



Welcome to the team robotics competition – **Wrist Shot**. This 2 minute 30 second game is played on an 8ft. X 8ft. field by two teams, red and blue. The gameplay involves 3 periods, just like a hockey game. The 3 periods in this game include: autonomously operated, teleoperated and end game.

The team that scores the most points at the end of play wins. Teams score or store pucks in several types of goals on the game field. The pucks are the standard 2.75" VEX wheels (part #276-1496).

The robot starting configuration must not exceed 18"X18"X18". In other words, it should fit in a box this size before you can compete. This is a critical design restriction. After the Autonomous Period starts, the robot may expand beyond these limits.

To ensure that the competition is fair, teams must agree on a parts list of official VEX parts that they each can work from prior to starting the build. In addition, teams may create unique parts of their own to use on their robot so long as the parts are *not* made from a pre-fab robotics kit (eg. NXT, MakeBlock, VEX etc) and are composed entirely of recycled materials.

## **AUTONOMOUS (First Period)**

The first 15 seconds of the match is the autonomous period. Robots must operate independent of human control exclusively using a computer program. Teams begin in their designated corner and can score points during this period.

Robots can have up to 4 pucks pre-loaded in their robot to begin.

Each puck scored during this period is worth double the standard point value they are worth in the teleoperated game.

At the end of this 15 seconds, game play pauses for score tally.

## **TELE-OPERATED (Second Period)**

The robots remain wherever they finished the autonomous period on the field and will begin the 2:00 second teleop play. A whistle will blow to indicate that robots can be engaged for human operation & control as soon as the referee has deemed all teams ready and the autonomous score has been tallied. This is at the referee's best effort & discretion. Moving prior to the whistle results in a 10 second penalty where the offending robot cannot move until a ten count is completed out loud by the assistant referee



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or judge. Violating this rule is cumulative up to two more times after which point the robot is disqualified from the match and being sent to the penalty box - receiving a score of 0.

Teams that score pucks in the goal on the field by pushing or shooting them through the horizontal slot at field level score 1 pt. each. Pucks scored in the “Five Hole” vertically are worth 2 pts. Pucks scored on the “Top Shelf” (where you keep the peanut butter) score 3 points. Pucks that are placed in the horizontal storage rack are worth 3 points each. Pucks placed in the vertical rack are worth 2 points each.

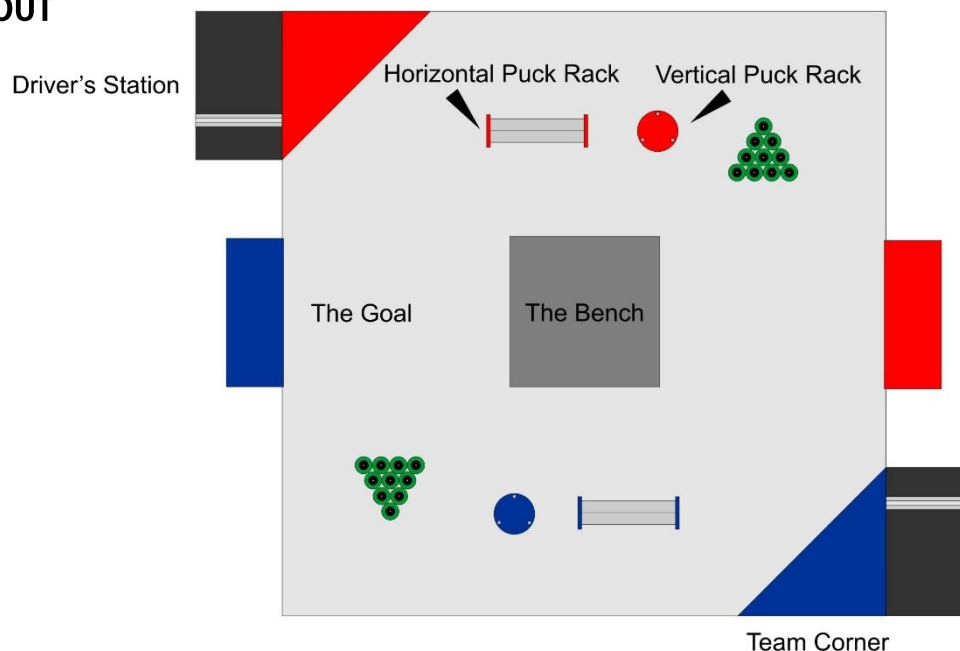
The robot can handle a maximum of 4 pucks at one time on board. Pucks may also be delivered from the elevated team station at the side of the field by rolling them down an incline. The team station is a platform 12 inches off the ground. There are 12 pucks in the driver’s station.

## END GAME (Third Period)

During the last 15 seconds of the match, teams can park their robots on the bench for additional points or continue to score pucks.

The bench is 2.5 inches off the ice. If a team can climb to the highest part of the bench, they receive 6pts. There’s not much space there however, a team can be pushed off this level before the match ends. The last robot standing on the bench gets the points.

## ARENA LAYOUT



**Good luck & remember to keep your stick on the ice!**



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