

# Team 1511 Chairman's Award Submission

**Briefly describe the impact of the FIRST program on team participants with special emphasis on the 2006/2007 year and the preceding two years.**

Direction, focus, confidence, self-esteem and "the opportunity to shine where no others would see their light" (S. O'Hern, team mom). These are qualities that FIRST has instilled in us. We have grown into more than just a team. We are a family; and FIRST provides our students with a strong support system and an opportunity to develop leadership skills. Students have found their voices, improved their school grades, made friends and learned the importance of responsibility and taking initiative.

**Examples of role model characteristics for other teams to emulate.**

1511 has helped over 20 teams through individualized assistance in programming, materials, advice and support, robot shipping and through networking provided at our four annual off-season events for FRC and FLL teams. We do not sympathize, we empathize, and we take action. For example, when team 73 lost its funding last year, we jumped in allowing them to work and travel with us as honorary members. This year we continued to assist by helping them to re-obtain sponsorship.

**Describe the impact of the FIRST program on your team and community with special emphasis on the 2006/2007 year and the preceding two years.**

Recently team 1511 has spent a lot of time and effort spreading FIRST in our community through the FLL program. Over the course of one year 1511 has quintupled the number of FLL teams in our town and reached out to over 100 students and families from all across upstate New York in the form of our FLL student and coach camps. We have also organized over forty demonstrations in the past three years and participated in countless community service activities.

**Teams innovative methods to spread the FIRST message.**

Apart from our 1,511 Thunderbolt goal (community outreach program) and FLL camps, Team 1511 has kicked off a program entitled Project Girl Wrench. The program reaches out to all interested females in our community, and its goals are to familiarize them with the basics behind designing, building and operating Vex robots. The long term goal is to provide females with the confidence and knowledge to become more active in the engineering community as well as to introduce them to FIRST.

**Describe the strength of your partnership with special emphasis on the 2006/2007 year and the preceding two years.**

Our mentor-student relationships are not just those of student and educator. Our team is a family, and our mentors are there, not only with FIRST advice, but with real-life advice and assistance. Our mentors truly care about the individual as well as the group and show this through their involvement year round. Harris Corp. provides our team with more than just dollars. The school has also provided six staff members, unprecedented building usage, board recognition, and mentor training.

**Teams communication methods and results.**

Communication is what holds our team together, the glue that allows us to be a strong team and family. Not a day goes by without pre-, build, or post season - where we will not receive at least three emails, a few calls and conversations in school or office halls about robotics. However, our most used and helpful methods of communication are our weekly emails and team forum where we currently have over 4117 different active posts ranging from jokes to tactics, and of course homework help.

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## **Other matters of interest to the FIRST judges, if any.**

This year our focus has been leadership development. As a team, we decided that individual growth is important to us and that developing student leaders should be our focus during the preseason. Many students read Dale Carnegie's book "How to Win Friends and Influence People", and attended leadership seminars to further their skills. We also created more student-led roles and nearly every student has led 1511 in some way; however, we never lose sight of the importance of mentors to our team.

## **We are Thunder**

It is one thing for a weatherman to predict the storm of the century; it is another for that storm to hit. Three years ago, when Penfield High School parents expressed an interest in bringing a FIRST team to our school, they realized that they lacked the experience and contacted FIRST veteran Kim O'Toole. Flash forward three years and the Thunder keeps growing louder.

## **Lightning Creates Thunder**

Thunder is the result of a shockwave created when heated air expands explosively and compresses the surrounding air. In the same way, our team has grown and expanded in our first few years. In our rookie year, we were honored to receive six awards, including Regional Champion, and Regional and International Rookie All Star Awards. We also established a pre-competition exhibition called the Rochester Rally. This yearly event allows local teams to test their robots in actual game play prior to ship date. If their robots are not completed, it provides the opportunity to receive help and guidance from veteran teams, and our tightly-knit family extends itself each year to assist other local Rochester FIRST teams.

Our biggest event, the "Rah-Cha-Cha-Ruckus" is an off-season Halloween-themed competition. This year drew twenty teams from the Rochester area, Michigan and Canada. The event committee was lead by Rolling Thunder team leader, Kim O'Toole, and included fifteen members from local teams. Six members were from 1511.

Our focus this year was developing a more student-led team. We had an involved process during the summer to choose our student leaders, including an application, interview, speech by the aspiring student leader, and then finally a team vote. Our leaders have specific jobs including School Relations, Meeting Coordinator, Activities Coordinator, Sub-team Coordinator, and Newsletter Coordinator. Each sub-team also has their own student leader who works with the sub-team mentor to plan and run sub-team meetings. There are numerous responsibilities and opportunities for leadership, and everyone was encouraged to lead an activity, a meeting or a sub-team. We believe that every member should develop the qualifications and skills to be a leader. Our team starts a thunderous reaction through the various demonstrations, fundraisers, events and community service projects taken on each year. Every time we participate in these events as a team, our goal is to provide those we meet with an awareness of FIRST, the opportunity to learn more about robotics programs and their importance, to join a team, or even to create a new team, so that they too may spread the Thunder.

## **Thunder is Sound**

Our team found that in order to reach our goals, we must first set them. Last year we set the booming long-term goal of reaching 1,511 "Thunderbolts." Thunderbolts are our term for the variety of ways that our team spreads the word of FIRST throughout the community. We have 188 Thunderbolts and the Thunder is growing louder each week as we move toward our goal. This summer the Thunder rolled with a series of camps designed to introduce potential students and mentors to the FIRST Lego League (FLL) experience. Initially, we had hosted only one camp at our school; but, due to the level of interest from members of our community, we held two additional camps, allowing us to reach over 100 students from all across upstate New York. In addition, two coach camps were held to better equip parents to properly facilitate all of the interested students. Our sessions took our community by storm sparking a great interest in FLL. Participants were so motivated by the presentations that they started their own thunderous reaction. As a result, the number of teams sponsored by 1511 swelled from three to fifteen over the course of a single

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summer. Our partnership did not end there. In addition to providing financial support, nine of our FRC members mentored these new teams. Caught by the FLL Fever, every year 1511 hosts two FLL competitions, the Razzle Dazzle and the Rochester Rumble. The Razzle Dazzle is similar to our FRC Rochester Rally. FLL teams test their robots and receive help with programming and design from other FLL teams and Team 1511. The Rochester Rumble is an event open to all FLL teams and takes place after the official FLL regional competition. It is a fun event for teams to practice before the championships or closing the season.

Team 1511 accepts all who are interested in participating in and learning about FIRST. We do not believe that anything should limit a person from joining an activity this meaningful. Three of our FLL teams have students with autism, and one of the winning teams we sponsored was primarily comprised of students with hearing impairments. This team later received the key to the City of Rochester presented by Mayor Robert Duffy. Team 1511 opens its arms to students with all manner of special needs and experiences.

Besides starting up fifteen FLL teams, our team was selected as a Labview pilot team last year and a fuel cell pilot team this year, challenging us to learn about and build a working fuel cell. We also began a program titled Project Girl Wrench that not only included females from our own team, but also sisters, friends, and even a foreign exchange student. The goal of this project was to familiarize females with the tools, methods, and design behind building and operating two Vex robots, that went on to compete in the Vex competition held at the Ruckus. Both 'bots performed beautifully, receiving fourth and sixth place. The best part was that it gave the girls the confidence and knowledge needed to work on the real robot this build season!

## **Lightning's Path**

On its path from the ground to the clouds, lightning takes a jagged route, abandoning electricity's normal path of least resistance. Each segment of this course produces its own sound, each spaced so close that the human ear perceives them as one. Similarly, each of our activities and events contributes to our roaring impact, blending together and making one sound: Rolling Thunder. We reach out to the community with Thunderbolts: demonstrations, community service, fundraising, FLL and competition. Each segment contributes to the lightning ascending into the clouds. Demonstrations are vital to our team because they are a great method to spread the word of FIRST and are effective in recruiting new members to the FIRST community. In the past three years our team has held over forty demonstrations throughout our community, ranging from local boy scouts to demonstrations at the Rochester Museum and Science Center. Our team is always looking for new and exciting ways to spread the Thunder and FIRST awareness in the community.

Community service is an important aspect of our team because it allows us to give back and helps create well rounded students. 1511 is always willing to lend a hand. Among many other activities, we have done walk-a-thons, wrote letters to a little girl with cancer, cleaned a local street, helped stock a food cupboard, volunteered at the Empire State Games, and donated items such as clothing and books. For team 1511, not a month goes by where the community can't hear our Thunder.

## **A Thunder's Roll**

There are many different types of sound that thunder makes. One type is a thunderclap, which lasts mere seconds before dying. Another is a rumble much louder and longer, but neither compare to a thunder roll, which can last up to 20 seconds. Our team, like rolling thunder, has a lasting effect on students and mentors alike. All of our graduating students have been inspired by our Thunder, and all eight have gone to college with seven of which are pursuing engineering or business degrees.

School education is also important to our team, so we adopted a policy that school comes FIRST. In order to keep a good balance, each student is required to do three hours of homework on site per week during build season. Mentors are always ready to help or tutor students, and our online forum allows students to post their needs for help with homework such as math problems or essay revisions. Late nights working on our robot has brought us closer to our school's staff. The custodians support our team and love to come up and see our robot. Last year, the team's hard work and dedication inspired one of the school custodians to go to college to further his education. This custodian and many other school personnel attend our nearby competitions, to see our Board of Education recognized team, and even practice throwing ringers onto the rack with our human players.

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On a larger scale, we have inspired and helped other FIRST teams. Last year team 73 lost funding and we adopted their students to our team. Over the summer we helped to re-obtain their sponsorship, and they are competing again this year. Team 1991 from Hartford, CT, a team where many of their students have hearing impairments, found our website and modeled their team around our team and handbook. We consider them our sister team and after countless emails and meeting them at Bash at the Beach, we are organizing a social event with them. Our teammates have helped more than eighteen other teams with everything from programming, materials, to team structure.

Thunder does not just affect those who hear it; it creates a sound so loud and powerful that many can feel it from miles away. Our team embraces this analogy because even those who cannot hear us still see our impact. We have a student on our team who is deaf. Even though he cannot hear us in the conventional way, he has taught us to be flexible and understanding. We learned the sign language alphabet and made cheers in sign language so we could spread the sound of Thunder in silence.

With every person, every event and every competition, our Thunder keeps rolling and growing louder. It is a chain reaction we started that cannot be stopped because we are and always will be: Rolling Thunder!