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This year marks the eleventh season of competition for LASER (Laker Afterschool Science Engineering and Robotics).

FIRST (For Inspiration and Recognition of Science and Technology) Robotics is a program, founded by Dean Kamen in 1989, that equips students from Pre-K through twelfth-grade with hands-on STEM (Science Technology Engineering and Mathematics) experience. Every year, FIRST releases a game introducing new challenges, in which teams from around the world participate. This season, FIRST collaborated with Star Wars: Force for Change for their 2020 season, FIRST RISESM. For the FIRST Robotics Competition (FRC) progression, high school students participate in FIRST's game, Infinite RechargeSM. Teams had six weeks before competition season to build and program 125-pound robots that can shoot seven-inch diameter foam balls into an eight-foot-tall goal, spin a rotating color wheel, and climb onto a tilting bar more than six and a half feet off the ground!

This year marks the eleventh season of competition for LASER (Laker Afterschool Science Engineering and Robotics). 3284 began their season in early January, when the team watched the annual kick-off video, read the rules of the game, and brainstormed ideas for their 2020 robot. For the following six weeks, members design, prototype, build, and program their robot using 3-D modeling software and metal fabrication.

At the end of the six-week building period, LASER traveled to the Greater Kansas City regional at Lee's Summit North High School in Lee's Summit, Missouri. At the event, 36 teams from six states competed for various awards, including the Regional Winner, Regional Chairman's Award, and the Engineering Inspiration Award, which qualify the winning team for the 2020 FIRST Championship. At the 2019 FIRST Championship in Houston, LASER was honored to have won the Engineering Inspiration award, which prequalified and paid the team's registration fee for the FIRST Championship.

After two days of competition with some of the best robotics teams in the midwest, LASER's robot, Umbra, was ranked fifth overall at the Greater KC regional. Umbra is completely custom and features a six-wheel tank drive, a hood shooter, a turret, and automatic vision tracking. As the fourth seeded alliance captain, LASER invited team 525, The Swartdogs, from Cedar Falls, Iowa, and team 5141, Griffinite, from Kansas City, Missouri, to compete in the finals matches on their alliance. The teams worked together to move past quarterfinals, but lost in semifinals by just a few points to the first-ranked alliance, which would then go on to place second at the regional. LASER's final record was 11-5.

LASER brought home the Safety Award, sponsored by Underwriters Laboratories. The team had several interviews with safety advisors and judges at the competition, after which the team was recognized to have instilled a strong safety culture in their team as well as others. 3284 has won this award 16 times in total, with three consecutive at the FIRST Championship. Later this year, LASER will be giving courses on first aid at the Central Missouri Regional. In addition, 3284 will give a presentation on safety at the FIRST Championship in Houston.

Alongside the Safety Award, LASER was honored to win the Regional Chairman's Award. The Chairman's Award is considered to be the most prestigious award offered by FIRST. This award is presented to a team which best serves as a model for other teams to emulate, while also embodying the mission of FIRST. The award judges a team's sustained outreach over a period of five years. To compete for the award, teams must write a ten-thousand character essay, memorize a seven-minute presentation, which is followed by a five-minute questioning period, and edit a three-minute video. Teams awarded Chairman's at the Championship are inducted into the Hall of Fame and qualify to attend the competition every year succeeding. LASER has graciously won this award at the

regional level for the past seven years. The team shares their experiences with other teams by running Chairman's Exchanges at various events, including the Greater Kansas City Regional, where team members gave a presentation about different aspects of the award. 3284 will be competing for this award at the Championship in Houston this April.

This year, LASER became the Missouri Regional Partner for FIRST® Ladies. FIRST Ladies is an initiative to increase the participation of women in STEM fields. Team members will run three official FIRST Ladies events over the duration of their 2020 season. LASER invited guest speakers to these events, including LASER alumni who currently work in STEM fields.

Later this year, LASER will be competing in the Memphis Regional from March 18 to March 21, alongside 37 other teams from 5 countries. 3284 will also compete against 35 teams from April 2 to April 5 at the Central Missouri Regional. Their last competition of the 2020 season will be the FIRST Championship in Houston, where teams from around the world will compete for a spot in the Hall of Fame.

For any questions regarding sponsorships, LASER, FIRST, or any other information, visit our website at <http://www.laser3284.org/>, or email us at laser3284@camdentonschools.org.