"A 'New Breed' of FIRST"

Since the beginning of Team 1511 Rolling Thunder, there has been a constant drive to do more. This team does not only aim high, they achieve high. Within the first year of participation, team 1511 grew and accomplished more than they ever expected. They are the epitome of a 'new breed' of FIRST. This 'new breed' goes above and beyond rookie year expectations and establishes themselves as leaders. Now, as a second year team, there is a desire to aim higher and lead stronger.



Team History

Established in the Penfield community in mid 2004, the mentors and students on team 1511 were unsure of what to expect. The students displayed interest and enthusiasm in this unique opportunity. As a rookie team, the team attended three regional competitions and received 6 awards. Foremost among these were, the Rookie All-star award at the Finger Lakes Regional and Regional Champions at the Greater Toronto Regional, both of which qualified the team for the Championship Event.

The team traveled to the Event in April of 2005 and was thrilled to receive the 2005 International Rookie All-Star title.

Team Mission and Goals

"Creating opportunities for the future by providing students with FIRST hand robotics expertise with local engineers; thus instilling confidence to succeed in a rapidly changing world."

- -Advance respect and appreciation for engineering, science and technology.
- -Develop within the team a character of honesty, integrity, and sensitivity.
- -Help and encourage everyone with an attitude of cooperation, collaboration, and concern for others, including competitors.
- -Promote important skills including leadership, teamwork, responsibility, accountability, academic performance, community involvement, and management.

FIRST- Bringing Teams Together

As one of our goals is to bring the Rochester area FIRST teams together, we have developed activities that strengthen inter-team relationships.

Last year we organized and hosted the "Rochester Rally," a pre-ship event for the 16 Rochester area teams to experience the game of Triple Play.

This year we hosted "Rochester Rally II" in which the area teams tested their robots in this years game, AIM High.

Back in Atlanta we hosted an "All-Rookie Meet and Greet." At this popular event, we handed out folders with information about all the rookie teams at the event, things to do in Atlanta, and how to start a FIRST Lego League team. We will repeat the event this year at the Championships, and the two Regionals we attend.



This past August, we pulled together the Rochester area teams to organize an off season event. The off season committee was chaired by our team leader, and was composed of 15 members, 5 of which were from team 1511 including 2 students. The "Rah Cha Cha Ruckus" took place in October of 2005 and proved to be a successful event. 15 teams including 1 Michigan team and 2 Rochester Rookie teams attended this event. Both first-year teams made it to the final match; everyone was very excited to see such an outcome from teams that were unfamiliar with FIRST and the robots

they controlled. The Ruckus helped to inspire the new students, and brought more members of various FIRST teams together.

We participated at "Bash at The Beach" off season competition in Old Lyme, Connecticut. Many of the new students on our team found this event to be inspiring, full of energy and new experiences. It was also a very good bonding experience for the team. We were excited to come in first place with team 237 and team 181, something that we were not expecting.

FIRST- Building Teams

Team 1511 has aimed to inspire younger students by starting 3 Lego League teams, 2 coming from an inner city school. At the Rochester Event, 12 members from team 1511 volunteered their time and held a demo to spark the Lego League student's interest in FIRST Robotics. It was a very rewarding experience seeing the excitement in the Lego league teams and how contagious it was for both students and parents. We will be hosting the "Rochester Rumble" on March 18th, giving the local Lego League teams another chance to play Ocean Odyssey.

This past year we assisted a rookie team, Rush-Henrietta Team 1930 by giving them information on how to run their team based off of our rookie year. We have provided guidance to several rookie teams from D.C. to Michigan. We are helping to start a team for the 2007 season in Lima, NY. We are always eager to give our assistance to other rookie teams.

As mentioned in an article from channel 13, when some students from Edison Tech almost didn't make it in this year's competition after losing their sponsor, students from Penfield High School were glad to adopt them as part of the team. 1511 is helping Edison Tech regain their sponsorship for 2007.

Thunder in the Community

One of team 1511's priorities is spreading community awareness. Seeing how we were able to impact our community last year, we set the immense goal to achieve 151 Thunderbolts. "Thunderbolts" are community activities designed to spread the word of FIRST, and to help make our community a better place.

The Patron Book

Our patron book serves as a fundraiser and a way to get the Penfield community involved in and aware of FIRST. Through this we hope to build lasting relationships with the businesses of our community. This year we have spoken with 200 businesses and raised over \$8,000 in patron sponsorship.

Community Events

The team is constantly organizing and participating in community events. We hold at least 2 carwashes annually in which pamphlets are handed out to explain what FIRST is, and information about the team. We have held over 20 demonstrations for various groups, including the local boy



scouts, children at the Rochester Museum and Science Center, and for Harris to inform the company of our progress and continue our strong relationship. We have organized multiple canned food drives for 2 of the local food shelves, participated in the local 'Feet for Food' walk, and raised over \$1,000 for Hurricane Katrina Relief. We have done other activities, including sapling distribution, RIT ROCS (Reaching Out for Community Service) Day, gift wrapping, Toys for Tots, and bell ringing for the Salvation Army.

We were highlighted on the local news channel in October, along with another segment on our three FLL teams in December. This year three local news stations covered the Rochester Rally II. We have found that the community enjoys our presence and appreciates our achievements as evident by the many compliments and thanks we receive for our help and accomplishments.

The Team

The members of team 1511 have held a strong bond throughout their experiences as a team. This bond is what has helped us to exceed our goals. After the 2005 season we were sad to let our 4 senior members go. They brought many qualities to the team and everyone looked up to them. We are very proud to know that FIRST has inspired these students to pursue college majors in mechanical engineering, computer engineering, computer science and business. These are all very important aspects of FIRST and we are already seeing that our other members are following in their footsteps. FIRST has opened doors for our graduating members this year. Two of our juniors, plan to attend the Clarkson School at Clarkson University next year to study engineering, and a third junior, will graduate early and attend college to study business. The three seniors will go on to engineering and psychology.

Throughout the summer we had weekly team meetings, working on community service activities, team building and fundraising. This time was also used to develop recruiting strategies and layout the preseason schedule. Come September, our efforts paid off. The team recruited 19 students and 6 mentors bringing our totals to 39 students and 15 mentors, making our team stronger than ever.

This team owes a lot of our success to our leadership group that has invested extra time and effort into making us thrive. Our members take leadership very seriously. Over the summer our team published a handbook that is not only a guide for our members to follow but also an infrastructure for other teams to emulate. Within this document we established requirements to help make the members more rounded, and set team expectations.



This year we developed a series of team building activities that strengthened our partnership with our mentors. One such session was a rotation night, where students could choose from different topics that interested them and attend activities from these areas, such as programming, electrical, marketing, etc. This activity was successful in sparking student's interest in new areas. The basic fundamentals of the design process brought to us by the Project Lead the Way curriculum at PHS, including problem

identification, conceptualization, refinement of preliminary ideas, design analysis, development, implementation, optimization, and presentation have proved to be useful in making our team more successful and efficient.

In addition to our weekly team meetings, during the preseason we divided into sub-teams based on our interests and abilities. These 10 branches specialized in areas such as spirit, programming, strategy-drive, mechanical, electrical, website and animation. Mentors from these fields worked with us by training us in their area of expertise. The sub-teams worked on many pre-season activities including examining several types or sensors, different drive trains, building preseason strategy and scouting guides, and team spirit.

The desire of team 1511 to aim high has been shown in all they have achieved. The members of this team have grown immensely over the past year thanks to FIRST. This team knows what FIRST is about, not winning nor losing, not even how you play the game, it is about the inspiration and leadership, and this is what makes Team 1511 a 'new breed' of FIRST.