

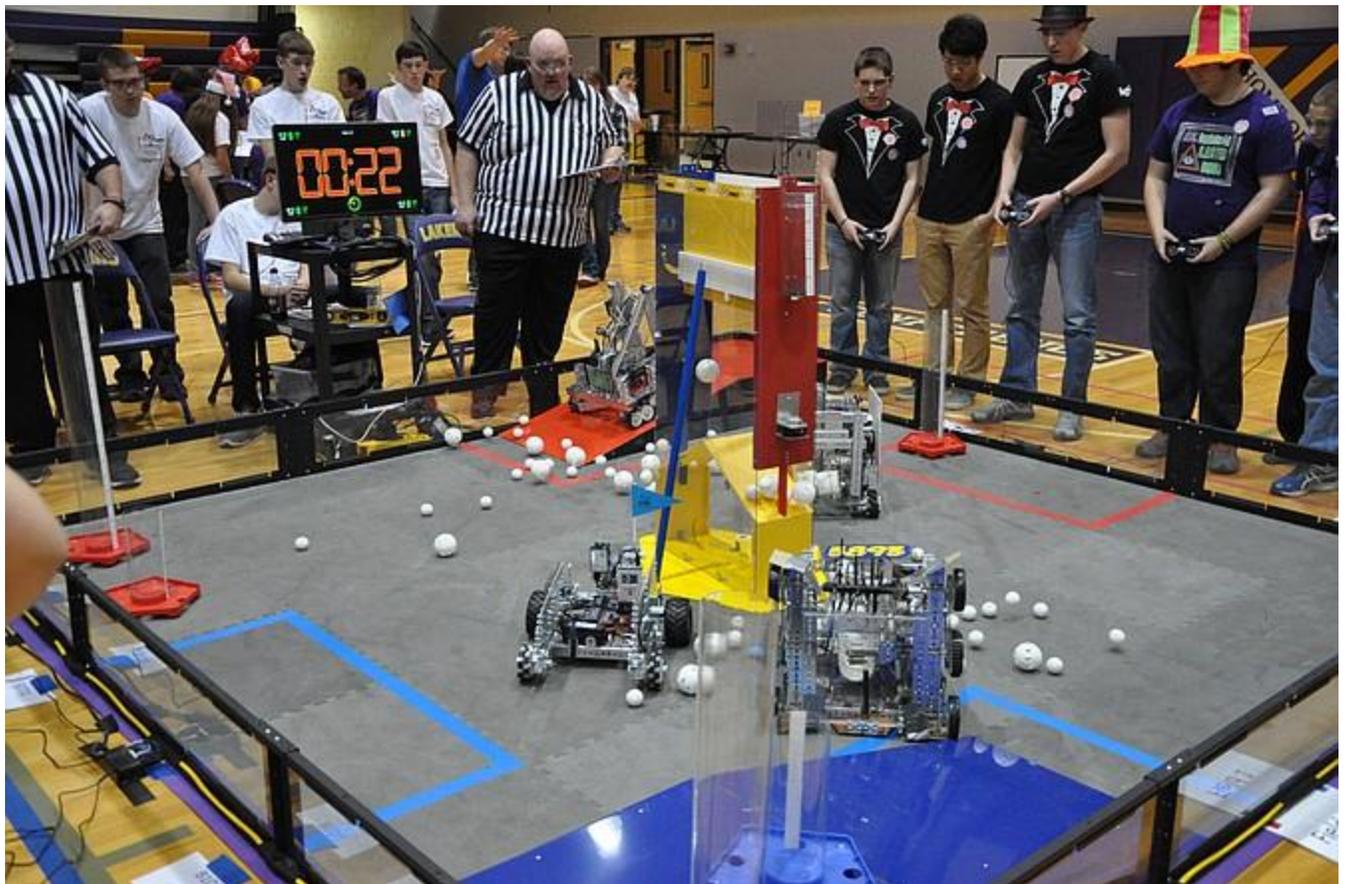
*the* **THE LAKE AREA'S FULL COLOR NEWSPAPER**

# **LAKE TODAY**

*Serving Lake Ozark, Osage Beach, Kaiser, the North Shore and surrounding communities*

## **It's All about That Bot'**

CHS hosts Mid MO FIRST Tech Challenge Dec. 13



Several students' watch the robots compete at the Mid MO FIRST® Tech Challenge sponsored by Camdenton 4-H FIRST® LASER 3284 took place at Camdenton High School on Dec. 13.

Monday, December 29, 2014

The Mid MO FIRST® Tech Challenge sponsored by Camdenton 4-H FIRST® LASER 3284 took place at Camdenton High School on Dec. 13.



One of the Camdenton Robotics team members works on the robot.

It was an exciting day as teams from central Missouri converged on to the Camdenton High School campus to compete in the “Sport of the Mind” event called FIRST® robotics!

Teams started off the day by setting up NASCAR style pits to prep their robots for competition. They then proceeded into closed-door judging sessions where they shared their engineering notebooks, team stories, community service and how they have promoted STEM (science, technology, engineering and mathematics) and FIRST® robotics in their community, state and nation.

After a high-energy, opening ceremony where the Pride of the Lake Pep Band welcomed teams, Camdenton R-3 Schools Superintendent Dr. Tim Hadfield spoke about the importance of Gracious Professionalism®, competing with all your heart, but also helping out other teams and being gracious in the heat of the competition.

Teams then took to the competition field to take on this year’s challenge “Cascade Effect” with an alliance partner that was randomly selected. Cascade Effect is played on a field 12-by-12 square feet in size with 1 foot walls and a soft foam mat playing surface. The teams were paired and identified as either “red” or “blue.”



Two Camdenon students show their excitement for the event.

In the middle of the field is the Center Field Structure which contains two ball dispensers with trap doors held in place by alliance-specific kickstands. There were also two center goals, one being colored red and the other blue, with infrared beacons placed beneath each goal. The field has six alliance-specific rolling goals with clear ball tubes varying in heights of 30, 60, and 90 centimeters, as well as two alliance-specific, platforms, and parking zones.

The scoring elements for the competition are 160 white plastic balls which are divided into 40 large and 120 small.

At the start of the match, the large and small balls are loaded in the dispensers in the center field structure. Each team was given two balls, one of each size, which can be pre-loaded onto their robot.

During the autonomous period, the center structure will be rotated to one of three positions. Points will be awarded for robots achieving certain tasks including placing autonomous balls in the rolling goal and/or center goal, robots moving off the platform, knocking over the kickstand and releasing balls into the field of play, and moving their rolling goals into the alliance's parking zone.

The next two minutes consisted of the driver-controlled period where the robots are tasked with collecting balls and placing them in the rolling goals. Balls scored in the rolling goals are worth points based on the length of the ball tube and the ball height.

The last 30 seconds of the driver-controlled period is called the end game. During the end game, robots may score balls into the center goal as well as the rolling goals. Teams can also earn bonus points for every robot and rolling goal that is not in contact with the floor when the match ends and also by moving their rolling goals and/or robots into the alliance parking zone.

After numerous exciting matches, the top teams advanced to make alliance selections for the semi-finals and final matches.

Awards are as follows:

- **Judges Award:** S and L Robotics 5033

- **Control Award:**

1st place – Direct Current 5893

2nd Place – Fire & Ice 8136

3rd Place – Camdenton LASER #2 CMS

- **Motivate Award:**

1st Place – Clockworks 8655

2nd Place – Camdenton LASER #5 CMS

3rd Place – Glendale High School Robotics 8856

- **PTC Design Award**

1st Place Maniacal Mechanics

2nd Place Red Hot Techie Peppers 4587

3rd Place Camdenton LASER #4 CMS 5908

- **Rockwell Collins Innovate Award**

1st Place – Camdenton LASER #4 CMS 5908

2nd Place — Camdenton LASER #3 CMS 5907

3rd Place Direct Current 5893

- **Connect Award**

1st Place Glendale High School Robotics

2nd Place The Harrisonville Corps 7532

3rd Place The Red Hot Techie Peppers 4587

- **Think Award**

The Harrisonville Corps 7532

- **The Inspire Award**

1st Place Red Hot Techie Peppers 4587

2nd Place Glendale High School 8856

3rd Place The Harrisonville Corps 7532

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Advancing on to the State FIRST® Tech Challenge are The Red Hot Techie Peppers, Glendale High School, the Rolla Patriots and Camdenton LASER.

All five Camdenton 4-H LASER teams will compete at a second qualifier on Jan. 24th at Rolla High School with hopes to advance more teams to the state tournament. The State Championship is hosted by the University of Missouri Science and Technology on March 7th.

To learn more about the Camdenton FIRST® LASER programs please visit [www.laser3284.org](http://www.laser3284.org) or contact the Camdenton R-3 Afterschool Services office. The High School LASER 3284 team will have their kickoff to learn this year's challenge on Jan. 3.