

Steward's Report for the Microlight World Air Games 2001, Beas De Segura by **Kevin Rutland**

Firstly, I would like to say that the following report is not in any way intended to be a criticism of anyone at WAG 2001, Beas De Segura; quite the opposite. All the people I saw gave the Microlight World Air Games their hearts and souls, and I have nothing but praise for their patience, willingness to be helpful in every way, and their total dedication to making the competition an excellent one. My report is intended to be helpful to anyone involved in future events, and my observations are a mixture of my own thoughts and though gathered in discussions with everyone I talked with at WAG2001.

Steward's Notes, Observations and Suggestions produced during the competition

The first part of my report contains copies the reports I handed to the Competition Director, Eduardo Marchesi, usually on a day to day basis. Eduardo was the perfect gentleman; finding time in his hectic schedule to look at and discuss my suggestions. He did say that they were beneficial.

Reproductions of the : **Steward Notes, Observations and Suggestions** as handed to the Director.

[These also had the additional header:

"Advisory or suggestions - for information and assistance only" as I was very aware of my position as an observer and adviser - there to be helpful, not to be a critic!]

#1 Steward Notes, Observations and Suggestions

SUGGESTIONS to Sunday June 24th

Marshaling items

- Move the windsock nearer to the Spot Landing box/deck, or provide another windsock so that pilots can see it when approaching for deadstick landings.
- Cone or other markers on the corners of the box.
- Wind speed measuring device used to assess wind during take off and landing stages of a task.

Spot Landing

- Video Camera at the far side of the landing box front line fixed to view front line (zero/250 line)
- Another video camera (if possible) to view 250/200 line.
- Viewing each line from each side with a camera will be even more useful.
- As many experienced marshals on the higher scoring boxes as possible - I would recommend one marshal on either side of each scoring part of the box, with the Chief Marshal and best Assistants also watching the two main boxes and front line.
- Also two marshals at the end of the box with a red flag, to show if the competitor rolls out of the box.
- Two other marshals given the task of removing any aircraft unable to restart - THEY MUST KNOW NOT TO GO ANYWHERE NEAR THE PROPELLER AT ANY TIME, and must have the attention of the pilot before approaching.
- Each marshal ONLY raises his hand if they see the wheel, on his side, DOWN AND ROLLING
- Scorers note competition numbers, engine off, and landing score - look for a hand up on each side of the box.
- No sunshades, sitting people near the box.
- Marshals to watch out for each other - NEVER TURN YOUR BACK!

OTHER TASKS

- Competitors list and start time on official start board.
- Forms for filling in handed out at briefing or at a desk in hangar.
- Fuel measurement and refueling in take off order (if possible)
- Start times given for each pilot or recognized spacing given - can be set back for all if necessary.

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- No radio antenna, or if so have the end taped and sealed to the frame.
- Camera check list used to collect cameras at a desk.
- Same desk for completed forms to be handed in and check list.
- Contact phone for emergency contact with a steward.
- Limited fuel - inspections need to be more complete.

Good observations

- Very friendly and keen marshals. Box marshal very good at control.
- Excellent gate control marshals.
- Very good measuring of fuel and number of scales.

#2 Steward Notes, Observations and Suggestions

Monday June 25th

Advisory or suggestions - for information and assistance only.

Marshaling items

- Excellent fuel measuring observed.
- Very careful inspection of tanks and fuel lines observed.
- Sealing carried out correctly on all machines observed.

SUGGESTION; More time needed for 3 axes due to more complex fuel lines and systems (this was noted by marshals themselves).

Landing for Tasks

- Jury not happy with wording *precision landing* used in Task description - normally used to describe engine off landings following an overhead engine off.
Suggestion:
Change the wording to *engine-on scored landing in the box* or something similar - after being approved by jury.
- No problems observed as a/c returning to the airfield landed. Those on limited fuel task used available runways (and box if available). Unlimited fuel a/c on task to land *engine on in the box* showed sensible separation and very good airmanship.
- Marshaling of the landing box was excellent.
- A marshal on each end of each line indicated clearly the position of wheels landing and rolling (with a few normal difficult decisions).
- All marshals kept low to observe the wheel contact and signaled by pointing at the box.
- The curve (camber) of the runway also helps to see contact and is useful.
- The video camera was set up in line with the **2nd** part of the Box - a very good position (I was in the same position on the other side of the box to view 1st and **2nd** sections of the box).

Suggestions:

- Keep the camera low to see through the gap between the wheel and the ground.
- Position a second video camera on the other side of the 2nd box to capture the other main wheel touching down/bouncing rolling.

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Weather

- Problem with Southerly wind direction at the start of the day. Discussion about using 2nd take off box situated a few hundred yards away from the south end of the runway, as taxiing aircraft (from apron) would interfere with a/c taking off from Box 1. GB team leader suggested that it would be OK with his team. Fortunately, the wing dropped and then swung toward the north, removing the problem, by the time the a/c started to take off.
- Question: Has improved weather info been found? Regulations require proper weather details to be published on the board.

#3 Steward Notes, Observations and Suggestions

Tuesday June 26th **Team Leader's Briefings**

- • Team Leader's briefings are becoming too vague.
- • Team Leaders are asking unnecessary questions. For example, the discussion about the charts being used not showing all details is futile. All charts are always 'out of date' by publication. All pilots are using the same chart and should be able to navigate by normal methods.
- • Specific important information is being lost in the 'clutter' of pointless talking.
- • Briefings are taking longer than is really necessary.
- • French protest about the standard of the briefing.

Suggestions:

- • Advise all Team leaders to restrict their questions to important questions directly related to a task.
- • Make a short list or Agenda (for yourself) to work through, and stop interruptions about any items not relating to the topic until the end of the task briefing.
- • The numbering of the task is very important and must be clear.
- • Try to plan the tasks a day or two ahead and pass them to the Senior Marshal/Jury/Stewards so that they can be changed, if necessary before a Team Leader's briefing. Many of the items of contention could be sorted out prior to the Team Leader's briefing, if the tasks were available for inspection much earlier.

Suggestion:

- • Make a list of tasks numbers in each class and display it in the Briefing Room. Write in the number of the task being covered each day in each class. This can then be referred to each day by Team Leaders.

Marshaling items - Precision Landings

- • **SAFETY** : Too many people around the Landing Box, especially spectators.

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- • Not enough space for spectators on the edge of the NE side of the runway.
- • Scoring of the landings seemed to favor the higher scoring box - bounces were not always indicated.

- **Suggestions:**

- • Only Marshals on NE side of runway (and other officials).
- • No spectators or pilots other than Team Leader and Assistant near the Scoring box.
- • All spectators moved back to the fence on the SW of the runway.
- • Remind marshals to watch closely for any lifting of a wheel.
- • Use video to double check scores before publication.

Take Off Flag for Wednesday's tasks

- • The signal flag system is a little loose and may cause complaints.

Suggestions:

- • Tell the Team Leaders that the flag will be raised ten seconds before the start time, and that the marshal will decisively lower it in a forward arc at the start time.
- • Also inform the Team leader that in two seat machines the navigator should be looking for the flag signals and should inform the pilot.
- • Single seat pilots must watch for the flag being raised
- • A 'Ten Seconds' board could be held up as an extra signal if thought to be helpful.

Fueling and Film/Camera/Cell Phones

- Marshaling of the limited fuel and measured fuel activities was observed to be excellent.
- Control of the issue of film and camera was excellent.
- Sealing of the Cell Phones was excellent.

Weather

- • Very good information provided on Wednesday.

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General

- • Excellent aircraft movement management observed.
- • Some shouting from American pilot when he was trying to get onto the runway.

Suggestion:

- • American Team Leader may wish to advise his pilot to arrive earlier when given a take-off time, to anticipate the congestion at the bottle neck part of the runway - shouting at the marshals is not really helpful or effective!

Accident control

- • Outstanding management of the 'crashed' trike in the Spot Landing box.
- • The Marshal raised the Red Flag immediately to prevent the last airborne machine from entering the task.
- • The Ambulance was moving within a second from the hangar and was at the runway entrance a few seconds later.
- • The marshals assisted the removal of the tipped trike instantly.

Kevin Rutland
17/6/01

#4 Steward Notes, Observations and Suggestions

Relating to Wednesday June 27th and Thursday 28th

Scored Landing Box

- • Marshal on the end of the box observed not being consistent with raising of penalty flag on landing, when pilots are not stopping in the box.

Suggestions:

- • Advise marshal that all landings requiring the pilot to stop must be flagged either green for a complete stop or red for a failure.

Marshaling items - Parking aircraft for Timed Tasks

- • Some problems with aircraft getting to the start box on time.

Solution:

Arrange aircraft down the edge of the runway facing out, so that they can taxi out for their given take off time.

Reminders for Spot Landings

- • Only Marshals on NE side of runway (and other officials).
- • No spectators or pilots other than Team Leader and Assistant near the Scoring box.
- • All spectators moved back to the fence on the SW of the runway.
- • Remind marshals to watch closely for any lifting of a wheel.
- • Use video to double check scores before publication.

General

- • Observed excellent marshaling of fuel measurement, and tank inspection and sealing.
- • The marshals did a great job staying out on the airfield for many hours on Thursday's 3 axis task, but they did get low on water.

Reminder:

- • Write the actual time the Results Sheet is displayed on the Notice

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Board. This will be the start time for protests.
Kevin Rutland 29/6/01

#5 Steward Notes, Observations and Suggestions

Relating to Friday 29th June

Timing Gate at Airfield

- It was observed that the timing gate at the airfield for the 3-axis task was understaffed, and may have had some timing errors.
- Only two marshals were in attendance.
- The marshal was standing behind the fence line, not looking vertically. This will cause a parallax (offset) error and influence accurate and consistent timing.
- When more than two aircraft arrive at the gate in quick succession the marshals may be overloaded, in identifying a/c, timing and recording.
- One a/c was observed circling back through the gate (Falcon).

Suggestions:

- Use a video camera pointing vertically, with its timer running to record all a/c crossing the line.
- Two vertical posts with two horizontal rails provide a better way of establishing a vertical 'line'.
- The marshal looks up from under the gate to call the moment the a/c crosses the edge of the two aligned rails.
- A second person calls the time and a third person writes down the information.
- I believe that between three and five marshals are needed at a timing gate, to provide some relaxation time during a long event.
- Report pilots performing unacceptable flying to their Team Leader. May need to be disciplined further if poor airmanship continues.

Spot Landings

- The areas to both sides of the Landing Deck were still crowded during the observed RWL1 and RWL2 tasks.
- Although many of the spectators will be pilots or people used to being at Spot Landing, there were also many visitors, who would be unaware of the dangers of sitting near the landing area.
- Some bags and water containers were positioned against the corner cones.

STRONG Suggestion:

- • This is a safety issue with MUST NOT be disregarded. One a/c making a mistake could cause SERIOUS injury to many spectators. I personally would insist on a crowd line set at least 10 meters away from the box.
- • Bags and other items should be placed away from the landing box area.

General

- • No cell phones or method of keeping in contact with the Competition Director were ever supplied, even though they were asked for on several occasions.
- • No weight list was published or supplied to Team Leaders, Stewards or Jury, although it was agreed to publish it at a Team leaders briefing. [*This may have been supplied eventually - I never saw it*]
- • The Competition Director was overloaded with work throughout the competition. [*In my opinion. He still did a remarkable job in running the competition himself, and making it a success*]

Suggestions:

- • To be able to support the Competition Director, and to be instantly available if needed by him, it would have been useful to have contact equipment.
- • A Deputy Director, Chief Marshal and Assistant Chief Marshals are able to reduce the workload, and allow the Director to be able to concentrate on his own work. I would recommend that all Directors use Assistants to reduce the pressure.

Final Comments

- • I observed excellent marshaling throughout the competition. Most of the errors in marshaling were those observed at many other competitions.
- • Talking with competitors, I was told that the tasks were enjoyable and challenging.
- • I was impressed with the lack of accident or other safety problems.
- • I hope that my observations and suggestions have been proved helpful.

Other Observations

- • Office staff were extremely efficient and helpful. Excellent support from all concerned.
- • The Scoring Room was extremely efficiently organized and manned.

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- . This was an excellent place to run the competition.

Suggestion:

- • Treat all Office Staff, Computer Operators, Marshals and everyone else involved in WAG2001 here at Beas de Segura to a celebratory meal. You ALL deserve it!

Wonderful people in a wonderful country! Thank you for a wonderful experience.

Kevin Rutland 30/6/01

I may refer back to these notes later in my report, but I included them here to show the progression through the actual days of the competition.

Final Report **- written after the Event**

On arrival at Beas de Segura airport my initial impression was one of efficiency. The secretarial staff was handling Registration matters very efficiently, and pilots were registering themselves on the computers in the office. The airport itself looked good and was being shared with the microlights being on one half of the available area, with a mile long runway, and the PPGs using the apron and the other half of the area with a runway about half that length.

- Aircraft measuring was proceeding in the central hangar. Electronic scales were being used to weigh aircraft. *Give one or ore of the scales the ability to slide to offset suspension loading forces.*
- The runway was in excellent condition, but with only one entry point, making it difficult to move microlights onto/off the runway if the wind was in a certain direction. The only morning we were likely to have a problem that concerned me (and Eduardo), was during a limited fuel task, where there may have been a tendency for pilots to take off with cold engines, risking an engine failure on the shorter part of the available runway. Fortunately, the wind direction reversed just before the task was due to start. *Always try to have two or more entry/exit places to allow for changes in wind direction.*
- One windsock was positioned towards one end of the runway. *Another was requested to be placed nearer to the takeoff/landing box.*
- The camping area was very rocky, with a few scorpions. The dusty conditions made the showers a bit of a mud bath.
- Teams were provided with a tent to store items beside their machines.
- There was plenty of room for all the competitors.

Fueling tasks

- Fuel was being efficiently measured on several electronic scales, measuring to an accuracy of ten grams. There were enough marshals (fifty in total) to deal with measuring of fuel, inspection and sealing of tanks, issue of cameras, and sealing of cell phones.
- Observed tank inspections were well carried out, as was sealing of tanks.
- Plastic containers were provided for fuel measurement and transportation.

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Some seemed to have a drip problem when fuel was being poured.

Marshaling

- Marshals were very efficient and the marshals I observed carried out their duties, in extreme heat and for many hours at a time, with great enthusiasm and dedication. Water was being provided (although not enough at times).

It is vital to have food and water brought out to marshals, and to have sufficient number of them to provide for toilet breaks, etc.

- With fifty marshals, the Director did not appear to have problems caused by lack of helpers.

He also had several very experienced pilots controlling key areas.

*I gather that they were all paid to be there - I'd say that they worked above and beyond the value of any reward they received. I would suggest that all events probably need a **minimum** of twenty-five marshals, **with** five or so experienced team leaders. I would love to have fifty at any event I was involved in!*

- Flag signals were a little vague, but did not seem to cause the observed pilots any concern

I would like to see a standard system of signals adopted and used in future events

- Timing gates were possibly understaffed at times, when several machines arrived at the same time.

I'd suggest about five or six people - two observers with binoculars, two time keepers, and one or two recorders.

I would also suggest using a video camera pointing skywards, set to infinity, and with a timer running (if battery power and lighting permit), so that in the event of a disputed time or ID, the video could be examined for the time the pilot said that he was there. The camera need only be turned on when aircraft are in the vicinity.

- The numbers were not always visible against the wing background.

Some research should be done to find the best ID numbering system to make it easier to see a competitors number

- All marshals away from the field were in cell phone contact. Most of the key marshals on the field also had radios, but the problem of battery life was sometimes an issue.

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Cell phones are essential for 'away teams'. Good communication for the Director, Chief Marshal, Key Marshals is also essential.

Precision landings

- The Landing Box had been lengthened to take the Density Altitude into account.
- Some pilots had difficulty seeing the box markings from 1000'
Wider white stripes at the edges (outside the Box) are helpful.
- The runway had a pronounced camber, which made it much easier for the marshals to judge the point of contact. As always, some mistakes were made calling the touches instead of the actual landing point. Cameras were being used as backup.

We had many long discussions about the problems of accurate Precision landing judging, over meals. Perhaps there is an electronic or mechanical solution. Possibly give it to university students studying electrons or mechanical engineering to come up with a solution - possibly as a competition.

- I was very concerned that spectators, and pilots were being allowed to stand (or worse still) sit very close to the box.

A safety line should always be established well back from the Box. Only marshals, judges, team leader + assistant, and Officials, should be allowed nearer. Spectators are often unaware of the danger of a mistake when a pilot is 'going for it!'.

- Sunshades were essential at this competition for the protection of marshals.

These must also be positioned well back from the Box.

Emergency Situations

On the one occasion that I witnessed, a machine tipped over in the Precision Landing task. Instantly, the ambulance was moving from the hangar, the marshal had red flagged the aircraft overhead, and the other marshal were helping the pilot. With no injury to the pilot, and the rapid removal of the bent Microlight the event was able to proceed.

*I was **very** impressed with the performance of the marshals and the rescue service - great to see the system working perfectly.*

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- There were surprisingly few outlandings. Perhaps due to the warm and dry conditions. The local area was not ideal for out-landings, but the area chosen by the Director, encompassed an area with a much better chance of success, should such an event happen.

The were four (I believe) minor incidents on the airfield itself, but none were considered serious.

Tasks and Briefings

- The Competition Director decided to run multitask events , with each class also undertaking a different series of tasks, to avoid the 'follow my leader' activities, and also to give the pilots better task to attempt. In itself, this was a great idea, but it greatly increased the workload of the Director, who lacked a Deputy once the competition got under way, and also had no Chief Marshal.
- It also lead to very long and complex Team Leader briefings, where each task (and its 'sub-task' sections), for each Class, had to be briefed.

In my opinion, Eduardo, found himself under far too much pressure during the competition. I feel that he would have been under much less stress, if he had appointed a Deputy to handle the multitude of questions always coming his way, and a Chief Marshal, to deal with the marshaling side of each task.

- The briefings were also very long due to Team Leaders, not being aware of the meanings of certain phrases, such as engine off, precision landing, timed gate, etc.

I would suggest that a booklet is produced which clearly explains all the phrases to be used in tasks. I will go into this idea in more detail at a later stage.

- Tasks descriptions also caused problems due to their wording, and to the fact that English was possibly the second or third language of some team Leaders.

I would suggest the idea of getting the actual task sheet (s) to be used, or a selection of them, published up to a year ahead of the competition. Teams would then have time to practice the best methods of attempting the task, and could also request clarification well before the actual competition started. Only the map details would then need to be added once the competition got under way. Tasks would be numbered 1, 2, 3 , etc. At a Team Leaders briefing everyone would be given the task number to be undertaken. Then the only part of the task needing clarification would be start times, and information relation to the local specifics. I'll also go into more specific details of my suggestion at a later stage, if requested.

Organizational Issues

- There were a few problems with the organization. T shirts and other items normally presented to the teams and officials either never arrived, or were not available until the last day. It was not really practical to get competitors to the Official Opening and Closing Ceremonies, due the distance time and travel constraints.

Perhaps local ceremonies are the solution. These are a great way of thanking the local people for their part in providing help and support, and also are more likely to be attended by competitors and spectators.

My own position as a Steward

Being a Steward was a very enjoyable experience. I was still getting up at 6:00am, arriving at the airfield by 7:00am. Observing the proceedings until about 10:30am, before heading back to the hotel for breakfast, being covered by the other 'team' of steward and jury members, who arrived at about 9:00am. Back again at about 11:30am, to talk about the previous events, attend meetings, type up reports and talk with competitors, team leaders and officials. Attending the team leaders briefings at 1:00pm, which often lasted well over an hour. took us into Siesta time. So, back to the hotel for a long lunch. We would be back at the airfield at 5:30pm for the second Team Leaders briefing at 6:00pm, and then out on the airfield again for the evening task, which usually started at 7:00pm and lasted until about 9:30pm. Back inside for last minute discussions, and off to the hotel at about 10:30, for a dinner which usually lasted until well after midnight.

My wife Anne, and I enjoyed every moment!

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