Team 67

2005 Chairman's Submission

# HEROES OF TOMORROW

## Team 67

## Huron Valley Schools

The students, mentors, and parents who make up the HOT team strive to be leaders for the FIRST family, our peers, and our community. For we are the Heroes of Tomorrow, inspiring students that will become the leaders of the next generation. Through our eight years of competition and participation in FIRST we have targeted and taken steps to achieve many of our goals. Our partnership between General Motors and the Huron Valley Schools has always been strong. We have grown each year with new aspirations and determination of spreading the message of FIRST.

**OUR HISTORY**

The HOT team has been competing in FIRST for eight years, and since the beginning we have achieved greatness through awards, contributions, and our overall success. In our first year we recieved the Rookie All-Star award at the Championship event. We have been awarded the Leadership in Control award eight times including twice at the international level. The HOT team was finalist for the Chairman's Award twice at the Championship event, and won the Engineering Inspiration Award at the Great Lakes Regional in 2002. Additionally, we have finished victoriously with five regional wins and finished second three times. Though winning FIRST awards are very important to our team, the peer awards from other teams mean a great deal to us. Over the years, the HOT Team has received fifty five such awards--including Best Alliance, Helpful Hand, Gracious Professionalism, and Best Match.

**FIRST LEGO League (FLL) AND Junior FIRST LEGO League (JFLL)**


The HOT Team takes the leadership role for the FLL program in the state of Michigan. With the help of many teams around the state we help organize and oversee the regional system. We piloted the FLL for FIRST in 1998 with the largest pilot in the country. This year we mentored FLL teams, hosted one regional tournament and continued our sponsorship and hosting of the statewide tournament. We have done this every year since 1998. Once again it was the HOT team that FIRST approached when they needed someone to pilot JFLL in the state. We played an active role with four teams and hosted the JFLL tournament at the regional and state competition. Other FRC teams mentored JFLL teams, however, the HOT Team was the only team in the state to organize the entire event. This year the HOT Team orchestrated over 350 FLL teams into 16 regionals in which 84 teams advanced to the state tournament. That is over 3,000 kids, 9 to 14, that started to learn about FIRST.

**COMMUNITY**

The HOT Team reaches our community in several creative ways. In the fall we clean the Huron River which runs through Milford. In addition to this we also clean the litter from Commerce Road that connects General Motors with Huron Valley Schools and the heart of our community.

This year we partnered with the Detroit Science Center to create Science Night at one of the local middle schools. The relationship we have built with Huron Valley Schools was the reason that the Detroit Science Center asked us to assist them. At that event our team members interacted with the elementary and middle school students allowing them to operate different science displays while learning scientific principles. The science displays centered on the concept of basic machines, like levers and pulleys, but there were other things such as wind, Segways, astronomy, and giant Frisbees. The HOT Team brought the HOTBOT and an FLL robot and talked to the students and their parents about both the FRC and FLL programs. This gave them a better understanding of the robotics programs in their schools.

**HOMEWORK: Creating New Teams**

One goal that we achieved this year was completing Dean Kamen's homework- alumni starting new FRC teams. Our alumni created two new teams--one at Lake Superior State and the other at Michigan State University. We know of no other team whose alumni started and ran two new FRC teams this year.

Team 1504 the "Spartan Robotics", is a blend of Okemos and Grand Ledge High Schools with Michigan State University and their corporate sponsors. One HOT Team alumni worked hard to get everything in place and then led alumni of other FRC teams to get things rolling. Three HOT alumni started the "Sault Instigators", Team 1596, a rookie multinational FRC team with members from both the United States and Canada. As far as we know, this is the only multinational FRC team. The Canadian members attend Korah Collegiate while the American members attend Sault High. In addition to these two FRC teams, five other HOT alumni are assisting four other FRC teams during their build this year.

Through the years, the HOT Team has mentored others as they started new teams. In addition to the two new teams started this year, our team has helped with the formation of other teams, including Teams 1256, 1140, 503, 217, and 64, to mention a few. In supporting these teams we provide assistance, information, and demonstrations as well as access to the GM Proving Ground and our robot building site. We have introduced many of these teams to either their mentoring sponsors in the schools or their engineering

sponsors. In addition, we also worked hand-in-hand with the Arizona Planning Committee as they planned and executed their first FLL state competition two years ago.

**MENTORING: Gracious Professionalism**

In the 2004 season the Heroes Of Tomorrow fulfilled one of our greatest acts of gracious professionalism when we adopted Team 406, the "Mumford Mustangs". Their story started about 2 weeks into the build season when their engineering sponsorship was dropped. They were in desperate need of assistance. The HOT Team stepped up to the challenge with great excitement and, with the assistance of our alumni, were able to help them build a robot and compete. This would be the first time that the students built their own robot. Mumford started their season with a great showing at Great Lakes Regional. The HOT Team won a Judges Award for helping them and gave one of the trophies to Mumford. The next week Mumford became finalists in the Detroit Regional where they received the first award their team had ever won, a Judges Award. They gave us the second trophy as thanks. Mumford ended up being our cheering partners and our friends. That was not the end of our support for Mumford. At the end of the season, with our assistance, DaimlerChrysler picked up their sponsorship for 2005.

**UNIQUE TOOL FOR COMMUNITY OUTREACH**

If you have been around our team at all this year you have heard about CASEY. If not, CASEY (Community Awareness in Science and Engineering Year-round) is a shobot with the main objective of spreading the word of FIRST in the local schools and the community. CASEY is designed by the students to have a personality, since it will wear costumes and has a face. It will blow up balloons and is designed to be simple enough that younger kids can drive it.

Some may ask why we don't just use the competition robot when we go out into the community? The reason--our competitive robot was made for competition and CASEY was made for entertainment. Usually during the fall our team participates in the Oakland County Competitive Robotics Association (OCCRA), which is a good program, however, this year our team decided to use this time to create a robot that would be useful for more than three months. Plans for CASEY started a year ago; so far we have worked through the OCCRA season and through out the FIRST build season.

We feel that CASEY is a unique way to spread the message of FIRST in schools, parades, children's units of hospitals, science centers, and other community events.

## GINA SWEET, A GIRL OF FIRST

One question that is often asked is, "How is your team helping the students and making a difference in their lives?" Let us give you one example: Gina Sweet.
In 1998, when Gina was an 8th grader, her class was asked to help the HOT Team pilot the FLL program. At that time Gina was not sure what she wanted to do with her life. Two years later she joined the HOT Team.

By her junior year, Gina was in charge of the wiring on the competition robot and had decided to become an electrical engineer. She was accepted into Kettering University, and General Motors picked her up as a co-op. Now in her second year at college, she works with GM in such areas as instrumentation development for the Tire and Wheel lab and wiring harness development for GM prototypes. She made the transition from student to mentor on the HOT team last year and is fulfilling that role again this year. FIRST told us that she is the first person to have completed the entire loop, from FLL, to FRC, to college, to work. Yes, the college and work have run together, but Gina is the first person to demonstrate the entire progression of the FIRST program. In addition to Gina, the HOT team has produced three students who went to engineering school and now work for GM.

## CONCLUSION

What has our team done for the FIRST program and what has FIRST done for us? It is easy to see. We may not have done everything or achieved all of the goals but we have placed our team in a leadership position to set the example. We have taken on opportunities that benefit the community, our schools, our team, and FIRST. FIRST has created challenges and we have accepted these challenges as our goals. We have the recipe for success.
Our heart and soul goes in to all that we do, and we always walk away with a feeling of satisfaction.
The HOT team is well known and respected by all our peers, our mentors, our communities, and by FIRST. Other teams respect us for our leadership, gracious professionalism, and our accomplishments. This reputation continues as we strive to live up to our name- the "Heroes Of Tomorrow."