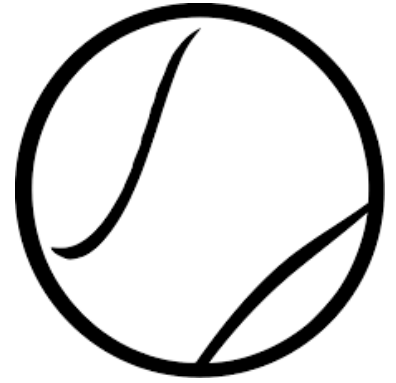


BUILD-A-THON 2017

TENNIS BALL shootout

OZone Robotics

Olentangy Orange High School



Challenge Reveal

October 27th

Build-A-Thon

December 1st-3rd



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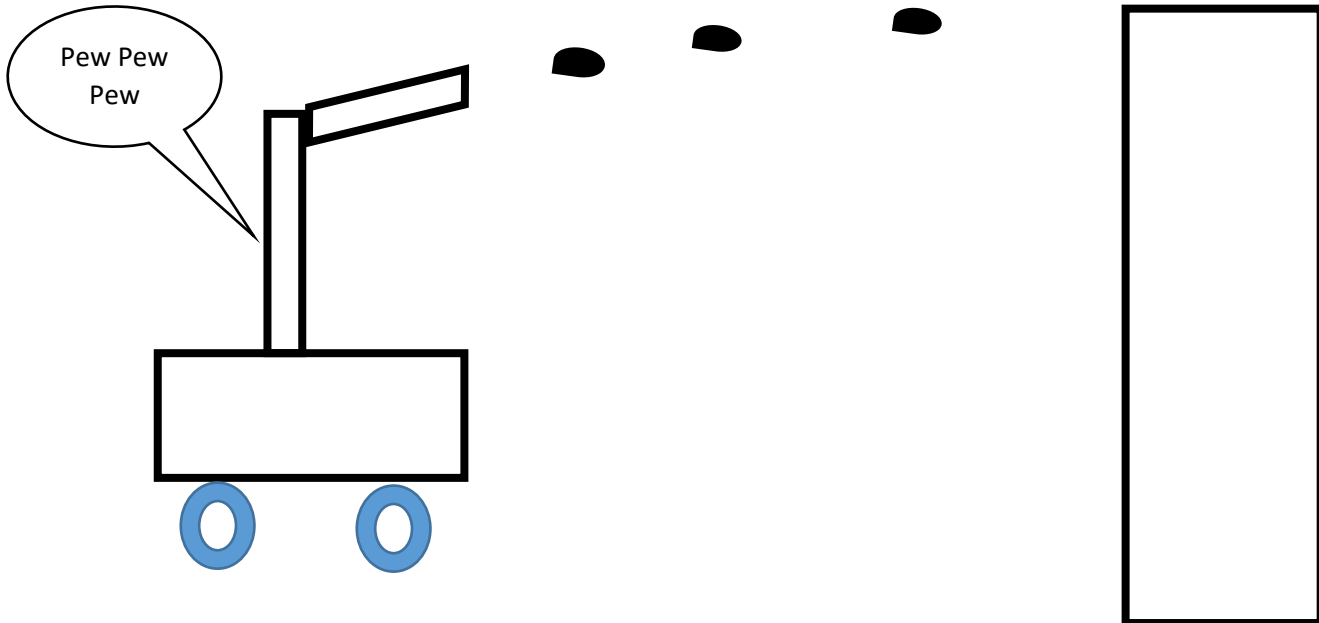
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2017 Build – A – Thon Challenge Overview

OZone’s inaugural fall build-a-thon challenge is the Tennis Ball Shoot Out. Teams are tasked with creating a tennis ball shooter whose goal is speed and accuracy to score as many points as possible during a given tele-operated round, driving their robot via remote camera and creating a team judges presentation.



Overview

Tele-op Rounds (2)

During a 90 second round each team will try to score as many winning shots on the scoring wall. The total of both rounds is added together for the final tele-operated shooter-scoring round.

Camera Operated Rounds (2)

During a 60 second round each team will try to score as many winning shots on the scoring wall. The total of both rounds will be added together for the final tele-operated shooter-scoring round.

Presentation

Each team will be required to present to the judges during the presentation portion of the event Sunday afternoon at 3:30 PM. Presentation rubrics can be obtained from one of the build-a-thon judges.

Rule Particulars Robot:

The robot may not exceed forty-two inches (42") in height

No part of the robot may extend horizontally beyond the drive base perimeter

Robot can hold a maximum of fifty (50) tennis balls

Rule Particulars Scoring:

Scoring shots will be awarded points for the value of the colored hole they succeed in landing (a successful shot is defined as a tennis ball going through the opening and remaining in the scoring net)

Ten (10) points for the largest holes (Red)

Twenty (20) points for the medium holes (White)

Thirty (30) points for the smallest holes (Blue)

Missed shots will result in five (5) negative points per tennis ball

Any scoring shots while the robot is over the shooting line are subtracted from the score

Rule Particulars Field of Play:

During the tele-op round the shooting line will be 12' from the scoring wall. Robots that travel over the scoring line at any point will receive a fifty point (50) penalty for the first offense and a fifty point (50) penalty for each further offense.

If a robot remains beyond the shooting line for more than five (5) seconds, they will be E-Stopped

During the camera operated round, the shooting line will be non-existent. However, robots must remain inside the end lines or risk being E-Stopped.

The robot must start in the starting box at the beginning of each round.

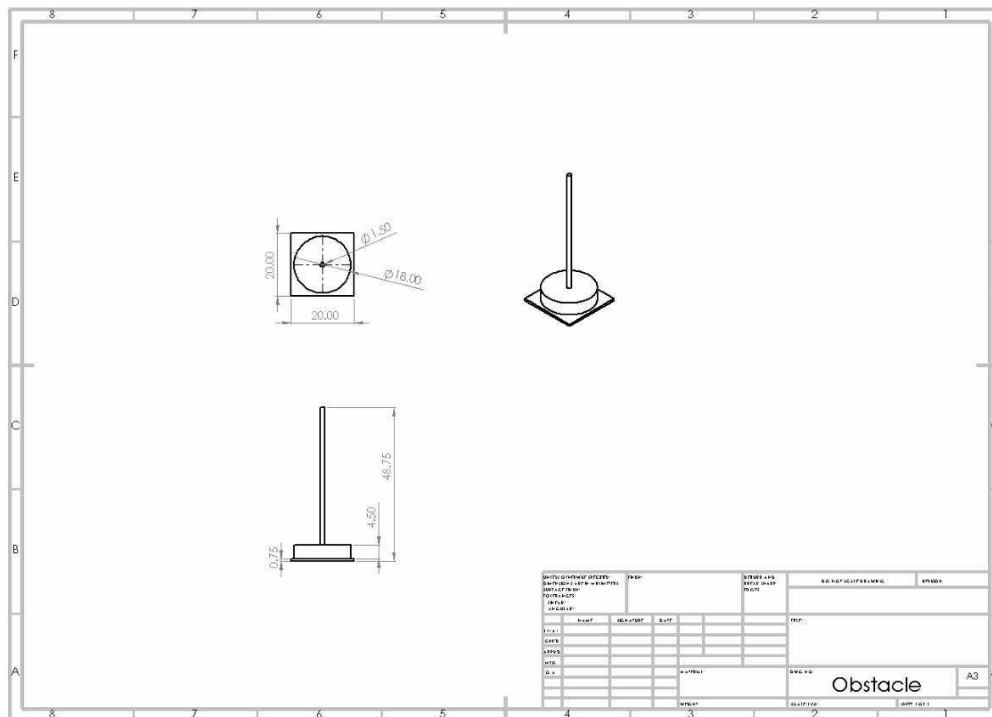
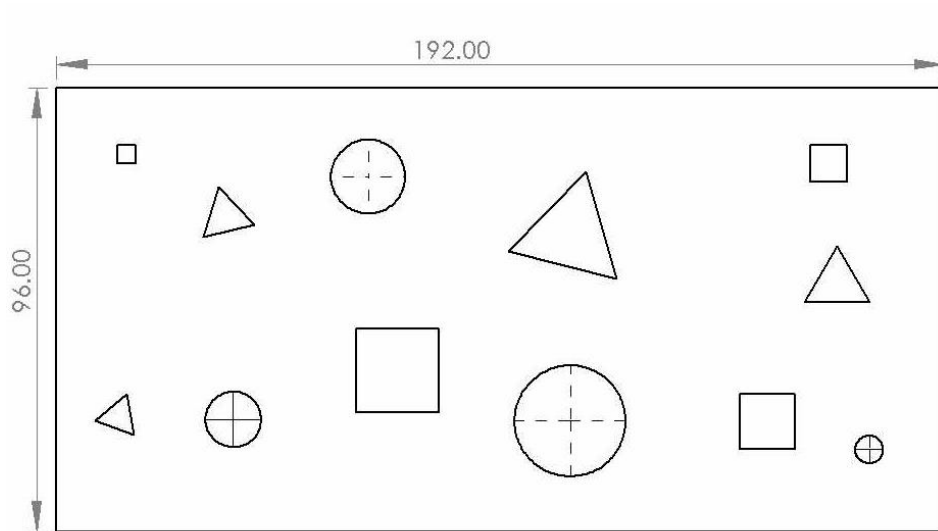
**Rules and regulations are subject to change at any point during the challenge to ensure the safety of our team members*

**Any update to the rules will be posted on the Build-A-Thon official website*

Scoring Wall and Obstacle Details

WALL: 8 feet tall by 16 feet wide. OBSTACLE: 48 inches tall, 20"x20" footprint.

Scoring holes will vary in size and shape. You can find dimensions to the scoring wall and obstacles via a download from the BUILD-A-THON webpage.



Competition Scoring Sheet

Team Name: _____

Teleop Score	Round 1		Round 2		Total:
	+	-	+	-	
Camera Drive Score	Round 1		Round 2		Total:
	+	-	+	-	
Presentation Score					Total:
					OVERALL TOTAL SCORE

Scoring Arena Isometric Layout

