

Challenge A: *Obstacles, Of Course!*

Global Finals Clarifications

We are very excited to see your *Team Challenge* solutions to Challenge A: *Obstacles, Of Course!* at Global Finals 2008. We are aware that there were a great variety of solutions across the 350 DI Tournaments around the world. We would like every team to be successful with their solution at Global Finals and we want to be able to award every team as many points as possible. So we are providing General Clarifications for your teams in order to bring more clarity to the Challenge. We are also providing guidelines that will help your team be sure your solution will earn as many points as the Appraisers are able to award. Please use the Global Finals General Clarifications and the other guidelines as a checklist for your solution for Global Finals 2008 so that we can award all the points possible to your team.

The following Clarifications and reminders are provided and, in addition to the written Challenge, will govern the appraisal of Challenge A teams at Global Finals 2008. This information is taken from the Challenge and previously published General Clarifications to provide a level playing field for all Global Finals 2008 teams.

A. The 7 General Clarifications previously published for the Challenge are repeated here for convenience:

1. Paragraph A.3.a should read: "There will be four Xs taped on the floor of the Presentation Site. (Diagram 1) These Xs will be formed as the diagonals of a 12in (30.5cm) by 12in (30.5cm) square. The square will not be taped; only the Xs will be taped. When the Vehicle is moving around the Obstacle Course, at least three of the four Xs must have a part of one Obstacle on or above its approximate area."
2. The second sentence in A.4.b should read: An Obstacle may be designed to assist the Vehicle to Overcome that Obstacle, but the Vehicle must contribute in a substantial and significant way to its Overcoming of the Obstacle.
3. On Page 1 of the Tournament Data Form, in Part Two the Side Trips listed should be Side Trip 1 and Side Trip 2.
4. Any capability to assist the Vehicle which is designed into an Obstacle must be substantially integrated into the Obstacle to be considered part of that Obstacle. In Table 1, the Intent of the Obstacle must be maintained at all times, including any assistance provided to the Vehicle by the Obstacle.
5. In Table 1, the Beam/Tight Rope Obstacle states that the Vehicle must cross a tight rope or solid beam, which is $\frac{1}{2}$ in (1.3cm) wide or less, for a distance of at least 12in (30.5cm). This means that the Vehicle must only touch the tight rope or beam when it is crossing.
6. Additional information about A.2.f: Direct team member involvement will be allowed to reattach or repair broken Special Features and to Repair the Vehicle, as long as the Vehicle is not changing shape, moving or Overcoming Obstacles. Indirect team member involvement will still be required to repower or restart the Vehicle.
7. The last sentence of A.2.d should read: "If items are intentionally added or removed, the team will receive no score for Overcoming Obstacles on the Trip in which the change takes place or any subsequent trip attempted. (D.1.a) But they will receive score for Obstacles Overcome in prior trips."

B. Additional Clarifications for Global Finals 2008

1. Control devices, whether wired or free, are exempt from the dimensions of A.2.c, provided that nothing associated with the control device is used as part of the Propulsion System. Extension cords and external batteries attached to the Vehicle by wire will be treated the same way and are exempt from the dimensions of A.2.c.
2. A.2.b states that it is Special Features on the Vehicle that enable it to Overcome Obstacles. A.2 states that the Vehicle will have a Propulsion System that has a Technical Energy Source. In the definitions, it states that a Technical Energy Source means that the Vehicle is not propelled by a team member. Indirect team member involvement cannot take the place of Special Features (A.2.b and A.2.d) or the Propulsion System/Technical Energy Source when Overcoming Obstacles.
3. A.4.b states that Obstacles must be an impediment to passage of the Vehicle. It is the intent of the Challenge that tracks, barriers, guides, roller coasters, etc. cannot be used by the Obstacle with the purpose of the Vehicle traveling on them to bypass the Obstacle. In this case the Obstacle would not be an "impediment to passage" and the Vehicle would not receive score for Overcoming that Obstacle.
4. Obstacles must maintain their dimensional requirements and limitations shown in Table 1 at all times during the team's performance.
5. A.5 states that "...the team's eight-minute Presentation to the audience and Appraisers must contain no spoken language." This means that the Challenge is non-verbal in its entirety. Teams may conduct private conversations to address problems but teams may not use spoken words (including singing, playing recorded words or songs with lyrics) at any time during their eight-minute Presentation, including *Side Trips*. Teams may make sounds and/or use written words at any time during their Presentation.
6. The Map in A.3.b is to be treated as a guide on the order in which the team plans to Overcome the Obstacles. The appraised order of the Obstacles for every attempted Trip will be based on the order the Obstacles are Overcome on the first Trip attempted. A.d.ii means that an incomplete Trip due to Skipping an Obstacle or time being called will result in a zero score for that Trip.


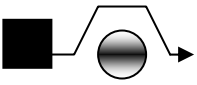
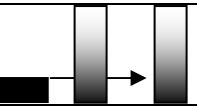

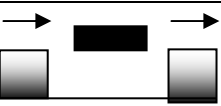
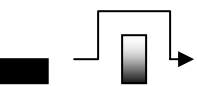
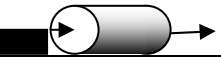
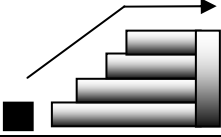
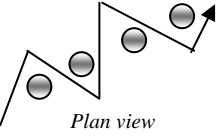
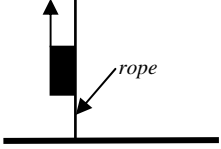
C. As an additional checklist for your team, so that we can be able to award your team the most points possible, please be sure that you have reviewed and are aware of the following in the Challenge:

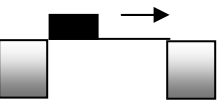
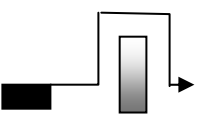
- In order for the Vehicle to earn points for Design and Construction (D.2.a) and Technical Innovation (D.2.d) it must conform to the intent of the Challenge, as stated in A.2.a.
- A.2.c states that if the team's Vehicle exceeds the allowable dimensions and cannot be adjusted to bring it into compliance the team would receive no score for Overcoming Obstacles (D.1.a).
- A.2.f states that if there is direct team member involvement in the Vehicle changing shape or moving the team would receive no score for Overcoming Obstacle that is involved. (A.2.f)
- During an Attempt a Vehicle must clearly meet General Clarification #2 or that Obstacle would receive no score for that Attempt.
- If during an Attempt an Obstacle does not clearly meet General Clarification #4 then that Obstacle would receive no score for that Attempt.

D. In order to be sure you are able to receive the most points possible, the following explains more about the intent of the Obstacles. The bolded sections provide further explanation:

Table 1 – Obstacles

IMPORTANT: The example images provided here are for clarification only. There are many different ways that Obstacles can be designed and many different ways that the Obstacles can be Overcome.

Obstacle Type	Level	Intent of the Obstacle	Example	Initial Score
Under	Easy	Vehicle must travel under a solid barrier that is 5in. (12.7cm) or less in height above the floor.		5
Go Around	Easy	Vehicle must go around a solid object that is at least 12in. (30.5cm) wide. This Obstacle must be directly in the Vehicle's path as the Vehicle approaches it.	 <i>Plan view</i>	5
Through	Easy	Vehicle must pass through an opening that is at most 7in. (17.8cm) wide.		5
Ramp & Fulcrum	Easy	Vehicle must travel up and down a ramp centered on a fulcrum at least 3 in. (7.6cm) high. Since the Challenge states that the Vehicle must travel up and down the ramp, it needs to contact this Obstacle.		5
Cross a Gap	Medium	Vehicle must travel across a gap that is at least 7in. (17.8cm) wide. Distance will be measured in the direction of travel. The gap must be at least 5in. (12.7 cm) above the floor. Floor contact points used when the Vehicle travels around the Obstacle Course must NOT contact the floor within the gap. The Gap has a gap if there is not any part of the Obstacle in the gap of the Gap. So, a bridge/road/track/beam/wire that is part of the Gap Obstacle that crosses the gap would close the gap and NOT meet the intent.		10
Over a Low Wall	Medium	Vehicle must pass over a wall. The wall ascended by the Vehicle must have a vertical face that is at least 5in. high (12.7cm). If the front face, including any assistance provided by the Obstacle, is not vertical, then the Obstacle does not meet the intent. Also, the Vehicle must Overcome the full 5 inches, not just the top X inches.		10
Tunnel	Medium	Vehicle must travel through a tunnel of any shape that is at least 24in. (61 cm) long. The entrance and exit openings must be no larger than 7in. (17.8cm) wide and 7in. (17.8cm) high.		10
Steps	Medium	Vehicle must climb steps with 4 risers equaling a total height of 5in. (12.7cm) or more. The face of each riser must be vertical. In order to climb this Obstacle and be considered to 'climb the steps' the Vehicle must contact the risers. Otherwise it would be going OVER the steps and not climbing them.		10
Slalom	Hard	Vehicle must wind its way through 4 pylons, passing them on alternate sides without touching them. Pylons must be spaced at least 12in. (30.5 cm) apart, but no more than 18in. (45.8cm) apart, in a straight line. If during an Attempt the Vehicle touches a pylon, then the Vehicle may re-Attempt this Obstacle over again by starting at pylon #1 OR follow A.4.c.	 <i>Plan view</i>	15
Rope Climb	Hard	Vehicle must travel vertically up a rope (making no contact with any other surface) for a distance of 12in. (30.5cm), measured from the Vehicle point of attachment to the rope. The intent is for the Vehicle to climb the rope, not to be pulled by the rope. Teams should mark the rope at 4in. (10.2cm) intervals so the Appraisers can easily measure the distance the Vehicle has traveled up the rope. The Vehicle may contact the floor. The floor is not considered an "other surface."	 <i>rope</i>	15

Beam/Tight Rope	Hard	<p>Vehicle must cross a tight rope or solid beam, which is ½ in. (1.3cm) wide or less, for a distance of at least 12in. (30.5cm).</p> <p>This means that the Vehicle must only touch the tight rope or beam when it is crossing. (General Clarification #5)</p>		15
Over a High Wall	Hard	<p>Vehicle must pass over a wall. The wall ascended by the Vehicle must have a vertical face that is at least 12in. high (30.5cm).</p> <p>If the front face, including any assistance provided by the Obstacle, is not vertical, then the Obstacle does not meet the intent. Also, the Vehicle must Overcome the full 12 inches, not just the top X inches.</p>		15