



2013

Business Plan & Risk Management Plan

Red Alert Robotics

FIRST® Team 1741

*Center Grove High School
2717 South Morgantown Road
Greenwood, IN 46143*

*www.redalert1741.org
www.usfirst.org*

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7 MISSION AND VISION

We create leaders by giving students real world problems to solve, which gives them experience in more than just science and technology.

7.2 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.

7.3 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.

Our Vision For 1741's Future

Us

Our students will learn engineering, business, and life skills and use them throughout their careers.

Our team, students, parents, and community will understand the bigger picture of *FIRST*®. All of the students will work well together.

We will not be afraid to be ourselves.

We will train students and teach them how to perform new tasks.

We will be successful while also maintaining good character.



Outreach

We will help make robotics more accessible to visually or hearing impaired students.

We will teach people that *FIRST*[®] robotics is awesome.

We will help 3180 win an award beginning with maintaining sustainability.

Our FTC team will sit with us at the banquet.

Building

We will do our documentation while we are building our robot.

We will have a functioning robot to work with the third week of build season.

Competing

We will win all of our matches for our alliance.

We will make it to World and win an award there.

We will win a blue banner for the robot.

We will win on Einstein without a mentor even touching the robot.

We will win the World Chairman's Award.

This Dream Wall was created at a May 2012 meeting where nearly every student, mentor, and parent was present. Participants were asked to imagine they were in the same meeting in May 2013 and chairmans

They felt great pride in their team. Students, mentors, and parents were asked to articulate what they feel proud of. The statements were collected and organized by topic and then turned into a graphic.

7.4 TEAM HISTORY

FIRST[®] Team 1741 Red Alert Robotics is located at Center Grove High School in Greenwood, Indiana, USA. For the past eight years, 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*[®], "To inspire young people to be science and technology leaders, by engaging them in exciting mentor-based programs that build science, engineering and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership."

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.



1.4 Quick Facts

Team Name	<i>FIRST</i> [®] Team 1741 Red Alert Robotics
Founding Year	March 2005
<i>FIRST</i> [®] Rookie Year	2006 (build season)
Current Team Students	38
Number of Female Students	9
Percentage of Minority Students	18%
Team Mentors	20
Mentors With No Child On The Team	14
Number of College Mentors	1
Number of Female Mentors	1
Major Corporate Sponsors	Red Alert Robotics Parent Organization, Rolls Royce, Center Grove Education Foundation, Indiana Department of Education, Transformation Trust Inc., Praxair, Tech Point Youth Foundation, Stadium Graphics.
School Corporation	Center Grove High School
Located in	Greenwood, Indiana
Team Colors	Red, White, and Black
Logo	Gear



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Year	Robot Names
2006	The Revolver
2007	Mantis, IRI: Nessie
2008	Thaddeus
2009	μ and Sherman
2010	Scorpion and Kirby
2011	Sampson, Destroyer of Worlds, Minibot: He-man, Master of the Universe; Squeaky, Minibot: Pipsqueaky
2012	Swish and Mordecai
2013	Awesome Name To be Determined



8 WHO WE ARE

We are the robotics team for Center Grove High School, *FIRST*[®] Team 1741 Red Alert Robotics (<http://www.redalert1741.org/>), located in Greenwood, Indiana, a suburb of Indianapolis. We compete in an international robotics league with more than 4,000 other high-school-aged teams. *FIRST*[®] (www.usfirst.org), For Inspiration and Recognition of Science and Technology, has robotics leagues for Kindergarten-2nd grades: Jr *FIRST*[®] Lego League (Jr. FLL); 3rd-8th grades: *FIRST*[®] Lego League (FLL); 7th-12th grades: *FIRST*[®] Tech Challenge (FTC); and our league of 9th-12th grades: *FIRST*[®] Robotics Competition (FRC). Each league is given a real world problem to solve requiring creativity, mathematics, science and technology, and a lot of teamwork.

We have six weeks to design and build a 120 pound robot that competes in a game with and against other robots. This challenges us to accomplish tasks that relate to real world problems and involves Gracious Professionalism[®] and Coopertition[®]. This is because we work with randomly selected alliances of three robots to play against another alliance in each match at tournaments. Gracious Professionalism[®] and Coopertition[®] embraces the spirit of *FIRST*[®] in competing against everyone, but working together for the greater good and being friendly and proficient.

We have a budget of about \$40,000 annually and run like a business with an organizational chart and a Board of Directors. Students play important roles by creating the business plan, the web site, graphics, communications, safety plans as well as designing and building the robot. Funding and other resources come primarily from community sponsors, family, friends, and our school. We are very fortunate to have a room in our high school dedicated to the team as well as having access to the high school's technology rooms and equipment which includes computers with CAD and animation software as well as work rooms with equipment for construction.

We are a student lead team which means our operation requires students to develop collaboration, communication, and cooperation skills. Students must work and communicate with a maturity level higher than that of an average high school student, as well as be flexible enough to accommodate to the diversities that both the mentors and teammates bring.

We have set up our team, to have leadership tiers. Each captain has a sub-captain directly underneath them learning what they do and how to do it. Once the captains depart the team, their sub-captain can step up and know exactly how to run our team. This program was made so that the team's expertise does not leave with the seniors when they graduate.



8.2 SUSTAINABILITY WITH OUR STUDENTS

We are committed to building a better “us”. Students gain transferrable skills in leadership, public speaking and business, designing and construction, along with self-discovery, self-esteem, and teamwork. We build our strength in these fields through unforgettable memories and experiences geared towards inspiring students to pursue STEM fields. In order to provide equal opportunity, we make a large print game manual for visually impaired students on our team. In past years, we have submitted an electronic version of the large print manual to the *FIRST*[®] website to benefit other *FIRST*[®] participants in similar circumstances.

During the off-season our team meets once a week. During these weekly meetings we hold training sessions for new students wanting to join the team as well as regular meetings to perform outreach and to enhance our skills and teamwork. The training classes we teach include teamwork, programming, animation, leadership skills, and machine work. Before the build season begins we hold a design exercise so students can get an idea of what designing a robot is like by learning the design process. During the design exercises, students must partner with other team members to design certain tasks such as a roller coaster, Jaguar box, and a restaurant. Grades are very important to our team. During the build season we do grade checks; if a student is struggling in a class we offer tutoring and study tables after school. We partner with each other by offering a safe place to learn and offer help with homework assignments.



2.2 ACTIVE STUDENTS

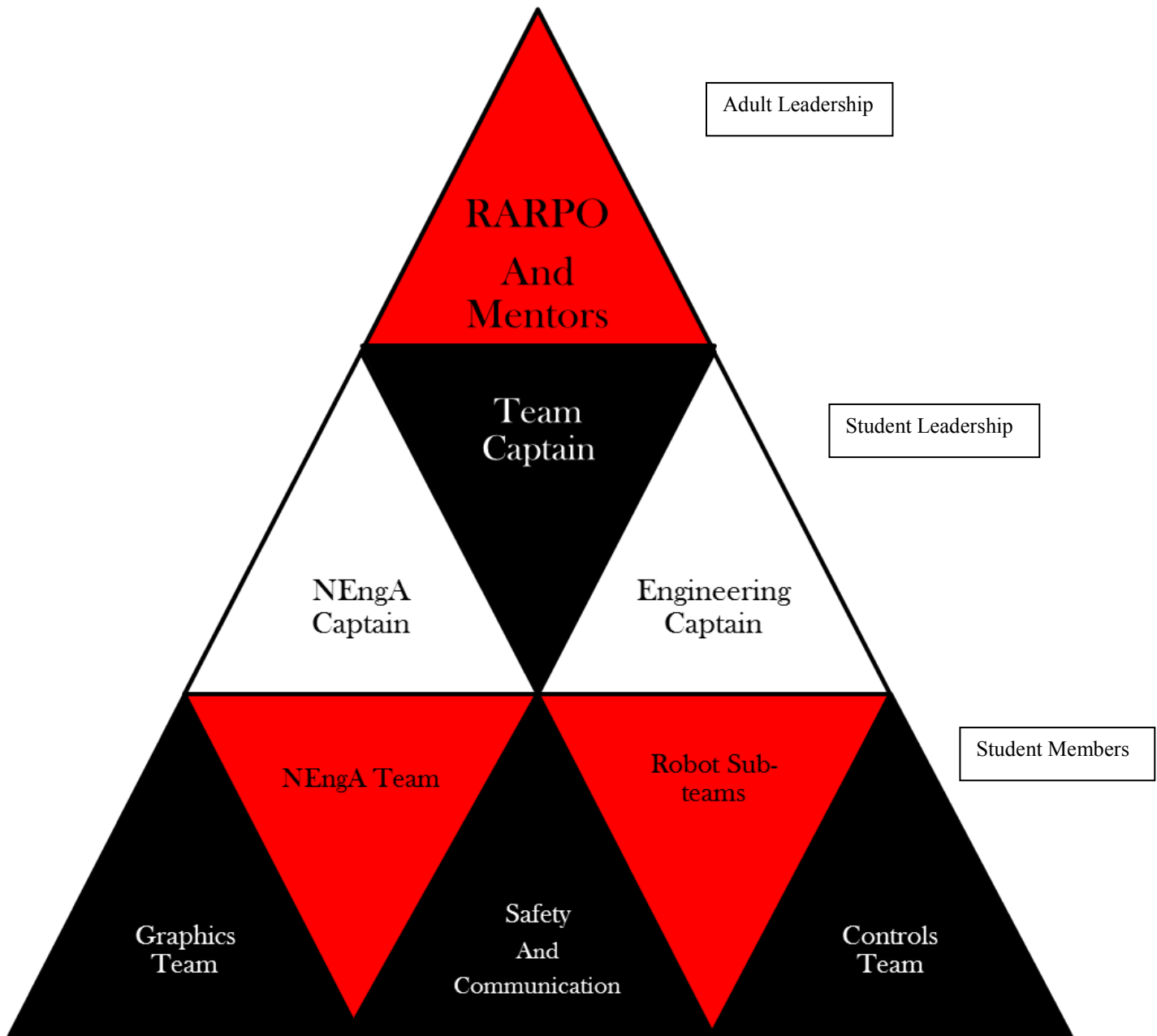
Name	Years in FIRST®	Name	Years in FIRST®	Name	Years in FIRST®
Cardwell, Nathan	4	Kogut, Adam	4	Raker, Josh	3
Choksy, Darius	9	Kring, Ethan	4	Ramirez, Tommy	2
Clark, Rick	4	Kubota, Yuki	1	Rasche, Sarah	1
Crank, Zachary	1	Lansdell, Collin	5	Ray, Tyler	3
Crider, Noah	1	Leser, Ryan	2	Reeves, Sean	1
Davis, Cameron	1	Leser, Travis	2	Rose, Hailey	2
Doyle, Kenzie	1	Martz, Joey	1	Schoenfelder, Jacob	1
Eid, Torben	3	Matthews, Stephen	2	Smith, Mariah	5
Gardner, Ka'oe	2	McKnight, Dustin	2	Tam, Amy	3
Johnson, Chloe	1	Mendenhall, Doyle	2	Turner, Amber	1
Johnson, Christian	1	Miller, Andy	1	Vaught, Caleb	2
Kekre, Juhi	1	Miller, Jesse	1	Ziegler, Nathaniel	2
Kobierski, Jessica	5	Osborne, Connor	4		

2.3 RECRUITING NEW MEMBERS

FIRST® Team 1741, Red Alert Robotics, has a number of different ways to recruit members each year. Within this past year we have hosted several open houses where we invited the whole community to come and see what FIRST® Red Alert Robotics is all about. In terms of recruiting directly from our school we have an open house at the beginning of the school year to encourage new students to join our team. We also participated in the high school's club fair and ice cream social for freshmen at the beginning of the school year. This teaches them that robotics is "The New Cool" and introduces the opportunity to get involved. At our schools "Meet the Teacher" night, we give the parents a greater understanding of who we are. Our team also has a close relationship with our FLL teams such that they join us at C.A.G.E Match, an off season competition, demonstrating what it is to be on a FRC team. At the end of the school year, we invite those FLL eighth graders to join our team and participate throughout the summer. This year we started an FTC team combining eighth and ninth graders with plans to expand FTC within both our middle schools.

2.4 MANAGEMENT PLAN

2.4.1 TEAM STRUCTURE DIAGRAM



2.4.2 EXPECTATION OF MEMBERS

- When someone asks a student to do something, they will perform the task to the best of their ability. If the student feels a request is out of order, the student may talk to their captain about it.
- If a student sees someone not following safety rules, tell that person in a positive manner what they are doing wrong.
- Do everything to the best of their abilities
- Respect all members
- Demonstrate a willingness to learn new things
- Teach and mentor younger/new students

2.4.3 EXPECTATIONS OF MENTORS

- Demonstrate the highest level of integrity
- Listen
- Demonstrate exemplary conflict management skills

2.4.4 EXPECTATIONS OF STUDENT LEADERS

2.4.4.1 TEAM CAPTAIN

- Oversee and manage the team's year round program
- Oversee all outreach and team events
- Lead team meetings
- Act as a liaison between the Red Alert Robotics Parent Organization and the team members
- Be a mentor and example to all other students
- Act as a 3rd party during a disagreement/difficult situation
- Make general decisions concerning the team
- Represent the team at all events
- Facilitate team discussions
- Lead weekly leadership meetings
- If absent, find a replacement for the meeting

2.4.4.2 ENGINEERING CAPTAIN

- Oversee and manage the building of the competition robot
- Oversee all off season engineering/build projects
- Act as a liaison between the team captain and the engineering sub-teams
- Be a mentor and example to all other students

- Act as a 3rd party during a disagreement/difficult situation
- Make general decisions concerning the engineering sub-teams
- Represent the team at all events
- Facilitate engineering team discussions
- Attend weekly leadership meetings
- If absent, find a replacement for the meeting

2.4.4.3 NENGA (NON-ENGINEERS WHO ARE AWESOME) CAPTAIN

- Oversee and manage the non-engineering sub-teams
- Oversee all team outreach and events
- Act as a liaison between the team captain and the non-engineering sub-teams
- Be a mentor and example to all other students
- Act as a 3rd party during a disagreement/difficult situation
- Make general decisions concerning the non-engineering sub-teams
- Represent the team at all events
- Facilitate non-engineering team discussions
- Attend weekly leadership meetings
- If absent, find a replacement for the meeting

2.4.4.4 SAFETY CAPTAIN

- Teach each team member the safety rules
- Enforce safety throughout the team
- Create, administer, and score team safety quizzes

2.4.4.5 COMMUNICATIONS CAPTAIN

- Write and send team newsletter
- Oversee and manage creation of the team web site and social media

2.4.4.6 SUB-TEAM CAPTAINS

- Lead their respective sub-team
- Oversee activities for which the sub-team is responsible
- Act as a liaison between the team captains and their sub-team
- Be a mentor and example to all other students
- Act as a 3rd party during a disagreement/difficult situation
- Make general decisions concerning their sub-team
- Attend weekly leadership meetings
- If absent, find a replacement for the meetings

2.5 RESOURCES

2.5.1 SCHOOL

FIRST® Team 1741 is sustained within our school. We help the school in any way we can because they are a major resource to us. Throughout the years, *FIRST*® Team 1741 has struggled with having room to work on our robot and store all of our tools. The school has helped us by giving us a room all to ourselves and allowing us to use the wood shop, design room, and CAD lab. In the past, they have donated many computers to our team and this year they bought additional computers for us. For competitions, they allow us to use the school buses. They have given us funding and allowed us to have both a refrigerator and microwave in our room to help us stay up during the long build season nights.

2.5.2 MENTORS

Our continued success is sustained primarily through our mentors. All of our mentors are community volunteers, except for two. Our mentors are always there to encourage and empower us. They put in countless hours to push us to pursue excellence. Our dedication stems from the commitment they show us. Some of our mentors are people who came in for a day and were so inspired they stayed on the team for years, even without ever having students on the team or a previous affiliation with *FIRST*®.

2.5.2.1 ACTIVE MENTORS

Name	Years in <i>FIRST</i> ®	Name	Years in <i>FIRST</i> ®
Baxter, Dwight	9	Meyer, Hugh	8
Baxter, Sharon	9	Miller, Jay	6
Butts, Matt	5	Miller, Jordan	7
Cardwell, Jon	2	Osborne, Chris	1
Coulombe, Nathan	4	Rose, Christopher	4
Crider, David	1	Rose, Ron	2
Eid, Brad	3	Setter, Andrew	5
Frampton, Patrick	9	Settles, Tim	8
Hamilton, Bob	3	Snodgrass, Mark	8
Ikegwuonu, Valentine	2	Thielmeyer, Rich	4

2.5.3 ALUMNI

100% of our students graduate from high school and go on to college or the military. 51% of our graduated students stayed involved with *FIRST*® as mentors or volunteers; 15% of them are currently involved with *FIRST*®. We try to keep in touch with our alumni using modern technology. Most alumni are a part of the Red Alert Alumni Facebook Page. They continue through college while keeping a close relationship with their past team mates.

A * by their name indicates they stayed involved with *FIRST*® after graduation.

A ** by their name indicates they are currently involved with *FIRST*®.

2006

- Nathan Dubbs - IUPUI
- *Cory Foster - Purdue
- *Kurt Mauer - Engineering at Purdue

2007

- Emily Baumgartner - Navy Electrical Engineer
- David Doane - Video Game Design in Manchester England
- **Patrick Frampton - Computer Science at IUPUI
- Autumn Holman - Law at IUPUI
- Scott Pace - Electrical Engineering at Purdue
- **Betsy Smith - Kindergarten teacher

2008

- *Eric Andrews - Media Arts and Science at IUPUI
- **Charlie Baxter – The Med Institute
- *Aaron Clay - Computer Science at Purdue
- Devin Dressler - Farming Technician at Ivy Tech
- *Michael Foley - Graphic Design at IUPUI
- James Kramer - Management Information Systems at Washington State University
- *Mike McCoy -Mechanical Engineering at Purdue

2009

- *James Dugan - Working at Allison Transmission and Engineering at Ivy Tech

2010

- Andrew Alderson - Computer Science at IUPUI
- *Colin Ballast - Computer Science at IUPUI
- Tim Barnett - Music at Ball State
- *David Foley - Mechanical Engineering at IUPUI
- Kelsey Hart - Civil Engineering at Purdue
- Jeremiah Hansen - Mechanical Engineering at IUPUI
- Zack Hansen - Mechanical Engineering at IUPUI
- Ben Hyatte - Environmental Science at IUPUI
- Jacob Hyatte - Chemistry at Purdue
- *Alyssa Inman - Management at Purdue
- *Mike Kobierski – Mechanical Engineering at Purdue
- Ryan Martin –EMT
- *Matt Misner - Informatics and Security at IUPUI
- Colton Sprague – Independent video game tester
- Trevor Settles - Physics at Purdue
- *Levi Miller - Electrical Engineering at Purdue
- *Craig Roberts - Electrical Engineering Technology at IUPUI
- *Zach Stanley - Electrical Engineering at Purdue

2011

- Robin Eid - Electrical Engineering at IUPUI
- Alyx Kopie - Painting at IUPUI
- **Jordan Miller - Animation and Video Game Design at IUPUI
- *Carly Morris - Entomology at Purdue
- Cynthia Rose - Engineering at Purdue
- **Nick Roeder - Engineering at Purdue
- *Austin Settles - Biology at Purdue
- Justin Sluka - Computer Science at Purdue

2012

- **Rachel Daniel - Technology Education at Indiana State
- **Steven Himebrook – Architecture at Ball State
- Rushi Patel – Electrical Engineering at Purdue
- Alden Ray – Electrical Engineering at IUPUI

2.6 OUR PARTNERSHIP WITH OUR 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 for Vision Walk
- 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
- 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

2.7 ANALYSIS AND STRATEGY

2.7.1 WWW/WNI Review

This activity was performed in early May by the students in reflection on the 2012 Build and Competition seasons.

What Went Well	What Needs Improvement	What We Have Improved (2013)
Our team is becoming better known in our community.	Organization and communication throughout the team and sub teams	Organization and communication throughout the team
Drive Train	Spirit for team and others	Process of training people
Qualified to go to World Championship by winning an award.	Training new people	Design Matrixes
Listened to Judges and input from other people	Check that ideas are realistic	New Schedule Process
Programmers met every challenge	Be more prepared for pre-competition scrimmages	Accountability Process
We became role models	Accountability and consistency	Completed most tasks before build season
Entrepreneurship Award	Enforce Rules	Process of how to deal with problems/drama
Engineering Inspiration Award	Follow schedules and meet deadlines	Integration among team members and mentors
Won by 1 point at World	Complete tasks before build season	Leadership Skills
Recognized by all	Decrease drama and/or deal with drama better	Scouting Process
Many Judges present at one time in our pit area	Have a better sense of game and robot design strategy	Respect
Recruiting	Integration among team members and mentors	
Improvement	More school involvement	
Team work	Leadership Skills	
Team Pride	Better Scouting Process	
Team Documentation	CAD Database	
Made it to Semifinals at World	More Fundraising for students	
Partnerships	Robot Cart	
	Keeping things clean	
	RARPO-Student and Parent involvement	
	Respect	
	Pit Crowd Control	

2.7.2 SWOT ANALYSIS

The SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis was performed with students over the summer of 2012. In this analysis, students perform a review of issues internal to the team.

Strengths	Weaknesses	Opportunities	Threats
Not afraid of change	Balance between us and <i>FIRST</i> [®]	Personal recognition	Drama
Good at Regionals with a durable robot	Keeping to the schedule and putting team priorities first	Scholarships and Internships	Budget cuts
Outreach	Drama and working together	Bringing back experienced mentors	Self-destructive behavior
Delegation	Lack of Precision	Partnerships	Lack of training, safety and understanding the student body
Business plan	No school support	Connections	Lack of money
Administration support	Pre-season training of everything	Win at World	Other teams
Great mentors	Limited to our space	Gain experience	Sabotage
Moving in a good direction	No extra anything	Become a leader	Disgruntled students
<i>FIRST</i> [®] web site	Lack of participation	Networking	Lack of rules
Friendships	Communication	Relationships	Injuries
Team advocates	Document entire build process	Learning experiences	Loss of students
Established team	Repeating Mistakes	Go for World Chairman's	Loss of parents
Good sponsors	Clean up	Learn about other fields	Loss of workspace
Awesome parents	Realistic goals	Starting over	Loss of computer access
Motivated students	Staying committed	Win a Regional with robot	Loss of machine work
Team spirit		Speaking to NASA	Loss of mentors
Wide array of talents		Start FTC Team	Loss of sponsors
Great CAD		Strong Bonds with FLL teams	Lack of respect
		Relationships with other FRC Teams	Not enough incoming students
			Lack of motivation
			Bad Weather

2.7.3 PEST Analysis

The PEST (Politics, Economics, Social Issues, and Technology) Analysis was performed with students over the summer of 2012. In this analysis, students perform a review of issues external to the team.

Politics	Economics	Social Issues	Technology
Legislation for <i>FIRST</i> ®	Non-engineering sponsors may be more recession-proof	We are not using social networking to its full potential	Scouting
Mandated funding	Michigan gets twice the competition for the same price	Being smart should be cool	There are different types of aluminum available
Other teams see us	School funding	Improve community technology	We are not using social networking to its full potential
Rumors	Put tariffs on imports	Internet could be good or bad—cyber-bullying	Using simulators
Janitorial Relationship	Budget cuts & referenda adversely affecting us	Start a trend in clothing, buttons, fedoras	Transferring data is easy over the Internet
Technology grants	Fewer Sponsors	Ice cream social	New Jaguars
Tax law changes	Taxable donations may be gone soon	Cyber-bullying action plan	More data possibilities
Get to know the politicians	Need to show why <i>FIRST</i> ® leads to more jobs through STEM	Teach others that robotics is awesome	Write our own OS or programming language
Get to know school and district administration	Getting funding from the state for all <i>FIRST</i> ® teams in IN	CG Robotics T-shirt	Write smartphone games or app, like scouting
What to Do About It	Light Bulbs	YouTube video	Uses of scouting data
Understanding how we fit into the politics system	Entry Fee goes up	TV exposure	Use of tablets and smartphones for communication
Working with other governments in US	Teachers laid off		
Contacting possible future government member to get their support before they go into office	Parts and travel fees go up		
Getting involved with STUGO	Sponsor presentations		

3 OUTCOMES AND GOALS

3.2 HOW WE DID IN 2012

3.2.3 TOURNAMENTS

Boilermaker Regional, Lafayette, Indiana, March 15-17

Queen City Regional, Cincinnati, Ohio, April 5-7

World Championship in St. Louis, April 25-28

IRI (Indiana Robotics Invitational), July 20-21

C.A.G.E Match, October 20

3.2.4 AWARDS AND ACHIEVEMENTS

3.2.4.2 BOILERMAKER REGIONAL: ENTREPRENEURSHIP AWARD

Recognizes a team, which has developed a comprehensive business plan in order to define, manage, and achieve team objectives. This team displays entrepreneurial enthusiasm and the vital business skills to ensure a self-sustaining program. Sponsored by Kleiner Perkins Caufield & Byers

3.2.4.3 QUEEN CITY REGIONAL: ENGINEERING INSPIRATION AWARD

Celebrates a team's outstanding efforts in advancing respect and appreciation for engineering and engineers, both within their school as well as their community.

This award qualifies the team to compete in the World Championship and comes with a \$5,000 stipend from NASA to pay for the registration fee for the World Championship. Other ways teams can qualify for the World Championship is to win a regional Chairman's Award that recognizes outreach to the community or winning the robot game at a regional tournament. Neither the Chairman's Award nor the winning a regional robot game comes with a stipend.

3.2.4.4 WORLD CHAMPIONSHIP

Our alliance of three teams advanced to the semi-finals of our field. More than 300 teams attend the World Championship where they compete on four fields named for great scientists. We played on the 'Curie' field. The winning alliances for all four fields then advance to the elimination rounds that are played on a special field named 'Einstein.' Advancing to the semi-final rounds for a field means that our team is one of the top 48 teams in the world.

3.2.4.5 IRI (INDIANA ROBOTICS INVITATIONAL)

This is an invitation-only off-season tournament we are proud to have participated in over the past 5 years. Teams from all over North America attend, including the teams that

played on the Einstein field at the World Championship. We finished 14th overall, the highest Indiana Team.

3.2.4.6 C.A.G.E. MATCH

This is an off-season competition that takes place in October. We are proud to have attended since its founding year in 2008. We take advantage of this event to train new members on how a competition is run. Since it has started we have won Most Charitable Donations. This year we won 2nd place for Most Charitable Donations.

3.3 OPPORTUNITY PLAN

FIRST® Team 1741 will achieve their goals by following these values:

PRIORITY	The top priority of the entire team is the development of student leaders
FOCUS	Keeping the focus of the team on learning as well as the inspiration of science, technology, and business, that will never be sacrificed for distractions such as winning
INVOLVEMENT	Striving to always involve the students and community in our projects
COMMUNITY	Teaching team members the importance of giving back to the community
MENTORING	Mentoring our middle and elementary school students as positive role models
ACHIEVEMENT	Promoting the significance of academic achievement at all times
PRIDE	Encouraging students to have pride in their school, community, and team

3.4 WHAT WE WANT TO DO THIS YEAR

3.4.3 EXTERNAL GOALS

- Put sustainable, high-quality *FIRST*® teams in every school in Johnson County
- Give an opportunity for students to join and be involved in an alternative program that recognizes the importance and significance of technology
- Start *FIRST*® teams in different parts of the world through our sponsors
- Help other teams get sufficient funding to be sustainable

Business Plan & Risk Management Plan

- Provide a place on the team or skill training for students outside of the Center Grove district who do not have a place on another team
- Find a practice area for all teams in the surrounding area (for before regional competitions)

3.4.4 INTERNAL GOALS

- Students do all designing and building
- Win non-engineering awards
- Win engineering awards
- Win a robotics regional
- Create an environment where each student can find their strengths and are encouraged to excel
- Encourage students to have pride in their school, community, and team
- Inspire students to appreciate both sides of the team and establish equality
- Be better recognized by outside parties and perceived to be just as important as athletics
- Improve our relationship with Project Lead the Way

3.5 IF WE SUCCEED IN THESE GOALS

3.5.3 WE WILL CHANGE OUR COMMUNITY BY:

- Bringing our community together in the same way our athletic teams are a unifying force. We need to start in our school by making ourselves well-known.
- Giving our community an idea of what their future generation looks like by showing them what we are capable of
- Showing our community how impressive our high school is by showing them how smart, capable, and diverse our students are
- Becoming a symbol that the community can look up to
- Bringing needed technology skills to the community

3.5.4 TO DO THIS WE MUST:

- Advertise our activities in the school and community by our tournaments being televised on-line
- Become viral through social media such as our website and our Facebook page
- Wear our team t-shirts to school
- Make team presentations to more potential sponsors

3.6 SHORT TERM PLANS

3.6.3 IN ONE YEAR

- 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
- 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

3.6.4 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

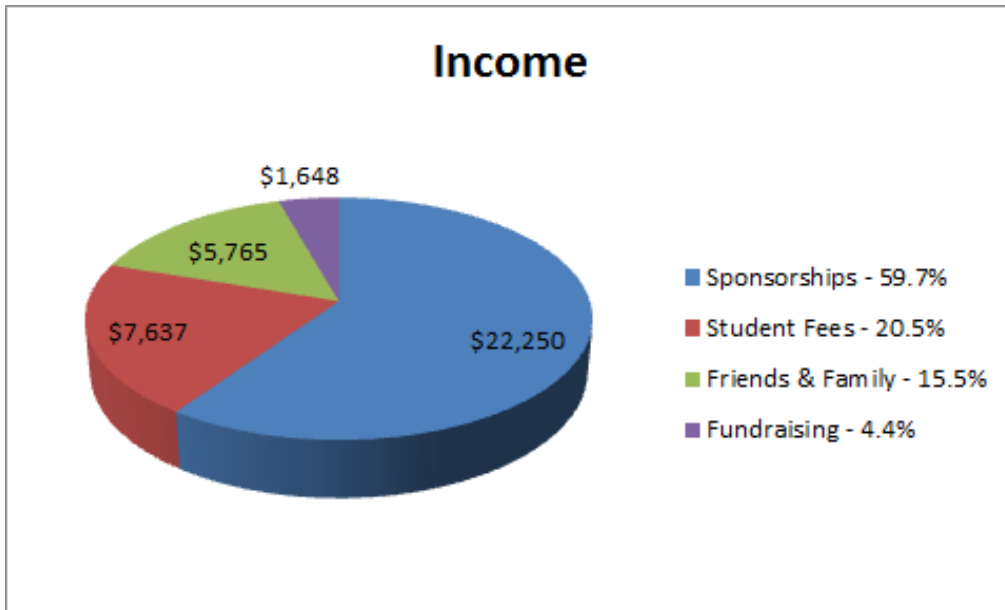
3.6.5 IN FIVE YEARS

- 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
- *FIRST*® robotics class as a part of High School Curriculum
- GEARS program in every elementary school in the state

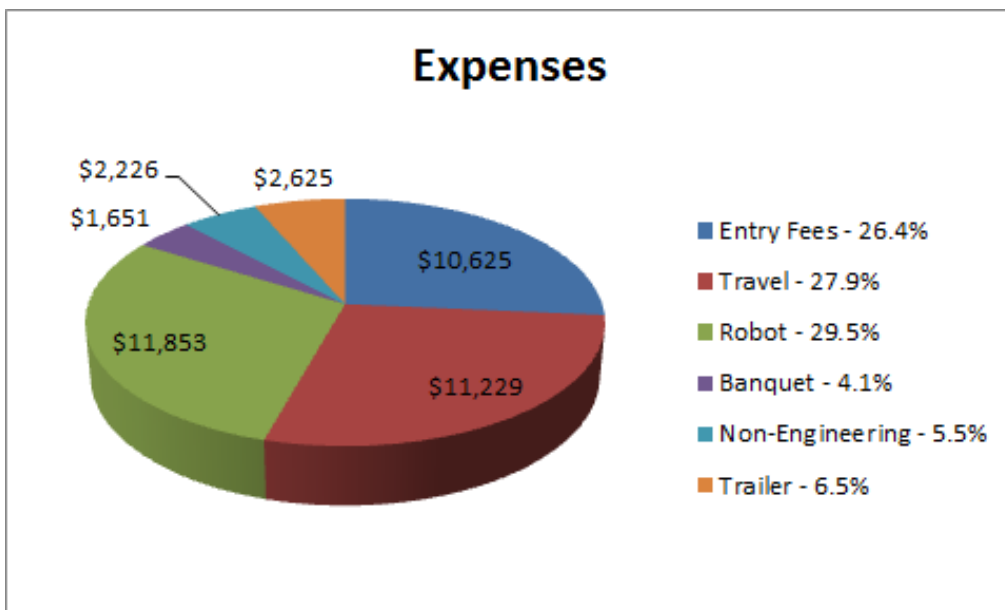
4 FINANCES

In the past, the treasurer of RARPO has been solely responsible for drafting our budget. To improve sustainability and a student lead team, we are planning official budget meetings that include the student body and the treasurer to create each year's budget.

4.2 2011-2012 INCOME = \$37,300



4.3 2011-2012 EXPENSES = \$40,209



4.4 2011-2012 FINANCE DETAIL

4.4.3 TOTAL INCOME = \$37,300

4.4.3.2 SPONSORSHIPS INCLUDE

- Rolls-Royce
- Cummins
- Endress+Hauser
- Indiana Department of Education
- Stadium Graphics

4.4.3.3 STUDENT FEES = \$400 per student, with financial aid available to students unable to pay

4.4.3.4 FRIENDS & FAMILY INCLUDES DONATIONS TO THE TEAM ON BEHALF OF INDIVIDUAL STUDENTS

4.4.3.5 FUNDRAISING

- *FIRST*[®] Light Bulbs
- Pampered Chef
- Girl Scout Wreaths
- Kroger Cards
- Concessions from Indy South FLL Tournament

4.4.4 TOTAL EXPENSES = \$40,209

4.4.4.2 ENTRY FEES

- Boilermaker Regional at Purdue University, West Lafayette, IN
- Queen City Regional at Xavier University, Cincinnati, OH
- (World Championship at Edward Jones Dome, St. Louis, MO provided by winning Engineering Excellence Award at Queen City Regional)
- IRI at Lawrence North High School, Indianapolis, IN
- CAGE Match at Southport High School, Indianapolis, IN

4.4.4.3 TRAVEL

- Hotels
- Bus rental
- Gasoline for buses
- Team meal

4.4.4.4 BANQUET

- Food
- Mentor/sponsor awards
- Student awards

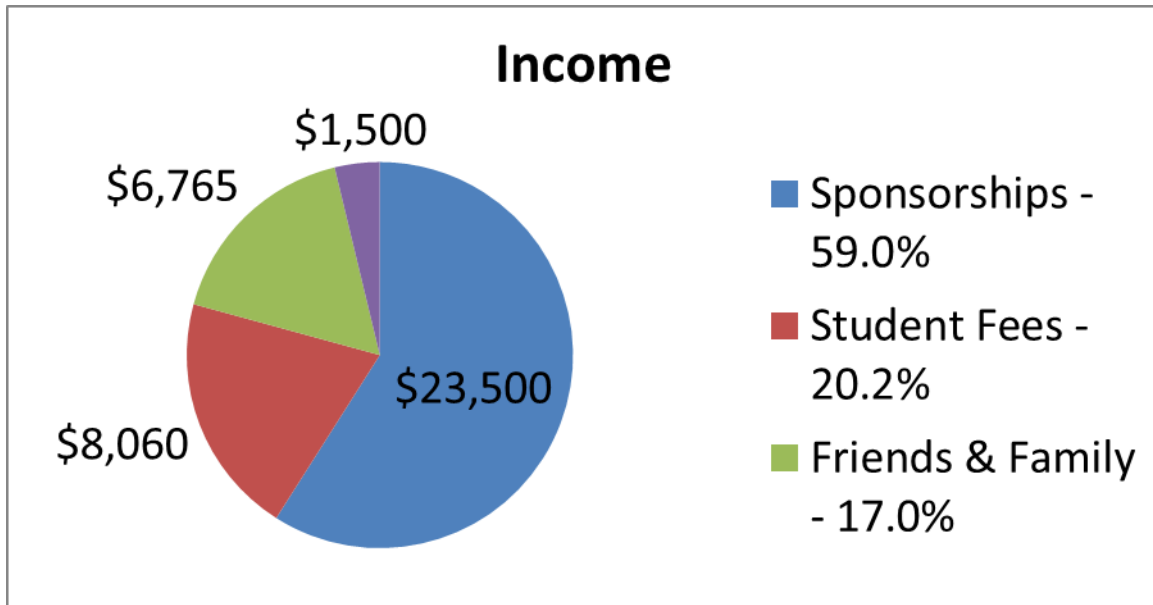
4.4.4.5 NON-ENGINEERING

- Spirit wear
- Office supplies
- Button supplies
- Wrist band
- Homecoming float

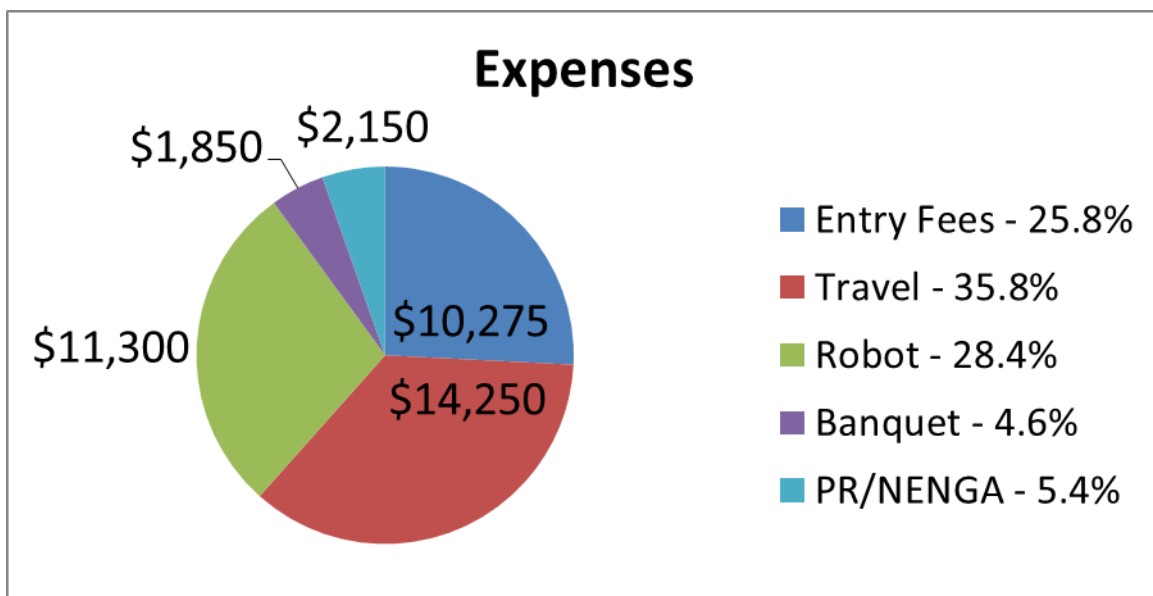
4.4.4.6 TRAILER

- Cost of trailer
- Registration
- Spare tire

4.5 2012-2013 PROJECTED INCOME = \$39,825



4.6 2012-2013 PROJECT EXPENSES = \$39,825



4.7 2012-2013 FINANCE DETAIL

4.7.3 TOTAL INCOME = \$39,825

4.7.3.2 SPONSORSHIPS INCLUDE

- Rolls-Royce
- Cummins
- Endress+Hauser
- Stadium Graphics
- Center Grove Education Foundation
- Tech Point Youth Foundation
- Praxair
- Southside Pediatrics
- Anonymous Sponsor

4.7.3.3 STUDENT FEES= \$400 per student, with financial aid to those unable to pay

4.7.3.4 FRIENDS & FAMILY INCLUDES DONATIONS TO THE TEAM ON BEHALF OF INDIVIDUAL STUDENTS

4.7.3.5 FUNDRAISING

- *FIRST*[®] Light Bulbs
- Kroger Cards
- Concessions from Indy South FLL Tournament

4.7.4 TOTAL EXPENSES = \$39,825

4.7.4.2 ENTRY FEES

- Boilermaker Regional at Purdue University, West Lafayette, IN
- Crossroads Regional at Rose-Hulman University, Terre Haute, IN
- IRI at Lawrence North High School, Indianapolis, IN
- CAGE Match at Southport High School, Indianapolis, IN

4.7.4.3 TRAVEL

- Hotels at Purdue, Rose-Hulman, and St Louis
- Bus rental
- Gasoline for buses
- Team meals

Business Plan & Risk Management Plan

4.7.4.4 BANQUET

- Food
- Mentor/sponsor awards
- Student awards
- Decorations

4.7.4.5 NON-ENGINEERING

- Spirit wear
- Office supplies
- Button supplies
- Homecoming float

4.7.4.6 TRAILER

- Registration
- Signage

4.7 2012-2013 DETAILED FINANCES

4.7.1 INCOME

Item	Amount	Description
Sponsors		
Rolls Royce	\$5,000	A yearly sponsorship from Rolls Royce
Anonymous Sponsor	\$5,000	
Tech Point Youth Foundation	\$3,300	Yearly grant from the Indiana Department of Workforce Development to be applied towards 1 competition.
Praxair	\$2,500	
Center Grove Education Foundation	\$1,000	
Southside Pediatrics	\$1,000	
Indiana Reality Pros, Inc.	\$500	
Ron Gardner	\$500	
Endress and Hauser	\$5000	
Fundraising		
Donations and Student Contributions	\$16,600	Through “Friends and Family Letters”, we receive donations from community individuals, local businesses, and from people in eleven states.
Other Fundraising	\$1,500	Kroger cards and <i>FIRST</i> ® Light bulbs

TOTAL INCOME= \$41,100*

4.7.2 Expenses

Item	Amount	Description
IRI Registration Fee	\$700	Entrance Fee Required for IRI
CAGE Match Registration Fee	\$275	Entrance Fee Required for CAGE Match
Boilermaker Regional Fee	\$5,000	FIRST® [®] Registration Fee for the Boilermaker Regional
Team Travel Expenses: Boilermaker Regional	\$2,400	Commuting to the Boilermaker Regional
Crossroads Regional Fee	\$4,000	FIRST® [®] Registration Fee for the Crossroads Regional
Team Travel Expenses: Crossroads Regional	\$2,600	Transportation, meal costs, and hotels for the Crossroads Regional
Competition Robot Expenses	\$7,000	Cost of construction of the competition robot and spare parts.
Prototype Robot Expenses	\$3,500	Cost of construction of the prototype robot
Publicity Costs	\$1,750	Covers Banner, buttons, t-shirts, spirit wear, and the website.
Community Outreach	\$400	Cost of running FLL Competition, Library Demonstrations, and other outreach activities.
Miscellaneous Yearly Costs	\$2,000	Cost of awards, shop upkeep

TOTAL EXPENSES= \$29,625

Any surplus funds are put into the team savings account to be applied to the following year. If a shortfall should happen in funds, mentors and/or students may be asked to pay for their own meals, travel fees, and/or room fees.

5 EXECUTION

5.1 EXECUTION OF THE 2013 BUILD SEASON

See Build Season Gantt chart at Appendix B

5.2 TEAM SUSTAINABILITY

5.2.1 SUSTAINABILITY

FIRST® Team 1741 works to maintain *FIRST*®'s presence in our community. We organize events open to the public to encourage knowledge of science and technology. In addition we are working with our school system to give younger students the opportunity to join *FIRST*® earlier. This acts as a funnel encouraging them to participate in *FIRST*® throughout their school career and leads them into our team. We have a new permanent teacher coach that has strengthened our sustainability for years to come.

5.2.2 IMPORTANCE OF SUSTAINABILITY

FIRST® Team 1741 knows that sustainability is what makes *FIRST*® such a success. *FIRST*® is about innovation, inspiration, teamwork, Gracious Professionalism®, Coopertition®, and passion; we believe these are the essential roots of sustainability. These roots help to fuel our drive and dedication in the *FIRST*® program. With our sustainability, we strive to plant a seed of *FIRST*® in the hearts of every individual we come in contact with and to nurture the growth of *FIRST*®.

5.2.3 SUSTAINABILITY WITH *FIRST*®

FIRST® Team 1741 believes the best way to create sustainability is to help facilitate younger teams. Within the past few years, we have started new teams for younger students and tried to foster a love and interest in science and technology. We have done this through Jr. FLL teams, FLL teams, FTC team, and our GEARS program. Since we reach these children at a young age we hope to instill in them a love of *FIRST*® so that they continue to participate in it through high school. In case we lose a major sponsor, we have created a list of fundraisers we could do. For example, this year a major sponsor decided to change their focus from an individual team to the entire organization. We are working on building up our school support to make sure we always have sponsors and the ability to travel. We have built a strong partnership with many local teams in addition to *FIRST*® Team 3180. We partner with *FIRST*® Team 234 by supplying them breakfast for welding our robot. We also strive to assist other teams, to the best of our ability, to enable their Chairman's, scouting, and Business Plan to be successful.

FIRST® Team 1741 is interested in expanding all levels of *FIRST*®. We have started an FTC team of 8th and 9th graders to work alongside our team. The 9th graders are a part of both teams allowing them to increase their knowledge of *FIRST*® and spreading Gracious Professionalism®. We are proud to say that we have started and facilitated many FLL teams over the past several years. *FIRST*® Team 1741 hosts the Indy South Tournament - the only official FLL event in central Indiana and the only event sponsored by an FRC team. Over the past two years, we partnered with an elementary school in our district to form our *FIRST*® Jr. FLL team. While working beside us, the students were able to learn the science behind ice cream. For the past 5 years Red Alert has helped run CAGE Match, which is a local off season competition.

We have a 100% high school graduation rate and 100% attend college. 15% of our graduates currently continue on in *FIRST*® as mentors or volunteers. These statistics show what an impact *FIRST*® has had on the lives of our students.

5.2.4 SUSTAINABILITY THROUGH DEAN'S HOMEWORK

Dean's Homework is very important to *FIRST*® Team 1741. This year Dean gave us an assignment at the Queen City Regional to create an FTC team. We looked at the costs, gathered information at the World Championship, and determined what would be needed to create a team. We took the requirements, met them, and now we currently have a successful FTC team that works beside our FRC team. This helps sustain us because the students on our FTC team are encouraged to move up to FRC and they are already experienced with the way we run.

FIRST® Team 1741's focus this year was contacting local media. We have appeared in all forms of local media this year including newspapers, television, and radio. Advertisements create sustainability within our team because it interests the audience, which in turn fuels them to come learn more.

5.2.5 SUSTAINABILITY WITHIN OUR COMMUNITY

FIRST® Team 1741 partners with our community. We host and participate in events that positively impact our community while allowing our students to step up as leaders and engage in high-level planning. Our build room was a stop for The Amazing Race, where couples built their communication skills while trying to hang a LogoMotion tube. To catch the attention of young children at our events, we hold mini-science fairs that encourage creativity and science/technology. We section off areas dedicated to young children and include student-created lesson plans such as "Fun with Physics." We hold our science fairs at many public events across our state. Red Alert also participates in Project Linus where our team parents, students, and our school's other clubs come

together to craft blankets for children in need. Red Alert has also helped mentor several area VEX teams completely composed of homeschool students. We offer them training classes, and this year we built their field.

When it comes to the environment, forget Red Alert, we are Green Alert. We partner with our school's Recycling Club to coordinate the recycling of bottles, cans, cardboard, scrap aluminum and batteries. We also partner with The Ronald McDonald House to recycle pop-tabs.

One of our most successful events each year is our *FIRST*[®] Community Tech Night. We focus on creating better cyber-citizens and increasing digital literacy within our community. In previous years, we have offered 32 different classes including internet safety, video game safety, anti-cyber bullying—that included a visit from the Greenwood Chief of Police— E-mail, Microsoft Word, and classes for technology used within the school corporation. Most classes are taught by *FIRST*[®] Team 1741 students and district middle school teachers. Classes offered for young children included “Silly Science” and “Marble Coaster eXtreme” classes. We reach people of all ages.

FIRST[®] Team 1741 tours the state with our own traveling exhibit called, “Amazing Robots.” We visit libraries doing demonstrations, and spreading the word of *FIRST*[®]. In conjunction with our library demonstrations we have started a literacy program called “Read Alert” where we boost literacy skills with technology-related literature.

5.2.6 DEVELOPING SUSTAINABILITY WITHIN OUR TEAM

We are determined to build a better team. We strive to do our best in all areas and aspects of *FIRST*[®]. Students gain transferrable skills in leadership, public speaking, business, and teamwork. We pride ourselves in the strenuous processes of high-level planning and decision-making of our team. Each student must show their commitment and willingness to make decisions for the good of the team and to work in harmony with each other. We build our strength in these fields through unforgettable memories and experiences geared towards inspiring students to pursue STEM fields.

Before build season begins, we focus on building the skills of our students. We offer training sessions in areas including programming, animation, leadership, and machining. To prepare students for build season, we have created several design exercises such as creating a t-shirt cannon robot for the homecoming parade and school pep rallies.

Grades are very important to our team. During the build season we monitor grades. If a student is struggling or failing, we have mandatory tutoring and studying

sessions, called Study Tables. Each individual student has his/her own personalized success plan.

5.2.7 DEVELOPING SUSTAINABILITY WITH OTHERS

Our strongest partnership is with our mentors. Even though we are a student lead team, our mentors are always there to guide us to be the best we can be. They put in immeasurable volunteer hours in order to see us succeed. From this commitment, we learn what it is to be dedicated. Our mentors are people who continuously inspire us with science and technology and encourage us to keep going. Most of our mentors do not have a student on the team and never have had a student on the team. This shows that we have inspired them just as much as they have inspired us in the ideals *FIRST*[®] has created.

Without a partnership with sponsors, our team could not function. Their ability to extend their knowledge and resources keeps us running and gives us a glimpse of our future through donations, summer internships, and jobs. We try to give back to our sponsors by updating them on our success throughout the year by giving presentations.

During the Christmas season our team partnered with a worldwide organization to help pack care packages. We helped pack 1300+ boxes to be shipped across the world. *FIRST*[®] Team 1741 also partnered with a local Girl Scout troop for fundraising. We helped another Girl Scout create GEARS, a mini robotics and science club, for her Gold Award. GEARS reaches out to girls in grades 3rd through 5th inspiring them to become involved with science and technology and feed them into our FLL teams.

5.2.8 SUSTAINABILITY WITH OUR SCHOOL

FIRST[®] Team 1741 has developed sustainability within our school through partnerships. Our partnerships with our Football Team and our Ultimate Frisbee team categorize as sustainable due to their commitment to help us with necessary assistance. Our team is the only school extra-curricular activity to build a float for the homecoming parade, and we are hoping to continue that throughout the years to come.

Our team is strongly involved in other areas of the school curriculum as well, which will hopefully be carried out in the future. Many of our students are involved in our school's Project Lead the Way Classes.

6 AWARDS

2012

Entrepreneurship Award—Boilermaker Regional
Engineering Inspiration Award—Queen City Regional

2011

Regional Chairman's Award – Boilermaker Regional
Entrepreneurship Award – Boilermaker Regional
Most Charitable Donations - CAGE Match

2010

FIRST® Dean's List Finalist – Boilermaker Regional
Gracious Professionalism Award sponsored by Johnson and Johnson
Regional Finalist – North Carolina Regional
Most Charitable Donations - CAGE Match
Humanitarian Award - MARC

2009

Most Charitable Donations - CAGE Match

2008

Motorola Quality Award – Boilermaker Regional
Xerox Creativity Award – St. Louis Regional
CAGE Match Finalist
Most Charitable Donations - Cage Match

2006

Rookie Inspiration Award – Boilermaker Regional
Regional Finalist –Boilermaker Regional



7 RISK MANAGEMENT PLAN

7.1 RISK MATRIX

Near certainty	5	10	15	20	25
Highly likely	4	8	12	16	20
Likely	3	6	9	12	15
Low likelihood	2	4	6	8	10
Probable	1	2	3	4	5
	Minimal	Minor	Major	Serious	Catastrophe

7.2 POSSIBLE RISKS

7.2.1 IN CASE OF LOSS OF SCHOOL BUILD AREA

THE EFFECT THIS WOULD HAVE ON OUR TEAM:

- We may have to move off of our school property. We have arranged a worst-case-scenario with parents who own barns. They may offer this as an option to us, should this happen.
- If barns or similar facilities are not available, the team may need to rent a space to use.
- We currently have four rooms allotted for our use and should we move off-site, this space could be reduced and we would no longer have use of the school's equipment (i.e. lathe, mill, band saw, et al.)

HOW WE WOULD HANDLE THIS, SHOULD IT ARISE:

- The Engineering side of the team may need to meet separately from the NEngA side of the team in order to save space.
- We would need to reassess our budget to allow for purchasing of rental space or needed resources such as tools.
- Market our team to other facilities, for example, Local Central 9 Career Center, in hopes of seeking alternative permanent meeting space; also continue contact with Center Grove in hopes of earning our meeting space back.

7.2.2 IN CASE WE LOSE KEY SPONSORS

THE EFFECT THIS WOULD HAVE ON OUR TEAM:

- With fewer sponsor dollars to use, our team has had to adjust our budget. We would likely continue to spend less in all areas such as build cost, promotions, and outreach funding.
- If severe enough, the team may need to increase the cost of team membership to students, likely having them pay more to participate in the team, pay to travel, or pay their own hotel expenses.
- Mentors may also see a cost increase, possibly having to pay their own travel and hotel arrangements.
- As a team we may need to find alternate hotel arrangements. As a team, we stayed in West Lafayette Jr/Sr. High School, home of *FIRST*[®] Team 461, for the Boilermaker Regional.
- As a team we may need to find alternate travel arrangements. As a team, we traveled to the Smoky Mountain Regional on a bus with *FIRST*[®] Team 1747.
- If funds run low enough, we may attend fewer competitions, or possibly only one.

HOW WE WOULD HANDLE THIS, SHOULD IT ARISE:

- The team would need to do more fundraising and begin it earlier – not starting at the start of the school year, but possibly at the end of the previous year’s competition season.
- Our team would need to market ourselves to attract new sponsors and to work towards a greater relationship with current sponsors.
- Start a team “Emergency Fund” which contains exactly enough money for a build expenses and one competition expense for the following year.

7.2.3 IN CASE OUR PARENT ORGANIZATION EMBEZZLES OUR FUNDING

THE EFFECT THIS WOULD HAVE ON OUR TEAM:

- First we would need to alert the proper authorities that this issue had arisen.
- The resulting loss of funds would have a similar effect as the Loss of Key Sponsors.

HOW WE WOULD HANDLE THIS, SHOULD IT ARISE:

- Our team would need to create new bank accounts for all of our funds.
- Anyone who has access to *FIRST*® Team 1741's funding would need to be bonded and ensured to handle our money.
- We would work to generate new funds through fundraising and finding new sponsors.
- We would work harder to apply for grants to fill in the missing funding.

7.2.4 IN CASE OUR TEAM LOSES ACCESS TO SCHOOL COMPUTERS

THE EFFECT THIS WOULD HAVE ON OUR TEAM:

- Students would have to bring in their own personal computers to complete team work, work at home, or use the few laptops that the team owns.
- Students would no longer have access to the four years' worth of team data the team has saved for use.
- Students could possibly lose access to the Robotics Team networked hard-drive which is accessible from all school computers.

HOW WE WOULD HANDLE THIS, SHOULD IT ARISE:

- The team would need to pay for and install needed programs on team laptops and possibly personal laptops for team use.
- The team may need to budget for additional laptops for the future, depending on the need.
- We may need to find alternative hosting for the Robotics Team networked drive and possibly the team website

7.2.5 IN CASE WE LOSE OUR SCHOOL LIAISON

THE EFFECT THIS WOULD HAVE ON OUR TEAM:

- With the support of our school's administration, the team can sustain without a school liaison as long as we work to inform this administrator, i.e. a Vice Principal such as Mr. Betts, of our team's activities.

Business Plan & Risk Management Plan

- With the loss of this liaison, we would lose access to needed student information such as grades, attendance, and even locker numbers
- Without a school liaison it is often difficult to arrange for team traveling and team events within the school.

HOW WE WOULD HANDLE THIS, SHOULD IT ARISE:

- The school approves a mentor to be the sponsor and grants that mentor a key to access the building.
- The team would appoint a mentor to accept team mail.
- The team would work to document activities with the school.
- The team must work to recruit a new liaison.

7.2.6 IN CASE OF SNOW AND/OR ICE STORM

THE EFFECT THIS WOULD HAVE ON OUR TEAM:

- Every day the school is closed, we are not permitted to meet. This shortens the amount of time we have to design and build the robot during build season.

HOW WE WOULD HANDLE THIS, SHOULD IT ARISE:

- We have a schedule tailored for each build season that maps out deadlines. Within this schedule, we have extra days implemented as buffers in case we should fall behind due to unsafe weather.
- If we should run out of buffer days, we will arrange meeting times to run longer thus making up the time lost.

7.2.7 IN CASE OF AN EPIDEMIC

THE EFFECT THIS WOULD HAVE ON OUR TEAM:

- Because we work together daily and still attend school, there are many possible times where a team member could come into contact with the flu or another virus and can distribute the virus throughout the team before becoming sick themselves. This could cause many students among our team to fall sick during the crucial points in build season.
- Without the majority of our students, we would fall behind schedule and could possibly not finish by bag day.

HOW WE WOULD HANDLE THIS, SHOULD IT ARISE:



- If it should spread enough to affect the schedule, we would use our buffer days to catch up and/or increase the meeting times to make up the lack of workforce.
- We encourage our students to wash their hands frequently during the Flu season and practice the proper coughing technique. Also, if they are feeling unwell the student may choose to stay home as to not spread the virus. If an epidemic should break out among our team we would send home students that were affected and try to conduct business as usual.

7.2.8 IN CASE OF TORNADO

THE EFFECT THIS WOULD HAVE ON OUR TEAM:

- In the past, the damage caused by tornados that would affect our team is road damage or blockage. The road blockage would be cleared within a day or two allowing us to continue to meet.

HOW WE WOULD HANDLE THIS, SHOULD IT ARISE:

- Our team practices tornado drills in case we were in the building when one struck.
- If a tornado would create road blockage or damage, we would find alternative routes to the school and if that was not possible then rearrange the schedule and use a buffer day. If we were out of buffer days then we would increase the length of team meetings to make up for lost time.

7.2.9 IN CASE OF FLOOD

THE EFFECT THIS WOULD HAVE ON OUR TEAM:

- In the event of a flood in our facility, not only would we not be able to enter the building, there would be a chance of damage to our team documents, machines, tools, and computers.

HOW WE WOULD HANDLE THIS, SHOULD IT ARISE:

- In case of damage, there are certain items of ours that are insured by the school. We would fundraise to replace anything else.

7.2.10 IN CASE OF STUDENT LEADERSHIP INCAPACITATION

THE EFFECT THIS WOULD HAVE ON OUR TEAM:

- There would be little to no impact on our team in case this should happen. We have set up our team with a leadership system where each captain has a sub-captain that can take over in case of emergency.

HOW WE WOULD HANDLE THIS, SHOULD IT ARISE:

- We have an aforementioned system of captains so our team is always prepared for this situation.

7.2.11 IN CASE OF SEVERE INJURY

THE EFFECT THIS WOULD HAVE ON OUR TEAM:

- Depending on the severity of the injury, the school district could take away machines and even our team.

HOW WE WOULD HANDLE THIS, SHOULD IT ARISE:

- In case equipment is taken from us, we would work with private companies to machine our parts.
- In case the school discontinues our team, we would relocate the team.

7.2.12 IN CASE OF LOSS OF KEY MENTOR(S)

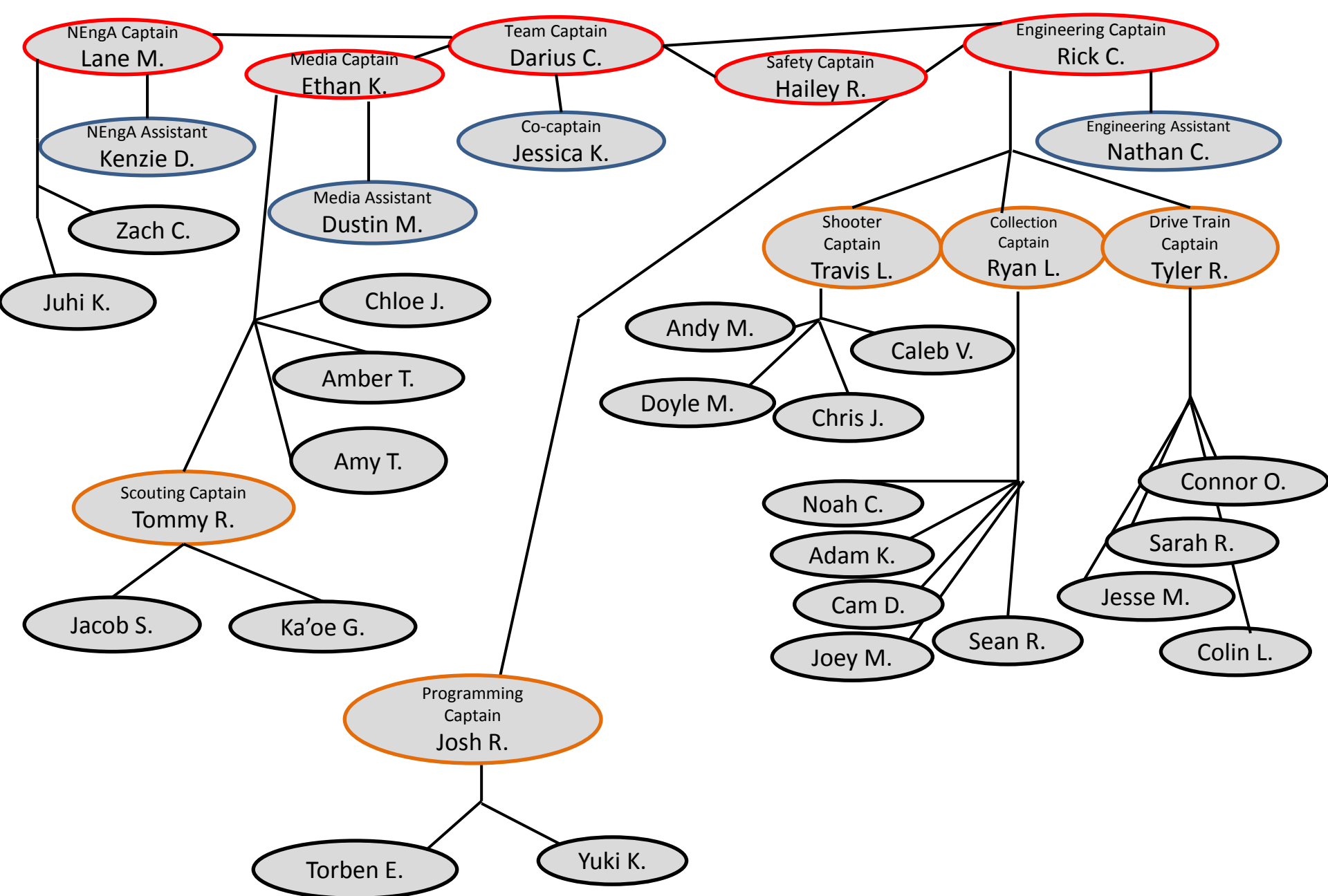
THE EFFECT THIS WOULD HAVE ON OUR TEAM:

- Each mentor has certain roles they perform, without those tasks being accomplished, our team would fall behind.
- If we were to lose our teacher sponsor, our team would not have a connection to our school.

HOW WE WOULD HANDLE THIS, SHOULD IT ARISE:

- The captains will have to identify the mentor's roles and divide them amongst themselves.
- We would have to work with the administration on finding a new connection to the school.

APPENDIX





2012-13 Family & Friends Sponsorship Form

Amount enclosed:

\$25 _____

\$50 _____

\$ 75 _____

\$100 _____

\$250 _____

\$500 _____

Other: _____

****Donors of \$500 or more will have names listed on the team shirt****

All Donations are tax deductible.

Tax exempt #: 36-4603591

Name of Contributor: _____

Address: _____

City: _____ State: _____ Zip code: _____

Phone: _____ Email: _____

Student/ Robotic Team Member Name: _____

Please make checks payable to: (RARPO) Red Alert Robotics Parent Organization

***Donations can be made by visiting the team website at www.redalert1741.org. Click on the "Donate" button and follow the instructions.

Please send this completed form and contributions to:

Red Alert Robotics Team

c/o Mark Snodgrass
Center Grove High School
2717 S. Morgantown Rd.
Greenwood, IN 46143
W: 317-885-8800 ex: 5149

For more information contact:

Michael Kobierski
Kobierski_michael_e@lilly.com

Visit our website at: www.redalert1741.org

Thank you for your generous support!



Oct 1, 2012

Dear Community Relations Director,

Center Grove High School Red Alert Robotics is requesting a gift-in-kind or sponsorship to support upgrading our robotics lab and supplement our traveling expenses. We are a not-for-profit 503(C) organization with 30 high school students participating in FIRST Robotics each year.

Last season, our team competed at the Boilermaker Regional at Purdue University. We won the FIRST Robotics award for Inspiration in Engineering at the Queen City Regional in Cincinnati. That allowed us to advance to the FIRST World Championships in St. Louis. This is the second year in a row that we have received a regional competition award to advance to the FIRST World Championships.

FIRST Vision: "To transform our culture by creating a world where science and technology are celebrated and where young people dream of becoming science and technology leaders."

Our needs are great as we continue to grow. We appreciate anything you can do to assist us in equipping these future engineers and scientists with the tools they need to flourish.

ITEMS/FUNDS NEEDED

NETWORKING SERVER & RACK -- \$5,118

<http://www.dell.com/us/business/p/servers.aspx?c=us&cid=test&cs=04&dgc=IR&l=en&lid=7AA29CFC&s=bsd>

COMPUTERS -- \$11,231

15 Sony Vaio laptops --- 15 x 749 = \$11,231

We prefer laptops to desktops because of the amount of travel we do as well as the ability it gives us to move between rooms in our labs.

<http://store.sony.com/webapp/wcs/stores/servlet/SYCTOPProcess?catalogId=10551&storeId=10151&langId=-1&LBomId=8198552921666459650&categoryId=8198552921644870001>

SOFTWARE \$3,145

-Labview Student Edition Software (programming) \$60 x 15 = \$900

- Adobe Creative Suite 6 Student Edition - \$449 x 5 = \$2245

PARTS AND MACHINES \$50,000

Robot motors, robot parts, mill machine, cabinet, work stations, motor testing station, air compressor, robot scale, lathe, steel travel/shipping cases, on-board camera, wireless routers, etc.

TRAVEL/ACCOMODATIONS -- \$20,000

In the spring of 2012, our team participated in two regional competitions and advanced to the world championships in St. Louis. From year to year, we have about 30 students on our team. We are requesting a grant of \$20,000, which would cover some of the costs for travel and lodging for 2-3 major competitions and a handful of smaller ones. Our average hotel charge per 4 day trip at each site is \$9,000, including mentors. Transportation and meal costs are also astronomical.

SCHOLARSHIPS -- \$2,000

We see the need to assist students who are very capable of competing in robotics but cannot afford the entry fees. Some bright students have dropped out due to finances. We want to make five scholarships available to potential members who fit the criteria. 5 x \$400 = \$2000

You can view our team's work and robotics competitions at www.redalert1741.org

We'd be happy to send team members and mentors to make a presentation to your company. We will provide a detailed equipment needs list at your request.

Thank you for your consideration and your great support of FIRST and STEM initiatives.

Sincerely,

Ron Rose
Corporate Fundraising Chair/Team Mentor
Red Alert Robotics Team 1741
317.888.5000 Mobile

Rick Ramirez
President
Red Alert Robotics Parent Organization
317.417.2145 Mobile

Center Grove High School
2717 S. Morgantown Road
Greenwood, IN 46143

donations@redalert1741.org

ATTCH: Corporate Sponsorship Form



SPONSORSHIP PACKAGES 2012-2013

ANCHOR SPONSOR - \$10,000 and above

Anchor sponsors receive ten-second pre-roll ads in our videos. You also receive a full sized logo on our robot, travel banners, team trailer, website, and shirts. You must provide video ad and artwork.

GOLD - \$5,000

Company name & ½ sized logo on robot, banner, trailer and team shirts. In addition to your logo appearing throughout videos on the robot, the ½ size logo will also appear at the end of our videos as a sponsor credit.

SILVER- \$1,000

Company name & ¼ sized logo on banner, website, t-shirts, 1-line credit at the end of our videos.

BRONZE \$500

Company name on team t-shirt, 1 line credit on website

Primary Contact _____

Company _____

Address _____

City _____

State _____ Zip _____

Phone _____ Email _____

Amount Enclosed _____

Mail contributions to:

**Red Alert Robotics 1741
C/O Principal Matt Shockley
Center Grove High School
2717 S. Morgantown Road
Greenwood, IN 46143**