

March Madness for Robots

By Hilary Bentman Staff writer



Kim Weimer/Staff Photographer

It was a basketball tournament like no other. Games lasted just 135 seconds. Teams consisted of only three players, shooting multiple basketballs into four nets at each end.

But the strangest part of all was that these players were made of nuts and bolts, motors and wires, sensors and cameras, and moved on wheels.

It was all part of the two-

day, FIRST Robotics District Competition, held this year at Hatboro-Horsham High School. FIRST stands for: for inspiration and recognition in science and technology.

The event concluded Saturday, when about 1,000 people packed into the school gymnasium to watch 38 robotics teams from the tri-state area compete for a chance to advance to the Mid-Atlantic regional championships and possibly nationals.

Matches were played between two alliances of three schools each. The goal was to score as many baskets as possible.

The robots, weighing upward of 150 pounds, had their own method for picking up balls, aiming and shooting at the baskets, some with remarkable precision.

Teams received bonus points if they balanced their robots on bridges at the end of the match.

The crowd was loud and energized, though it was difficult to tell if they were cheering on the robots or the human students controlling them from behind glass. Between matches, the students, many of them budding engineers, returned to the pit to fine-tune their creations and work out any kinks they noticed on the court.

“Robot coming through” could be heard whenever machines were being transported between the court and the pit. It was a signal to get out of the way. Although their school hosted the event, Hatboro-Horsham junior Vincent Gargiulo and sophomore Miguel Guerra said their team didn’t really have home court advantage in this type of competition.

Gargiulo and Guerra are teammates on Hardwired Fusion, comprised of students from Hatboro-Horsham and Upper Moreland’s robotics programs. Like their competition, the team had just six weeks to create its robot after receiving a kit from FIRST, based in New Hampshire.

Hardwired Fusion’s entry was called RumbleBee, for its black and yellow motif. With a sweeper on its front, it is designed to pick up balls and feed them into a shooter.

March Madness for Robots

“It’s a simple shooter,” said Guerra.

Founded in 2001, the Hatboro-Horsham robotics team was originally called Hardwired Hatters. In 2005, its name was changed to Hardwired Fusion when neighboring Upper Moreland (a district traditionally considered a rival in other competitive sports) joined to form a single team.

The robotics program’s goal is to inspire students to explore and pursue careers in science, technology, mathematics or engineering. It’s supported by Hatboro-Horsham’s and Upper Moreland’s educational foundations, as well as corporate and private sponsors.

Midway through the day’s competition, Archbishop Wood sophomore JP Rosney said his team, the RoboVikings and their creation, The Ringer, was “doing pretty well.”

When asked if The Ringer performed better than the school’s human-based basketball team, Rosney said better than the boys team, but he stopped short of saying it was better than the girls team.

Rosney said he hopes robots are one day part of households. When asked the one task he’d like to see robots perform for humans, teammate Kevin Letizio chimed in “take out the trash.”

By all accounts, the team to beat in this district was powerhouse Wissahickon High School. The school’s program has been running for 13 years and has amassed a variety of awards and prizes. This year the 75-member team created 120-pound Miss Daisy XI for the competition.

Wissahickon senior Brianna Zenon explained the team’s success by saying, “We try to learn from our mistakes.”