



THE GREEN MACHINE

Edina Robotics FIRST Team 1816 Update, October 2006

Welcome

This Update issue, written by student members of the Edina Robotics *FIRST* Team 1816, is intended to communicate our team's excitement to our sponsors, mentors, our parents, and other supporters.

Community outreach is one of the things expected of every *FIRST* (For Inspiration and Recognition of Science and Technology) team. This Update highlights some of our team activities related to outreach.

Governor's STEM Summit

This September, our team was invited to exhibit at the Governor Pawlenty's STEM (Science, Technology, Engineering, and Mathematics) Summit at the Science Museum of Minnesota. The Summit provided an opportunity for high school students to learn about future job opportunities from over 40 high tech companies and institutions of higher learning. Over 1,000 high school students, parents, and teachers attended the event. Our team shared our experiences from the 2006 *FIRST* season through video and demonstration, and invited our peers to participate in the *FIRST* program by starting teams at their schools. At our exhibit area, we showed footage of our competitions, demonstrated our newly developed vision system (which shot marbles at a selected colored lights to demonstrate its ability to distinguish colors), and gave our audience a firsthand look at a *FIRST* robot in action. We were very successful in generating interest in robotics, and look forward to seeing more Minnesotans on the field and in the stands at *FIRST* competitions. Irondale High School in New Brighton is the home of the most recently established team in the state; the group of enterprising students with whom we visited at the STEM Summit has already registered a new *FIRST* team.



Students and mentors of The Green Machine enjoyed interacting with their peers, teachers, and parents at the STEM Summit for High School Students held at the Science Museum of Minnesota.



Presentations to area schools interested in robotics

In October our team visited Southwest High School in Minneapolis to share our experience and to encourage them to start their own *FIRST* Robotics team. Our team is particularly interested in outreach because, while there are 17 *FIRST* teams in Wisconsin, there are only two teams in Minnesota. Ideas were exchanged as each member of our team gave personal reasons of why *FIRST* mattered to them. The meeting went very well and significant interest was expressed. If a team is actually formed, our team will be a resource to them during their rookie year.

Homecoming parade

The Green Machine's award-winning 2006 robot made its debut in the Edina High School Homecoming Parade on October 6. Controlled remotely by team members riding in the back of a green decorated pick up truck, the robot briefly made its own way south on Wooddale Avenue – until the treads on the wheels became shredded by the rigors of the road. Team members, who threw candy to the crowd lining the parade route, were delighted participate in the Homecoming festivities.



Communicating on the web

Over the summer, the team developed a website, extending our outreach into cyberspace. We invite you to visit us at www.edinarobotics.com to check out the latest adventures of The Green Machine. The website, updated several times weekly, gives us a new way to communicate with our sponsors, mentors and team members – and other *FIRST* teams as well. You can see the team's marketing video, video of our 2006 competitions, and videos demonstrating our vision system's ability to differentiate colors. Mouse over our logo eyes and watch them wink. Stay tuned as our website continues to grow and evolve.

Incorporating new members

The team is in the midst of registering members for the 2007 season. Not all results are in, but it appears that the team will more than double in size and that new team members will outnumber veterans. Because our veteran team members are mostly seniors, the team will make a deliberate effort to involve younger students working alongside veterans in each activity to assure future team continuity.

A new workshop!

Honeywell has graciously provided a loading dock area in one of their facilities in which the team will be building the robot this year. We're so excited to have a true workshop space; last year's robot was crafted in a member's kitchen and garage. Thank you Honeywell!



Thanks to sponsors and projected needs

Corporate sponsorship is an integral part of staging a *FIRST* team. Corporate sponsors provide not only funding, but also mentors. For many team members, meeting with mentors is their first contact with "real world" applications of math, science, technology and engineering. Working side-by-side with mentors opens opportunities for future careers in these vital industries.

We thank our 2006 sponsors: Medtronic Inc., NASA, Edina Education Fund, the lawfirm of Schwegman, Lundberg, Woessner, and Kluth, EHS Parent Council, Best Buy, Barr Engineering, Spanlink, Ergotron, Jerry's Enterprises, Handy Pro, Big Image Corp., Cooper Research, Kaemmerer Group, LLC, Exlar Corp., and Evalumed. You, and other contributors, allowed us to build our 2006 robot and successfully compete in the *FIRST* Regional Competition in Milwaukee and the National Championship in Atlanta in the spring of 2006. Your generosity gave us the means to cover all of our expenses for the 2006 season, which totaled over \$30,000. You have helped create a unique opportunity for a dynamic and exciting learning experience in applied science that is lacking in the classroom.

In the 2007 season, we anticipate expenses of over \$50,000 to accommodate a larger team. Honeywell kicked off our 2007 fund year with a contribution of \$1,500, and the team has also received a contribution of \$110 from Home Depot to be used to purchase tools. We also have posted a Wish List on our website for donated items including hand tools, power tools, cleaning supplies, office supplies and folding or stacking chairs. Please **check out our wish list on line**. Many of the items we need are things you might have at home and no longer have a use for.

We invite your involvement. Visit us at www.edinarobotics.com; or email us at edinarobotics@yahoo.com.

This issue of the Green Machine Update was compiled by students Kevin Milne and Matthew Kaemmerer under the direction of marketing communications mentor, Carol Kaemmerer. Visit us at www.edinarobotics.com.