



THE MINISTRY OF TRANSPORT,
COMMUNICATIONS AND HIGH TECHNOLOGIES
OF THE REPUBLIC OF AZERBAIJAN

AREA
Azerbaijan Robotics Engineering Academy

roboopark



I am a Pilot
--- Flying for Dreams ---

World Drone Olympiad

Drone Race Category

Game Description, Rules and Scoring

FLYING FOR DREAMS





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Introduction

Based on research Small hobbyist drone sales are likely to drastically increase from 1.9 million in 2016 to 4.3 million in 2020.

Things that Drones teach Kids :

✖ Aerodynamics

Drones require specific aerodynamics to fly. The way the propellers spin changes the way a drone turns or moves across a 3-dimensional space. Maneuvering a drone requires practice and teaches an understanding of aerodynamics.

✖ Cognitive Development and Critical Thinking

It doesn't matter whether you're flying a drone indoors or outdoors. Reacting to changes in flight patterns or environment allows your child to improve the cognitive reasoning skills. They will gain a better understanding of cause and effect. And they will be better equipped to make quick decisions under stress.

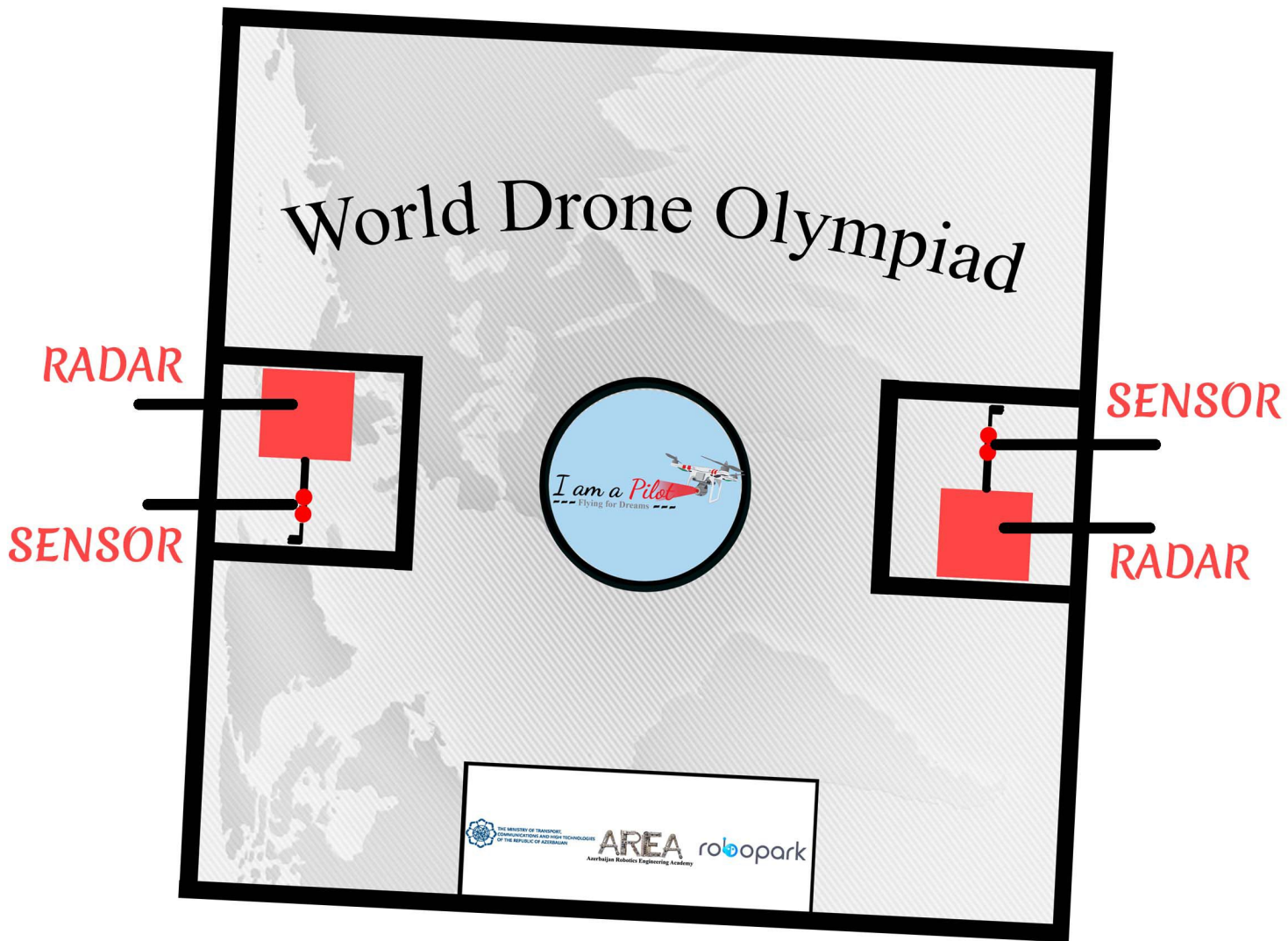
✖ Introduction To Coding and Electronics

Once your kid has gotten good at flying the drone with a remote control they can begin tackling the more advanced forms of drone flying. They can learn to code and program drones to fly specific patterns and become familiar with the internal electronics that make the device work.





Game Description



Challenge in the category of the Drone Race is to be quickest person which crossed Sensor and raised Flag up.

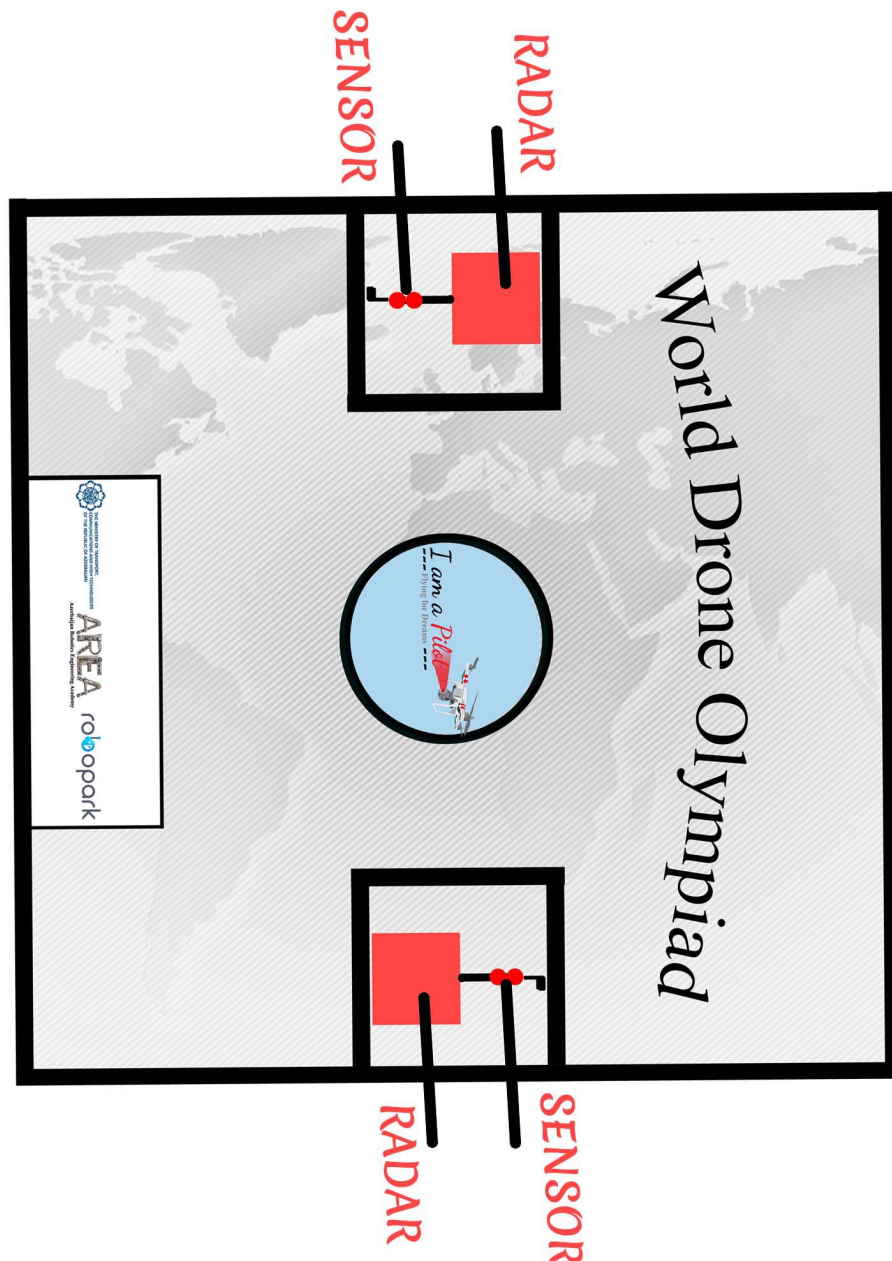
In the game arena, teams will launch their drones from platforms





Game Rules

1. Each pilot will have 1 chance to try to complete the mission.



2. Challenger is able to go any direction that they want.

2.1 If any crash happened, Pilots can continue to fly But they will have 10 seconds penalty that will be added to their final score.

2.2 After raising flag up, Pilot must fly back to his/her platform to stop the finish time.

2.3 Game has time limit 1 minute.





3. Winner

After game finishes Referee will check the flags if any of the flag is not raised up score of Pilot will be considered as zero.

3.1 If Both Pilots have raised the flag then, Referee will check the final time of both pilots, Pilot with lower finish time is the Winner.

3.2 If after 1 minute none of the pilots has finished the game and has not raised the flag up Referee will decide who is the winner- by measuring the distance of the Drones to their own platforms.

Closer Pilot is the Winner.

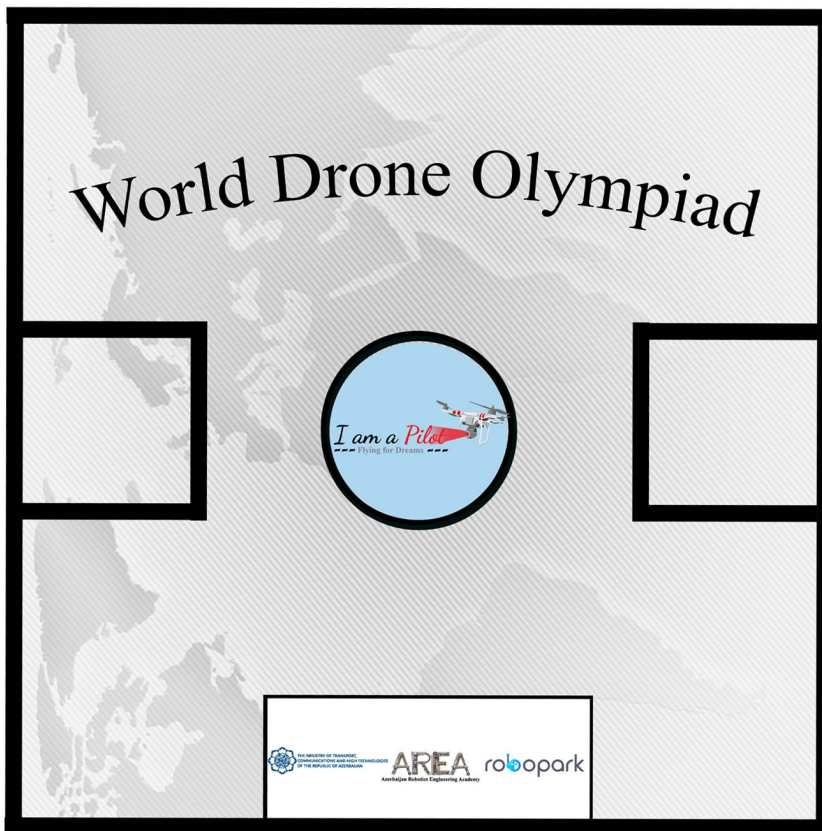




Field Specifications

- The internal dimensions of a game table are 4980 mm x 4980mm.
- The external dimensions of a game table are 5000 mm x 5000mm.
- The primary colour of the field surface is white.

Game Mat Specifications



- All black lines area 10 ± 1 mm
- The dimensions may vary within 5 ± 1 mm

