Drone Challenge

Introduction

"Mastering others is strength. Mastering oneself is true power." - Lao Tzu

Welcome to the Drone Challenge, a competition designed to test your skills in controlling drones. This challenge is not just about flying a drone, but about mastering the art of control. It's about precision, agility, and strategy. It's about navigating through obstacles, performing tasks, and completing missions. So, gear up, take control, and let your drone soar to new heights. May the best controller win!

Team Specification and Eligibility

- Each team can have a maximum of 4 members.
- Each team member must be a student of an authorized college/institute.
- Each team must have a unique name and a team leader who will be the point of contact for the organizers.

Construction of Drone

- Teams can use either self-made or off-the-shelf drones for the challenge, as long as they meet the following specifications:
    o The drone must be electrically powered and have a maximum of four rotors.
    o The drone must fit inside a box of dimensions 30 cm x 30 cm x 15 cm (length x width x height).
- Teams are responsible for the safety and maintenance of their drones and must bring their own batteries, chargers, controllers, and other accessories.
- Teams are not allowed to use any kind of weapons, explosives, flames, or harmful substances on their drones.
- Teams are not allowed to use any kind of signal jamming or interfering devices on their drones or controllers.

Event Format

The challenge will consist of two rounds: Navigation (Qualifier Round) and Rescue (Final Round).

Navigation Round (Qualifier Round)

- The Navigation round will test the ability of the teams to fly their drones through a series of obstacles and checkpoints in the shortest time possible.

- The arena will have several obstacles and checkpoints along the way. The obstacles may include hoops, poles, nets, walls, etc. The checkpoints may be marked by flags, signs, lights, etc.
- The top teams from the Navigation round, based on their scores, will qualify for the Rescue round. The number of qualifying teams will be determined by the organizers and announced before the start of the challenge.

Rescue Round (Final Round)

- The Rescue round will test the ability of the teams to use their drones to locate and deliver payloads to designated areas.
- The arena will have a base area, where the teams will start and end the round, and several target areas, where the teams will have to deliver the payloads. The target areas may be marked by flags, signs, lights, etc. The arena may also have some obstacles and distractors along the way. The obstacles may include hoops, poles, nets, walls, etc. The distractors may include dummy targets, decoy payloads, etc.
- The teams will have to fly their drones from the base area to the target areas, carrying and dropping the payloads at the correct locations.
- Further details regarding scoring, penalties, etc will be intimated before the start of the event.

Rules and Regulations

- The organizers reserve the right to change any or all of the rules as they deem fit.
- The decision of the organizers and the referees shall be final and binding on all the teams.
- The teams must abide by the rules and instructions given by the organizers and the referees at all times.
- The teams must respect the safety and integrity of the arena, the equipment, and the other teams.
- The teams must not indulge in any kind of unfair or unethical practices, such as cheating, sabotaging, or interfering with other teams or their drones.
- The teams must report any technical issues or malfunctions to the organizers as soon as possible.
- The teams must be present at the venue at least 30 minutes before their scheduled slot and be ready with their drones and accessories.
- The teams must ensure that their drones and controllers are in good working condition and do not pose any risk of injury or damage to anyone or anything.
- The teams must cooperate with the organizers and the referees and follow their instructions and directions at all times.