<u>Mission</u> <u>Statement-</u> *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.

<u>Vision</u> <u>Statement</u> - We create leaders by giving students real world problems to solve, which gives them experience in more than just science and technology.

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 booster club, and were also the founding members, in 2008, of the Red Alert Robotics, an organization ran by parents in order to sustain our team. Along with these mentors, Steve McCoy and Dwight Baxter founded the Engineering side of the team teaching students' life skills in science and technology. Since the founding year of FIRST® Team 1741, Red Alert Robotics, has grown to 58 students and 22 mentors.

Sponsors

O <u>Monetary</u>

- Endress+Hauser \$5,000
- Rolls Royce— \$5,000
- Indiana Realty Pros, LLC—\$2500
- Cook Medical—500
- MedExpress— \$1,000
- Center Grove Education Foundation— \$1,000
- Southside Pediatrics—\$1,000
- CrossRoad Engineers, PC—\$1,000
- Beth Breuninger—\$500
- Ingredion—\$500
- Ted & Audrey Stehle—\$500

O In kind

- 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 robot
- Center Grove High School— 16 laptops, wood and machine shops, classroom space, and design and CAD rooms

What we do/Services Rendered

Members

The top priority of our team is the development of student leaders. Through our team, students gain transferable skills in leadership, public speaking, commitment, and business, along with self-discovery, self-esteem, and teamwork. Our mentors pour thousands 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 15% continue to participate in *FIRST*® as mentors or volunteers. Upon graduation, 90% of our students go into a STEAM related field of study.

Community

- Camp Can Do: Played with children who have disabilities and demonstrated our robot
- Children's Museum Demonstration: We organized STEM activities and demonstrated our robot
- Craft Fair: Brought our robot and merchandise to our school`s craft fair
- FLL Tournament: Helped run and judge Indy South Regional Qualifying Tournament
- <u>FLL, FRC, and FTC team mentoring</u>: Helped establish and sustain local FLL, FTC, and FRC teams
- FTC Tournament: Helped organize and run the Indy South Qualifying Tournament
- <u>Girls Engineering Awesome Robots Successfully (GEARS)</u>: A program that is affiliated with Girls Scouts of America that gives young girls the opportunity to become passionate about engineering
- Homecoming: Designed and built a float that represents school's theme and FIRST®
- <u>Library Demos:</u> Promoted literacy and technology through interactions with children, to inspire them
- Operation Christmas Child: Packed over 1300 shoe boxes for children all over the world
- <u>Project Linus</u>: Crafted blankets given to first responders to distribute to children involved in trauma
- Radical Robot Summer Camp: Organized and taught a five day summer camp for elementary kids
- Robots at Restaurants: Demonstrated our robot and educated people about FIRST®
- Science Fair: A safe place for pre-FIRST® aged children to learn about STEM at local events
- <u>Sponsor Presentations:</u> Robot demos displaying the benefits from the company's financial contributions
- <u>Sugar Grove Camp:</u>Robot demonstration & STEM activities for elementary kids in a day camp
- WFYI (NPR): Volunteer positions to assist with costume characters & interacted with the community
- <u>Vision Walk</u>: Volunteered to assist with the event in honor of past, visually impaired, team members

Future Plans

- In One Year
 - O Strengthen relationship between students and mentors
 - O Better communication with Red Alert Robotics Parent Organization; Students more involved in the meetings to know the financial aspect of the team
 - O Increase communication with school, local newspapers and TV stations
 - O Sustain the amount of girls on the engineering side
- In Three Years
 - O Start an FLL or Jr. FLL team in every local elementary school
 - O Female engineering mentor
 - O Establish a robot camp at two local elementary schools
- In Five Years
 - O Four additional Major Corporate sponsors
 - O GEARS (Girls Engineering Awesome Robots Successfully) in our district elementary school
 - O Organize and run one Jr. FLL event at a local school
 - O Have the majority of our cost supported by sponsors
 - O Establish 1 sustainable local High School FIRST® FRC team
- In Ten Years
 - O FIRST® robotics class as a part of High School Curriculum
 - O Create an FRC/FTC team at every high school in our county