### 2006 Chairman's Award Entry

The purpose of FIRST is to promote science and technology in the community, and to provide a unique learning experience for all its members young and old. The FIRST purpose is at the center of our activities on team 578-Blue Lightning. Whether it's helping with the Lego League, teaching new members about procedures or showing the community the need for technology, TEAM 578 is ready to lead.

### FIRST's Impact On Our Members

Our team has changed immensely in the past year. Last year, the adults played a big part in running our club from October to April, but we have looked at the purpose of FIRST and realized that we need to change into a student driven team that operates year round.

Our first student chosen project was started over the summer. We wanted to build a new cart. We used all the things we have learned from FIRST and the design process to create a self-propelled, remote controlled cart with speakers, and lights to carry around the robot and help us recruit new members. We did the whole process on our own without parents. We started by engineering the cart to carry the robot. Some adult mentors were questioning how much to spend, so we raised our own money through multiple fundraisers. After we got enough money, we ordered the required parts, and machined the parts we couldn't buy. We built the cart in a team member's garage.

The importance of the whole thing was that we completed it on our own with skills we learned from FIRST, like engineering, fundraising, design analysis, and building. Our veteran members had learned to work together as a team to achieve goals in an organized manner and now applied those skills to a project of their own.

#### Our Teams Role Models

There are many qualities that all role models have in common, some of which are good leadership; caring about their students, and focusing on the main task. The students also need to be able to go to them when they need assistance, or need to talk about any issues they might be having.

# • Examples of our Student Mentors-

On our team there is an exceedingly knowledgeable student mentor. He shows many qualities of being a great role model. He has taken the time to show many new members the "ropes" of being in FIRST. In one case he invited a handful of people to his house to explain the animation program. He explained every aspect of the program in full detail, sending us off with confidence. We had pride that we could eventually make such complex things by using the program. We now have a great animation team that is very knowledgeable and has created an astonishing animation.

Another student mentioned that their biggest role model was an older team member who came over and talked to him on his first day when he was alone. It sounds really simple, but it really meant a lot to him. In our team we have a big brother/ big sister program that was initiated this year by the senior members. It helped the younger students feel included and welcomed by the older team members. They were flabbergasted by the knowledge of the older students.

### • Examples of our Adult Mentors-

As in most teams we have many wonderful role models. Our team is full of people who do kind things and don't expect anything in return. One of our adult mentors, who works for Gleason Works, gives about 18 hours of his time every week. During the preseason, he organized an activity called the Ping Pong challenge which tested and increased our ability to work in groups. Whenever there is a tedious task that no one else wants to do, he leads the team and makes it fun.

Our team has many great adult role models but, for some reason our team members look to our student mentors for guidance more than the adults. Maybe that's because our students have taken a bigger part in leadership than ever before.

# How We Spread the F.I.R.S.T Message

Our team has spread the FIRST message in multiple ways. One of the new programs supported by some of our Blue Lightning members was the creation of the new Lego League Team called the Blue Sparkies. This new team finished in the top 25% during their first season out.

This is also the first year that we have had a successful website. We have had a student working on it for 4 weeks. Now members of the community can go to our website to see the weekly progress on our robot. The website also shows upcoming events.

In May we went to Tinsel Town, a local theatre, to give a public demonstration of the technology involved in FIRST. We were there for the premier of the movie "Robots". The people who were there to see the movie were given the opportunity to drive our robot for a hands-on experience to see what it could do.

In September, our veteran members sold giant chalk stencils of the school logos to help fund the team. The logos showed up all over town and spread the news that the Fairport High School had a FIRST robotics team. In September, we also recruited more than 20 new members using our new student created promotional video. In October, we participated in the local Ra Cha Ruckus using last year's robot and placed 2nd. In February, we give annual presentations to the local Fairport Rotary, one of our sponsors, to let them know what we had done.

# The Strength of Our Partnership with Gleason Works

Our team goes to Gleason Works, our corporate sponsor, to work on our robot three times a week. Gleason Works has given us a room to work in and a large space near our workroom for us to build the playing field. They also help us manufacture some of the parts to build our robot. They spend much of their time helping us with designing, building and programming the robot. This was the first year we were able to design and manufacture twin robots so that even more students could have a hands-on experience. Gleason Works supported this with its funding.

The Gleason Open House, which we hold each year right after the ship date, is one of our best opportunities to thank their employees for what we have been able to do. We tell them about the message of FIRST and the potential of today's technology.

#### Teams Communication Methods and Results

One of the main ways we improved on our communication was through e-mail using our Yahoo group and a second way is now, our website. Everyone has an e-mail and that is important considering our team

doubled in size this year. During the build season, we had team meetings at the beginning and end of every day. It kept the team up to date and made sure that everyone had a job. Our team found this system time saving and effective.

# The Main Idea

Our robotics team has finally made the transition from a robotics club to a FIRST team. We used to be focused on building a robot. Now we find teaching new members about technology and spreading the word of FIRST is our new main goal. FIRST, providing and promoting futures in science and technology.