

## **Rules & Regulations for National Olympics**

The JetToy Olympics offers teams an opportunity to engage in a friendly competition with students from other cities using SAE International's – *A World In Motion*® JetToy program.

### ***Materials & Vehicle Specifications:***

1. JetToy vehicles in the competition must be constructed on site, the day of the event using materials supplied only in an official JetToy kit. All materials will be made available for Student team use by the organizers.
2. Teams may build multiple JetToy vehicles to use in different events.
3. Teams can use only one balloon motor per vehicle as propulsion system.
4. Different nozzle sizes can be used for different events.
5. No propulsion system besides the JetToy balloons and nozzles may be used.
6. The test vehicle size should not be larger than 12" x 20" x 12" (WxLxH).
7. Teams are not allowed to use any external material for concept car preparation for presentation round. Any such external usage if found will lead to the elimination of team. However, teams will be allowed to use external material for demonstrating the concept in front of the Judges. E.g. Tub with water, Wooden ramps, Tables, Rope, etc.
8. Tampering of Nozzle, Axle will not be allowed for the event.
9. Any kind of foreign material impacting the propulsion system may be lead to disqualification.

### ***Race Lanes:***

1. The floor of the Race lane should be of Natural stone – like Marble, Granite, Kota, Plain Cement / concrete, or of Ceramic tiles. No other surfaces like rubber matt, etc. can be used. Development board committee to certify the floor for National event.
2. Teams will be assigned a race lane. All of their competition will be performed on the assigned race lane only.
3. The race lane will be 10 meters length by 3 meters wide. For all events, points will be awarded after the vehicle comes to a halt with the position of 50%+ of the vehicle marking the point the vehicle has traveled except for the speed event where the time will be noted at the 3m mark.
4. For the speed event, if the vehicle does not cross 3m mark the attempt will be declared invalid.
5. During any attempt by the team, if the vehicle does not move from the start point even after release of the Nozzle, the attempt will not be counted and the team will be given chance to inspect their vehicle again. Minor repair will be allowed and should be done in front of track judges (no external help allowed).

6. If a vehicle leaves the confines of the lane points will be awarded at the location of exit, as per track scoring guideline.
7. JetToy when released from the Start position during Speed test should have all the 4 wheels grounded. An attempt will be provided if the Jettoy wheelies abruptly (max 2 times per team) If the Jettoy is found wheeling regularly the event will be disqualified for the team.
8. While performing on the track, Teams will be allowed to replace the Adhesive Tape in case the tape is not able to hold the balloon motor in place because of the following reasons,
  - a. the Adhesive Tape is old & does not have proper adhesive property or
  - b. in case the Adhesive Tape loses its adhesive property because of the high ambient Temperature at the venue on the event day.

Note : Teams should use the Tape provided by the Track Judges only.

9. Teams will be given three attempts during the competitions. Marking system is as in the table given below. Please refer to **JetToy Olympics – Track Description & Scoring Guide** for specific event scoring details.

Sr.No.	Performance	JetToy
1	Distance	10
2	Weight	10
3	Accuracy	10
4	Speed	25
5	Longest Travel	25
6	Presentation	20
Total		100

**Conduct of the Competition :**

1. Points can be achieved in 5 different events. Performance events include speed, distance, weight-carrying ability, accuracy and longest travelling time.
2. Maximum balloon inflation for any event will be a diameter of 8 inches.
3. Weights for the weight-carrying ability event will consist of 3 washers which are provided in AWIM Kit stacked & taped in a cylindrical arrangement and should be fastened securely in the vehicle.
4. Teams will compete to acquire the highest number of total points.
5. Only Test Engineer (2 nos) will be permitted at the starting line; one to operate the pump giving directions and the other to hold and launch the vehicle.

All teams will be given a specific amount of time to complete their 3 attempts per event. Any trials that are not finished during the allotted time will be forfeited.