JetToy Competition
Event / Track Description & Scoring Guide

AWIM Development Board

© Copyrights reserved with SAEINDIA Development Board 2014
Distance

Objective: Student design teams will construct a JetToy car that can travel as far as possible.

- Track Specs: The track will be 10m long x 3m wide
- Teams must release JetToy behind the 0m mark
- JetToy must stay on track for attempts to be valid (if JetToy leaves the track, points are rewarded at point of exit)
- JetToy balloon must be inflated to maximum of 8 inch diameter or less. Track Judges will confirm the balloon diameter before JetToy is released.

Scoring

- Design teams get three attempts.
- Final score is based on the average of the 3 attempts.
- Point total is awarded by judge determining the scoring box and adding the total cm travel in the point box.
- Measurements are taken from the furthest point of travel (i.e. most distant point), reference car front edge.

Distance Track –

The JetToy stopped 55cm beyond the 9m line, the point value of this trial is 9.55
JetToy Olympics - Track Descriptions & Scoring Guide (Modified – Sept-2014)

Weight

**Objective:** Student design teams will construct a JetToy car that can carry a specific amount of weight.

- Track Specs 10m long x 3m wide
- Teams must release JetToy behind the 0m mark
- JetToy must stay on track for attempt to be valid (if JetToy leaves the track, points are rewarded at point of exit)
- JetToy balloon must be inflated to maximum of 8 inch diameter or less. Track Judges will confirm the balloon diameter before JetToy is released.
- Weights for the event will consist of 3 washers, taped in a cylindrical arrangement provided by Track Judges.

**Scoring**

- Design teams get three attempts.
- Final score is based on average of the 3 attempts.
- Point total is awarded by judge determining the scoring box and adding the total cm in the Point Box.
- Measurements are taken from the furthest point of travel (i.e. most distant point), reference-car front edge.

### Weight Track –

<table>
<thead>
<tr>
<th>0 points</th>
<th>1 point</th>
<th>2 points</th>
<th>3 points</th>
<th>4 points</th>
<th>5 points</th>
<th>6 points</th>
<th>7 points</th>
<th>8 points</th>
<th>9 points</th>
<th>10 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>0m</td>
<td>1m</td>
<td>2m</td>
<td>3m</td>
<td>4m</td>
<td>5m</td>
<td>6m</td>
<td>7m</td>
<td>8m</td>
<td>9m</td>
<td>10m</td>
</tr>
</tbody>
</table>

The JetToy stopped 66cm beyond the 5m line, the point value of this trial is 5.66
**Accuracy**

**Objective:** Student design teams will construct a JetToy car that can travel a specific distance.
- Track Specs 10m long x 3m wide
- Teams must release JetToy behind the 0m mark
- JetToy must stay on track for attempt to be valid (if JetToy leaves the track, points are rewarded at point of exit)
- JetToy balloon must be inflated to maximum of 8 inch diameter or less.

**Scoring**
- Design teams get three attempts.
- Final score is based on the average the 3 attempts.
- Points awarded are by determining the scoring box and adding the total cm traveled in the Point Box.
- Measurements are taken from the furthest point of travel (i.e. most distant point), reference-car front edge; if vehicle lands in target square the points are determined by square where 50% + of vehicle stops. Target square begins at 9.1 points; increases by a tenth of a point each 5 cm to center of target at 10 points; decreases by tenths beyond center.

### Accuracy Track

<table>
<thead>
<tr>
<th>0 points</th>
<th>1 point</th>
<th>3 points</th>
<th>5 points</th>
<th>7 points</th>
<th>8 points</th>
<th>7 points</th>
<th>5 points</th>
<th>3 points</th>
<th>1 point</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 points</td>
<td>2 points</td>
<td>4 points</td>
<td>6 points</td>
<td>8 points</td>
<td>Target 10 points</td>
<td>8 points</td>
<td>6 points</td>
<td>4 points</td>
<td>2 points</td>
</tr>
<tr>
<td>0 points</td>
<td>1 point</td>
<td>3 points</td>
<td>5 points</td>
<td>7 points</td>
<td>8 points</td>
<td>7 points</td>
<td>5 points</td>
<td>3 points</td>
<td>1 point</td>
</tr>
<tr>
<td>0 points</td>
<td>1 point</td>
<td>3 points</td>
<td>5 points</td>
<td>7 points</td>
<td>8 points</td>
<td>7 points</td>
<td>5 points</td>
<td>3 points</td>
<td>1 point</td>
</tr>
<tr>
<td>0m</td>
<td>1m</td>
<td>2m</td>
<td>3m</td>
<td>4m</td>
<td>5m</td>
<td>6m</td>
<td>7m</td>
<td>8m</td>
<td>9m</td>
</tr>
</tbody>
</table>

The JetToy stopped 68cm beyond the 3m line, the point value of this trial is 6.68
JetToy Olympics - Track Descriptions & Scoring Guide (Modified – Sept-2014)

Speed

Objective: Student design teams will construct a JetToy car that can travel as fast as possible over 3m distance.

- Track Specs 3m long x 3m wide
- Teams must release JetToy behind the 0m mark
- JetToy must stay on track for attempt to be valid.
- JetToy balloon must be inflated to maximum of 8 inch diameter or less. Track Judges will confirm the balloon diameter before JetToy is released.
- Track judge will time the teams attempt using a stopwatch / or by installing appropriate sensors.
  - Time starts when nozzle is released on the instruction of Judge.
  - Time stops when JetToy passes the 3m mark

Scoring

- Design teams will run 3 trails
- Final score is based on the Best of the 3 attempts, in case of sensors the indicated speed will be recorded).
- Team with the best time gets 10 points and the next best gets 09 points….. and so on.

<table>
<thead>
<tr>
<th>Speed Track</th>
</tr>
</thead>
<tbody>
<tr>
<td>0m</td>
</tr>
</tbody>
</table>

The JetToy crosses the 3m line with the best time/speed among all participating teams gets 10 points, second best team gets 09 & so on.
(In case of teams more than 10 in numbers we go by percentage method)

* Points to be awarded to decide event winner & will not be considered in overall scores
JetToy Olympics - Track Descriptions & Scoring Guide (Modified – Sept-2014)

Longest Travelling Time

**Objective:** Student design teams will construct a JetToy car that can travel for an extended period of time (longest travel time).

- Track Specs 10m long x 3m wide
- Teams must release JetToy behind the 0m mark
- JetToy must stay on track for attempt to be valid (or exit track past 10m mark)
- JetToy balloon must be inflated to maximum of 8 inch diameter or less. Track Judges will confirm the balloon diameter before JetToy is released.
- Track judge will time the teams attempt using a stopwatch
  - Time starts when nozzle is released
  - Time stops when JetToy stops moving forward or leaves the track.

**Scoring**
- Design teams get three attempts.
- Final score is based on the average of the 3 attempts.

<table>
<thead>
<tr>
<th>Time Track</th>
</tr>
</thead>
<tbody>
<tr>
<td>0m</td>
</tr>
</tbody>
</table>

The JetToy stays on track and keeps moving for 32.34 sec., point value of the trial is 32.34
• Artistic Design
  
  o **Objective:**
    Student design teams will construct a JetToy that is functional and artistically designed.

  o **Scoring:**
    Overall competition will be evaluated by Jury panel to designate the JetToy they believe to be the best Artistic Design as well as on the Concept

• Presentations

  o **Objective:**
    Student design teams will present their JetToy design.

  o **Scoring**
    Presentations will be evaluated by a Jury panel for placement.