

Chairman's Award - Team 3937

[Print](#)[Close](#)**2019 - Team 3937****Team Number****3937****Team Name, Corporate/University Sponsors**

Ryerson/Harding University Center for Distance Learning/Custom Colors/Eaton Corporation&Harding Academy

Briefly describe the impact of the *FIRST* program on team participants with special emphasis on the 2018/2019 year and the preceding two to five years

Because of FIRST's inspiration, Breakaway members show new interest in STEM fields and are better prepared for their future careers. In the past five years, 75% of our alumni have pursued STEM majors. Through FIRST, members have learned time management, perseverance, communication skills, and Gracious Professionalism. Learning the value of hard work has also been impressed on members because of FIRST.

Describe the impact of the *FIRST* program on your community with special emphasis on the 2018/2019 year and the preceding two to five years

Through FIRST, our community has more opportunities to learn about STEM. For example, we use our program TechDayz in rural districts and a school for the homeless in Little Rock. By partnering with the Arkansas Dept. of Ed., we have pushed for STEM in local schools and helped senior citizens with technology. We have also assisted the Ark. Museum of Discovery to promote education in a fun way.

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

By hosting Ozark Mountain Brawl, the annual kickoff, FLL Qualifier, and running Rock City Regional, our team has helped FIRST grow. Breakaway stands as an example of the benefits of FIRST. Various programs extending to multiple age groups ensures that the message of FIRST is spread. The way we establish and run our programs is self-sustaining in the way we teach people to teach people. We regularly schedule outreach events and our PR departments are trained to plan and run the events.

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

Breakaway leads by example. We personally mentor others and spread the benefits of FIRST. At events, we are always lending a helping hand to other teams. Breakaway has the reputation as the team that will always be willing to spend time assisting others, starting with the classes taught at our kickoff event. We use STEM to inspire others to create and strive to expand the trend of FIRST and STEM exponentially. The growth and success of FIRST in Arkansas is a testament to our impact.

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

Whenever a school or organization is starting an FRC team in Arkansas, they are almost always given Breakaway's contact information. Our social media, blog, and email is always open to the new teams around us. Pangburn, Arkadelphia, and Southside Batesville are just a few teams we have assisted in starting. When we set up a booth at an event, we have multiple teachers and leaders in the community looking for more information on FRC. Breakaway's legacy and outreach have brought so many to FIRST.

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

Breakaway started 2 FLL teams at our school 8 years ago and we currently maintain a 100% retention rate from our FLL program to FRC. Our mentors also assisted in starting FLL teams such as the Crossbots. We establish strong bonds with the future generation of our family by mentoring FLL students in and out of meetings. Breakaway encourages FIRST statewide through media, demos, partnerships, and interviews. Breakaway aspires to communicate with anyone interested in joining the FIRST community.

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

We host and run an FRC kickoff which had 38 teams from across the state, including 17 rookies attending. Our goal is teaching others skills to be passed on and we do this by teaching classes, ranging from programming to scouting to improve sustainability. We have assisted over 40 FRC teams. Breakaway also assists all the teams that come to our FLL Qualifier. Almost every new FIRST team in Arkansas contacts Breakaway.

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)

Breakaway has mentored 3 FLL teams: The MindSweepers, The Outlaws, and Crossbots. Our members meet with The Mindsweepers for 2 hours a day, twice a week during the season. We have also assisted a Hungarian FLL team, the Fazekas RoboTeam. The Crossbots are the 2019 FLL State Champions, an award The Mindsweepers claimed in 2017. We have also mentored over 40 FRC teams teaching them programming, machining, and writing and presentation skills.

Describe your Corporate/University Sponsors

Harding University provides a shop and many of our machines to work on the robot and is a corporate sponsor for the Rock City Regional. Distance Bible Ed. assists in our travel costs to competitions. Ryerson provides the metal and supplies we use on the robot. ReMax Hoggard Team, Medical Center Pharmacy, and Harding Academy provide financial support. We have also been sponsored by various local businesses such as Whole Hog Cafe, Eaton, and Shimazoo for different events.

Describe the strength of your partnership with your sponsors with special emphasis on the 2018/2019 year and the preceding two to five years

Sponsors are given updates weekly through our blog during build season and are invited to the shop, our Bag & Tag Party, and RoboBanquet, Breakaway's end of the year event. We also give our sponsors gift baskets with Breakaway merchandise. The sponsors are represented on our build shirt, robot, pit and are mentioned in each blog post. Our Marketing team focuses on communicating and bringing sponsors into the Breakaway family. We strive to bear their company names with pride.

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

FIRST is a STEM-based organization for students of all ages and was created to prepare participants for the professional world. FIRST cultivates hard work, engineering, public speaking, community involvement, and writing all while promoting an attitude of teamwork, Gracious Professionalism, and Coopertition. Students involved in FIRST get job experience and develop connections with peers and experts from across the globe.

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

While creating our legacy for 8 years, Breakaway has worked hard for FIRST. Team 3937 is a great example of what a FIRST team should be. Events hosted and run by our team always thrive. Mentoring and assisting other teams furthers the message of FIRST and our example of hard work along with the spirit of Coopertition. By reaching out to community leaders such as the Arkansas governor and partnering with the Museum of Discovery we have brought light to the importance of STEM education.

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

Elizabeth Fisher

Essay

"Arkansas comes to FIRST through Breakaway" -Arkansas FRC Mentor

For years, Harding Academy had an idea. Our school needed a way to mold and nourish the talent that was present. FIRST opened up an option to Harding Academy that no other program could. Through FIRST, our robotics team could learn STEM in a whole new way, develop relationships around the world, and create a family that is now known as team Breakaway. Team 3937 was named Breakaway because we wanted to "break away" from the status quo and stand out for our quality and helpfulness. Winning 5 offseason events, 4 Regional Competitions and competing in the World Championships for 6 years demonstrates a program of quality. While our accolades are notable, helping people improve their lives is the heart of the program. The 28 current members seek to continue a program that grounds itself in its goal to educate and inspire students to create and pursue STEM and FIRST.

Impact on Others: Techdayz

Our main mission is to be an example of the excellence of FIRST. FIRST is about more than robots; it's about people, so we reach out to those around us to improve their lives. Our team strives to cultivate the potential of young students using STEM through one of our unique educational initiatives: TechDayz. The hands-on, engaging TechDayz promote critical thinking while sparking a desire for learning. For example, we teach lessons using Snap Circuit and Lego EV3 Kits with lessons designed by our team. Students from rural and underrepresented areas develop an excitement for education, promoting a future in STEM. We travel to rural areas such as McRae Elementary and Midland school district or urban settings such as Our House, a school for children on the verge of homelessness, with the goal of changing students' lives from a young age. We remain in contact with both groups and have already secured plans for future visits. Our House is eager to expand the program.

Though it started with a small reach to local schools, TechDayz now reaches students across the world in countries like Hungary, Ghana, Nicaragua, and the Dominican Republic. Our outreach of TechDayz also brings more attention to FIRST as others see the difference we are actively making in the lives of young students across the globe. TechDayz meets and surpasses many of the Arkansas Common Core Educational standards in science. Since beginning in 2012, TechDayz has reached almost one thousand children, and we expect it to impact more each year.

Another successful branch of our TechDayz program is Cyber-Seniors. We designed Cyber-Seniors to work with senior citizens from retirement homes. The tasks ranged from creating a voicemail to transferring files between computers. The experience allowed Team 3937 to work with the older generation and to develop relationships using STEM as a catalyst for growth.

Team members met with the Arkansas Department of Education (ADE) members to discuss TechDayz and Cyber-Seniors. The advisers were pleased to hear about STEM programs being hosted by high school students. We continue field research with ADE and teachers to discover how TechDayz can best serve the needs of our educators in Arkansas. We are also presenting how to use FIRST robotics in conjunction with STEM education in Arkansas through the Arkansas Education Board and Arkansas Curriculum Conference.

Our team had the privilege to meet Governor Hutchinson to discuss STEM in our state. He commended our work and was eager to see it further expanded. We talked about TechDayz and Breakaway's desire to give Arkansas students the opportunity to invest in their future in STEM.

Preparing the Future: FLL and LEGO Club

In addition to TechDayz, we host Lego Camp where local students in grades 4-9 compete by building Lego robots and performing challenges against their friends. The participants at the camp plan, program, and build Lego robots based on the game of that year. The camp has grown since we first started it 7 years ago and has taught over 250 children while also teaching our team members the value of leadership and mentoring. Breakaway members have also mentored at ASU's Lego camp over the past three summers.

This is our third year to host a program called Lego Club Cup in which Breakaway members mentor students from grades 4-6 and compete in a Lego game designed by our team. Teams and mentors meet twice a week to work on the game. This program allowed students from four different local schools to learn about and be involved in STEM in a fun program focused on competing with robots. In the coming school year, we anticipate having at least another 8 new schools participating in our Lego Club program that currently has over 100 participants, tripling in the past 3 years. Lego Club is our team's approach to offering young students their chance to start their journey in STEM. This program teaches the value of STEM to young students and leadership to Breakaway team members.

Since 2011, Team Breakaway has mentored 2 FLL teams at Harding Academy and encourages the students to continue to FRC. Members from 3937 have guided approximately 100 FLL students for 4-6 hours each week through tasks ranging from programming and building robots to presenting and formatting projects. One team, the Mindsweepers, earned the State Champion's Award and Runner-Up State Champion's Awards, which shows the effort the FLL students and the FRC mentors put in. Our team has also hosted and run the Searcy FLL Qualifier for 7 years with 27 teams attending in 2016. Breakaway promotes Gracious Professionalism and Coopertition in our FLL program and often assists other FLL teams with programming or repairing a damaged robot. Currently, 100% of Breakaway's FLL students join FRC. Our team also mentored an FLL team from a local school, Crosspointe, which is also an award-winning team.

Members from Breakaway assisted 8 Hungarian FLL teams, one of which, Fazekas RoboTeam, attended the Festival of Champion's last year.

Building FIRST Community

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We aim to be an example for other teams competing in FIRST Robotics Competition. During tournaments, we strive to provide resources, time, and experience to help other teams. FIRST challenges us to show Gracious Professionalism at all times and, by doing that, we hope to inspire other FRC and FIRST teams.

We host an annual FRC kickoff and offer classes ranging from programming and building tips to scouting and marketing, all of which help both veteran and rookie teams. 38 teams were present at our 2019 kickoff. Every team in Arkansas, excluding one, was present at this event. Breakaway is a pillar in the FIRST Arkansas community and has assisted over 40 teams and counting.

Our biggest event is the Rock City Regional which we co-host, set-up, and take-down. 61 teams attended in 2018. We also host an off-season event, Ozark Mountain Brawl. It is the oldest offseason event in the world being over 20 years old and the only offseason event in Arkansas. We have hosted it for three years at our school and have helped the competition grow to include 21 teams, representing 2 countries and 3 states.

In the summer of 2017, our team expanded our reach to over 80 more teams when we were invited to an FRC event in China to assist new teams. This event was an incredible opportunity for us to share FIRST even more internationally.

Sharing FIRST With the Community and Sponsors

We host other events to increase awareness for FIRST and our team in the community. We host the annual Breakaway 10K race which raises awareness for STEM to hundreds of people. The success of the 10K advanced it to Arkansas Grand Prix status for the 2016 season and was a Championship race in 2017. We began with 36 runners in 2012 and now have almost 200. Another way we increase awareness is the annual appearance of team members on KATV to demonstrate our robot and share FIRST to the entire state, reaching an audience of over 400,000 people. Our social media presence has gathered an audience of around 25,000 people who hear our message. Breakaway members assist the Arkansas Department of Education in a Girls STEM Day and STEM Superheroes Day, a STEM fun-day at a local elementary school.

Breakaway is close to its sponsors: Ryerson, ReMax-Hoggard Team, Eaton, Harding University's Center for Dist. Ed. in Bible & Ministry, Medical Center Pharmacy, Whole Hog Cafe, and Harding Academy. Sponsors receive weekly updates and are invited to the shop and to events such as our Bag & Tag party and the Robo Banquet. Our annual Robo Banquet is a great way to show the closeness of the Breakaway family by letting us celebrate our sponsors, alumni, mentors, and graduating class.

Conclusion: Breakaway is Family

With 48 alumni, our team produces skilled and productive members of society, the majority of whom go into STEM-related fields such as engineering. Students don't leave the Breakaway family after they graduate. Our alumni are still celebrated through events such as our Alumni Tailgate Party at Harding University's Homecoming where they can see past robots and connect with new members. Alumni also often come back and mentor and help the team.

Breakaway team members put in an average of 30-40 hours each week during build season, and the team has put in over 20,000 hours annually. We ensure that the programs we initiate are sustainable and continually grow. Members from our FRC, FLL, Lego Camp, Lego Club, and TechDayz programs go on to mentor other students or programs.

In summary, we use STEM to inspire others to create. We want to make sure that everyone has the opportunities they deserve as we continue to be a beacon for STEM education. By establishing 3937 firmly at our school and in the FIRST community, we make it known that we want our community to be known for its creative thinkers, innovators, and leaders. Our team is more than a group with a common goal, our team is a family. Like FIRST itself, Breakaway is more than robots.