2nd FAI WORLD AIR NAVIGATION RACE CHAMPIONSHIP

05. – 14. September 2019

Santa Cruz LPSC, Portugal

From: Maurice Ducret, International Chief Judge
Location: 2019 GAC Plenary Meeting, Billund (Denmark)

Preparation phase

The preparation & communication phase started 6 months before the WANRC. Project management and Skype tools were used to interact and communicate. The defined tasks were only partially processed if at all. Respect the communication wasn't optimal at times, even if it was worked hard in the background by the organizers, but not visible for the officials. Thus, central tasks could not be processed or completed, e.g.:

- Setting up of the qualification process
- Receiving the maps in time
- Layout of airfield and facilities
- Organizer organigram

The rest and the open points had to be organized during the Training days. E.g.: For WAG Dubai everything was created and printed at home!

Arrival and preparation of the competition

Heinrich Schawalder (President of the International Jury) and I arrived Wednesday the 4th of September. A rental car was organized for us which we could use for travel and during the event.

After taking a first glance at the airport we tried to contact Filipa and Joao. Filipa was busy with validation flights and thousand other tasks. The participants who had already arrived had no idea about the upcoming daily program. But after a short time, the organizer launched WhatsApp and the participants were informed about the latest news and upcoming training days. After a first meeting with Filipa it turned out that there is still a lot to do in the coming days and more helpers are needed.

On the first Training day Lorenz Egli arrived, who supported me in organizing the necessary materials for the competition and in allocating and briefing of the Judges. Despite some uncertainties regarding material and location, everything could be arranged in time, so that nothing stood in the way of competition. Of course, there were some compromises among others the Planning-room (windy or dark), the Quarantine (small size in relation to the participants) and the Scoring-room (small size and amount of Logger read out terminals). Without the great help of Duarte Folgado a timely completion would have been impossible.

Thank you to Duarte, Lorenz and all the local helpers!
Armin Züger (Scoring Manager) had already created some training routes with Júlio Teixeira (Route planner) in advance, and of course there were always improvements and corrections to do that were done till late at night. At the end the starting lists had to be created for each day. Many thanks for your hard and professional work Armin and Júlio!

In summary, however, it can be said that the Championship Director João Carlos Francisco and Filipa Oliveira with their Team of ANR helpers and volunteers prepared and organized everything very well and in time (sometimes one hour later) to make the 2nd WANRC an unforgettable and save event!

Participants

In total 43 Teams consisting of Pilot and Navigator from 17 Countries were participating the 2nd WANRC in Santa Cruz, Portugal.

Accommodation and meals

The accommodation was chosen by the participants themselves. The organizer only gave recommendations. Everyone could choose the accommodation according to his budget. Already from the training days the lunch could be taken in the tent at the airfield. The lunch was buffet style.

Ceremonies

The opening ceremony took place at the airfield of Santa Cruz with the standard Program according to the FAI procedures. During the ceremony an airshow took place with the participation of several Portuguese acrobatic patrols who performed acrobatic displays. The closing ceremony took place on Museu Municipal Leonel Trindade, in the city of Torres Vedras. The Medal Ceremony was presented to the winners at the airfield and the GAC President deputy Hans Schwebel closed officially the 2nd FAI WANRC. Thereafter, all the people involved in the event were invited for the Gala Dinner in a beautiful winery.

Airfield facilities

All necessary facilities e.g. Scoring-room, Security-room, Planning-room, Debriefing-room, etc. were finally supplied and in acceptable condition.

All Competitor- and General-information were well displayed at the Information board in the Hangar and distributed via WhatsApp (WANR2019 Official Info).

Briefings

The Judges briefing (in a Theory room) as well as the General briefing (in the Hangar) were held at Santa Cruz Airfield. The General briefing were held (with certain delay) by Championship Director João Carlos Francisco.

Every day there was a morning briefing for all participants and an evening briefing for all team managers.
Competition days

A short introduction about the Qualification process defined by the Organizer. There will be two Navigation flights a day. The Crew that flew Parcours A in the morning will fly Parcours B in the afternoon and vice versa (no parallel Parcours but one in the north the other in the south). A total of four navigation flights will be flown. For the next round, the three best Navigation flights (out of four) are added together and the 20 best Crews will move on. The 20 best Crews will now fly a parallel Parcours with two Tracks A and B. Each Crew flies Track A & B. The two best Crews (both navigation flights added together from this round) will reach the Final. The two Crews fly a parallel Parcours with Track A & B (both navigation flights are added from this round). This is how the two winning crews will be determined finally.

Day 1 – Monday, 09. September 2019
After the Judge Briefing and the Morning Briefing some minor adjustments followed and then we were ready for the first Navigation flight. It was started unfortunately but with delay because the morning briefing took longer. The two Navigation flights could be carried out without any special occurrences. Although we couldn't make a sharp test with the judges, they already did a great job on the first day! The judges and helpers were so expired, motivated, pro-active and self-organizing so it was a big pleasure for me to work with such a professional team!

Day 1 Complaints/Protests: 0 complaints and 0 protests

Day 2 – Tuesday, 10. September 2019
Due to strong wind conditions only one Navigation flight could be carried out on this day. The Navigation flights went so far without any problems. But one crew had to leave the centerline for a short time because of another competition plane.

Day 2 Complaints/Protests: 2 complaints and 0 protests -> Wind and traffic related.
Agreements/Solutions were found for both complaints.

Day 3 – Wednesday, 11. September 2019
Semi Final for the best 20 Crews! The Navigation flights went according to the program.

Day 3 Complaints/Protests: 2 complaints and 0 protests -> Meteo information and Aircraft performance 75kts. Agreements/Solutions were found for both complaints.

Day 4 – Thursday, 12. September 2019
Due to the weather conditions the program was changed and the Final of the Navigation flights was preferred to the Precision landings. The two best Crews could now compete against each other. It was a huge show (Flymaster Screen in hangar) and after the landing the two crews were received with great applause. The task was to fly a ANR Parcours in the shape of an Airplane.
The Landing test took place right after the completion of the Final. Two landings were announced:

- 1 Landing: Power landing (touch and go)
- 2 Landing: Forced landing (full stop)

Groups were formed for the landings, each one first made a touch and go and then a full stop landing.

The German Landing measuring system and Cameras were used for the judging of the accuracy landings.

After the Judge briefing and the installation of the markings and devices beside and abeam the runway the landing test could start. Mostly all pilots followed the procedures and so we had a smooth procedure. The involved judges and helpers did a great job! A special "Thank you" goes to the German Landing system team with Hans Pietsch (Chief of the Landing system), Jesus Mas (Int. Judge of Spain) and Jacky Carriquiriberry (Int. Judge of France).

Day 4 Complaints/Protests: 4 complaints (Ldg.) / 1 complaint (Nav.) and 1 Protest (Nav.) - Video judging was requested by 3 Crews and Valuation method for the Top ANR was complaint by one Crew. Agreements/Solutions were found for all complaints. The protest regarding power on landing was finally approved by the Juror and the ranking adjusted accordingly.

Findings / Suggestions

During the 2\textsuperscript{nd} WANRC we had a lot of fruitful discussions, exchange of ideas and improvements with the organizers, officials, team managers and competitors.

Just a few keywords:

- To define and to inform the qualification process via local rules is a must this also applies to the announcement of the GS and the distribution of the maps right in time
- One bottleneck was the amount of logger read out terminals and the type of used loggers (old fashioned & software issues)
- Most referees have good ANR knowledge, but nevertheless the study of the rules is necessary and should be checked with a test
- Verification of avionics and security check should be carried out by professionals not judges
- To avoid a bottleneck in decision making the event should be built like a company (Organigram, Role, Function, Competencies, etc.).
- We need to rethink how we deal with the development of avionics and our disciplines for the future
- The Quarantine procedure needs to be reconsidered
- ANR Live is the future of ANR. With Flymaster (www.flymaster.net) we have a Partner who can supply the software and the hardware. Furthermore this partner of the FAI is already known and represented in other disciplines (Using synergies)
Conclusion

Despite the bumpy start, the WANRC was a complete success! It's incredible what the Portuguese always managed to conjure up at the last moment!

The daily work, communication, corporation, planning and interaction between Competitors, Judges, Jury, Volunteers and Organization was finally fantastic and lead to this success of the 2\textsuperscript{nd} WANRC!

Most of the competitors had fun and were satisfied and enjoyed their stay in Santa Cruz, Portugal. I hope that they will pass on their experiences and impressions to other Pilots, Friends and Families so that ANR becomes worldwide known!

The 2\textsuperscript{nd} WANRC was finally well prepared and perfectly organized even if it's usually an hour later by the Portuguese friends! They did an enormous job and worked very hard before during and afterwards! Thank you, my Friends from Portugal!

Finally

It was the second Event for my acting as Int. Chief Judge and I was happy to have Heinrich Schawalder President of the International Jury beside me. He supported me with his experience, knowledge and as a friend!

Maurice Ducret
International Chief Judge 2\textsuperscript{nd} WANRC