

FIRST INTERNATIONAL ROBOTICS COMPETITION CALI - COLOMBIA



UNIVERSIDAD DISTRITAL
FRANCISCO JOSÉ DE CALDAS



OCTOBER
25 - 26
2017

CATEGORIES:

1. Speed on ground track
(Open Category)
2. Minisumo
(Category for Universities and High School Institutions)
3. Speed on Air Track
(Open Category*)

*Fully open:
National and International schools, Universities and Amateurs can participate.

FREE REGISTRATION

VENUE: CALLE 5 No. 62-00
CIUADELA UNIVERSITARIA PAMPALINDA
COLISEO POLIDEPORTIVO - BLOCK 5
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Competition category: Speed on air track (drone competition)

Venue: This competition will take place on October 26th- 2017 at *Calle 5 No. 62-00, Universidad Santiago de Cali - ciudadela universitaria pampalinda, soccer field*. Time: 3:00 pm.

Registration deadline: October 13th – 2017, before 11:59 pm GMT (Bogota – Lima – Quito)

Each team must register online before the registration deadline using the following link
<https://goo.gl/forms/JV4mMeaPB9RQ7afC3>

Each team must complete the registration process five hours before the competition (October 26th- 2017 at 10:00 am) at *coliseo deportivo (block 5)*.

-All pilots must attend a talk on general security which will take place on October 25th – 2017 at 2:00 pm. Venue: *Soccer field, Universidad Santiago de Cali - ciudadela universitaria pampalinda*.

Competition accreditation to the teams will be handed at the end of the talk

Teams can use the competition field to train their drones on the competition day (October 26th) from 9:00 am to 12:00m

Competition overview (RACE TRACK)

This a time trial competition. The team that completes the course in the shortest time is the winner.

The race track will take place within the soccer field limits. Hence, the flight trajectory cannot surpass the soccer field limits and a maximum height of 10 meters.

The spectators shall remain 10 meters beyond a security perimeter and 30 meters where there is not security perimeter established.

Doors or rings: They will have 2 meters diameter and 1 meter height

Track length: between 500 and 800 meters, with a time limit between 30 and 40 seconds

Number of laps: 2 laps. The judge is able to stop the race at any time for security reasons.

Competition rules

- No video forecasting is allowed during competition (except the team competing).
- All pilots, without any exception, must comply with rules and safety regulations to guarantee a safe flight.
- All pilots, without any exception, must comply with the especial events notifications, restrictions and regulations.
- All pilots, without any exception, must accept the conditions established by the organizer of the race in regard to the location and the race.
- Drone models for the competition FPV (First person view) can only use battery operated devices.
- Maximum weight: 1.5 Kg
- Maximum diagonal length: 450 mm
- The use of metallic blades is forbidden
- All remote controls must have a switch to initiate the “turn on” sequence
- All pilots must show effective and defined fail-safe procedures approved by competition judges
- All pilots must be able to operate the drone following safety rules and pass the mechanical, electronic, and video tests.
- All batteries must be handled and stored following safety rules.
- All pilots must follow the rules established for the competition, and it is not allowed to operate the drones outside flight areas designated by competition judges.
- Equipment and drones must remain in the designated area, and risky mechanical operations (such as welding metallic pieces) are forbidden.
- The use of blades outside the competition field is forbidden.
- All drones must have an alarm system controlled by low level voltage.
- If the pilot losses control of the drone, communication or video forecasting, the drone must be landed in a security area.

Schedule

- For each team, the individual time trial race starts with regressive acoustic signal: 3, 2, 1
- Preliminaries: a fast lap without timing followed by time trial lap.
- Positions are defined from lowest to highest time
- Semi-finals: The first 8 teams with the least time in the preliminaries can race in the semifinals.
- Finals: The 4 best teams with the least time in the semifinals can race in the finals

- The format for the finals can be adapted or modified on the basis of the number of pilots.
- Pilots must complete a lap going through the doors, rings and flags following the track established by the organizers.
- If the pilot ignores a flag or a door will be penalized
- If any accident happens during competition, the pilot can continue the race if he/she is able to put back the drone on air.

Penalties

- 10 seconds if the pilot concludes a lap incorrectly
- Disqualification if the pilot ignores 4 doors
- Causes for not being able to finish:
 - The drone abandons the track
 - The drone suffers a crash and it is not possible to continue

Disqualifications

- Random and uncontrolled movements (judges will decide on the matter during competition)
- Surpassing the security lane
- Ignoring judges' advice during competition