



## 1. Quadcopter technical requirements

- 1.1 Distance between the diagonally opposed axes of the engines should not exceed 330 mm
- 1.2 The size of propellers should not exceed 7 inches (17.78 cm) in case of 2-blade and 5 inches (12.7 cm) in case of 3-blade. Usage of full-metal propellers is forbidden.
- 1.3 Maximum allowed weight of a full-equipped quadcopter – 1 kg.
- 1.4 It is permitted to use re-chargeable batteries, which have up to 4 cells with maximal voltage of 17.4 V; 4s LiPo; LiHV. It is strongly advised to have at least 1 extra battery.
- 1.5 Quadcopter should have an identification LED. Place of attachment, color and brightness are not regulated.
- 1.6 Video-feed sent from the quadcopter Front-Person View camera, must be done on one of the RaceBand/Boscam/FatShark channels. Maximal allowable transmission power is 25 mW. Ability to quickly change the channel should be present.
- 1.7 It is forbidden to use a pre-programmed maneuvering / way pointing device (GPS Guidance). Any automatic positioning and/or path rectification system for longitude, latitude or height is forbidden e.g. sonar.

## **2. Requirements for participants**

- 2.1 Participant should have at least an average quadcopter control skill level.
- 2.2 Participant must confirm and pay for their participation in the competition within the period specified in the invoice.
- 2.3 Participant should be able to react in case of non-standard situations without endangering other participants.
- 2.4 Participant of the drone racing tournament can be every person who is at least 14 years old.
- 2.5 It is forbidden to participate in the race while under the effects of alcohol or drug intoxication.

### **3. Participant registration procedure**

- 3.1 Every participant should understand and accept the rules and guidelines presented in this document.
- 3.2 To participate in the competition it is needed to fill the registration form on the web-site [www.eudrl.com](http://www.eudrl.com) and pay a fee of 10€. Payment details will be sent by e-mail.
- 3.3 If we do not receive a payment within 5 days after registration, you will be contacted by email or by phone for a confirmation.
- 3.4 If you waive to participate in the competition, please send us an email at [info@eudrl.com](mailto:info@eudrl.com)

## 4. Competition format

### 4.1 General terms

- Competition has 2 stages: qualification and playoff.
- Minimum number of participants – 16 people.
- Each heat will last 2 minutes, during which competitors will race to complete as many laps as they can in that time.
- Every lap completed equates to 1 point, which will be added to the stage score.
- Participant who finishes first gets an additional point for heat.
- If a participant crashes his or her quadcopter before the end of the race and cannot recover, all completed laps will still be added to the total score.
- When the 2-minute timer is up the participant may complete the lap they are currently on and this will count towards their score for that heat. A maximum of 30 seconds is allowed to complete this final lap.
- Qualifications, semi-finals and finals start with reset scores for the previous stage.
- At the end of every stage, all participants will be sorted by the number of laps they have completed. In an event of a tie, the participants with the fastest lap time (for current stage) will be determined first.

### 4.2 Qualification

- Participants are divided into groups (A, B, C, D, etc.), 4 members each.
- Qualification round consists of 4 heats for each group.
- Participants ranked from 1 to 8 according to their score reach the playoffs

### 4.3 Playoffs

#### 4.3.1 Semi-finals

- Participants are divided into 2 or more groups of 4 people.
- Group A consists of 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>, 7<sup>th</sup> participants;  
Group B consists of 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup>, 8<sup>th</sup> according to their score.
- Each group runs 2 heats.
- Participants ranked from 1 to 4 according to their score reach the finals.

#### 4.3.2 Finals

- The finalists run 2 final heats.

Qualifiers					
Group A	Heat I	Heat II	Heat III	Heat IV	Total
Participant I					
Participant II					
Participant III					
Participant IV					
Group B					
Participant V					
Participant VI					
Participant VII					
Participant VIII					
Group C					
Participant IX					
Participant X					
Participant XI					
Participant XII					
Group D					
Participant XIII					
Participant XIV					
Participant XV					
Participant XVI					

Semi-finals			
Group A	Heat I	Heat II	Total
Participant I			
Participant III			
Participant V			
Participant VII			
Group B			
Participant VIII			
Participant VI			
Participant IV			
Participant II			

Finals				
Final group	Heat I	Heat II	Total	Final standings
Participant I				
Participant II				
Participant III				
Participant IV				

## 5. Violations and penalties

- 5.1 Participants must follow a predetermined course and fly through each gate and around each flag.
- 5.2 Participants who miss the gate or flag should come back and fly through the missed gate or flag giving priority to other participants.
- 5.3 Participants, who get an advantage due to cutting corners, must immediately return to the last gate or flag and fly this segment again.
  - In case of any doubts or claims related to compliance with the rules by one of the participants, one should resort to view the recording from quadcopter's camera. Each participant has the right to request video footage from a drone only 1 time per stage.
- 5.4 Repeated violations will result in a zero score for the stage and possible disqualification.
- 5.5 The participant, who was unable to come to the place of the flight control, as well as whose drone is not ready to take off within 90 seconds after the warning signal will be disqualified from that race.
- 5.6 The participant, who flies out of the designated area of the race for the first time, will be given a warning. The second time he will be disqualified.
- 5.7 If a collision between drones occurred in the first 15 meters of the track, the race will be restarted. In the case where the drone gets into an accident not related to the other participants, the race does not stop.
- 5.8 It is forbidden for the quadcopter to fly higher than 3.5 meters from the floor level in places not marked as such. A warning will be issued for the 1<sup>st</sup> violation. In case of a repeated violation – disqualification from the tournament will follow.

## 6. Other rules

- 6.1 The racetrack is closed until the authorized member of the racing control confirms that the race track is safe.
- 6.2 Charging the battery should take place in specially designated area and comply with all safety regulations.
- 6.3 Participants should be able to change the VTX frequency channels quickly and easily if needed.
- 6.4 Participants must land their quadcopter immediately after the heat as fast as and as safely as possible.
- 6.5 Participants should not engage any video transmitters before the immediate beginning of the race. Participants who were seen for violation of this rule, for the first time will be warned, the second - disqualified.
- 6.6 At the end of the race, participants must take their quadcopter back only when they are told that it is safe and shut it down as quickly as possible.
- 6.7 Please keep Race Control clear so that the Race Director can see and hear everything that is happening on the track.

*Requirements for pilots participating competitions regulated by board members EUDRL OÜ. In the case of changes / additions of conditions for participation in the competitions, each pilot participant will be notified by e-mail.*