COMPETITION REPORT

AIRSPORT: Aeromodelling
EVENT: 2019 FAI World Drone Racing Championship Grand Final
CIAM COMPETITION CLASS: F9U
DATES: December 11 - 14, 2019
PLACE (VENUE): Xiangshan, Ningbo, People's Republic of China
ORGANIZERS: Aero Sports Federation of China (ASFC)
Zhejiang Starmach Sports Co. LTD
Federation Aeronautique Internationale (FAI)

Contest Director: Na ZHOU - People's Republic of China
Contest Director FAI Assistant: Chris BALLARD - Australia
Starter: Siji LIU - People's Republic of China
FAI Jury: Bruno DELOR - President - France
Massimo SEMOLI - Member - Switzerland
Jenny LV - Member - People's Republic of China
Judges: Sotir LAZARKOV - Supervisor judge - Bulgaria
Javier SOLER - Judge for preflight processing - Spain
Jingyu LI – Judge for preflight processing - People's Republic of China
Pascal BERLU - Pilots' judge - France
Angelika MOBIUS - Pilots' judge - Germany
George CHAN - Pilots' judge - Hong Kong
Oscar CHINELLO - Pilots' judge - Italy
Hao XU - Pilots' judge - People's Republic of China
David M ROBERTS - Pilots' judge - USA
Jose Manuel MARTINEZ-IBANEZ - Judge for video recording checking - Spain
Fengxu HU - Judge for video recording checking - People's Republic of China
TV commentator: John SCALLY - Canada

INFORMATION BULLETINS
Three information Bulletins were circulated by the organizer containing all the necessary details for the event.
A dedicated web site was on line with FAI providing all necessary information.
The registration of all competitors and officials, was performed by using Noosphere eNavigator application.

REGISTRATION and TECHNICAL PROCESSING of MODELS
The on-site registration took place Tuesday, December 10, in the Ningbo Workers' Sanatorium Hotel.
31 countries, 3 additional individual competitor’s wild card for People's Republic of China and 5 individual pilots qualified from the 2019 World Cup ranking list, were registered using the eNavigator application for 112 competitors in total. One competitor from The Hong Kong has not been finally in situation to come.
In total, 252 participants have been registered on-site:
- 111 competitors including 44 juniors and 9 women.
- 21 team managers. In addition, there has been 10 other team managers participating as competitors.
- 72 helpers.
The technical processing took place Wednesday December 11th, in a tent provided by the organizers on the venue. The models of the competitors have been marked as a proof of being processed. The technical processing and the official practice have been monitored by the judges nominated to run the event.

**COMPETITION AREA STATUS**

The Blossom Sports Field, Banbian Mountain at Xiangshan, Ningbo was the venue selected by the organizers. It is a sporting complex built for football matches and for golf competitions. In the football court numerous tents were installed by the organizer and were available to accommodate the FAI Drone Racing World Championships.

The track was designed by the organizer and the setup was impressive and located in the golf court on side of the football court. During the night the track was illuminated and use of on-board programmable LED light units made easier the recognition of each model by using a different color for each one.

A big tent was provided for hosting the teams, a tent was for the score processing team and another one for the preflight processing. Separate tents offices were also provided to FAI, Jury members, judges, media, VIP, etc.

**WEATHER CONDITIONS**

Weather conditions were good in general. The first days of the competitions were windy without affecting the competition. All days there was a high excursion of temperature between the day and the night. The third and fourth day the wind ceased to blow and the day were sunny and pleasant with mild temperature during the day.

**EVENT ORGANIZATION**

Various IT companies contributes to the management of the event:
- Noosphere for the registration and for the event management system.
- Newstar Juhang for the electronic Mylaps timing system.
- Starmach and Rush FPV Racing for the flight video system.
- Ningbo TV (NBTV) and Starmach for the video live streaming and broadcasting.

The Mylaps electronic timing system didn't work due to a deficiency with the on-board transponders and in the instrumentation of the track which was not solvable during the championship. The second electronic timing system based on ImmersionRC boxes showed some problems which were solved in three hours after the first qualifying round but that caused a delay in the competition schedule. In fact, the third qualification flight was postponed to early morning of Thursday the 12th of December. For that reason, the additional rounds sequence planned for the competitors placed over 64 after the qualification stage was not performed.

All the companies worked very hard with their complex tasks and provided an excellent service and organization. The needs for TV livestreaming were well managed for giving a good image and interesting information of the championship.

Performance of all officials has been excellent considering the fact that the scheduling issues had to be faced promptly and efficiently. The organizer and the Supervisor judge worked hard even during the night for recovering and checking times data of the two first qualifying rounds.

More than enough volunteers were present throughout the entire event.

The team manager's meeting was organized before the start of the competition on Wednesday 11th of December at the Ningbo Workers' Sanatorium Hotel. All the team managers attended the meeting with positive attitude and useful questions.

As mentioned above, the schedule announced in the bulletins was not followed for the qualifying stage due to the delay caused by the issue of the timing systems. For the elimination stage, the planned schedule has been met until the end of the championship.

**INJURIES**

No such an incidence was reported.

**DOPING CONTROL**

No doping control was required.
COMPLAINTS
Some complaints were received and recorded but none of them became a protest. The Supervisor judge was able to provide proper clarifications which were well accepted by the relevant team managers who didn’t raise the possible subsequent protest.

PROTESTS
No protests received.

CEREMONIES
The opening and prizegiving ceremonies were well organized in the Blossom Sports Field and transmitted in live TV streaming.

A wide stage was prepared in front of a giant display which was also used for showing images and videos of the championship.

At the opening ceremony, the stage hosted the authorities and the VIPs in front of the national teams each paraded behind the its national name. A spectacular show was performed by dancers who, wearing the traditional Chinese dresses, danced with the traditional Chinese dragon and Ningbo fishes.

The show was followed by short speeches of the local organizers and of the FAI President Bob Anderson. The championship was declared officially open after that the Chinese and the FAI anthems were played.

For the prizegiving ceremony, the podium was placed on the stage. The FAI General Secretary, the FAI Jury, the Air Sport Federation of Asia Vice-president and the local authorities gave the medal, diplomas and prizes to the athletes. The national anthems for the first places were played in front of the flags showed in the giant display. Money prizes (120.000 USD in total) were offered for all classifications.

The closing ceremony took place during the banquet at the Ningbo Workers’ Sanatorium Hotel. The FAI anthem was played and the championship officially closed by the FAI Jury President. At the banquet the good food was served with a buffet. The atmosphere was warm and pleasant.

RECOMMENDATION
The FAI Jury would like to recommend to take care for the following matters for the future WDRC Grand Final:

1. Flight video and timing systems
   At the beginning of the championship, some issues on the flight video system and on the timing systems were discovered. This was due to a lack of time for the installation and tuning of all the systems. For the future it is better to plan at least one full day for that activity before the championship. In addition, the tests to be performed shall be studied, identified and planned in advance of the championship. Proper pilots and system integration technicians and equipment shall be used for that purpose.

2. Live streaming commentary
   For this championship, it was recruited a very capable commentator who commented the most important phases of the championship. He made his commentary remotely. A commentary provided also on the stage where a large screen was installed could increase the emotions and the interest live streaming for the spectators.

3. Prizegiving ceremony
   The prizegiving ceremony could be made more emotional and interesting if additional prizes (example basketball championships) were awarded like, the youngest competitor, the youngest woman, a special prize, etc. or show on the stage all the juniors, all the women, etc.

4. Publication of the results
   As suggested at the 2018 WDRC, the publication after each race will assist to trace any possible error well in time and to make more interesting following the competition. The results were published most of the time with a too long delay. For the qualification flights, the ranking in real time would increase significantly the interest to follow this sequence of the championship.

LIVE TV
The good cooperation of the organization with NBTV didn’t cause issues or delays during the Live TV neither caused impacts to the championship planned schedule.

Live stream was for the opening ceremony, some elimination rounds, the finals and the prizegiving ceremony.
COMMENTS

We would like to thank all the organizers and the entire competition staff for running the event in a fair and friendly atmosphere. The organisers are to be commended for an excellent event.

Xiangshan, Ningbo, December 16, 2019

Bruno DELOR (FAI Jury President)

Massimo SEMOLI (FAI Jury Member)

Jenny LV (FAI Jury Member)