

# 2018 FAI DRONE RACING WORLD CUP REPORT

by Bruno DELOR

**Annex 1:** Recommendations for Drone Racing World Cup events from Drone Racing World Cup Board

**Annex 2:** FAI Drone Permission data for 2018

2018 was the third edition of the FAI Drone Racing World Cup (F3U class).

## CALENDAR

There were initially 24 contests from 19 different countries registered in the FAI Calendar for 2018. The 2018 Brazil F3U World Cup Drone Racing has been cancelled. In addition, the 2018 Royal Adelaide Show FPV (AUS) may not be taken in account for the World Cup results considering participants were only from Australia which means the rules requirement of competitors from at least two different countries is not fulfilled.

So, finally, 22 contests from 17 different countries have been considered for the final results and placing of the World Cup, compared to 16 contests from 12 countries for 2017 and 9 contests from 7 countries for 2016.

2018 Indonesia Drone Racing World Cup	ID 12686	Bali (Indonesia)	6-8 April	<b>INA</b>
2018 China Drone Racing Open (WDRC Test Match)	ID 12676	Shenzhen (China)	11-13 May	<b>CHN</b>
2018 Drone Festival Race	ID 12675	Gdynia (Poland)	19-20 May	<b>POL</b>
2018 Seoul Drone Race World Cup	ID 12683	Seoul (Korea)	25-27 May	<b>KOR-1</b>
2018 Leiria Drone Race World Cup	ID 12568	Leiria (Portugal)	9-10 June	<b>POR</b>
2018 WDR Paris World Cup	ID 12609	Brétigny-sur-Orge (France)	16-17 June	<b>FRA-1</b>
2018 German Drone World Cup	ID 12492	Nördlingen (Germany)	30 June-1 July	<b>GER-1</b>
2018 Cabourg World Cup	ID 12606	Cabourg (France)	30 June-1 July	<b>FRA-2</b>
2018 International Drone Race Slovakia - Trencin FPV Race	ID 12727	Trencin (Slovakia)	30 June	<b>SVK</b>
2018 FPV Racing World Cup	ID 12513	Prilep (Former Yugoslav Rep. of Macedonia)	7-8 July	<b>MKD-1</b>
2018 Jämi FPV Open	ID 12545	Jämijärvi (Finland)	21-22 July	<b>FIN</b>
2018 Barcelona Drone Racing F3U World Cup	ID 12583	Barcelona (Spain)	21-22 July	<b>ESP-1</b>
2018 World Cup Russia	ID 12773	Moscow Region (Russia)	28-29 July	<b>RUS</b>
2018 World Cup Latvia Droneracing	ID 12437	Riga (Latvia)	10-12 August	<b>LAT</b>
2018 World Cup Spain - La Rinconada	ID 12580	Seville (Spain)	10-12 August	<b>ESP-2</b>
2018 Mitteldeutscher FPV Race Cup	ID 12491	Bitterfeld (Germany)	11-12 August	<b>GER-2</b>
2018 EPFL Drone Racing Cup	ID 12693	Lausanne (Switzerland)	31 August-2 September	<b>SUI</b>
2018 Daegu Drone Race World Cup	ID 12684	Daegu City (Korea)	7-9 September	<b>KOR-2</b>
2018 F3U World Cup Italy	ID 12427	Magreta di Sassuolo - Modena (Italy)	8-9 September	<b>ITA</b>
2018 Noosphere Race Cup	ID 12455	Dnipro (Ukraine)	15-16 September	<b>UKR</b>
2018 F3U Pam Cup	ID 12572	Plovdiv (Bulgaria)	29-30 September	<b>BUL</b>
2018 Phoenix World Cup	ID 12512	Prilep (Former Yugoslav Rep. of Macedonia)	13-14 October	<b>MKD-2</b>

## PARTICIPATION

	2016	2017	2018
<b>Number of Contests</b>	9	16 + 78 %	22 + 38 %
<b>Number of Organising Countries</b>	7	12 + 71 %	17 + 42 %
<b>Number of Registrations</b>	327	575 + 76 %	1004 + 75 %
<b>Number of Competitors Placed</b>	229	434 + 90 %	669 + 54 %
<b>Number of Concerned Countries</b>	17	37 + 118 %	41 + 11 %
<b>Number of Juniors (under 18 years)</b>	18	76 + 322 %	133 + 75 %
<b>Number of Concerned Countries</b>	4	18 + 350 %	23 + 28 %
<b>Number of Women</b>		6	13 + 117 %
<b>Number of Concerned Countries</b>		6	9 + 50 %
<b>Number of participants placed in:</b>			
7 contests			1
6 contests	1		9
5 contests		7	10
4 contests	2	7	12
3 contests	11	11	34
2 contests	66	113	144
1 contest	149	296	459
	<b>229</b>	<b>434</b>	<b>669</b>

		Competitors number	Senior	Junior	Women
AUS	Australia	1	1		
AUT	Austria	6	6		
BEL	Belgium	13	8	5	
BLR	Belarus	3	2	1	
BRU	Brunei Darassalam	2	2		
BUL	Bulgaria	8	4	4	
CHN	People's Republic of China	44	26	18	2
CZE	Czech Republic	4	3	1	
DEN	Denmark	2	1	1	
ESP	Spain	62	60	2	2
EST	Estonia	3	3		
FIN	Finland	31	26	5	
FRA	France	57	50	7	1
GBR	United Kingdom	3	3		
GER	Germany	59	51	8	1
HKG	Hong Kong	13	13		
HUN	Hungary	13	10	3	
INA	Indonesia	31	26	5	
ITA	Italy	26	25	1	1
JPN	Japan	7	7		
KOR	Korea	74	25	49	
LAT	Latvia	12	10	2	
LTU	Lithuania	7	7		
LUX	Luxembourg	2	2		
MAR	Morocco	1	1		
MAS	Malaysia	1	0	1	
MKD	Former Yugoslav Republic of Macedonia	5	4	1	
NED	Netherlands	4	4		
NOR	Norway	7	7		
POL	Poland	37	31	6	2
POR	Portugal	19	18	1	
ROM	Romania	4	4		
RUS	Russia	19	16	3	1
SIN	Singapore	1	1		
SRB	Serbia	5	5		
SUI	Switzerland	37	35	2	
SVK	Slovakia	12	10	2	
SWE	Sweden	2	2		
THA	Thailand	6	1	5	1
TPE	Chinese Taipei	2	2		
UKR	Ukraine	24	24		1
		<b>669</b>	<b>536</b>	<b>133</b>	<b>12</b>
<b>41</b>				<b>23</b>	<b>9</b>

## CLASSIFICATION

The total World Cup score for each participant is the sum of their best four contest results (numbers of points). For each participant, one contest result per organising country is considered for the World Cup placing (better number of points for any organising country in which he has scored in two contests).

The winner is the junior **Killian ROUSSEAU** (France) with 161 points, followed by the junior Jan WIELGOSZ (Poland) and David SPACEK (Czech Republic) both with 144 points.

**Note:** Second and third placed have the same score; according to the World Cup rules, placing is determined by taking in account for the two concerned competitors their fifth result.

Six juniors are placed in the top 8 which is impressive. In addition, 12 of the 22 contests have been won by a junior.

In the following sheet, are mentioned for the columns corresponding to the results:

- Country abbreviation code of the contest as for example FRA-1 or POL (see correspondence on the calendar page 1).
- Placing and number of competitors placed; for example, 1/49 means first place with 49 competitors placed.

1	ROUSSEAU Killian	Jun	FRA	161 points	FRA-1	1/49	48 points	ESP-1	4/56	37 points	GER/2	1/49	48 points	KOR-2	13/80	28 points
2	WIELGOSZ Jan	Jun	POL	144 points	POL	14/60	27 points	SVK	2/44	44 points	ESP-1	2/56	44 points	BUL	2/26	29 points
3	SPACEK David		FAI (CZE)	144 points	SVK	3/44	41 points	FIN	7/51	34 points	GER/2	3/49	39 points	SUI	11/58	30 points
4	CHOI JoonWeon	Jun	KOR	140 points	INA	1/46	48 points	CHN	8/62	33 points	KOR-1	12/70	29 points	POR	11/56	30 points
5	PETERSONS Tomass		LAT	138 points	POL	2/60	44 points	FIN	1/51	48 points	LAT	4/26	23 points	UKR	7/29	23 points
6	LASZCZAK Pawel	Jun	POL	135 points	POL	9/60	32 points	LAT	1/26	32 points	SUI	4/58	37 points	ITA	1/28	34 points
7	GROUT Thomas	Jun	FRA	133 points	CHN	10/62	31 points	POR	9/56	32 points	FRA-2	4/44	37 points	ESP-2	8/54	33 points
	MAXIMOV Platon	Jun	RUS	133 points	POL	4/60	37 points	FRA-1	4/49	37 points	GER/1	13/74	28 points	SUI	10/58	31 points
9	FERREIRA André		POR	122 points	POR	3/56	41 points	FRA-1	18/49	23 points	GER/1	20/74	21 points	ESP-2	4/54	37 points
10	PETERSONS Kristaps		LAT	117 points	POL	11/60	30 points	FIN	10/51	31 points	UKR	1/29	35 points	BUL	6/26	21 points

An Excel file with the complete results can be downloaded on the following webpage of the FAI website:  
<https://www.fai.org/world-cups/drone-racing-2018>

## LOCAL RULES AND UNUSUAL OCCURRENCES

Drone racing being an emergent sport with a new community of competitors, it is not surprising to encounter difficulties in contests and to note that competitors or even organizers don't know basic FAI/CIAM general rules.

In that situation, the Subcommittee Chairman has requested the Drone Racing World Cup Board (Robert Herzog from Belgium, Jose Manuel Martinez Ibanez from Spain and SoonCheon Park from Korea) to propose recommendations to correct problems encountered in FAI Drone Racing World Cup events. The final recommendations from the Drone Racing World Cup Board have been received the 14 November (See Annex 1).

In some contests, local rules have been considered. The most significant change is the use of a complete double elimination instead the actual second chance sequence.

**Recommendation:** Consider within the FPV Racing Subcommittee the replacement of the actual second chance sequence by a complete double elimination sequence giving a real second chance to reach the final.

## OTHER COMMENTS

### Official results

A template for the official results has been sent to each organiser prior to the event.

**Recommendation:** Improve the template for 2019 in order to take in account optional sequences, and request the organiser to provide the detailed results in all races for every round.

### FAI Jury

For a World Cup Open International event, requirements about composition of the FAI Jury are defined in CIAM General Rules Volume (C.7.3). The three members of the FAI Jury must be from at least two different nations. One or two jury members may be nominated from the competitors but, in that situation, an alternate jury member must be nominated for each participant jury member to serve on the FAI Jury when considering any protest involving that participant jury member.

A form for the FAI Jury President report has been sent to each organiser prior to the event.

### Identified discrepancies:

- At the 2018 World Cup Spain La Rinconada in Sevilla (ESP-2), all three members of the FAI Jury were competitors.
- Some FAI Jury President reports have not been properly filled or have been sent without the FAI Jury President signature.

## **FAI DRONE PERMISSION**

Many competitors participated in the first World Cup in 2016 without getting a FAI Sporting Licence. This was because the FAI recognised for 2017 the need to accommodate the fast-growing sport of Drone Racing and help those pilots who found it difficult to obtain a FAI Sporting Licence via their NAC.

It has been decided to maintain for 2018 possibility to issue FAI Drone Permissions.

Data about FAI Drone Permissions delivered in 2018 are given in Annex 2 of the report.

FAI Drone Permissions have been issued to 355 persons from 38 countries. Some countries still don't recognize properly drone racing; in that situation, use of a FAI Drone Permission is the easier solution for the concerned competitors to compete in a FAI Drone Racing World Cup contest. For some other countries, wide use of FAI Drone Permissions seems to be justified by the long delay to get a FAI Sporting Licence from the NAC.

Note: Only 224 of those persons from 27 countries have effectively competed in a FAI Drone Racing World Cup contest. In addition, some persons had also a valid FAI Sporting Licence, which means their FAI Drone Permission was not necessary.

### ***Recommendations:***

- *Maintain for 2019 possibility to issue FAI Drone Permissions.*
- *When duly justified, consider positively a NAC formal request to refrain issue of FAI Drone Permissions for their country.*
- *Prevent in the FAI Sporting Licences management tool the possibility to issue two FAI Drone Permissions for a same person (more than 40 cases identified in 2018) or to issue a FAI Drone Permission to a person who already get a FAI Sporting Licence (even if the licence is expired).*

## **- Annex 1 -**

# **Recommendations for Drone Racing World Cup events from Drone Racing World Cup Board**

### **Recommendations for organizers**

- 1- READ THE SPORTING CODE. Not only once. And try to understand why it says what it says. If any question arises, go to 2nd and 3rd recommendation
- 2 - INVOLVE NACs. It is not evident how to organize a FAI/CIAM without a basic knowledge of the essential general rules. Sometimes F3U organizers do their best but have a huge lack of knowledge about aeromodelism.
- 3 - ASK FAI. Sometimes a simple mail sent to FAI before the competition can solve a huge problem during the event.
- 4 - COMPLAINTS. Complaints have a standardized method that is tested and working for decades. Know how it works, why and USE IT
- 5 - INFORMATION TO COMPETITORS. All competitors, assistants, team managers... wish to know what is happening and why. Spend some resources to do it and a lot of misunderstandings or “bad intentioned” chatter will vanish

### **Recommendations for participants**

- 1- EDUCATION AND RESPECT. Some competitors think that spending their time and money gives them superpowers to treat like garbage everyone else. Being a teenager is not an excuse. Competitors, officials, organizers and FAI must treat everyone with education and respect. Fair play works in every sport.
- 2- READ THE SPORTING CODE (at least). A huge % of them protest without even knowing that there is a CS. They assume that an Open is like any of the friendly meetings they usually fly at, and everything they protest or discuss is right. We need to make a special effort on educating them and making them understand that there are rules that are equal for everyone. And that the rules can be changed, but following procedures, not on-the-fly
- 3- ASK RELIABLE SOURCES. If something is not happening as expected, ask officials, FAI Jury or even FAI. Conversations with other pilots usually make the problem bigger
- 4- COMPLAINTS. If a competitor or manager wants to complain, it is their right. But usually they say that to add some pressure to officials and organizers. Or to justify in front of the other pilots that it is “money fee” topic instead of an sportive decision. Protest are seen currently as a punishment, not as a standard and crystal-clear procedure.

### **Recommendations for FAI**

- 1- TIMEKEEPING. The SC states an “electronic timekeeping” method that is not known, accepted or available at current time keeping solutions. It must be changed to adapt to real world, not to wait that the real world adapts to FAI

Who: FPV Racing S/C

When: 2019 Rules

- 2- F3U RULES. Some rules are not easy to interpret (gate dimensions, second chance flights, ...). Maybe a rewording or a FAQ will help

Who: FPV Racing S/C

When: 2019 Rules

3- ORGANISATION OF THE EVENT. As in other worldwide sports, there should be a FAI team to supervise and help every OWC organizer on-site. Without that team, it is very difficult to create a common standard. Competitors, managers, sponsors, media... do not know what they are going to find until they arrive to the venue. If we want to create a world cup, all events must follow at least some common rules known by everyone. It works like that in any sport

Who: S/C Chairman - CIAM Bureau - FAI Head Office

When: 2018 World Drone Racing Championships - 2019 Master World Cup events and World Championship Grand Final

4- OFFICIALS. International competitions should imply a percentage of international experienced officials, well known by pilots and managers. It can be done by building a FAI team (they can be even the same ones that help the organizers) or by creating a list of "FAI Approved" Officials.

Who: S/C Chairman in connection with CIAM President and FAI Head Office

When: 2018 World Drone Racing Championships - 2019 Master World Cup events and World Championship Grand Final

5- FAI JURY. Must be a little group of known and respected individuals, common to every OWC. Competitors do not understand the duty of the FAI Jury and they only see them act if something is "wrong". In that situation, comments like "they are organizers so it's not worth to complain", "this jury does not know what is a quad, why is he here?", "who is this person?" should end forever

Who: S/C Chairman in connection with CIAM President and FAI Head Office

When: 2018 World Drone Racing Championships - 2019 Masters World Cup events and World Championship Grand Final

**- Annex 2 -**

**FAI Drone Permission data for 2018**

	World Cup competitors number	FAI Drone Permission delivered	FAI Drone Permission used	World Cup competitors percentage
AUS	1	2		
AUT	6	1		
BRU	2	4	2	100%
BUL	8	4		
CRO		1		
CZE	4	8	4	100%
DEN	2	4	2	100%
ESP	62	5	3	5%
EST	3	3	3	100%
FIN	31	32	30	97%
FRA	57	13	9	16%
GBR	3	2	1	33%
GER	59	6	2	3%
HKG	13	34	13	100%
HUN	13	1		
INA	31	37	30	97%
IRL		2		
ITA	26	16	12	46%
JPN	7	6	3	43%
KOR	74	25	21	28%
KUW		2		
LAT	12	5	4	33%
LTU	7	2		
LUX	2	1	1	50%
MAR	1	1	1	100%
MAS	1	5	1	100%
MKD	5	3	1	20%
NOR	7	1		
POL	37	7	3	8%
POR	19	19	11	58%
SRB	5	7	5	100%
SUI	37	55	34	92%
SVK	12	12	10	83%
SWE	2	2		
THA	6	2	2	33%
TPE	2	3	2	100%
UKR	24	15	14	58%
USA		7		
	<b>581</b>	<b>355</b>	<b>224</b>	<b>42%</b>
	<b>34 countries</b>	<b>38 countries</b>	<b>27 countries</b>	