Put in all your brain cells to come up with an innovative water propelled rocket and using all your knowledge of projectile motion, how you going to launch it to land in a given area. This will test the **accuracy** of the rocket.
Next, attempt to defy the laws of gravity and try to remain airborne for maximum duration. This will test the **endurance** of the rocket.

Round 1-Bull's Eye

A specific range of the water rocket will be tested in this round. The rocket has to hit a provided target range marked on the ground as concentric rectangles.

Round 2 - Airborne

The water rocket can be launched from launch pad with any suitable angle as per your convenience and would be tested for maximum time of flight.

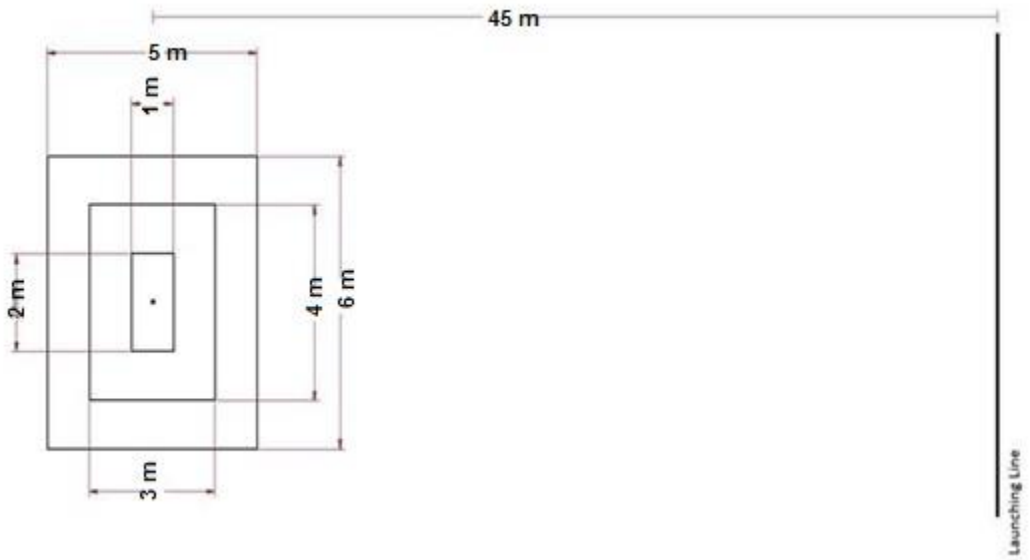
Water rockets with boosters are also allowed in this round. Multi-staging mechanism can also be implemented with or without boosters.
All such modifications are suggested in the model specifications section.

The arena for the first round consists of 3 concentric rectangles.

Region A – The innermost Rectangle of 2*1 m

Region B – The rectangle in the middle is of 4*3m

Region C – The outermost Rectangle of 6*5 m



Judging Criteria

Round 1

- The arena is divided into 3 regions.
  - Region A holds 100 points.
  - Region B holds 75 points.
  - Region C holds 50 points.
  - NO points will be awarded if the water rocket lands outside region C.
  - In case water rocket lands on a line between two regions, average of the points for both the regions will be taken as score.

    - In case water rocket lands on any of the side lines of the outermost rectangle, it will be considered a valid landing but only half the points for region C will be given.
- The position of the rocket will be the first point of impact of the rocket on the ground.
- This round is the qualification round.
- In event of any clash of final points a tiebreaker will be held between the concerned teams. The clashing teams will have to go through round 1 until the points differ.
- The team with greater score will be awarded superior rank.
- Top 15 teams will make their way to the second round.

Round 2

- A stopwatch will be used to measure the time of flight. The duration shall include the time when the rocket is launched and until it touches the ground in the first instance. The time for the motion of the rocket after touching the ground once is not included.
- Bonus 8 seconds will be added in the final time for water rocket with boosters or multi-staging. Multi-staging along with boosters will earn12 extra seconds.
- However, it must be clearly understood that these bonus time will be awarded only on successful functioning of the mechanisms. This will be judged by the organising authority here.
- Successful Functioning for boosters is their (all of them) detachment from the main stage and further propulsion of the main stage after that.
- Successful Functioning for multi-stage is the separation of the various stages at different intervals.
- The top three teams will be granted certificates and prize money.
- All decisions taken by the organizing team will be deemed as final.

Tie Breaker

- Each team will be given three chances out of which best two will be considered.

- Out if the three chances the sum of the two best ranges achieved by the same rocket will be considered.

    - It is to be noted that in the three trials the same water rocket is to be used.
    - In case the water rocket breaks before the trials are over then the sum of the trials up to then only will be considered.