

Chairman's Award - Team 3284

[Print](#)[Close](#)

2018 - Team 3284

Team Number

3284

Team Name, Corporate/University Sponsors

The Boeing Company/Electrovert/Camdenton R-III Schools/Nihon Superior/Camdenton R-III Afterschool Services/Gerbes/Community Foundation of the Lake/Sakelaris Ford & Camdenton High

Briefly describe the impact of the *FIRST* program on team participants with special emphasis on the 2017/2018 year and the preceding two to five years

LASER 3284 members are impacted by FIRST through: Gracious Professionalism®, Coopertition®, ethics, perseverance, mentoring and building lasting relationships, advanced academic rigor, acquisition and utilization of 21st century skills, advocacy to our state and national legislatures about the necessity of STEM and Afterschool programs, community outreach, sharing the mission of FIRST, public speaking, and technical writing skills.

Describe the impact of the *FIRST* program on your community with special emphasis on the 2017/2018 year and the preceding two to five years

LASER's sustained growth & implementation of all four progressions of FIRST have changed the culture of our rural town by involving over 250 students this season. LASER makes an impact on organizations outside of the school community by working with the Camdenton Optimist Club. This year LASER ran their Christmas Tree Lot when elderly members were unable to continue the tradition. We work with the Optimist Club to park cars for the circus and clean shorelines with the Adopt-A-Shoreline program.

Team's innovative or creative method to spread the *FIRST* message

LASER annually hosts the Show Me Robots event at the MO State Fair. This events reaches over 10,000 people that traditionally are not educated about STEM and FIRST. They're introduced to robotics by passionate students & hands on activities. Since the Lake of the Ozarks is the third most dangerous lake in the nation, we work with the MO Highway Patrol to teach students in our district about water safety and FIRST. In addition, LASER handed out over 400 life jackets to students who needed them.

Describe examples of how your team members act as role models and inspire other *FIRST* team members to emulate

LASER has established a culture of safety, updates the program each year & helps other teams start their own safety program. This year LASER is giving safety workshops at all three of our regionals and has presented at an offseason conference, as well. We also invite teams to tour our facility, be mentored by LASER students and mentors & answer questions about the program. LASER also shares our culture of outreach by inviting all area teams to be involved in events within the community.

Describe the team's initiatives to help start or form other FRC teams

LASER has started 10 FRC teams in Missouri. LASER invites rookie & potential FRC teams to offseason events, such as Show-Me Robots at the MO State Fair, GRC & Cowtown Throwdown, & furnishes them with a student coach, our practice robot & mentorship leading up to the competition and throughout their career. These teams get to experience FIRST in a competition setting while learning about the importance of Cooperation & Gracious Professionalism from students who are passionate about FIRST.

Describe the team's initiatives to help start or form other FIRST teams (including Jr.FLL, FLL, & FTC)

LASER has started 58 FTC, FLL & FLLJr teams across the state. 3284 travels to visit potential FIRST teams & hosts site visits in their own facilities to help coaches and students understand the components of a successful FIRST team. LASER members volunteer their time to mentor any team that needs help in establishing any progression of FIRST. 3284 also hosts 2 FLL and 1 FTC camp each summer to start teams out with the knowledge they need to be successful. LASER also engages new teams at events.

Describe the team's initiatives on assisting other FIRST teams (including Jr.FLL, FLL, FTC, & FRC) with progressing through the FIRST program

LASER mentors over 100 FIRST teams. Aside from camps, site visits & continued mentoring through email & Skype, LASER is the Central MO Affiliate for FLL and FLLJr providing 4 accessible & cost-effective events to teams that could not compete otherwise. LASER sends the Central MO Affiliate VISTA to mentor other programs, as well. LASER is also working with the MSHSAA to recognize FIRST as an official school activity, allowing more teams to be recognized by their district & get needed funding.

Describe how your team works with other FIRST teams to serve as mentors to younger or less experienced FIRST teams (includes Jr.FLL, FLL, FTC, & FRC teams)

LASER mentors younger progressions by traveling to work sites, communicating through emails & Skype, sharing parts & concepts & hosting events throughout the year., LASER has given over 200 presentations at the local, state, national & international levels including annually hosting MO STEM Day at the Capitol & presenting at 2 FIRST World Championship events. LASER will host 3 Chairman's Exchanges sponsored by the CocoNuts & safety presentations to help other teams develop their programs.

Describe your Corporate/University Sponsors

Sponsors: STEMfinity, NiHon Superior-Japan, NVIDIA, Camdenton R-III Schools, Optimist Club, Lake Regional Health Systems, The Boeing Company, Gerbes, Save-A-Lot, Afterschool Services, Community Foundation of the Lake, Sakelaris Ford, Electrovert & Scott's Concrete. With no local industry, LASER collaborated with our community & internationally to support & sustain our 4 progressions through innovative technology & media. Several sponsors have become mentors as they value the message of FIRST.

Describe the strength of your partnership with your sponsors with special emphasis on the 2017/2018 year and the preceding two to five years

LASER has been able to develop and maintain strong partnerships due to the willingness of the team to give back to the community. In 2018 LASER is partnering with Lake Regional Health Systems to host the first Central MO GoBabyGo! to provide personalized toy cars to children with impaired mobility. LASER has strong relationships with the Camdenton Education Foundation and Missouri Department of Elementary and Secondary Education in terms of funding and other support for the program.

Describe how your team would explain what FIRST is to someone who has never heard of it

LASER describes FIRST as a program that promotes collaboration, leadership, communication, & critical thinking through the exploration of STEM. FIRST inspires students around the world to think outside the box & engage in challenges that allow them to develop 21st century skill sets while having fun. FIRST teaches that graciousness & professionalism are always necessary, even when it isn't easy. FIRST is a testament to how hard work, dedication, & perseverance are incredibly rewarding & fun.

Briefly describe other matters of interest to the FIRST judges, if any

In 2017 LASER was named the Central MO FIRST Affiliate for FLL and FLLJr which allowed LASER to host 5 FLL and FLLJr Events. LASER was also featured in a FIRST case study for being a rural program with rapid growth, sustained progression of programs, & outreach efforts to grow FIRST. Central Missouri events are unique due to all events being ran and hosted by LASER members.

Team Captain/Student Representative that has double-checked this submission.

Melissa Stout

Essay

For the past nine years, FIRST has inspired LASER to build; whether robots, 21st century skill sets, or leaders for tomorrow. LASER is building a network of STEM & FIRST on a community, state, national & international scale via presentations, community service & mentoring. LASER has 25 students, 15 mentors & numerous parents that have dedicated over 21,200 hours through FIRST. The team has a 15:11 male to female ratio, which emphasizes LASER's belief that all youth have the potential to change the world. The impact of LASER is featured in a FIRST case study showcasing rapid growth & the sustainability of our program which comes from LASER's FTC, FLL & FLLJr progressions. As the inaugural FIRST team in central Missouri, LASER built a strong foundation for STEM in the region by engaging new members, recruiting professional mentors & teaching skills desired by STEM employers. LASER has 1 FRC, 4 FTC, 12 FLL & 14 FLLJr teams supported by 32 mentors. 250 students, or 1 in every 15 students in the district, are currently on a FIRST team. Ultimately, LASER builds robots to build kids.

LASER Builds Drive Trains to Build Leadership

LASER knows building leaders comes from experiences through FIRST. Team members take their leadership role as the Central MO FIRST Affiliate seriously by hosting official FTC, FLL & FLLJr championships & expos throughout the region. LASER volunteers & presents in other regions to expand FIRST. Hosting camps, clinics, off season events & community service programs has become a way of life for LASER members. 3284 invites other teams to participate in events they host like MO STEM Days at the Capitol, MO Show-Me Robots at the State Fair, the Ozark Maker Faire, & 3 Chairman's exchanges sponsored by the CocoNuts. Other teams often ask for advice in the areas of building, CAD, safety & community outreach; LASER never hesitates to provide leadership to these teams. LASER believes "leadership is a choice, not a position." Stephen Covey

LASER Builds Mechanisms to Build Collaboration

LASER members have dedicated themselves to collaborating with FIRST teams & the community. 3284 has started 10 FRC teams, 58 other FIRST teams & has mentored over 100 teams. LASER sent LEGO EV3 Mindstorm & field kits to Guadalajara, Mexico & Santo Domingo, Dominican Republic. LASER also sponsored an FTC team from China & an FRC team from Israel by arranging to lend them materials prior to the World Championship. 3284 also furnishes new FRC teams with a student coach & a robot at off season events. LASER continually mentors teams through email, site visits & sharing resources. Team 6424 nominated LASER for a GP award by stating, "From our rookie year to present, LASER goes above & beyond to help build our program & others."

Because of the unconditional support, LASER collaborates with community organizations to give back. LASER supported Citizens Against Domestic Violence by decorating & stocking the children's room with STEM related games, books & toys; a local food bank by collecting canned goods & two local boys who were removed from their home by hosting a schoolwide hat day fundraiser. LASER purchased bikes & clothes for each boy & donated the leftover funds to help Chickadees Robotics rebuild their facility after a fire. Last year, Todd Funke, a mentor & parent, passed away from heart disease. Because of this, 3284 started the Todd Funke Memorial Scholarship, which is awarded annually to a deserving senior LASER member.

Additionally, LASER partnered with the Camdenton Optimist Club to run a Christmas tree lot in 2017. Parents & students dedicated 483 hours & 100% of the profits were donated to 3284. LASER also collaborated with Camdenton R-III schools to provide CPR classes that are now a statewide graduation requirement under SB 711. 3284 invited the bill's sponsor, Senator Brown, to participate in the trainings. As a division UL Safety award winner at the World Championship in 2017, LASER collaborates with the community to promote a culture of safety.

LASER partnered with The Kuhnigits to participate in GoBabyGo!, where team members built & customized electric cars for children with disabilities, allowing most of the children to be independently mobile for the first time. 3284 will start a FIRST Central MO GoBabyGo! event with Lake Regional Hospital in July. FIRST is about more than robots; it is about taking the compassion learned, time yielded & skills developed to build collaborative leaders. LASER knows "If everyone is moving forward together, then success takes care of itself." Henry Ford

LASER Builds Electronics to Build Communication

Since 2012, LASER has partnered with the governor to proclaim April as FIRST Robotics Month in MO. LASER's 4 progressions annually represent FIRST during MO STEM Day at the State Capitol. In 2017, LASER traveled to Capitol Hill in Washington DC with the FIRST National Advocacy Conference to talk to Congress about the need for Afterschool STEM programs including FIRST. These programs provide students with communication skills they will use in their education & workplace. LASER is also striving to have FIRST recognized as a MSHSAA activity. This will create opportunity for MO schools to start FIRST teams & for existing teams to gain more resources. LASER understands "The art of communication is the language of leadership." James Humes

LASER Builds Software to Build Creativity

LASER believes in utilizing creative solutions to share the message of FIRST. 3284 went beyond the status quo to exercise Gracious Professionalism & Coopertition when inclement weather sent FTC team 8856 home from our Mid-MO FTC qualifier. One LASER FRC member drove their robot for the rest of the competition, even though the robot utilized two controllers. He finished as the fourth alliance captain & proved that everyone wins with creativity & Coopertition. Furthermore, LASER hosts the annual Show-Me Robots event at the MO State Fair. Because of this event, over 10,000 Missourians have the opportunity to experience FIRST & understand its importance for youth.

Essay - page 2

Local outreach has also been used to creatively promote FIRST values. LASER does this by hosting a community wide low-cost electronics recycling drive & partnering with the Green Club to launch school-wide recycling. Rather than spreading awareness via posters, LASER created bins with recycling facts. Additionally, the tradition of safety led LASER to share water safety in the local elementary schools. Because Lake of the Ozarks is the 3rd most dangerous waterway in the country, LASER partnered with MO State Highway Patrol to teach water safety & give life jackets to 400 kindergarteners. LASER knows "Creativity takes courage." Henri Matisse

LASER Builds Chassis to Build Confidence

FIRST supplies applicable experiences, giving LASER the confidence to expand outreach by hosting events, camps & trainings. LASER's 5 FLL & FTC camps help raise interest & start new teams. These camps teach students & coaches everything from how to build & program sensors on the EV3 robot to the fundamentals for starting a team & the ethos of FIRST.

LASER builds confidence by expanding knowledge of FIRST through more than 200 presentations to community members, teachers, students, administrators & state & national legislators. Some of LASER's presentations include the 2015 World Championship VIP Dinner, MO Interface Conference, MO Department of Education, TechitOut Conference & the 2018 World Championship presentation with Vinnie Rodino & Don Bossi. The MO School Board Association showcased LASER in a video that was sent to every MO school board member & over 600 superintendents. LASER was featured in a FIRST case study for rapid growth, sustained progression of programs & outreach in rural areas. LASER's media coverage gives students the confidence to the expand STEM & FIRST.

This year, LASER's annual hat day built confidence in team members from Kindergarten to 12th grade as members from every building in the district announced the fundraiser at their school's leadership assembly. The funds for the hat day went to STEM related games & books for the new pediatric center at Lake Regional Hospital to help patients gain confidence in themselves & motivation to pursue a STEM career. In addition, Maya Irvine, LASER team member & Youth Ambassador for the National Afterschool Alliance had the confidence to lead 3284 in creating the LASER Code of Ethics according to Dr. Woodie Flowers comments from this year's kickoff video. LASER knows "When you have confidence, you can have a lot of fun. And when you have fun, you can do amazing things." Joe Namath

LASER Builds Code to Build Critical Thinking

LASER strives to prepare students for life after FIRST by teaching them to utilize critical thinking skills. These skills have led team members to challenge themselves by taking advanced courses. Currently, 96% of LASER members are enrolled in weighted classes & 100% plan to take advanced courses next school year. Many members are recognized as model STEM students. In addition, 92% of LASER alumni pursue STEM careers, which surpasses the FIRST average of 75%. These alumni use critical thinking as software & petroleum engineers, physicists, math teachers, biological & actuarial scientists & machinists, among other STEM professions. Alumni continue to foster these skills as they return to mentor & coach FIRST teams. LASER does not "go where the path leads; instead where there is no path & leaves a trail." Ralph Waldo Emerson

LASER Builds Robots to Build Kids

When you combine the essential elements of a robot; the drive train, mechanisms, electronics, software, chassis & code; you build a machine that is capable of performing the task at hand. When you combine all of the essential elements of a 21st century leader: leadership, collaboration, communication, creativity, confidence & critical thinking; you build kids that sculpt the future. We thought we were building robots, but the robot built us.