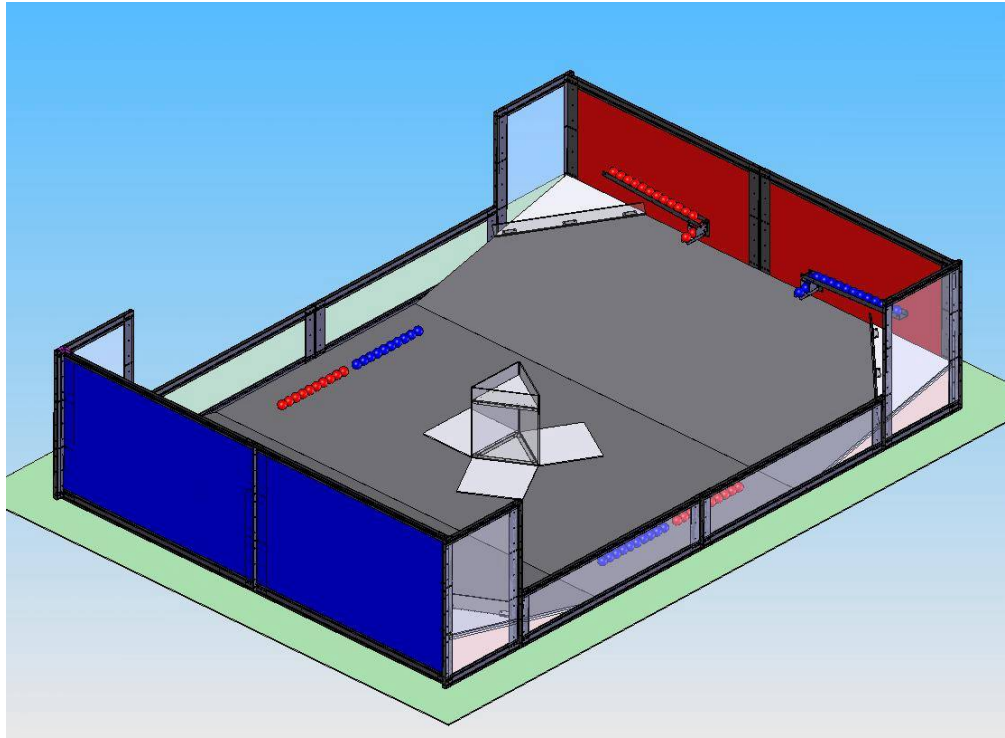




# “Half-Pipe Hustle”

## Game Description & Scoring



FIRST is piloting a new initiative – the *FIRST Vex Challenge*, sponsored by RadioShack. Teams made up of high-school students and adult mentors purchase Vex starter kits, battery packs, and programming modules directly from RadioShack. The Vex kits provide a level starting point for all teams. The game rules and regulations are provided by *FIRST* and, in addition to competition, teams maintain an *Engineering Notebook* to track their progress during the design process.

*Half-Pipe Hustle* is split into two distinct match types, operator-controlled and autonomous. While both are played on a similar field (approximately 10' wide X 14' long) with identical objects, their scoring and play style differ.

### Operator-controlled matches

Each 2-minute match features two-team alliances – one “red” and one “blue.” The object of the game is to attain a higher score by placing colored balls into goals, owning goals by scoring more balls in each goal, and/or having one or both robots from an alliance on a deck at the end of the match.

There are 50 red balls available to the “red alliance” and 50 blue balls available to the “blue alliance.”

#### Scoring – Operator-controlled Match

- 1 pt** – For a ball scored in any goal
- 5 pts** – For ownership of a corner goal
- 10 pts** – For ownership of the center goal
- 5 pts** – For having a robot on a deck at the end of the match

### Autonomous matches

Each 30-second match is played on a field very similar to the one used in operator-controlled matches. The major differences lie in the segmentation of the field into quadrants and modifications made to the center goal to facilitate the separation of robots while matches are being run. Each team earns its own score (there are no alliances in autonomous matches) and plays on a quadrant of the field, attempting to score the most cumulative points over a series of matches. Without operator control, the robots must place balls in the goals and/or navigate to the deck to score points.

#### Scoring – Autonomous Match

- 1 pt** – For a ball scored in a corner goal
- 2 pts** – For a ball scored in the center goal
- 5 pts** – For having a robot on a deck at the end of the match