

“Don't worry when you are not recognized, but strive to be worthy of recognition”

- Abraham Lincoln

Ten years ago, a small group of parents and students formed 1741, Red Alert Robotics. Their passion for STEAM laid the foundation for where we are today. Students joined the team to build a robot, but we have become so much more. In the spirit of the three R's of recycling, we look back on our team through the lens of Responsibility, Relationships, and Recognition. It is through these three ideals that our team has flourished and impacted others.

Founded on the idea that the team should be student led, we have established a system of accountability that encourages **responsibility** and allows students to grow in their skills. Our student leadership team consists of four main captains: Overall, Operations, Engineering, and Design. Along with these captains, there are three other year-long elected captains: Media, Safety, and Scouting. Throughout each build season, there are four sub team captains, each with an assistant captain that is selected thoughtfully. These students lead the team and are responsible for the actions of their sub teams.

Our team follows three key questions, inspired by legendary football coach, Lou Holtz. “Can I trust you?, Do you care about me?, and Are you committed to excellence?” Business cards with these questions are distributed each year, to establish a sense of responsibility. These questions have led our students to strive for their maximum potential in their leadership skills and teamwork.

We demonstrate our commitment to excellence in and out of the workshop. Each student is expected to maintain the school district academic standard for participation. If students are struggling, mentors and upperclassmen offer academic help in any class. Starting last year, we were given the opportunity for students to earn a varsity letter. All students must maintain their grades and complete their designated hours during build season to earn this award. This honor does not come easily or automatically, but by exceeding expectations through participating in team events.

Our team has been able to develop several key **relationships** within our school and community. Our team practices vertical articulation beginning with Jr. FLL, where elementary students are able to get a head start on their journey to FRC. Individual team members mentor younger teams which inspires them to participate on our FTC and FRC teams.

Our relationship with our school is equally as important as with our

community. To accomplish our ambitious tasks, the school gives us access to a wood and metal shop, a CAD lab, and a room to store our equipment. We also have access to a gymnasium to practice for competitions and have team bonding activities. Our team was featured as the main article in last November's edition of a local magazine, Center Grove Newsletter. This magazine was sent to over 13,000 houses throughout our area and on the front cover were two of our seniors. Through our partnerships with the community, we have impacted over 17,390 people.

Our relationships are not only with our school, but also with our sponsors. We give annual robot demonstrations at the facilities of our corporate sponsors. During these demonstrations, we give the staff an opportunity to drive our robot and ask the students questions. We have also been invited to tour several shops, which allow us to thank our sponsors and observe the space where our parts were made. By partnering with local businesses, community members are able to learn more about our team and FIRST. Strange Brew is a local coffee shop that allowed us to brand our own blend of coffee, Robot Rampage, last year. Since then, this coffee has become one of the top sellers and for each bag sold we get a percentage of the profits. We also partnered with a local gourmet popcorn shop, Not Just Popcorn. We named a flavor of their popcorn, Red Alert Velvet and were able to place our own Red Alert Velvet logo on the bags.

Our relationships within FIRST and our team are just as important as our business relationships. During build season, we have delivered annual care packages to two local teams since their rookie season. In the care packages we had a gift certificate to AndyMark along with snacks and drinks. We have also had many opportunities to conduct outreach events with other FRC teams. Last summer, we led a demonstration with FRC team 292 at the Indianapolis Children's Museum. After displaying our robot, the campers were able to make their own catapults, which then they were able to launch at a target. Each year we strive to involve more students within our team. We held a boot camp last summer, which included leadership activities that helped build confidence and a sense of belonging. We taught both our rookies and team 4846 about what we do.

We value the friendships created within our team. The relationship between the members encourages vital teamwork skills and bonding experiences. This year we established Big and Little Siblings within the team. This relationship between the veteran upperclassmen and the underclassmen allows the rookies to learn from the veterans before they graduate.

Our team **recognizes** that there are specific needs within our community. At one of our local middle schools, we partnered with the technology teacher to create, "IT Girls," a club which inspires middle school girls to pursue computer science. To further engage young girls, we partnered with Girls

Scouts Across America to create GEARS, Girls Engineering Awesome Robots Successfully. This program uses NXT robots which kids build, program, and then display to the group and parents to earn a scout's badge. To continually help younger students, we host, organize, and run the Indy South FLL Qualifying Tournament and the inaugural Indy South FTC Qualifying Tournament. We have also volunteered for the Central Library FLL Qualifying Tournament and were invited back last November for the second year. Our team members have noticed that many young students have taken interest in joining an FRC team in the future. Red Alert strongly encourages kids to stay inspired in STEAM. Over the summer, our team held the first Radical Robots Summer Camp. This camp was designed to involve young kids in STEAM by conducting experiments and building NXT robots.

We recognized that there was a need for a place a practice and were able to use our resources to host a week zero event, Recycle Rumble. Every Indiana FRC team was invited and eight attended. Back at home, we have helped a struggling FRC team that we initiated in 2010. Mentors, students, and alumni have rallied to attend their practices to ensure they will have a robot to compete with this year. By maintaining the strong connections we have with our school, we have been able to introduce more STEAM opportunities. We have had several meetings with our school board and administration due to the lack of our own space. The STEM Academy has been approved and we have the privilege to be actively involved in the design process.

Our founding mentors initially recognized the need to support several organizations in our community, which encourages students to work with organizations close to their heart. We have always had a close tie to the first responders in our community, so it was natural for us to partner with Project Linus. This organization takes donated blankets and distributes them to children who have gone through traumatic events. In honor of past team members with vision impairments, we annually volunteer for the Indianapolis Vision Walk. This event raises money and awareness for the visually impaired in our community. In order to impact our global community we partnered with Pack Away Hunger a non-profit organization that packs and sends highly nutritious meals to starving people around the world. We raised money to pack 2,160 meals. Half of the meals we packed stayed locally at our school's food pantry and the other half were sent to Guatemala.

During our build season, many students put passion into their tasks. Last season we realized the hard work everyone puts into build season. To show our appreciation towards the hard working team members and mentors, we have a Student and Mentor of the Week. Each of the four main captains nominates one student and one mentor that they think worked exceptionally hard that week. The team then writes a website post and conducts an interview with the student and mentor to use in our "Red Alert on Air" YouTube show.

Last year, we recognized the need of our team to continue to progress and accomplish new task. To promote literacy and safety within our community, the team wrote our own children's book "Ryan the Raccoon and the Terrific Treehouse". This book was written by our students and illustrated by our media captain. We also programmed and illustrated our own smartphone app, Fly Fly Away. This app is based off of the 2013 FRC game, Ultimate Ascent, where a robot shoots discs through goals. Our team is always eager to demonstrate our robot and teach the community about what we do. The staff of the Indiana Pacers, an NBA team, gave our team the opportunity to launch our t-shirt cannon to launch shirts into the crowd. During this event, we were able to speak about our team and FIRST.

Our goal to add value to our community has driven our team from the beginning. Greatness is not achieved through our words, but through our actions. By exhibiting FIRST values, no matter where we go, we believe we are a model team. Through our desire to share STEAM, we have taught community members that there is more to FIRST than building a robot.