

Here at Patti Engineering, we strive to provide exceptional service not only to our customers, but also our communities. We believe we have a social responsibility to help build strong communities in the areas in which we do business. Strong communities build strong companies and we have a long history of community involvement.

Our citizenship commitment makes us a stronger company while strengthening the cities and towns where our employees live and work. We encourage employees to be active members of their communities, improve them through philanthropy, volunteerism and leadership. Additionally, as a company we donate to various charities throughout the year.

There are three main charities we donate to on a regular basis with financial gifts and volunteer time: Michigan Regional Future City Competition, the FIRST Robotics Competition, and the Grace Centers of Hope in Pontiac, MI. In this article we will share updates on our participation in each of these three wonderful Charities.

**Future City Competition** - 2013 marks the third consecutive year that Patti Engineering sponsored an award at the [Engineering Society of Detroit's \(ESD\) Michigan Regional Future City Competition](#). The program challenges sixth, seventh and eighth grade students, along with a teacher and volunteer mentors, to team up to design and construct a model city of the future using computer software, promoting technological literacy and engineering through practical, hands-on application of mathematical and scientific principles. January 28, we sent a group of engineers to judge projects at this year's competition to award the Patti Engineering sponsored, "Best Use of Automation Technology," where we recognize a team that displays impressive team work while encompassing innovative and creative use of automation in the design of their virtual cities. Sam Hoff, president of Patti Engineering said, "It is important to support the youth in Michigan, and across the nation, as they excel in the areas of math, science and engineering."



This year's theme, "Rethink Runoff: Design Clean Solutions to Manage Stormwater Pollution," required each design to encompass plans for infrastructure, transportation and communication systems, as well as, power plants, industrial, commercial and residential settings. While the Patti Engineering judges were pleased with all of the teams' creations, they awarded the MacArthur K-8 University Academy from Southfield, MI the "Best Use of Automation Technology" award for their innovative underground city concept, which allowed the planet's surface to remain in a natural state while the structure of the city was built beneath the earth's surface.



The **FIRST Robotics Competition** combines the excitement of athletics with the rigors of science and technology - **FIRST** (For Inspiration and Recognition of Science and Technology). The FIRST Robotics Competition involves 2,548 teams and 50,960 high-school students (Grades 9-12). Robots are built in 6 weeks and typically weigh up to 150 pounds. Working alongside volunteer engineers, the teams follow strict rules and time limits with limited resources to build and program a robot to perform pre-defined tasks. They learn how to use sophisticated hardware and software and compete to qualify for more than \$16 million in college scholarships.

"FIRST isn't about competing, it's about cooperating, and recognizing that if you have the right tools, you'll be able to make this world a better place for yourself and for the country," said Dean Kamen, FIRST founder, adding, "There is no stimulus package that will have as much return as stimulating a bunch of kids to become the workforce of the future, the problem solvers, the creators of the future."



The 2013 Game - **ULTIMATE ASCENT** is played between two Alliances of three teams each. Each Alliance competes by trying to score as many Frisbees into their goals as possible during the two-minute match. Discs scored in higher goals earn more points. Matches end with robots attempting to climb up pyramids located near the middle of the field. Competitions start March 1<sup>st</sup>! Last year's competition was Rebound Rumble, each alliance attempted to score as many baskets as possible during a two minute and fifteen second match.

Patti Engineering is proudly supporting six teams for this year's first competition from five local high schools: Lake Orion, Oxford, Notre Dame Prep, Goodrich, and Royal Oak. Ken Kutchek, Patti Engineering's VP of Operations, is a robot inspector at various Michigan District competitions and is a mentor/coach for the program at Lake Orion High School where his son Kyle is on Team 302 - Dragons. Patti Engineer, John Jowski, is a mentor on his daughter Elizabeth's team - Team 70 Goodrich.



Ken had the following to say about his experience with the program:

*"First Robotics is a great program. It provides hands-on learning of science, engineering and technology in a very fun, exciting, and competitive environment. High school students learn skills they will use for the rest of their lives..... idea generation, creative thinking, quantitative decision making, mechanical design, 3D CAD, fabrication, electrical design, software development, automation, troubleshooting, in addition to project management, time management, self-confidence, team work, communication, finance and leadership. The competitions are high energy and lots of fun; it makes all the hard work and dedication of planning and preparing worthwhile. Many of these First Robotics students will become the great engineers of tomorrow."*

## The Grace Centers of Hope

Just last year, Patti Engineering became involved with another charity called [The Grace Centers of Hope](#). This organization clearly stood out to us. We selected to work with them for many reasons. Our Auburn Hills office borders the town of Pontiac, which is no longer supported by GM plants. Therefore, Pontiac has been hit especially hard by the economy and the city is struggling to stay afloat. Grace Centers of Hope is working to revitalize the town of Pontiac. They provide refuge, safety, security, a home for those in need, and a wide range of programs to help people rebuild their lives enabling them to re-enter society as productive and responsible citizens. Grace Centers of Hope helps middle class families whose financial situations have changed drastically, women suffering from abuse, individuals challenged with mental illness, and those whose lives have been destroyed by alcohol or drugs. No matter how they became homeless, each one seeks hope.

Every six months, we have participated in a community service project to support this charity. Our employees work a half day for the charity during what would have been a normal workday. This has been a great opportunity to serve a good cause; enjoying the benefits and rewards of knowing we are making a difference, with the side benefit of it being a great team building day for our employees.

