

TECHNONHNZH

Taking technology to society



Drone Racing

"There is nothing like the exhilaration of seeing what your Drone sees as it streaks through the air"

VJTI Technovanza present the mega event 'Drone Racing' in association with IDRL - Indian Drone Racing League for the first time at VJTI.

It may start as just a game, but it doesn't end as one!

CERTIFICATE POLICY:

- ➤ Certificate of Appreciation/Participation will be awarded to all the pilots.
- Certificate of Excellence will be given to top three pilots.
- ➤ Disqualified teams will not be considered for any certificates.

CASH PRIZE DISTRIBUTION:

- ➤ Cash Prize worth INR 70,000 for top three pilots.
- ➤ Travel Reimbursement worth INR 30,000 for the next three pilots in the rank table.

EVENT FLOW:

- ➤ 26th December 2017:
 - o Filtration process of beginner pilots will be held on the basis of the time taken to complete the course.
 - o Arena will be provided on the spot.
 - The qualified pilots will proceed to the practice day and race day events to compete with professional IDRL pilots.
- > 27th December 2017:
 - The day is reserved for practice for the qualified pilots and IDRL pilots.
- ➤ 28th December 2017:
 - o Race Day
 - o Details of the race day are given below.



Important terms:

DNS: Did Not Start
DNF: Did Not Finish
DQ: Disqualified
OOB: Outof Bounds

RULES AND SPECIFICATIONS

General Rules:

- ➤ Pilots must show Fail Safe and Arming/Disarm Working at Registration Desk.
- > Pilots should carry a minimum of 2 batteries.
- ➤ Pilots should carry their own battery chargers, charging points would be provided.
- ➤ Pilots should bring their own soldering and other materials.
- All frames must pass a safety and airworthiness inspection. Once the airframe has been checked and approved, it must not be modified or changed, or it will need to be re-inspected.

TECHNONANZA

DRONE SPECIFICATIONS:

- > Upto 6 inch props.
- > 6" max frame size
- \triangleright 2, 3 or 4 blade max.
- ➤ FPV goggles / FPV screen compulsory. No Line of Sight Flying allowed.
- ➤ Any material for props but not Carbon Fiber.
- ➤ No Weight Limit
- \triangleright Vtx Rating = 25mW/200mW 5.8 Ghz for FPV with at least 32 channels
- These channels need to be supported: 5645, 5740, 5800, 5860, 5945
- ➤ 4S Max Battery Pack

VENUE RULES:

- ➤ Pilots must adhere to all rules within the competition venue, and will not fly in any other part of the venue unless it is a designated flight zone.
- ➤ Pilots must arrive at the venue with their complete setup 1 hour before the official race time and must be in complete READY-TO-GO state 15 minutes before race time.
- ➤ Pilots will NOT be given any practice sessions during the 15 minutes before race starts.
- ➤ Pilots who are not in READY-TO-GO state 15 minutes prior to race start will be disqualified from the race.
- ➤ Pilots MUST NOT assume any change of race time until it is officially announced by the organizers.
- ➤ Pilots must contain all equipment and airframes within the pilot pit area and must not solder, weld or cause any spark within the pit area. There will be established workbench areas for soldering, repairs and modifications.
- ➤ A charging station would be provided with power points.
- ➤ General charging of electronic devices including radios or any device with a self-contained power supply is permitted.
- ➤ All batteries must be stored in a LiPo-safe bag or in an approved, fire resistant container.

TECHNONANZA

COURSE RULES:

- ➤ Pilots must stay within all prescribed flight paths.
- ➤ Pilots must keep all aircraft in the disarmed state until they have been given the "ARM" signal. This will happen only when the aircraft has been placed on the starting deck.
- All pilots will be allotted their respective frequencies and split into heats well before race day. Frequencies will be allotted from 5645, 5740, 5800, 5860, 5945 with 5860 used as backup frequency.
- ➤ Pilots will NOT be given any Retries.
- ➤ Pilots will be given best of 3 rounds in which to record their best lap time in the Qualifier Rounds. 1 round is mandatory while 2 rounds are optional if the pilot is happy with his/her lap time in any of the 3 rounds.
- ➤ Pilots must adhere to the prescribed launch sequence. No movement before the starting signal. False starts will incur a penalty.
- ➤ Pilots must maintain control of their aircraft at all times and only fly within their skill level. Any pilot who exhibits unsafe flying procedures may be disqualified at any time.
- ➤ Once pilots have successfully completed all laps, they must return to the start/finish pad, land and DISARM.
- ➤ Pilots that have crashed at any point during the heat and are unable to resume racing must DISARM their aircraft and wait until the heat is over.
- Race tracks would have gates, pilots must successfully fly through all gates, around the flags, and other obstacles on the course. If a pilot misses an obstacle or gates, they must safely turn around and attempt the obstacle again. If they don't turn around and continue to race, that entire heat would not be counted.
- ➤ If a pilot due to any reason, knowingly/unknowingly/accidentally goes out of bounds, then pilots' first priority should be to get the drone back in the bounds and continue to race. If such incident occurs multiple times then organizers have full right to disqualify the pilot from heat or the whole event.

TECHNONANZA

- ➤ In the event of a crash or the inability to resume flight safely, the pilot must immediately DISARM their aircraft and give the Thumbs Down signal. For that heat, pilot is deemed as DNF.
- ➤ Pilots may have multiple airframes and each airframe must pass all safety and airworthiness checks before flying.

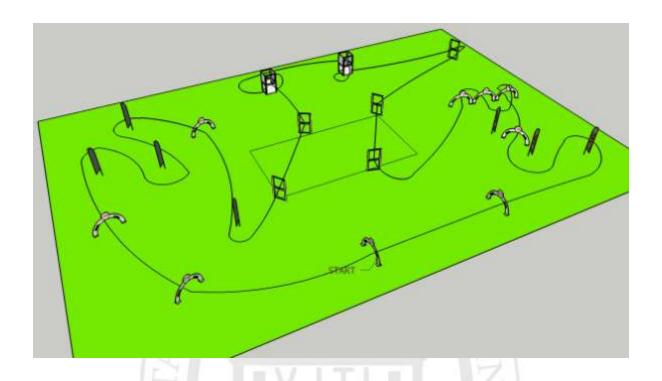
JUDGING RULES:

- ➤ All races will be governed by an appointed team of judges/organizers.
- ➤ All races will follow the general rules and regulations of the competition.
- ➤ Each race will be monitored by judges, cameras, timing/lap systems and volunteers to maintain fair and accurate competition.
- ➤ In the event of a mid-air collision, pilots can resume the race if they are able to take off again without intervention, otherwise their heat is considered a DNF.
- Any practice or behaviour deemed unsafe, (i.e. flying above the max ceiling height) will result in an immediate disqualification.

ARENA:







OBSTACLES DIMENSIONS:

> 8 Shaped structure:

Width: 7 feetHeight: 14 feet

o Top and Bottom Square Area Gap: 6 feet * 6 feet

> Double stack cube:

Length: 7 feetBreadth: 7 feetHeight: 14 feet

o Top and Bottom Square Area Gap: 6 feet * 6 feet



FOR ANY QUERIES CONTACT US:

Prafull Parmar
Chief Operating Officer
+91- 9769244457
prafull.parmar@technovanza.org

ShubhamWaghadhare Chief Marketing Officer +91- 9920780107 shubham.waghadhare@technovanza.org

CONTRIBUTORS AND CREDITS:

- > IDRL Pilots
- Satya Gupta (Quadkopters.com)
- ➤ Karan Kamdar IDRL (droneracingindia.com)