IGC Agenda 2007 Item 6.6.1

Grand Prix Races Report
2006 & 2007

Enclosed with this report are the Referee Reports from each of the qualifying Grand Prix races held in 2006.

The Rules for the event were reviewed after each race and the Bureau are determined to keep them as simple as possible, while also maintaining safety for the pilots and ensuring everyone has a fair chance to start.

The management of the start has proven to be the most significant challenge for race directors, especially in marginal weather conditions.

Good discipline and a strong sense of sportsmanship have been very apparent amongst the pilots who have flown at these events.

The qualified pilots from 2006 for the Final in December 2007 are:
Ben Flewett, Giorgio Galetto, Herbert Weiss, Petr Krejcirik, Victor Panafutin, Tim McAllister, Uli Schwenk, Tassilo Bode, Mario Kiessling, Didier Hauss. Peter Harvey, Phil Jones, Mark Holliday, Oscar Goudriaan, Bruce Taylor and Peter Trotter

The qualified pilots from the Reserve List are:
Sebastian Kawa, Michael Sommer, Christophe Ruch and Steve Jones

There are some well qualified pilots amongst this group: four of them are current World Champions; three are former World Champions; and, three are former European Champions.

Our congratulations go to all the qualifiers.

For 2007 we are planning additional Grand Prix races to maintain the momentum of this style of racing. We have bids from the Austria, the Nordic countries, and Italy.

At the time of writing this report we await the outcome of negotiations between the FAI and Air Sports Ltd. These negotiations will determine exactly what degree of media coverage we can provide for Austria, the Nordic Countries and Italy. The negotiations will also be critical in determining the degree of funding support that will be available for the Final in December 2007.

Bob Henderson
President, IGC

Report on Omarama Qualifying Grand Prix January 2006

Rules

- As per usual, some pilots had not read the Rules. For example, even after discussions about how to manage the start, some were unaware that they would be penalised for not complying with the “ne minute behind the line” requirement.
- We need to provide each pilot with a Rules pack for the QGP and SGP events.

Launch/ Start

- We need to find a way of coping with equipment problems arising from organiser fitted equipment during both the launch and the start. We experienced a number of problems with the telemetry etc in the gliders interfering with the reception of GPS satellites. This may not be a problem in future as the equipment used is re-designed to fit and work easily in the gliders (they were using of-the-shelf-commercial equipment this time round).
- My suggestion is that we treat any hiccups that may be due to interference or organisational requirements as being "the fault of the organisers" and that we hold launching or hold the start until the affected gliders are ready to race.
- This requires a change to the start protocols.

Start Countdown

- On the last days we were able to use the data coming from the gliders to figure out when to commence the start count-down - meaning that we just watched their altitude until we were happy that they were all established and climbing OK.
- We adopted a call of “Start Delay” if we were not ready to commence the 20-minute count-down immediately after the release of the last glider from tow.
- We need to refine the Rules to clearly show that the objective of the start is to have all gliders ready to start with similar energy levels and position (ie all above the start attitude and adequately positioned to each the start line). In other words we need to manage the start like a yacht race.
- I also suggest that we allow ourselves greater flexibility with the length of the start countdown using either 10, 20 or 30 minutes.
- If we have a land back as a result of a fault with equipment installed by the organisers I recommend tat we go to "Start Delay" and either hold or cancel the start countdown - and then provide a high tow to get the glider back close to the start altitude. We did this twice and everyone was happy with it.

The Start

- On the request of all the pilots, we cancelled the “one minute below the start altitude” requirement as this did not suit the conditions at Omarama. I recommend tat we focus on the speed limit (which worked well) and the “one-minute behind the line” which also worked well. I think that adding the “one-minute below the start altitude” makes it unnecessarily complex unless there is good reason like good thermals with a defined cloud base close to the start altitude.

- I recommend that the “one-minute below” be made optional.
- We need to insist that the organisers have a very accurate clock for the count-down. The pilots at Omarama were hitting the start line (at 3000ft AGL) within 2 seconds of the count-down time!

Finish

- Organisers need to have manual observers on the Finish Line. These guys were finishing so close together that the scoring programme could not differentiae them.
- There is a seriously scary problem with energy at the Finish! WE hade 6 gliders al land straight in at Vne on Day One in a single gaggle - and they used all the remaining airfield to come to as stop! Organisers need to avoid having a last leg that provides and significant energy to the gliders. This reduces the speed at which they will come across the line.
- Safe behaviour must be reinforced.
- **We adopted a requirement that no-one was allowed to pass by diving underneath another glider in the last 5 km on the run to the airfield.** This meant that, if there was a gaggle approaching the finish, the leader of the gaggle set the minimum altitude for everyone else. This reduced the “boy racer” mentality of diving onto the deck to gain a few extra metres on one’s opponent.
- We need Organisers to ensure there is at least 750m of airfield beyond the finish line for high-speed and down-wind landings.
- The pilots made a lot of mistakes joining the circuit after racing to the finish line. They all said that their focus was on the race to the line and they didn’t even think about the circuit until they had pulled up after the finish. This needs to be managed – with simple circuit rules and reinforcement at each briefing.

Tasks

- The use of the Bonus Point was very effective in breaking up the initial gaggle. It needs to be used early rather than later. We need to reinforce that the Bonus only applies to a valid rounding of the turn point (ie within 0.5 km and below the nominated altitude) and that a pilot who lands out can be awarded the Bonus Point.
- We found that setting a leg mid-task that went straight across the ridges was also useful in forcing the pilots to decide on how to get to the next turn point and, therefore, breaking up the gaggle. Why break up the gaggle? To reduce the risks at the finish!

Alternative Tasks

- We need something as a task if the weather will not support a Grand Prix task. We experimented with this on the last day. It was a "match-race" (sprint) task – 5 gliders in each race (because we had 5 tow planes); towed high; all release from tow together; all starting in a line; the gliders were marshalled by one of the pilots; the star countdown was a 10-second count called from the ground; the race was basically an out-and-return across Mt Benmore – total distance 51 km. It created good racing and high speeds as the gliders were able to get some energy from the ridges and spurs on the mountain.
- Maybe we could run heats and a final, with the winner of each heat gaining 1 point and the winner of the Final gaining 1 point (effectively using Bonus Points only for the day).

Scoring

- The new scoring worked well, but it is confusing (for the public) as to why the scores change.
- I agree with the land outs not being scored.
- Maybe we should invert the scoring? 1st place gets 0, 2nd gets 2, 3rd gets 3 etc and the land outs get the last finisher +1. The Bonus Point then becomes = -1. I will model this and see what it looks like.
- I was concerned that SeeYou, for all the work tat they have done on scoring, were providing beta copies of software for the scorer at Omarama to solve problems. One problem we had was the software not properly assessing the altitude limit at the Bonus Turn Point – if that was over Omarama (and hence also a start/ finish point). Another problem was the software scoring a pilot who landed through the line as a non-finisher because the ground roll started prior to the line crossing!
- We used the telemetry to validate a start for ET after his primary FR failed and his back-up FR had errors on the airspeed record (spikes on the airspeed of some 80 kph!). The back-up airspeed trace was "smoothed" by eye in relation to the reports of other pilots who flew through the start with ET. This gave a probable speed of 156kph. We then reviewed the telemetry from Animation Research and this gave a speed of 159kph at the line. The telemetry gives us, in my opinion, a 3rd source of data for assessing the flight.

Other Issues

- Performance differences between gliders made for angry pilots. The D2 was superior in the long fast final glides to the LS8 and so the D2 pilts were very frustrated that they couldn't stop the LS8s passing them in the 30 and 40km final glides.
- Maybe we make all aircraft fly at the same wing-loading in future?
- Aerials for the telemetry and cameras were a problem. There is too much carbon fibre in the fuselage so we ended up with all the aerials being placed around the cockpit rim. Not an ideal solution. We need to talk to the manufacturers about how to put some aerials on the gliders.
- I think we should look at using either the 15m or Open gliders for the GP. The 15m are the "racing" gliders; the Open class would look spectacular with their wing flex! Perhaps the chosen class would no longer then compete in the WGC events? Maybe the old 750kg Open Class ships would find a good home in the GP?
- We are going to need some IGC "experts" travelling around the GP events to act as "race directors" or at least as advisors to ensure that the GP product is standardised. This will be critical if we are to attract and maintain serious sponsorship and media interest. Perhaps this is a sponsorship opportunity – with sponsorship money paying for the "experts". I am exploring this opportunity here with the guy who established the "big-5" sponsors for the NZ Americas Cup challenge.
- We need to tighten up our rules about Bids and the Bid process for 2008 and beyond.
- The idea of having the pilots in "uniforms" worked well. This needs to be a requirement for the event.
- We need to streamline the way we create the scores and the time available for protest so that (where possible) the scores at briefing are the Official Scores for the previous day.

Specifications

- I believe that we need to develop specifications for:
  - The site and infrastructure required to support a competent GP
  - The media support expected to be provided (I have already asked Max for his assistance with this)
  - The scoring programme.

The Future

- The telemetry was impressive. With the overlaid graphics we were able to watch each glider start, round the turn points and finish. As this system matures we will be able to score the race while it is in progress.
- We need an Organisers Guide to ensure these races are run in a standard format.
- We need to urgently look at reviewing the description of the Start and the fact that we need to allow for hiccups caused by the organisers.
- Sponsorship is needed to support this event.

Report for IGC Bureau on Qualifying Grand Prix, Nitra (Slovakia) 15-22 April 2006

1. Facilities
The Nitra Airfield is well known since several International Championships were organised there. The local facilities are excellent. There is a large camping on the airfield and several hotels of good standard in the vicinity. The briefings were held in a large hangar. A Lithuanian tracking system was used and the tracks were also displayed in the hangar.
A Wi-Fi Internet access was available on the Airfield.

2. Organisation
The Nitra Aero Club has extensive experience in organising international gliding competitions. The director of the competition, Vladimir Foltin, mastered his duties very well with the assistance an operational director, a scoring team and a webmaster.

The Grand Prix was organised simultaneously with the Pribina Cup which is a large conventional competition with 3 classes and about 120 participants. Nevertheless the GP had some priority.

The briefings were first class. The meteo information was excellent. The tasks were given first for the GP. Scoring was done with See You and was fast and accurate.

Unfortunately nothing was done for the media and there were almost no spectators. The tracking did not work well and there was no speaker describing what was going on for the public.

3. Day to day running
The weather was quite good during the week and 6 tasks ranging from 104 to 399 km were set. Most of them were going to the East over the Tatra mountainous area where there were excellent soaring conditions and no airspace restrictions.

The competitors were launched and started before the pilots of the conventional competition were towed. Eight tow planes, including Cmelaks and microlights, were used so that the gliders could be launched in a short time Since the weather was OK there were no problems at the starts

However the GP competition was somewhat overshadowed by the Pribina Cup and not enough emphasis was given to the new kind of contest

During the final glide the pilots often had a mandatory reporting point over the Pribina castle but no minimum altitude was set so that they flew over the city at quite low altitude. There were mass finishes on some day but this did not lead to safety problems because the finish line was at the entry of the runway and the airfield is quite large.

4. Rules
There were no major problems with the rules except that an error was spotted in rule 7.3.2 c in which it is requested that “the pilots must be in the Start Area, below the maximum altitude, no later than one minute before the start line is opened”. This should be replaced by the following “The pilots must be in the Start Area no later than one minute before the start line is opened.”

It should also be specified in the rules how many days are needed to validate a GP.

5. Conclusion
The Nitra GP was well organised from a sporting point of view but no real attempt was made to achieve the goal of this kind of competition which is to be a showcase for our sport.

Also this GP was somewhat overshadowed by the conventional competition which was organised

simultaneously. In the future we should no longer accept GP's which are not organised as stand-alone events.

Roland Stuck

Report for IGC Bureau on Qualifying Grand Prix, Drakino Airfield (Russia) 1-10th August 2006

1. Facilities

Drakino Airfield is about 150km (2,5hrs drive) from Moscow Town but still in the Moscow Region. It is a very large airfield in grass and landable in all directions. Size of field would easily accommodate a 120-glider competition. There are 2 Hotels of a high standard, Holiday Cabins, Multiple Room Hotel, Restaurant, Equestrian Centre, Paintball course, Kart track all within the Airfield Compound. For administration purposes a large Terminal type building with tower and Offices is available. Most of these facilities were constructed for the Gliding Aerobatics World Championships in 2005. The airfield is normally used mostly for Motor Aerobatics and there are only 2 Blaniks and a Jantar 3 in Residence. All gliders used in the competition were brought from other Airfields (Orel) by aero tow or Trailer. The nearest Town is Sherpikov about 5km with Food shopping, Telephone cards, Banking facilities etc available. A slow Wi-Fi Internet access was available on the Airfield.

2. Organisation

The sporting Organisation was arranged by Mr. Iakov Shrage (IGC Delegate + Competitor) The Team consisted of a Director, a Task setter and Scorer, a Media Person for Computer and Internet Production (a competitor), a Metman (a competitor) and 1 advisor Ms Helga ??. Whereas this team proved just about sufficient with the amount of Tasks and Flying days I think they would have been very stretched under normal circumstances. On the first day they had trouble with the automatic scoring script and entered and checked all the traces manually. However automatic scoring was sorted out for the 2nd day and the first day was re-scored automatically. The Met information was quite good and they did a temp flight every morning (when possible)

For the social Part of the Competition (opening, official opening and closing ceremonies) some team from the Moscow Sports Council seem to take care of all of these arrangements, all of them were first class. They were also involved in the publicity and press arrangements. There were some large Posters 3x4m on Billboards in the Town. T-Shirts, Hats, Pens, Flags, Pennants etc were all produced for the Grand Prix. There was a Press Office at the Airfield, which was permanently staffed with a Press Relation Person. There was a constant stream of TV + Radio coverage and Journalist visiting. On the official engagements there were at least 10 TV Stations present with interviews of the organisers, competitors and even the referee. Unfortunately the official Open Day 5th August was a non-flying day but they held an Air-show and had a full afternoon entertainment on a large stage specially put up for the event.

3. Day to day running

Briefings as usual were held every day. A lot of Re-briefings and Briefings on the Airfield had to be arranged due to the uncertain weather. The tow out to the grid was rather on the slow side due to insufficient vehicles available. For the aero tows they had 4 Wilgas available for 12-13 gliders but unfortunately 1 was not usable and the Launch of the gliders due to slow procedures took on average 40 minutes. The finish Line had to be changed 2times (1 to far into the field, 2 creation of spectator area on finish line). Tasks could basically only be set towards the south as Moscow Airspace blocked the complete north. There was also a Total height restriction of 1500m MSL, which was subsequently changed to 1500 QFE. Unfortunately the weather did not play ball as we were under a Cyclonic weather system with lots of rain for most of the duration of the contest. The

weather 200km south was fantastic but it could not be reached from Drakino.

4. Rules

The first problem I had was that there were not sufficient GNSS approved recorders and I just had to accept that the available recorders, Ipaqs with GPS Mouse, Garmins etc would be collected immediately from the competitors after Landing (which did not quite work as well as I would have liked) We also had an incident with an LX20 recording a 10second interval and missing a Turning point.

There was confusion on the first day about when the countdown of the 20 minutes starts. SPGP Rules states "after release of last glider" however some SPGP local rules were changed to "take off of last glider from the normal grid position". (St.Auban 2005/2006)

I had to get clarification from the Bureau on how many tasks would make it a valid competition. This is not defined in the rules and certainly needs to be looked at. For this reason I had to accept the 2days as a valid competition.

They requested to add an extra day to get 3 tasks. However their event already was a total of 10 days with 9 possible competition days. Initially they excluded the official opening day 5th August (to have an 8 day competition) but I am sure they would have flown if the weather had been ok. I felt that the spirit of this rule is to keep the total event at 8 days and it would not have been wise to start changing this as they technically already had exceeded this. With the clarification of min. days/task required this should not be a problem in future. However attention should be paid when the bids are submitted that the contest event does not exceed the 8 days.

We had a tied 3rd place for the reserve pilot and the rules only state a tiebreak for the 1st place but subsequent placings can be tied/equal on points. Again with the short 2-day contest this should not arrive in future if we request min 3 days.

Bruno Ramseyer

Report for IGC Bureau on the Qualifying Grand Prix held on the Hahnweide Airfield (Germany) 19-27th August 2006

1. Facilities

The Hahnweide is located about 30km east of Stuttgart, near Kirchheim Teck. It is a large airfield with two runways. The main one is a grass runway 1000 x 200 m. Eight gliding clubs are based on the airfield.

The facilities were excellent. Briefings were held in the hangar of the Wolf Hirth Gliding Club. The competition office, the scoring office, a room for meetings, and a press centre were located in a modern building close to the hangar. A large camping area with adequate toilets, wash rooms and shower rooms was available. A large public parking area was available. A lectern and a tower for the speaker and media were installed in the public area. Vpos glider tracking was displayed on a large outdoor screen as well as on a screen located in the briefing hangar. Catering was available in the briefing hangar and in a good Italian restaurant located on the airfield. A fire brigade and an emergency organisation were present on the site every day. A wireless network was accessible in the hangar.

2. The Contest Area

The contest area is located along the "Schwaebische Alb", a W/SW-E/NE mountain range, 700-1000m in height, approx. 150km long. In principle this area provides excellent soaring conditions with good thermals and ridge lift. Over the airfield the meteorological conditions are generally not as good but the close "Talwald" works normally fine.

Some airspace restrictions are due to the proximity of the Stuttgart Airport; the maximum altitude grows step by step from 1500m MSL west of the airfield to 2500m over the Schwaebish Alb. When pilots were over the Schwaebish Alb before the opening of the start line they had to plan their flight properly in order to be behind the start line in due time and without violating any airspace.

3. Organisation

The Wolf Hirth Gliding club did an excellent job. Hans Puskeiler and his team have great experience in organising major events such as the biggest Oldtimer airshow in Germany and the famous international Hahnweide contest.

The Sporting part was arranged by Tilo Holigaus, who was both Competition Director and Task-setter. The team also included a met man, a scorer, a media person for computer and Internet production along with many helpers. Briefings were held in German (the five foreign pilots all spoke German). They were short and to the point. The weather briefing was excellent. The task setter did his best with the poor weather. The scoring was done with SeeYou and worked well. The web site was very informative: news was sent live during the competition; tracking pictures and videos were available.

The social part was also very attractive. The opening ceremony was held in front of the town hall of Kircheim Teck, unfortunately in rainy weather, but still well attended.

An airshow was held every weekend day and interesting demos of old-timers, models, balloons took place every weekday. There was also musical entertainment and other shows every evening.

The event was covered by numerous TV and radio channels. On one single day no less than 4 TV stations were present. There were also many journalists visiting. The Competition Director and

the pilots were interviewed daily and played their roles quite well.

Many spectators were present on the airfield, even on the weekdays. This is due to the excellent PR work, to the proximity of the city of Kircheim Teck and to the tradition of gliding that has existed there for many decades. Tilo Holigaus did a professional job in commenting on the competition live for the public.

A very interesting initiative was the “0 to 100” program: the organisers invited 4 people of various ages to participate in a training course during the competition. The objective was, starting from zero, to teach them to fly during the week. Two of them managed to fly solo on the last day with inboard TV cameras installed!

4. Day to day operations

The organisers had decided to allow free gridding, as was done in Sweden, but they soon came to realise that positions on the grid were not neutral. Therefore the positions of the pilots were rotated after three competition days. Gliders were weighed only on the first competition day. Six tow planes were used and all twenty gliders were generally launched in less than half an hour. The launch altitude was 600m AGL at the beginning of the contest but during the two last days the launch altitude was adjusted to the start altitude.

There were no problems at the finish line since the pilots had a mandatory reporting point which preventing them from finishing at excessive speeds. There were no mass finishes - pilots returning home were generally separated by quite large time intervals.

Unfortunately the weather was very bad – a low-pressure area rotated over the northern part of Europe during the entire week. Nonetheless we had four valid days. The two first tasks were short (92 and 179km) along the Alb which were only achievable by exploiting ridge lift. On the third day thermal convection allowed a more conventional task (331 km long). On Saturday the organisers planned to set two tasks on the same day. One competitor landed out during the first task (187 km) but managed to return to the airfield in time for the take off for the second task. Unfortunately the second task had to be cancelled after the start line had been opened because of the weakening of thermals.

5. Rules

The main problem at the Hahnweide was that thermal conditions over the airfield were not as good as over the Schwaebish Alb so after releasing close to the airfield the pilots had generally to glide to the famous "Teck" castle 3km SE of the airfield to find lift. With the rather low launching height (600m AGL), access to the Alb proved occasionally very difficult; large differences in start altitudes occurred if not all pilots managed to climb on the Alb in due time. On the third day the start altitudes ranged from 1313m to 886m MSL, which resulted in a protest.

Despite such a start not giving an equal chance to every pilot, I rejected the protest because in fact no rule had been violated. All the pilots had been launched approximately at the same altitude, in the same area and within a reasonable time interval (about 26 min). Furthermore the CD had done his best to make sure that all pilots were climbing and postponed the start several times so that the task was opened more than 40min after the release of the last glider. It was difficult for him to continue to postpone the start because this also made it very difficult for the pilots who had enough altitude over the Alb to plan their glide to the start line. Finally the pilot who had protested had not been particularly penalised by the start procedure since another pilot who had

been launched 2 minutes before him managed even to start with the highest altitude. Additionally, if I had cancelled the results of this day I would probably also had to cancel the results of several other days where there were also differences in the start altitudes (what is the acceptable difference in this case?). Such a decision would obviously have led to a very difficult situation which would have had a very negative impact on the image of the GP. The protester did not accept my decision and criticized the way I had handled the protest during a meeting with the pilots.

I think we definitely must clarify the GP rules about the start to avoid such a situation in the future. First we must decide if the Competition Director has to make sure that all pilots have enough altitude to start just below the max start altitude, or if he only has to give an equal chance to every pilot to reach this altitude. In my opinion it is nearly impossible for the CD to check that every pilot has the right altitude because in weak conditions there will always be pilots who do not manage to climb properly (pilots also make mistakes!). Therefore the CD will nearly always be obliged to delay the start. This could even make any start impossible. Furthermore, if the choice of the time is left to the CD there will always be somebody claiming that he was disadvantaged because the start line was opened at the wrong time for him.

I therefore recommend opening systematically the start line 20 minutes after the release of the last glider. If a pilot cannot stay airborne or decides to land back because he cannot reach a decent start altitude, he may be re-launched AFTER the opening of the start line. He can then be launched behind the start line and start immediately so that he will lose only the time needed to re-launch (a few minutes). Of course if several pilots need a re-launch they should be towed in the order in which they landed back. Additionally it should be stated that the start line should not be opened at all if conditions are so weak that more than a given proportion of the pilots land back before the opening (for example one-third, or a number equal to the number of tow planes).

After this experience I also think that the referee may have a difficult task in his role of single-man jury. One of the problems I had was that there were no minutes drawn up about the hearings so there were disputes about what was said. I therefore suggest switching back to a three-man jury, at least for the World Grand Prix.

Finally I think that the penalty for not being behind the start line before the opening of the line and the penalty for crossing the line above the start altitude are both too harsh, especially if we adopt the above start procedure.

6. Conclusion

The Hahnweide QGP was certainly one of the events where the objective to make gliding competitions more attractive to the public and the media was best attained. However it also showed that in weak thermal conditions there are still some problems in the rules which need to be fixed to make the GP a fair competition.

Roland Stuck

Report for IGC Bureau on Qualifying Grand Prix, Saint Auban (France) 3-9 September 2006

1. Facilities
The Saint Auban facilities are well known and excellent. This time the competition head quarters were not located in the western hangar as during previous GPs but in the North building. The briefings were held in the "Les Ecrins" Room and the Vpos tracking was displayed in the main lobby of this building. This gave a rather intimate format to the competition.

2. Organisation
The competition was entirely organised by the CNVV team. The competition Director was Brigitte Fontin, the Task setter was Jean Marc Caillard and the Met briefings were made by Roger Eyrier. Scoring was done with See You by Gontran Fontaine. The chief of operations was René Fontin.

Unfortunately, nothing was done for the media and there were almost no spectators. The tracking worked again quite well. This demonstrates once more that the Vpos tracking only works in a mountainous environment, probably because the GSM antennae are better oriented (towards higher altitude) and the connections are not blocked if several receivers receive the same signal.

3. Day to day running
The weather was quite good during the week so that a task could be flown every day. The lengths of the seven tasks ranged from 104 to 399 km. The task setter did an excellent job of avoiding sending the pilots into areas where thunderstorms were building up.

Towing was performed with 7 planes, and all gliders had their own tow rope so that the 14 gliders could be launched in less than 20 minutes.

During the first days, the conditions around the airfield were weak so pilots had difficulties in reaching the start altitude. As at the Hahnweide, there were large differences in the start altitudes but the pilots were sporting enough to accept this unsatisfactory situation. On the last days, the start line was moved closer to la Vaumase in order to make the start easier. The start was no longer visible from the airfield but this was not a problem since there were only very few spectators.

The pilots were generally spread out quite quickly and there were no mass finishes. Like during the 1st WSGP, the organisers set a minimum altitude between the last mandatory reporting point (Rocher St Jean) and the beginning of the airfield so that there was no dangerous flying in ground effect above the houses of Saint Auban.

4. Rules
As at the Hahnweide GP, the main problem was the fairness of the start. In my opinion, we should not leave the responsibility of making sure that all pilots have the start altitude to the CD. I think the organiser should only have to make sure that all pilots have an equal chance to reach the start altitude and should not be allowed to delay the opening of the start line (except under exceptional circumstances affecting safety)

I therefore recommend systematically opening the start line 20 minutes after the release of the last glider. If a pilot cannot stay airborne or decides to land back because he cannot reach a decent start altitude, he may be re-launched AFTER the opening of the start line. He can then be launched behind the start line and start immediately so that he will lose only the time needed to re-launch (a few minutes). Of course, if several pilots need a re-launch, they should be towed in the order in

which they landed back. Additionally, it should be stated that the start line should not be opened at all if conditions are so weak that more than a given proportion of the pilots land back before the opening (for example one-third, or a number equal to the number of tow planes).

I attach to this report some valuable suggestions from John Good about these issues. John was crewing for Doug Jacobs in Saint Auban and would have been the referee in Ely, if the contest had not been cancelled.

The Grand Prix ended with a tie for the second place. Despite rule 8.3.4 stating that in such a case, all tied pilots shall receive the same place score, we applied the existing tiebreak rule for the first place and decided that the second placed was the pilot with the most daily wins.

4. Conclusion

From a sporting point of view, the Saint Auban GP was a well organised contest with exciting races every day. Unfortunately, as in Nitra, no real attempt was made to achieve the goal of this kind of competition, which is to be a showcase for our sport.

Roland Stuck

Sailplane Grand Prix starts

(Some ideas by John Good)

One of the important goals of a Grand Prix race is to have all competitors start at the same time and energy. This is so that when spectators view the end of a race they can be confident that, as in a Grand Prix auto race, the order of finish is the order of merit for the day. Anything that interferes with this can diminish the spectator appeal of a race.

It is thus important that the start procedure be easy for pilot to understand and to execute properly. We can conclude that a good start scheme allows pilots to start together at about the same height, and that time penalties and serious differences in start height or time of line crossing should be rare.

Experience shows that this is not easily achieved. Only when conditions are favorable do starts tend to be equal; under difficult conditions, large variations in start time and energy have been common. Pilots have often found it difficult to conform to the correct start procedure and have frequently earned penalties (despite prior knowledge that these penalties can be harsh).

It is worthwhile to consider how these problems can be reduced. This document will look at some possible methods.

Refine the start procedure

Grand Prix rules specify a 4-km start line oriented perpendicular to the first task leg. In this discussion, the term Start Area refers to the area behind the start line. Current rules specify a penalty for all pilots not in the Start Area for the minute prior to the start. The goal is to ensure that when pilots start they are not faced with traffic conflicts, which could be the case if they were to encounter pilots attempting to enter the start area.

It should be possible to reduce the chance of start penalties by modifying the start rules to make the conditions under which a penalty is earned more restrictive. One possibility would be to say that a pilot's start is penalty-free provided he stays in the Start Area for one minute prior to the start, or within 2 minutes after the start does not enter the area within 2km of the start point except from the Start Area. This would mean that a pilot who was well outside the start area (thus posing no safety problem for starting pilots) would not be penalized. (Grand Prix experience thus far suggests that most start penalties are not associated with safety problems.)

A further reduction in start penalties would result from a rule that said that a pilot who is more than 150m below the maximum start height receives no penalty. The thinking here is that only starts near the maximum start height will be done at high speeds - a pilot who starts lower will use only normal interthermal speeds, and so a glider encountered on course represents only a routine problem.

Delay the launch

Since the time of the first launch more or less fixes the time of the start, the launch should not commence until lift conditions are reliable. For those familiar with "traditional" soaring competition, this will require some adjustment: Unless the first GP launch is at least 30 minutes (and perhaps up to an hour) after the time that would be correct for ordinary competition, there's a chance it is too early.

Keep the task reasonably short

Since under GP rules non-finishers receive no points, it should be the goal of the task-setter to achieve at least 90

Decide whether pre-start conditions are easy or difficult

The standard for "easy "is that gliders can readily climb at 1.5 m/s or better to an altitude at least 150 meters above the maximum start height. If such climbs are not available within 5 km of the Start Area, the standard for maximum altitude should be raised accordingly.

Under difficult conditions, ensure that climbs are available within the Start Area

Despite penalties, experience shows that when pre-start climbs are slow and located outside the Start Area, pilots have difficulty starting correctly. To avoid start penalties it is necessary to ensure that pilots who are having trouble climbing for the start will at least tend to be struggling within the Start Area. There are two general ways to ensure this:

1. Adjust the first turning point.
   It may be desirable to set a task whose first turning point is (say) south of the field. But if the area favorable for early climbs is also south of the airfield, this will mean that pilots are not within the start area when doing their pre-start climbs. It may be better to have a short first leg to the north (or possible northeast or northwest), followed by the desired southerly turnpoint. By this scheme, pilots are climbing within the Start Area.
2. Move the start point away from the home field.
   Overhead starts have best spectator appeal, but when conditions are difficult they will at best include only some of the gliders. It is better to use a start point away from the home field, located near where climbs will be possible. The start has much less interest for spectators than the finish; it is not worth having a spectator-friendly start when the cost may be penalties and thus the possibility of a misleading and unsatisfactory race and finish.

Delay the start

Grand Prix rules call for a task to start 20 minutes after the last launch, but allow the Competition Director (CD) to delay this. This sounds as if it has good potential - the CD can hold the start until most or all competitors are high enough for a fair and equal start.

But on difficult days (when such a delay appears as if it would be most useful) it is rarely the case that all pilots can be high simultaneously. If five pilots are low and the start is thus delayed 10 minutes, it's commonly the case that some of those pilots have climbed, but another group of five is now low and hoping for a further delay.

There is not likely to be any scheme by which the CD can reliably make difficult weather fair to all. It is thus probably best not to delay a start except under exceptional conditions. If a launch time has been intelligently chosen, all competitors should understand that the task will start 20 minutes after the last launch, and the pre-start period is thus a time when skill and judgment are tested in much the same was as on course.

SAILPLANE GRAND PRIX REPORT FORM
1st UK Grand Prix
4th to 9th September 2006
Gransden Lodge, England

I, the undersigned Referee declare that:

1. In my opinion the event has been conducted in accordance with the Sporting Code and the Rules for the event.

2. The final results have been verified and are valid.

No protests were received.

EVENT DETAILS

Title/Name:	1st UK Grand Prix
Date:	4 - 9 September 2006
Location:	Gransden Lodge, England
Organising Club:	Cambridge Gliding Centre
Number of Flights:	90
Number of Tasks:	6
Number of Competitors:	15

EVENT PERSONNEL

Event Director: Brian Spreckley
Chief Scorer: Mike Roberts

REFEREE: Bob Henderson

COMPLAINTS AND PROTESTS: Nil

FACILITIES
Gransden Lodge facilities were ideal for a Qualifying Grand Prix. There is camping available on the airfield and bunkrooms and shower and toilet facilities associated with the clubhouse. A catered kitchen provided all meals. Briefings were held in the clubhouse. Room for spectators at briefing was limited. No tracking system was available. A free Wi-Fi Internet access was available on the Airfield.

ORGANISATION
The CGC has extensive experience in organising national gliding competitions. Brian Spreckley, as Director, ran a professional, relaxed and well-organised competition, aided by the fact that he was well known to all competitors.

The briefings, including meteo information, were run by the Director. Task setting was done, again by the Director, on SeeYou. A and B tasks were set on most days.

Scoring was achieved using SeeYou. The publication of the scores was often delayed while the scorer was involved in other (non-GP) activities. The scores had to be manually adjusted to ensure they sorted in the correct order. Assistance from SeeYou was obtained to resolve this issue.

A website was run with photos and a daily blog to keep people informed. Limited information was provided to people on the airfield about tasks and timing for each day.

The Grand Prix took priority over all Club activities; launches and finishes were without incident.

Local Anglia TV attended the first flying day and did three live interviews during the day, including on the lunchtime and evening news. Spectators were generally local Club members.

The presentation ceremony was held after flying on Saturday evening with the presentations made by Mr Robert Marshall of Marshall Aerospace. Prizes of plaques and medals were donated by the CGC. The winner also received a new EW microRecorder donated by EW Avionics. A very special prize has been donated by Dick Bradley, of SOARING SAFARIS, of the use of a glider at their airfield in South Africa for the highest placed pilot not selected to fly in New Zealand in 2007.

DAY TO DAY RUNNING

The weather was adequate for most week with 6 tasks, ranging from 126 to 245 km, being set. The predominant task directions were West and North of Gransden Lodge. Day 2 and Day 3 were particularly difficult with only 6 finishers on Day 2 and 4 finishers on Day 3. The winners speeds ranged from 68 to 107 kph.

The Start procedure (below a nominated altitude for one minute prior to the start) created an energy problem on Day 4 when combined with a strong thermal sitting over the start line.

Bonus points were set on Gransden Lodge on Day 2, 4 and 6. On Day 4 two aircraft crossed the turn point boundary (0.5km) at exactly the same second (on the FR) at Vne, both continuing to overhead the airfield at approximately 300ft AGL. Fortunately they then pulled up into a strong thermal. Both were awarded One Bonus Point.

Finishes were very low over level ground North of the airfield with the Finish Line at the end of the main north-south runway leaving plenty of landing options. There were no gaggles at the finish line.

Control of the public around the Finish Line was compromised on Day 5 when a photographer sat in the middle of the finish line.

RULES

The procedure *"the pilots must be in the Start Area, below the maximum altitude, no later than one minute before the start line is opened"* was applied. Following Day 4 this was amended to only requiring the pilots to be at the nominated altitude at the time of crossing the start line.

The GP Rules need to be adjusted to offer a menu of start options to enable altitude and speed controls to be adjusted to suit the needs of each site. The length of the start sequence could also be shortened at sites where relatively low thermal conditions are the norm.

CONCLUSION

The UK GP was well organised from a sporting point of view but with little media or public interest or involvement.

The Director was heavily loaded doing Met, tasking, running the launch and the start and - periodically - scoring. Care needs to be taken a future GPs to ensure that there is an alternative person who could take on the Director's duties should he/ she be unavailable.

For future Qualifying GP events the Organisers need to be provided with a set of minimum specifications to be met for coverage of the event.

Signed: _____ Referee

Date and place: 9th September, Gransden Lodge

SAILPLANE GRAND PRIX REPORT FORM
1st South African Grand Prix
3rd to 9th December 2006
Bloemfontein, South Africa

I, the undersigned Referee declare that:

1. In my opinion the event has been conducted in accordance with the Sporting Code and the Rules for the event.

2. The final results have been verified and are valid.

No protests were received.

EVENT DETAILS

Title/Name:	1st SA Grand Prix
Date:	3–9 December 2006
Location:	Bloemfontein, South Africa
Organising Club:	Soaring Safaris
Number of Flights:	70
Number of Tasks:	5
Number of Competitors:	14

EVENT PERSONNEL

Event Director: Dick Bradley
Weighing and Operations: Keith Ashman
Chief Scorer: Richard Glennie
Media liaison: Riaan Bezuidenhout
Administration and Webmaster: Carol Clifford

REFEREE: Roland Stuck

COMPLAINTS AND PROTESTS: Nil

FACILITIES
The Bloemfontein airfield is a large airfield with thee main runway directions forming a triangle. The parachuting and the power flying clubs' facilities are located on the western part whereas the gliding club is on the southern part of the airfield. The gliding facilities of Soaring Safaris and of the local gliding club were excellent despite no camping being available on the airfield (most pilots and helpers were accommodated in guest houses and hotels). The club restaurant provided excellent dinners. Briefings were held in a dedicated room in the hangar in which the tracking was also displayed during the flights.

The tracking system used was manufactured by Dakka Technology, a local company. It is a low cost system based on UHF transmission of the GPS position and altitude. After some initial problems due to the coupling to See You it worked quite well and seems to be a very promising alternative to the Vpos system in countries and areas where the GSM transmission does not work. A free Wi-Fi Internet access was available in the hangar.

ORGANISATION
The local team has extensive experience in organising national gliding competitions. Dick Bradley

as the CD ran the Championship in a sovereign and relaxed manner assisted by a small number of very efficient helpers.

The briefings, including excellent meteorological information from the South African Met Service, were run by the Director. Task setting was done on SeeYou.

Despite the Grand Prix taking priority over all other activities the competition gliders were launched after those of the "normal" users.

Scoring was achieved using SeeYou. There were only a few penalties for starts at an altitude above the maximum start altitude and/or over the maximum allowed speed. The publication of the scores was very fast but the protest time was generally extended to the beginning of the briefing on the next morning.

The website provided lively information with photos on a daily blog.

A team of Air Cadets from the South African Air Force was present on the airfield during the whole competition It was a real pleasure to see their interest in gliding and they were very helpful for the pilots.

Several TV and newspapers covered the event. A short video was made which will be displayed on the major South African TV channels by the beginning of February. Unfortunately almost no spectators attended the event.

DAY TO DAY RUNNING

The weather was adequate for most of the week with 5 tasks, ranging from 199 to 284 km, being set. On 4th December the day had to be cancelled because of strong dust storms. On 7th December the pilots rounded the first part of the task but could not continue because of a thunderstorm. The predominant task directions were west and north of Bloemfontein where the airspace restrictions are minimal. The winners' speeds ranged from 118 to 140 km/h. Even standard class gliders achieved speeds close to 140 km/h.

Weighing was performed every day. Towing was performed with 4 powerful tow-planes taking off on runway 01. Launching the 14 gliders to the release height (600m AGL) took generally less than 30 minutes. The start procedure created no safety problems partly because the rule requiring circling to the left before the start was strictly applied.

Finishes all took place from the north where the organisers set a mandatory reporting point every day. The finish line was located in front of a small control tower, which had been erected close to the parachuting centre. The pilots could either land straight on runway 19 or make a speed finish and land on 36 close to the gliding facilities. Flying in ground effect before the airfield was prohibited so that no hazardous manoeuvres were performed. Despite most pilots finishing sometimes within less than one minute there were no dangerous mass finishes.

Bonus points were set every day except on the last day. These were generally given for the first pilot rounding the turn point on the airfield. However on 7th December the first pilot rounding the turn point over the airfield did not get the bonus point because the day had to be cancelled subsequently because there was no finisher.

Social events were organised almost every evening and this contributed to the excellent atmosphere between the pilots and the organisers.

RULES

The limitation of the wing loading to a common maximum value of 50 kg/m2 worked well and nearly ironed out differences in performance between older and more recent 15 m gliders. Even standard class gliders were not greatly handicapped. We suggest making this as an option in the rules for future SGP organisers.

The penalties for starting at an altitude above the maximum start altitude showed again to be too high compared to the penalty for starting at ground speed over the maximum allowed ground speed. We recommend setting these penalties to 2s /m excess altitude and 10s /km/h excess speed respectively. In case of infringement of the max start altitude it also appears necessary to check carefully the real start altitude by using the calibration charts of the flight recorders. The altitude determined by this method sometimes differed by as much as 30 meters from the altitude found with the simple calibration used by SeeYou.

In order to avoid any misunderstanding it should also be clearly mentioned in the rules that no bonus point shall be given in case the day has to be declared as non valid because there is nof finisher.

CONCLUSION

This first South African GP was well organised from a sporting point of view and run in a friendly atmosphere. The pilots enjoyed the new kind of competition and provided some interesting ideas for further improving the concept. The media coverage was good but unfortunately there was very little public interest or involvement. In the future we need to improve this if we want the GP idea to be really successful in promoting our sport

Signed: R.Stuck, Referee

General Comments on the staging of the Australian Gliding Grand Prix Gawler 28/12/06 - 6/01/07

Event Organisation - All the necessary facilities were provided for the contestants to allow for an excellent contest which was conducted very efficiently with all pilots commenting at the conclusion of the event that they thoroughly enjoyed the event.

11 pilots competed, 6 from Australia, 2 from Germany, 2 from Russia and 1 from Italy. There were 6 competition days out of a possible 8 and approximately 3000km flown without any accidents or glider damage other than a minor under wing tip scrape caused by a wing drop during takeoff.

The event organisers put in considerable efforts to elicit publicity during the event with some success in newspapers, radio interviews and a small amount of television coverage.

The competition web site elicited approximately 6000 "hits" during the event.

Vpos trackers and the Silent Wings viewing programme was used during the event to give those on the ground a live view (6 minute delay) of the progress of each days task. This was also broadcast on the web page live. Whilst the technology clearly still has problems (almost 50

The event attracted small numbers of the public to the airfield and those took a great deal of interest in the tracking technology.

Contest Organisation - the event was organised by the Adelaide Soaring Club based at Gawler - South Australia. The nominated Contest Director had to withdraw because of ill health and at short notice Philip Ritchie took on the task. Philip is the current President of Adelaide Soaring Club and he handled the job of Contest Director in an excellent fashion.

Launching of the competition was very efficient and most days all aircraft were launched in less than half an hour.

The organisers weighed all aircraft each day. As a consequence if an aircraft was overweight they had to dump the excess weight but without penalty. This guaranteed all aircraft were within the legal limits each day which was well received by the pilots.

The scoring was efficient with provisional scores out within an hour including penalty calculations and final results announced at the following day briefing.

There were no complaints lodged to the Referee nor were there any protests lodged.

Matters requested to be reviewed by the IGC

(i) Start Procedures - again most concern was centred on the prestart procedures. Confusion was expressed by the competitors about Rule 7.3.2 c which was clarified by the Contest Director in writing as to how it was applied. Subsequently the competitors expressed their concerns based on safety regarding procedure. The Contest Director communicated with IGC and received advice that the procedure could be amended in the terms as expressed in the Competition Director Ruling 2 (attached) The competitors subsequently reported that they were happy with the revised procedure

(ii) Eligibility for Bonus Points - with the introduction of allocation of bonus points for first to a turn point it was necessary to issue Competition Ruling 1a (attached) - consideration should be given to including the ruling into the main competition rules.

Henk Meertens, Contest Refereee