### Check In

7.g. Team operates safely & has a device within spec before the end of the allotted competition period.

### Construction Parameters:

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3.a. When ready-to-launch, the launch device, projectiles, stabilizing weights, and all other device components fit in a 60.0 cm per side cube.

3.b. The launch force is supplied by non-metallic elastic solids such as rubber bands/tubing, wood, plastic, or bungee cords.

3.c. The triggering device when activated, does not contribute significant energy to the launch. It extends out of the lunch area, allow for competitors to remain at least 75 cm away from the launch area. It also does not pose a danger due to flying parts or excessive movement outside of launch area.

3.d. Team provides unmodified tennis, racquet, Ping-Pong, and/or light weight plastic/foam golf balls to be used as projectiles.

3.e. The launch device is designed and operated in such a way to not damage or alter the floor.

3.f. Electrical components are not part of the device or triggering device.

### DEVICE MEETS ALL CONSTRUCTION PARAMETERS ABOVE DURING INSPECTION

(Devices that do not meet construction specs will not be allowed to be tested until brought into specification. If any construction violations are corrected during the competition block, circle F. If the device is not brought into specification during the competition block, leave items 3-16 blank and do NOT enter into the spreadsheet.)

### Competition:

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5.b. Team places their device at a location they select in the launch area and the competitors are not within 75 cm of the launch area or in front of the front edge of the launch area during a launch. The competitors only touch the part of the triggering device that extends at least 75 cm outside of the launch area.

5.c. No part of the launch device extends outside of the launch area before or after a shot. Any part of the launching device extending beyond the launch area during the launching action returns to and remains in the launch area immediately after the launch without assistance of the competitors.

### DEVICE MEETS ALL COMPETITION RULES FOR THIS LAUNCH

7.b. Straight line distance, in mm, from the center of the initial impact of the projectile to the center of the target.

For Launch 2 only: If Launch 1 at a target lands within 500 mm, a bucket shot may be requested in place of the second shot. If this is a bucket shot, circle T and fill out the items below and leave 7.b. blank. Otherwise, leave the items below blank and fill out 7.b.

7.d. The projectile hits the bucket at first impact

7.d. The projectile contacts with the inside bottom surface of the bucket.

### Chart Score

17.   7.c.i. Of one graphs/tables selected by the Event Sup, it includes data spanning ≥ 1 variable range in 4.a.ii. (up to 60 points)

18.   7.c.ii. Of one graphs/tables selected by the Event Sup, it includes at least 10 data points in each data series (up to 60 points)

19.   7.c.iii. Of one graphs/tables selected by the Event Sup, it is properly labeled (e.g. title, team name, units) (up to 60 points)

20.   7.c.iv. Points for each distinct graph/table turned in (30 points for each, up to 120 points total)

21.   7.c.v. Includes a labeled device picture or diagram (up to 50 points)

22.   7.c.vi. Includes at least 2 example calculations (up to 50 points)

23.   T | F | General Rule: The team is disqualified. (Notify the team and their coach as soon as possible.)