex A describes the process at the start, finish and turnpoints when FR does not show a fix within the required sector but a straight line drawn between subsequent positions passes through the sector. This process is not described for reviewing penetration of airspace.

In one case, a pilot on task appeared to pass through the corner of prohibited airspace. The FR trace showed one fix before the airspace and one fix after the airspace. The straight line between passed through the airspace. The FR was set with an 8 second fix rate. (previously the competitor had submitted a file from a FR with a smaller time interval).

Determination by the contest director, with support from the stewards was

- There was no fix in the airspace
- There is no statement in the rules to allow/require interpolation between fixes.
- If we asked for another FR with a smaller fix rate, we may have seen a fix within the airspace, but the rules advise that we should use the FR trace which gives the benefit to the pilot.

There was no penalty issued.

A few team captains questioned the organisers and stewards about this decision but there was no formal protest to “test the decision”.

Questions to Annex A:

1. Should the definition of interpolation between fixes be expanded to include airspace violation assessment?
2. Should we require a smaller fix rate, say 4 seconds as the minimum for all FR used?
3. Should the organisers be able to demand additional flight files for airspace verification, and use all evidence, not just the evidence that benefits the pilot?
4. Or was this a reasonable outcome?

More airspace

100 m vertical buffer on airspace files: This was introduced during the practice period after suggestions from some Team Captains. – Should this be standard?

Should there be a horizontal buffer? There is no penalty zone horizontally.

Scoring DLL

A pilot had a FR trace that showed correct entry into the turnpoint OZ. The igc FILE did not pass the security test. The backup FR (with an 8 second fix rate) did not show entry, and the closest mark was 5 metres from the boundary.

Subsequently, the team captain spoke to LX Nav who stated that the DLL software listed on the IGC web page for the FR (Flarm mouse) was not current. They supplied the current DLL and the file passed security and the turnpoint was granted.

Questions

1. Who is responsible for updating these DLL files on the IGC web site?
2. Is there any final date when these cannot be updated?
3. If a manufacturer provided an update during the competition, is it OK to use it?

Engine start up on task

One pilot started his engine on task but then proceeded to continue on the flight, starting his engine two more times. Other than trying to prove that he may have helped another pilot, there is no clear statement to say that the pilot must return to the airfield and discontinue the task.

2.5 Task setting and operations

A mix of AAT and speed tasks was set, but the weather meant that some fixed tasks were amended to AAT because of showers in the task area.

Terrain and weather issues created some problems for task setting, but all possible flying days were used.

Are there task setting guidelines to advise task setters on the length and types of tasks? Whilst allowing some time for tactical decisions?

The local terrain and weather severely limited the space available for tasking on some days.

2.6 Scoring system (use and application)

The scorer (Hannu Niemi) developed a team cup scoring program that was tested and proven to be accurate. Hannu also created a program to concurrently run an alternate team cup program that will be reviewed by Annex A committee.

Scoring software testing

The jury utilised the spreadsheet that was originally provided by Peter Ryder to test the scoring parameters. There was a discrepancy which was investigated. The spreadsheet did not accurately process the data in accordance with the Annex A scoring formula and which is being used by See You. We were satisfied that the scoring program was accurately applying the scoring formula.

Question: Why do we need a manual testing process? Why not a central computer based scoring system that can automatically test some of the practice days to validate the system used by the event?

2.7 Protest handling and registration

There were no formal protests raised

3 SAFETY (Comment only where appropriate)

3.1 General safety of the event

The Organisation provided consistent safety messages during the competition.

The chief marshall and the tow master were part of the core safety team.

The nominated safety officer was not part of the operational safety decisions – task setting, etc. but was regularly emphasising safety at the briefing.

All landings were supervised by the launchmarshalls, nearly all the time the CD and DCD were also observing.

3.2 Occurrence of incidents and/ or accidents

Non -standard circuits from published procedures were identified and warning issued. Many of these appeared to be safe and a consequence of the finish height requirements.

An Arcus on a practice day attempted to **start the engine at low altitude** over the airfield which resulted in a very unsafe circuit and landing. There was a review of the trace and the issue discussed by organisation, stewards and pilots. Warning issued on score sheet. A contributing issue appeared to be lack of experience on type.

During a competition day a standard class glider had to land back after launch and made a wheel up landing causing damage to the fuselage. This was solved with thanks to the effort of the local technical people. On another day, during the roll out after landing, an Arcus T was faced with a blocked rudder. This was solved overnight by changing some parts that were luckily available.

The rules require a **Safety inspection as part of scrutineering**. This was completed but ended with a number of token solutions with quite a few mirrors and side yaw strings added simply to comply, with no real understanding of how to use them. I have recommended to OSTIV that the list of safety items needs some consideration.

We promoted the **Ostiv safety award**, and provided a box for safety comments and recommendations for the award. This resulted in only one letter, a complaint about the trackers. We were unable to award the safety prize. It appears that nearly all pilots do fly safely, it is the standard expected, so finding a 'better/safer' pilots is very hard. I have suggested that this also needs a review.

Pilots reportedly were turning off the **flarm** once the start gate opened, but after a few comments at briefing this was no longer reported. The possibility of checking flarm traces was considered, we may need a rule to authorise this?

3.3 Availability of medical personnel

Another strength for the organisation. Present on site were:

- Fire engine
- Ambulance
- Boat
- SAR plane

All with professional experienced people to operate

3.4 Use of safety officers

The pilot safety committee was selected with Steward Patrick Pauwels leading this group. There were no major issues raised.

The organisations safety officer was visibly present at launch and finish, and was open to any questions or suggestions.

3.5 Launch safety

There was good control over the launch, with proper spacing between the two lines of launching. Launching occurred on two parallel runways, with tow planes landing between.

Good control over pedestrian and car traffic ensured no conflicts with landing towplanes.

The young rope runners experienced some safety issues at the start of the event with regards to grabbing towropes attached to tow planes – sometimes the tow plane was still travelling too fast. We also had some concerns about them running out close to landing towplanes. These issues were quickly resolved and monitored by the chief marshall.

Release zones were well planned and gliders complied with advised procedures.

3.6 Pilot skills relating to safety

It was a safe competition.

There were numerous outlandings and despite the difficult terrain, there were no accidents, which speaks well for pilot skill and responsibility.

There were no unsafe finishes. Some pilots did not follow the advised procedure with circuits, but in each case the option chosen was executed safely.

The only incident was the Arcus engine start at low altitude on a practice day, which revealed a lack of experience on type for the pilot concerned, and some poor judgement. (see section 3.2)

Rayskala airfield was declared a temporary danger area and was closed to other traffic. They usually have many ultralights flying from the field.

Special airspace was provided following discussions with flight services – upper limit extended from

FL65 to FL75 for duration of comps over significant parts of the contest area.

3.7 Suggestions for future safety enhancements

Nil

RESULTS

Club Class

1.	Bernard Eric	France	6067
2.	Walbrou Killian	France	6050
3.	Orskov Rasmus	Denmark	5954

20m two seat Class

1. Jones Steve Jones Howard	Great Britain	6729
2. Lehto Antti Luukkanen Nikke	Finland	5858
3. Achleitner Guido Rass Michael	Austria	5742

Standard Class

1.	Schmelzer Bert	Belgium	5912
2.	Kawa Sebastian	Poland	5881
3.	Hood Jeremy	Great Britain	5836

Team Cup

1.	Great Britain	927.7
2.	France	870.9
3.	Sweden	827.7

Terry Cubley — Chief Steward

Patrick Pauwels — Steward