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| Your Team Number: | 384 |
| Team Name, Corporate / University Sponsors: | Showbest Fixture Corp./Specialty's Our Name/Infineon of Richmond & J. R. Tucker High School |

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| Briefly describe the impact of the FIRST program on team participants. | FIRST has given us the opportunity to develop an appreciation and passion for science and technology. We learn to tackle the impossible and work together to make it possible. We are encouraged to learn and strive for excellence. We are inspired to work towards goals that are seemingly out of reach. We become better citizens by contributing to our community. We develop character by practicing gracious professionalism. By working with mentors and teachers, we find our heroes. |
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| Examples of role model characteristics for other teams to emulate. | Team 384 works hard and works together. Our team values each member's talents. Our excellent communication ensures that each member is an important participant in developing and achieving our goals. WE ARE ENTHUSIASTIC! We embrace gracious professionalism and focus on partnering with and helping other teams. Our commitment to giving to our community is strong. We have developed creative programs and work year round to spread the message of FIRST. |
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| Describe the impact of the FIRST program on your team and community. | The message of FIRST has blossomed for our team. Our inspiration to explore science and technology grew to include commitments to our school and our community. How we compete is influenced by learning and emphasizing gracious professionalism. We seek ways to help other teams and schools. Our goal has moved from winning a robotics competition to building a good robot and BEING A GOOD TEAM! Team members not only pursue studies/careers in science and technology, but strive to be better people. |
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| Teams innovative methods to spread the FIRST message. | careFIRST was created to include children with limitations in the FIRST experience. The participants have the opportunity to experience the fun and creativity of technology. We created training materials so other teams can start their own programs. To engage future high schoolers, we began ROBOT CAMP and THE MIDDLE SCHOOL APPRENTICE PROGRAM. The goals are to: mentor the ideals of FIRST, provide a hands-on introduction to FIRST and create enthusiasm for FIRST. |
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| Describe the strength of your partnership. | Partnerships formed by team 384 weave together to create the strong fabric of our program. Sponsors provide resources and many have become our mentors. Mentors, technical and non-technical, have committed to our year round program. They are our backbone. They actively recruit new mentors. Parents are fund raisers, consultants and cheerleaders. Many are mentors. These partnerships all strengthen the team. They are our role models as |
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we partner with other teams other schools, and the community.

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| Teams communication methods and results. | Team 384 increased visibility at our school by participating in school functions and publications. We have an increase in team membership. Team members and mentors communicate through a gaggle Email system, available to every member, which keeps us updated on team business. Mentors and teachers meet regularly throughout the year which enhances team continuity. Electronic communication with teams from around the country lets us share information and builds partnerships and friendships. |
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| Other matters of interest to the FIRST judges, if any. | Team 384 is very excited about the careFIRST program we have at Richmond Children's hospital. We believe involving children, who are not able to be a part of FIRST Robotics or FLL, in technology and the FIRST program, is the next step in changing our culture. To expand the scope of careFIRST, we will assist teams in starting their own programs. We will send to other teams, the instructional manual and DVD we created and a box of Legos. The manual and other information are at: WWW.sparky384.com |
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Sparky Team 384 is a carrier. We carry the enthusiasm, spirit and ideals of FIRST Robotics. Our goal is to infect everyone with whom we come in contact. Each year Dean Kamen encourages and challenges us to bring more people into the FIRST experience. Upon returning from Atlanta in 2004, our team continued to meet and brainstorm ways that we could raise to Dean's challenge. Sparky has always been involved in sharing FIRST with our community but we realized it was time to "KICK IT UP A NOTCH!" Within two weeks of Atlanta, Sparky began to implement a year round and far reaching effort to spread the word about FIRST Robotics.

SPREADING THE WORD AT TUCKER HIGH SCHOOL

We decided that we needed to remain visible at our school, not just during competition season, but during the entire year. Our goal was to increase the number of students on the team and to recruit more non-technology students and females. We made sure that in every PTSA or school newsletter contained an article about Sparky and FIRST Robotics. We brought our robots to club fairs and the team staffed exhibits for Incoming Freshman programs and Back to School nights. As a result of our efforts, we have seen a record number of students participate on the Robotics team this year. The number of females on the team increased from six last year to fourteen this year and they are now working in programming, design and manufacturing. When Sparky had a Lego drive this fall, the entire school participated and donated Legos for us to give to other teams to assist them implement a careFIRST community service project.

J.R. Tucker High School teachers further integrated FIRST Robotics into their curriculum. In Mechanical Systems class, the students learn about the use of: levers, hydraulics and pneumatics by designing systems for the robot. In Manufacturing students make: parts, nuts, and screws for the robot. The Technical Design class creates the designs to build the robot and many of the parts. The classes who study Technical Work calculate the parts needed for

the robot. Our Physics students and teachers work on calculations to determine the center of gravity and strength of the machine designed. Students from Photography classes work with team members to create an instructional video of our teams' careFIRST, community service project. Team members studying in our Computer classes create the Sparky web page and program the robot. In the end, they see the finished product, a functioning robot, a complete video production or a beautiful, informative web page. This year, 120 Tucker Physics students will take a field trip to the NASA/VCU Regional Competition. At Tucker High School robotics enhances the entire learning experience.

SPREADING THE WORD TO MIDDLE/ELEMENTARY SCHOOLS

This year, Sparky 384 continues its outreach to local elementary and middle students by visiting schools to run our robots and talk about science and technology. To this effort Sparky has added two exciting new programs. With the goals of: mentoring FIRST ideals, providing a hands-on introduction to robotics technology, and fostering an early enthusiasm for FIRST Robotics, Sparky began Robot Camp and the Middle School Apprentice Program.

Robot Camp was held on three Saturdays this fall and was staffed by students, teachers, and mentors. Twenty five middle school students attended and learned about robotic technology, and how to work safely. They participated in hands-on building, witnessed the running of all five Sparky robots and had the opportunity to drive the robots. The students observed and participated in a team working together toward a goal and solving problems together. They enjoyed learning from the "big" kids while Sparky 384 team members reveled in the role of mentors to the younger students and were excited to share their passion about FIRST Robotics with the participants. Although none of the young participants are in the Tucker High School district, they will be eager members of their own high school's robotics team.

The enthusiasm of the middle school students confirms the program was a success and we look forward to continuing this program.

To provide a more intensive experience in FIRST Robotics, Sparky 384 began the Middle School Apprentice Program. Five middle school students were invited to watch the kick-off of the 2005 game and to participate in the build season with the team. They shadow team members and mentors on all jobs and have the opportunity for supervised hands-on work. Our entire team is excited to be able to include these students in our program and believe that they will enter high school ready and eager to participate in FIRST Robotics.

SPREADING THE WORD TO OTHER TEAMS

Team 384 takes to heart Dean Kamen's message of gracious professionalism and our homework assignment to mentor a rookie team. Surely, spreading the word of FIRST and FIRST ideals must include living these ideals!

Sparky 384 formed a mentoring relationship with rookie team 1545, from Douglas Freeman High School. We offered the team access to our building facilities and advised them on fund raising and in building strong mentoring and parental support. Freeman team members have had the opportunity to study and drive all five Sparky robots. The familiarity with several robots assists them in gaining experience and building their own robot. Parents and mentors

from 384, worked with parents from Douglass Freeman and Mills Godwin High Schools, team 540, to help them develop mentor/parent groups to support their teams. Students from Freeman and Godwin High Schools gathered at Tucker to watch the kick off with us and begin the build season together.

One Sparky mentor took a lead role working with Freeman students every weekend to build their robot. We share with all these teams any opportunities to secure financial support that we find during the year. In addition, Sparky shares with Freeman by providing any materials and help they need to build both their robot and their team. Douglas Freeman High School may be Tucker's competitor in the sports arenas, but not in FIRST Robotics.

Sparky seeks many ways to partner with and assist other teams. Our team continues to provide volunteers to the regional Lego League competition organized by Maggie Walker, team 422. We believe that by helping other teams, we all win. Our most prized award is the 2004 NASA/VCU Regional Sportsmanship award for outstanding sportsmanship and continuous gracious professionalism. We strive to spread the word of gracious professionalism by our actions.

SPREADING THE WORD IN THE COMMUNITY

Community involvement has been a continuous Sparky effort. Every year we spread the word with visits to elementary and middle schools. In addition, we showcase FIRST Robotics by bringing team members and the robots to the Virginia State Fair, The Board of Education and to Philanthropic Foundations. Sparky 4.0 even met the Governor of Virginia! This year we added the Richmond Children's Hospital Family Fair, the Henrico Curriculum Fair, and the up-coming Boy Scout Jamboree.

In addition to these activities we expanded our focus to include finding ways to be better citizens of the world. We donated team funds to the Moody Middle School Scholarship Walk-A-Thon and the Henrico County Christmas Mother. By selling home-baked chocolate chip cookies, we raised \$100 for the tsunami relief fund.

The most significant program started this year has been careFIRST. Inspired by the 2004 Lego League theme NO LIMITS, our team developed careFIRST to introduce children who are unable to participate in traditional FIRST programs, to the fun and creativity of technology. We use participation in technology activities and interaction with the robots to: introduce FIRST Robotics and Lego League Robotics, allow the children to participate to the extent they are able, give the children the opportunity to interact with team members, and to provide fun and stimulation.

Our program combines technology and outreach to children and young adults who are hospitalized at Richmond Children's Hospital, a long term rehabilitation facility for children with significant impairments. We visit the hospital once a month, outside of the robot build season, and have used both our large robots as well as Lego robots. There is a special curriculum written for each visit with a theme and activities designed to engage, educate and entertain the children. Each month 6-8 team members participate with about 75% of our team having been involved in the past year and our goal is 100% participation.

We created an instructional manual and DVD to: demonstrates the program, give instructions on how to start a careFIRST program, and how to adapt careFIRST to other settings. The instructional manual, DVD and a box of donated Legos are available to assist teams in getting started. Information about careFIRST is posted on our website and, to date, we have Emailed the manual to 300 FIRST. Our hope other teams will expand this program to other settings and create their own unique careFIRST program in their communities. We are inviting all teams to take this program and adapt it and grow it. careFIRST belongs to the entire FIRST community.

Why is Team 384 so committed to spreading the word of FIRST Robotics? It is because of what FIRST has done for us. We learn how to tackle the impossible and work together to make it possible. We are inspired to pursue dreams that once seemed out of reach. We develop character practicing gracious professionalism. We become better citizens by contributing to our community. We find heroes working with mentors and teachers. One of our students wrote:

"It's not very often you hear someone say that robotics saved their life, but it is true for me. I do not have a prosthetic limb or use a robot to help me with my daily life; instead, robotics saved my future."

We believe by spreading the word of FIRST Robotics, this can happen for many more people!

