1. EVENT

The Belarus Drone Racing FAI World Cup 2019 will take place from 10th to 11th of July 2019.

The aims of the event are promotion and popularization of aeromodelling (drone racing) sports, development of international aeronautical relationships, exchange of experience, determination of the FAI World Cup winners in Individual category.

Official languages will be Russian and English.

2. ORGANISERS

The event will be organized by the Belarusian Federation of Air Sports (FAI active member) with the assistance of the DR1.by community and under the auspices of the Aeromodelling Commission, Federation Aeronautique Internationale (FAI CIAM).

3. RULES AND REGULATIONS

The Belarus Drone Racing FAI World Cup 2019 will be held according to the current FAI rules published on the FAI CIAM website https://www.fai.org/page/ciam-code:

- FAI Sporting Code Section 4 - CIAM General Rules;
- FAI Sporting Code Section 4 - F9 Drone Sport (effective 1st May 2019).

All additions to the FAI rules established by the event organizer are published in this Bulletin.

4. VENUE

The event will take place at Drone Track Borovaya. It is located near the city of Minsk the capital of Belarus (link to the Google maps: https://goo.gl/maps/0ZtogiSuP2Q9JtMz5).

Drone Track Borovaya is an area allocated for FPV racing (F9U classification by FAI). The track is organized and constructed by the Belarussian Federation of Air Sports and DR1.by community.
Main features of the track:

- Security zone for pilots is established
- Access to electricity is available (220V)
- Equipped with Lap Timing hardware and software
- Located close to city highways
- Supermarket, Gas station, Cafes available close by
- Accessible 24×7 free of charge

Venue map:

Free parking is available at the venue and does not require prior registration. A number of fast food cafes are available at the A100 gas station located 200 meters from the drone track.

During the event, cookies, cold and hot drinks will be proposed by the organizers. Electricity (220V) and WIFI will always be available for pilots.

Be aware that access to the pilot’s zone will be restricted to registered pilots and it’s registered supporters and technicians.
5. PARTICIPANTS

The number of participants is limited to 50 pilots. All registrations after this amount will be placed to the waiting list in case of cancellation of participation by one of the competitors.

Each competitor must be in possession of a valid FAI Sporting License (each competitor must be listed in the FAI Sporting License Database) issued by their own National Airsport Control (NAC). Drone permission will be accepted for the Non-Belarus pilots.

6. DRONES TECHNICAL INFORMATION

Every drone (which will be used in the event) must be clearly marked (sticker, engraving, etc.) with participants National ID number and FAI License Number/Drone Permission. Text size for these markings should be at least 6mm high.

For the event, each pilot can register and use up to 3 drones. Use of unregistered drones is not allowed! Use of other pilot’s drones (even registered ones) is not allowed! If you crash all of your allocated drones beyond repair your event run is over.

Drones must meet these general requirements:

- Motor-to-motor (MTM) diagonal distance must not exceed 330mm;
- Battery voltage must not exceed 25.5v (6s);
- All-up-weight (AUW) must not exceed 1000g;
- Propeller diameter must not exceed 6 inches;
- Metal propellers or any propeller protection devices are not allowed;
- Each motor can be tilted up to 15° maximum angle in each direction;
- Only electric motors.

Radio Control System

Participants are allowed to use 2.4Ghz and 868Mhz (Crossfire etc.) radio control systems. Both systems must abide by Belarusian regulations:

- 2.4Ghz — transmission power during event must not exceed 100mw and must employ Listen Before Talk (LBT). This means that all FrSky systems must use the EU LBT firmware (transmitter and receiver);
- 868Mhz — transmission power during event must not exceed 25mw and telemetry must be switched off as well as dynamic power.

Video transmission

Participants are allowed to use only 5.8Ghz TBS Unify (all variants), ImmersionRC Tramp and FuriousFPV Stealth video transmitters in combination with circular polarized antenna. Video transmission must abide by Belarusian regulations - transmission power during the event must not exceed 25mw.
Video transmitters not mentioned above cannot be used during the event. Linear/dipole antennas are not allowed!

NOTE: We reserve the right to add or remove (removal can’t be done less than a month before event) video transmitters from the existing list by updating information on the event web-site.

LEDs

Each drone must be equipped with at least 40 RGB LED functioning elements (for example — 8 RGB LED strips containing 5 LED elements each on both side of each arm) which are located under drone arms/body or in the back. These RGB LED elements must be switchable either by hand or electronically to adjust to any of these colors — RED/YELLOW/GREEN/BLUE/CYAN/PURPLE. During flight each color will represent a video frequency.

Drone cannot be used if at the start of flight RGB LED elements are not in working order or pilot is not able to set up the correct color.

Failsafe

Must be set to drop or no pulses. Any last RC input holding or other methods that try to keep the drone in the air after it has lost RC signal are not allowed.

Automatic modes

Horizon, angle, level and other stabilization (including GPS assist etc.) modes are not allowed. Anti-crash, turtle or similar modes which are meant to either stop the «spin of death» after hitting an obstacle or flip drone after a crash are allowed but use of these can be limited by the assigned judge if drone is deemed not fit for flight.

7. EVENT ORGANISATION

Timekeeping

Timekeeping will be done with an electronic timing system based on VTX signal tracking. No additional hardware is needed to be installed by participants.

Practice flights

Practice flights will be organized before qualification. Quantity of practice flights will be announced on general briefing. Practice will be run with 6 pilots per race.

Qualification

Qualification method will be the average of the 3 best times to perform a lap. Qualification will be run with 6 pilots per race.
**Elimination stage**

The elimination stage will be organized according to scenario B - 32 competitors selected from qualification stage. The double elimination sequence will be applied.

**Final stage**

Final stage is organized in a standard way. The two best placed in the last elimination round (one race) and the two best placed in the last round of the double elimination sequence (one race) are selected for the final to determine their final ranking from 1st to 4th place.

**8. INSURANCE**

Personal insurance for Non-Belarus pilots is necessary. Third party insurance policy is recommended. Organizers are not responsible for any damage done during race to third party property or other persons.

**9. AWARDS / TROPHIES**

The pilots placed 1, 2 and 3 will be awarded gold, silver and bronze BFAS medals and BFAS diplomas. Winner of the event will be awarded BFAS cup.

**10. PROTESTS**

All protests must be presented in writing to the Event Director at the competition site and must be accompanied by a deposit of 50 EURO. The deposit will only be returned if the protest is upheld.

**11. EVENT REGISTRATION, ENTRY FEES**

Online registration is open now (from 01 July 2019): [http://dr1.by/fai-world-cup/](http://dr1.by/fai-world-cup/)

Every participant (competitors and supporters) have to fill in the Entry form to proceed with the registration. Be aware that access to the pilot’s zone will be restricted to registered pilots and their registered supporters and technicians.

The closing date for official registration is **August 5th 2019**. Late entries may be accepted at the discretion of the Organizer.

**Entry fees:**

<table>
<thead>
<tr>
<th></th>
<th>Seniors</th>
<th>Juniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Belarus pilots</td>
<td>30 Euro per person</td>
<td>15 Euro per person</td>
</tr>
<tr>
<td>Belarusian pilots</td>
<td>75 BYN per person</td>
<td>40 BYN per person</td>
</tr>
<tr>
<td>Supporters and technicians</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>
Payments should be made in the following way:
Name of Beneficiary: PA BFAS
Beneficiary address: Belarus, 223053, Minsk region, Borovaya village, Building 7
Taxpayer number: 600561932
IBAN: BY09OLMP301500000653000978
Beneficiary bank: JSC Belgazprombank
60/2 Pritytsky str., Minsk, Belarus
S.W.I.F.T.: OLMPBY2X
Correspondent bank: Raiffeisen Bank International AG, Vienna
S.W.I.F.T.: RZBAATWW
IBAN: 000-55.058.887
Purpose of payment: Entry fee for FAI WC Droneracing 2019
(please state your country, invoice number/name of persons).
Currency: Euro
Full payments should be made by wire transfer not later than August 6th 2019.
Please ask the organizer for an invoice before making a payment by info@bfas.by.

12. ACCOMODATION

Accommodation is not included in Entry fees. The following accommodation option located close to the venue is offered by the organizer at discounted rates:

IT Time Hotel (https://www.booking.com/hotel/by/ittime.en-gb.html)

- Single room 27 €/night inc. breakfast
- Twin room 49 €/night inc. breakfast (price for the room, two visitors)

Be sure to book a room at least 10 days before the event to get the discounted room rate.

In order to book a room or request additional information, please contact info@bfas.by, tel.: +375 17 2510056.

13. VISA / CUSTOMS AND PASSPORT CHECK-IN

For visa information please link to http://mfa.gov.by/en/visa/

The Organizer will provide a visa support letter. This requires filling in the form (see Annex 1) and sending it to the Organizer via email to info@bfas.by and copy to secretary@bfas.by. A visa support letter will be issued for all delegation members.

Visa-free entry up to 5 days via the checkpoint “Minsk National Airport” is available: http://mfa.gov.by/en/visa/visafreetravel/e0ced19bb1f9bf2c.html
14. EVENT SCHEDULE

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.00 – 12.00</td>
<td>Pilot registration and drone technical inspection</td>
</tr>
<tr>
<td>12.00 – 12.10</td>
<td>Arrival of crews, registration. Helicopter checks</td>
</tr>
<tr>
<td>12.10 – 12.40</td>
<td>Briefing</td>
</tr>
<tr>
<td>12.40 – 15.00</td>
<td>Practice</td>
</tr>
<tr>
<td>15.00 – 16.00</td>
<td>Brake (Lunch)</td>
</tr>
<tr>
<td>16.00 – 19.00</td>
<td>Qualification Part 1</td>
</tr>
<tr>
<td>19.30</td>
<td>Barbecue After Party</td>
</tr>
<tr>
<td>09.00 – 09.30</td>
<td>Briefing</td>
</tr>
<tr>
<td>09.30 – 12.00</td>
<td>Qualification Part 2</td>
</tr>
<tr>
<td>12.00 – 13.00</td>
<td>Brake (Lunch)</td>
</tr>
<tr>
<td>13.00 – 17.30</td>
<td>Elimination stage and finals</td>
</tr>
<tr>
<td>18.00 – 18.30</td>
<td>Award ceremony</td>
</tr>
<tr>
<td>19.00</td>
<td>Departure</td>
</tr>
</tbody>
</table>

Changes may occur. Detailed schedule will follow on the registration.

15. ORGANIZER ANTI-DOPING POLICY

The Organizer is resolved to ensure that competitors neither seek nor gain any advantage by the use of banned or inappropriate substances, and that all pilots thus have the opportunity to compete in a fair and open contest. All competitors shall accept that they may be required to submit to and cooperate with doping control measures (WADA).

Competitors should familiarize themselves with these Rules and Procedures, which are available on the FAI web site. For further information on anti-doping, follow these links:

- TUE: [https://www.fai.org/page/therapeutic-use-exemptions](https://www.fai.org/page/therapeutic-use-exemptions)
- FAQ: [https://www.fai.org/page/competitor](https://www.fai.org/page/competitor)

16. CHAMPIONSHIPS BODIES

**Event Director:** Yury Mikhalap  
Phone: +375 29 1799001  
yurymhlp@gmail.com

**Chief Judge:** Anton Hancharenka (Belarus)

**Chief Scorer:** Siarhei Tryhubovich (Belarus)

**Jury FAI:** Alexander Bahvalov – President (RUSSIA)  
One of Competitor  
One of Competitor
17. CONTACTS

Belarusian Federation of Air Sports (office): Tel. +375 17 2510056
info@bfas.by

We are looking forward to welcoming you at the
Drone Racing FAI World Cup in Minsk, 2019!

Yury Mikhalap
Event Director

Anton Bystrov
BFAS Secretary General
APPLICATION FOR VISA INVITATION

1. COUNTRY: ___________________________________________________________

2. NAME and SURNAME of the Head of delegation: __________________________

3. State of permanent residence: __________________________________________

4. Place of work (company):
   Position: ____________________________________________________________
   The main activity of the company / organization: _________________________

5. Passport details of the delegation members (including Head of delegation):

<table>
<thead>
<tr>
<th>№</th>
<th>NAME and SURNAME</th>
<th>Date of birth</th>
<th>Passport number</th>
<th>Passport validity (from/to)</th>
<th>Citizenship</th>
<th>Status (athlete/judge/other)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. The requested visa validity (from/to): 09.08.2019 – 12.08.2019

Please send the form to the Organizing Committee in MS Word format by email: info@bfas.by
APPLICATION FOR ACCOMMODATION  
(IT Time Hotel)

1. COUNTRY: __________________________________________

2. Room sharing plan:

<table>
<thead>
<tr>
<th>Arrival date</th>
<th>Departure date</th>
<th>Type of the room*</th>
<th>NAME and Surname first guest</th>
<th>NAME and Surname second guest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*types of the room:
SGL – SINGLE (one regular bed, one guest, breakfast)
TWN – TWIN (two regular beds, 2 guests, breakfast)
DBL – DOUBLE (one big bed, 2 guests, breakfast)
For the single room fill only name of the first guest in the table.

IT Time Hotel: [https://www.booking.com/hotel/by/ittime.en‐gb.html](https://www.booking.com/hotel/by/ittime.en‐gb.html)
The following accommodation options are offered by the organizer at discounted rates:
- Single room 27 €/night inc. breakfast
- Twin room 49 €/night inc. breakfast (price for the room, two visitors)
Every guest has to pay for accommodation at the reception in national currency (BYN).

Please send the form to the Organizing Committee in MS Word format by email:
 info@bfas.by and secretary@bfas.by