

Mission Statement- *FIRST*® Team 1741, Red Alert Robotics, will operate in the spirit of *FIRST*® in our minds and actions. We will operate in *FIRST*®'s image with quality, safety, Gracious Professionalism®, and respect; inspiring future generations to incorporate the core values of *FIRST*® into their lives.

Vision Statement - *FIRST*® Team 1741 is committed. We are committed to the ideas and beliefs that *FIRST*® has instilled in our team. *FIRST*® Team 1741 is dedicated to having a positive impact on the future of our students, our team, and our community. *FIRST*® has allowed us to grow as individuals and as a team through transferrable skills, hands-on experiences, and self-discovery.

Overview of *FIRST*® Team 1741- *FIRST*® Team 1741 Red Alert Robotics is located at Center Grove High School in Greenwood, Indiana, USA. Since our team began in March of 2005, Red Alert has been led by a group of students, mentors, parents, and the Center Grove School Corporation, focused on spreading the mission of *FIRST*®. In 2005, Center Grove School Corporation noticed a void in their school activities with regards to science and technology. Summer Ehresman, a computer education teacher, and two families, the Baxter's and the McCoy's, decided to form a *FIRST*® team to fill this vacancy. They were the founding mentors of *FIRST*® Team 1741, Red Alert Robotics. Summer Ehresman was our school sponsor and her computer experience allowed our rookie team to learn a variety of software programs. Linda McCoy and Sharon Baxter established the Non-engineering side of Red Alert Robotics (NEngA), and were also the founding members of the Red Alert Robotics Parent Organization (RARPO), an organization run by parents in order to sustain our team formed in 2008. Along with these mentors, Steve McCoy and Dwight Baxter founded the Engineering side of the team teaching students' life skills in science and technology. In August 2012, Mark Snodgrass became our new teacher sponsor and head coach. He has been instrumental in enhancing team development and providing more funds for our team. He has a great vision for the growth of *FIRST*® from Jr. FLL to FRC, not only in our school community, but throughout Central Indiana. Since the founding year of *FIRST*® Team 1741, Red Alert Robotics has steadily grown. As of the 2013 season, *FIRST*® Team 1741, Red Alert Robotics, has grown to 38 students and 20 mentors.

Sponsors

- **Grants**
 - Rolls Royce— \$5,000
 - Transformation Trust, Inc. — \$5000
 - Endress+Hauser — \$5,000
 - Tech Point Youth Foundation —\$3,300
 - Praxair—\$2,500
 - Center Grove Education Foundation— \$1,000
 - Southside Pediatrics—\$1,000
 - Indiana Reality Pros, LLC—\$500
 - Ron Gardner—\$500
- **Partnerships**
 - Colors. INC— Donates the anodizing of our robot each year
 - Water Jet Cutting of Indianapolis— Makes parts on robot for precision
 - Poynter Sheet Metal— Welds our robot
 - Center Grove High School— 16 laptops, Control and Non- Engineering Room, wood and machine shop, design and CAD room

What we do/Services Rendered

Members

The top priority of our team is the development of student leaders. Through our team, students gain transferrable skills in leadership, public speaking, commitment, and business, along with self-discovery, self-esteem, and teamwork. Our mentors pour countless hours into each student furthering their knowledge of Gracious Professionalism®, Coopertition®, the design process, machining and construction, and the importance of giving back to our community. We build our proficiency in these fields through unforgettable memories and experiences geared towards inspiring students to pursue STEM fields. 100% of our students graduate high school and go onto college and 51% continue to participate in *FIRST*® as mentors or volunteers. Upon graduation, many of our students go into a STEM related field of study.

Community

- ***FIRST*® Community Tech Night:** Free technology education and digital citizenship courses for our community
- **FLL Tournament:** Helped run and judge Indy South Regional Qualifying Tournament

- FLL, FRC, and FTC team mentoring: Helped establish and sustain local Jr. FLL, FLL, FRC, and FTC teams
- Robots in the classroom: Students do robot demonstrations to reinforce curriculum
- Operation Christmas Child: Packed over 1300 shoe boxes for children all over the world
- Girl Scouts of America Partnership: Fundraising and Gold award
- Vision Walk: Helped run the event and partnered with football team to raise funds
- Homecoming: Designed and built a float that represents school's theme and *FIRST*[®]
- Conner Prairie- Mini Maker's Faire: Demonstrated our robot and taught people about *FIRST*[®]
- Project Linus: Craft blankets for children in need
- Scouting at *FIRST*[®] Competitions: Working collaboratively with *FIRST*[®] community members to scout at regionals
- Science Fair: A safe place for pre-*FIRST*[®] aged children to learn about science and technology at local events
 - C.A.G.E. Match, Indy South Regional, Community Tech Night
- Kids Against Hunger: Helped stuff and mail envelopes
- Girls Engineering Awesome Robots (GEARs): Girl Scout Gold Award, promoting *FIRST*[®] throughout elementary schools by giving girls 3rd through 5th grade a taste of robotics
- Chick-fil-A: Demonstrated our robot and taught people about *FIRST*[®] and participated in a fundraiser
- Library Demos: Promoted literacy and technology through interactions with children, to inspire them (includes use of a robot)
- Rose-Hulman: Demonstrated our robot at the opening of the Branam Student Innovation Center

Future Plans

- In One Year
 - Start an FLL or Jr. FLL team in every local elementary school
 - Strengthen relationship between students and mentors
 - Better communication with Red Alert Robotics Parent Organization; Students more involved in the meeting to know the financial aspect of the team
 - Increase communication with school, local newspapers and TV stations
 - Female engineering mentor
 - GEARs (Girls Engineering Awesome Robots) program in every elementary school in Center Grove
 - Have a practice robot field for local teams
 - Change "Community Tech Night" into a more attractive event
 - Move away from charity themed outreach and toward technology based outreach
 - Incorporate classes- both during the off season and build season times
 - *FIRST*[®], Inventor, Programming, Design, Illustrator, 3DS Max, Photoshop, Photography/video, Marketing and Branding, Printing & Typography, Woodshop, Skills –Business, Public speaking
- In Three Years
 - Organize and run one Jr. FLL Event at a local school
 - Add two additional major corporate sponsors
 - Have the majority of our cost supported by sponsors
 - Create enough funds to carry over into the next year
 - Increase attendance during off season
 - Make a yearly science carnival at local events
 - Establish one sustainable local High School *FIRST*[®] FRC team
 - Establish a robot camp at two local elementary schools
 - Make the "Robot in Classes", in which we go to PLTW and science classes to present our robots, a yearly event
 - Students vote from RARPO
 - Girl power on engineering side
 - Create an FRC team at every high school in our county
- In Five Years
 - Establish an effective system of recruiting new members during the summer months
 - Four additional Major Corporate sponsors
 - Establish three sustainable local High School *FIRST*[®] FRC teams
 - Three different Community tech nights with a 300 yearly participants
 - *FIRST*[®] robotics class as a part of High School Curriculum
 - GEARs program in every elementary school in the state