Executive Summary

The Wissahickon Senior High School Robotics Team, here after referred to as Team 341, has been acknowledged as a hard working team within the FIRST® organization. Founded in late 1999 for competition in the 2000 event, Team 341 was originally comprised of fifteen members. Now, the team boasts over forty members who have built a legacy within the robotics organization and local community.

By implementing various marketing strategies, the Wissahickon Senior High School Robotics Team hopes to maintain our image as a respectable and compatible team while expanding our capabilities and increasing the magnitude of our goals. While sponsorships and construction facilities have changed over the past year, objectives and values of the team have remained constant.

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Founding Organization

For Inspiration and Recognition of Science and Technology (FIRST®) was founded in 1989 by Dean Kamen. Over the past sixteen years, FIRST® has become a multinational, nonprofit organization with teams located in Brazil, Canada, Great Britain, Israel, and the United States. During FIRST®'s introductory year, twenty-eight teams competed. Now, over seventeen hundred teams, spanning from Haifa, Israel to Honolulu, Hawaii, compete in thirty-one regional competitions. FIRST® has made it their goal to inspire student participants to pursue math, science, and technology in ways that one would not usually experience in a regular high school setting.

When FIRST® began, the organization was funded by businesses, especially Fortune 500 companies, educational institutions, and the U.S. Federal Government. With the help of new investors every year, FIRST® is able to put together more difficult competitions that keep everyone challenged year after year. Many investors feel as if FIRST® promotes learning and is a good resource for educational environments because of their interest in exposing students to the world of science and technology. FIRST® begins in elementary and middle schools with the FIRST® Lego League.

FIRST® credits the success of the organization to the thousands of volunteers, engineers, teachers, and other mentors who have helped make the organization as prosperous as it has become worldwide. Many of FIRST®'s past student participants have returned to help out at regional and national competitions to allow present members the same, if not more, opportunities than they received.

Since its beginning as an organization with only twenty-eight teams, FIRST® has become a worldwide phenomenon. Now with seventeen hundred plus teams, and thousands of students all over the world competing, the organization has come a long way since its introductory days. Robotics programs have been promoted in schools worldwide as an excellent way for

students to learn new things in a hands-on environment. With FIRST® and its beliefs becoming well-known around the world, the future looks bright for all schools having a program to further students knowledge about math, science, and technology

History

2005 will mark Team 341's sixth season as a FIRST® Robotics team. Miss Daisy, Wissahickon Senior High School Robotics Team name, is a well-rounded team that has progressed in all areas, not just on the field. Right out of the starting blocks in 2000, the team has come out on top as the Rookie All-Star Team at the Philadelphia Alliance Regional. Following the regular season, Team 341 hosted an off-season competition, known as Ramp Riot. Miss Daisy still holds this competition, which has become more successful each and every year.

In the 2001 season, the team won Ford Motor Company's "Best Team" Award at the National Competition in Florida and was the champion at Ramp Riot. During the next season, 2002 success started to take root, even though the team was not fully financially supported through sponsors. The team won three awards during the 2002 season, the Daimler-Chrysler's Team Spirit Award at the Long Island Regional, and the Judge's Award and Volunteer of the Year Award, both at the Philadelphia Alliance Regional. In the same season, one of Miss Daisy's team members won a $40,000 scholarship to Drexel University, which was presented at the National Competition. Financially, it was a rough year, but Team 341 made it through the season better than they had previously.

During the 2003 season, the Daisy crew decided to take a new path in building the robot. In the earlier years, professional engineers had helped to build the team's robot, but the loss of a sponsorship affected the support engineers gave to our team. The team decided to become 100% student built, and in that season, Miss Daisy was a grand success. Team 341's success had lead to the team winning four awards. At the Philadelphia Alliance Regional, the Daises received the Regional Chairman's Award and the Leadership in Control Award. The team also won the Kleiner-Perkins Caufield & Byers Entrepreneurship Award and was the Galileo Division Champions in the National Final Four at the National Competition.

In 2004, when the bar had been raised, our team continued to struggle financially, and even began having difficulties on the field. Though off the field,

the team won several awards. The Team Spirit Award was won at the Chesapeake Regional Competition and Miss Daisy was also presented Regional Chairman's Award at the Philadelphia Alliance Regional, for the second consecutive year. Moving on to Championships, the team was awarded Honorable Mention for the National Chairman's Award. Though this past year was rough, it was a great experience for both students and advisors.

As of 2005, the Wissahickon Senior High School Robotics Team has lost our partner, North Montco Technical Career Center. By losing two advisors, team members, and a building facility, Miss Daisy has had a rough start to the new season. With no doubt the team will make it out strong because of the support from parents and the school administration for allowing the team to use the high school facilities.

Team 341 is "growing out of the pot" into the world of FIRST®. We are a team that cherishes and fosters diversity. In the first year, there were a total of fifteen students, four being girls. To date, six seasons later, the team consists of about forty members, fifteen being female and over twenty-five percent coming from diverse ethnic backgrounds. The students on the team are given hands-on building experience and enjoy seeing the designs produced. Miss Daisy is not going to stop growing now because the Daisy crew is ready to wear their petals once again with pride during the 2005 competition season.

Goals

Setting goals is a priority in any organization, whether it is a profit or nonprofit organization. Goals set by the team offer guidance toward success. As of this year, many goals from previous years have been accomplished and new ones have been created. Each division of Team 341 has established specific goals to reach within the competition season and while goals are set, sometimes they cannot be accomplished.

"We Build People" is the motto of Miss Daisy, and therefore it is always our constant goal. Skills that students learn include computer programs, mechanical and electrical skills, people skills, and how to have fun while being a part of Team 341. While athletic teams focus may be on building people physically, a robotics team focuses on building the mind and spirit of its members. Being a participant of FIRST® Robotics helps one experience real-life struggles because of the strict deadlines and difficult challenges provided by the organization.

Having a strong team on and off the field is an asset when it comes to competing in any FIRST® competition. Therefore teamwork is an essential aspect of any team. Each year, Team 341 expands upon the existing goal of working together to ensure everyone has the opportunity to express his or her own opinion. To accomplish this goal, leaders are assigned to a division of the team, that they have a specialty in, to make sure that the team works as efficiently as possible. Before the build season began, Team 341 dedicated an evening, the 341st night of the year, to a team building and bonding experience. Games were played to allow each team member to get to know each other and form unbreakable connections.

Being a Regional Chairman's Award winner two years in a row has been an honor, to say the least. Yet, this does not mean Miss Daisy is going to stop being a role model for FIRST® teams and the local community. To maintain our status as a respectable team, Team 341's crew continues to reach out to the surrounding schools and businesses within the area to promote FIRST®. Even

internationally, teams are beginning to approach our team for help. We hope to continue our outreach locally and now, even, globally to anyone who requests assistance.

One of FIRST®'s goals is to expand student's knowledge about math, science, and technology. Team 341 makes it a goal every year to reach out to the local community and inform them about robotics, since many people do not know what the FIRST® Robotics organization is. Over the course of a year, team members attend approximately twenty-five community demonstrations to promote FIRST® and the Wissahickon Senior High School Robotics Team. By going to technology expositions, giving corporate demonstrations, elementary and middle school demonstrations, and other local community presentations, Miss Daisy has achieved FIRST®'s goal of giving citizens a better understanding of the robotics program.

Many goals are set to improve the performance of Team 341. We hope to accomplish these goals and even expand upon them in the future, as previous goals are achieved or overlooked because they were not a high-quality ambition, and fresh ones are put into place.

Management &Organization

Without management and organization amongst the people involved with the team, Team 341 would not be able to function properly which would not lead to the success for which we strive. Even after losing two key advisors during this past off-season, Miss Daisy has pulled together to fill the positions.

Advisors of Team 341 are members of Wissahickon School District's faculty, who have a specialization in science and mathematics, that were chosen for their willingness to help students learn and grow and have an interest in the FIRST® Robotics organization. These mentors have been very active in the development of the team. The advisors of Miss Daisy put in approximately two hundred seventy hours during the six week build season keeping the team on track, making sure the team has all the required equipment and supplies, and controlling all of the official financial transactions. Compensation for advisors is provided by the Wissahickon School District for their time and energy put into the program. Because of the increased interest in the robotics team over the past few years, advisors also chose who they feel could best contribute to the team from the applicants who apply for team membership. Another important decision that the advisors of Team 341 need to make is which regional competition to attend along with which team members have put in the man-hours and accomplished their goals, and deserve to attend the specific competition.

Miss Daisy has been very fortunate to have so many of her graduated students return to help out the new crew each year. These students have been associated with the team since it was founded in the late 1990s and are able to give valuable information that continues to make Team 341 great each year. Miss Daisy's college advisors also help to create our award-winning website, programming, and assist in the building of the robot with no incentives involved. In appreciation for everything that FIRST® has given to them, these students also return to serve as field crew, officials, and inspectors at both the Philadelphia Alliance and Chesapeake Regional Competitions.

While the advisors of Team 341 put much time and effort into the team,

sole leadership comes from the student members. The student members of Miss Daisy are students of Wissahickon Senior High School and interested students who attend North Montco Technical Career Center. In order to be as productive as possible, the entire team is divided into nine subcategories of three to twenty students who work together to accomplish set goals for each day. Some examples of these subcategories include, CAD and animation, business, awards, design and programming, and imagery. Each subgroup has leaders who are experienced in the field to make sure that the members of the group are staying on track, to assist where needed, and to keep in contact with advisors.

Social and educational experiences are the most rewarding aspects that students receive being a part of the robotics team. Students are able to meet new people from other grades, family backgrounds, and walks of life that they may not have met in a normal high school setting. For the first time in team history, the advisors of Miss Daisy put
together a team building night where all members of the team were split into groups to accomplish trust exercises. By splitting the entire team into subgroups, everyone had the chance to work with people that are not normally in their subcategories.

Team 341 has put a considerable amount of time and thought into making sure the team runs as efficiently as possible. By dividing the team into subcategories, it allows for more productivity since it is easier to communicate in smaller groups that it would be with the entire team. When you put all of the components together in the end, the final product is the well-run and organized Daisy team.

Operations

Organization is key for Team 341 to progress and to operate correctly. There are many subdivisions that focus on certain tasks. Being a student built team is a bonus because students, usually seniors who are advanced and well acquainted with their area, are given the honor of being a captain of that particular division. The captains are in charge of making sure everyone is on task and share their knowledge with others. This gives the students on our team the opportunity to show leadership and control. Our team believes the more involved the members are, the better off the team and students will be in the future.

Being a FIRST® team, having the ability to build a robot that works well and plays the game successfully is a major factor. Miss Daisy has two divisions known as the design team and the pit crew that deal with the mechanical and electrical side of the team. These two subgroups work hand-in-hand, so many of the students are involved with both. The two together are our build team, which consists of about eighteen students. The design team is responsible for researching parts and creating the final design and mechanics for the robot. Then the build team goes to work to complete the robot in the six weeks. After the robot ships, and the team is at a competition, the pit crew's job becomes demanding. This group is responsible for making any repairs on Miss Daisy and making sure she is ready for each of her matches. As these two divisions have their hands filled with tools, the many other divisions are hard at work on their projects.

Programming is essential to having a working robot. Though the number of members on our team in this subgroup is minimal, they get their job done. The programmers are accountable for designing computer programs for the drive system, autonomous mode, and other complex parts of the robot, such as a vision camera and the gyro. Our programming team works long hours along side the build team to accomplish the goal of building an inspiring robot.

As the build and programming teams are working on the robot, we have a

CAD team producing a CAD drawing of the robot. Along with the CAD team, the animation team creates a thirty-second animation that adheres to the guidelines set by FIRST®. Inventor and 3D Studio Max for PC are generally used within these groups. If a member would like to get involved with either of these teams, it is the captain's responsibility to instruct them how to use the program(s). Many hours in front of a computer eventually produce a wonderful product that shows dedication and creativity.

As a robotics team, we are involved in an array of activities. We have a media team that captures the team's happenings either on video or in pictures. Over the course of both the season and off-season, a large amount of video and pictures are taken. It is this team's job to organize the media, and construct video and picture presentations for sponsors, community demonstrations, and specialized awards. This year, the media crew is hard at working producing an interactive video that will be distributed to the FIRST® community. This project aims to assist rookie teams to have a successful season. This disc will include everything from how to operate a team to what to expect at a competition. The captains are hard at work making sure this project stays on task, so that it can be given out to FIRST® teams as soon as possible. The media team is also crucial to the scouting team. Footage of opposing teams allows the scouting team to learn more about other robots and prepare the booth crew for a hard fought match.

The scouting team is a strategic group from our team. It is their duty to observe opposing teams and plan a strategy for, or against, them in a competition round. A database is made by this group to organize and analyze the different teams participating in the specific competition. Their knowledge of opposing team's robots allows us to choose our alliances wisely during selections, if we are located in the top eight seeds. If not, then it is their job to sell our team to those who are in the top eight. Many teams offer to help provide information on other teams, also known as a scouting network. Our team is always willing to help other teams in designing a database that fits the needs of their team. Having good communication skills and an open mind are very

important when involved with this team.

Maintaining a uniformed theme throughout the team is an important aspect. We have an imagery group that designs our pit, the accessories our team members choose to wear, and our robot's art. This helps our team compete for the Imagery Award at competitions. Without this subgroup, Miss Daisy would not be as recognized as she is today.

When many people originally hear about FIRST®, the think of only robots, drills, and tools. Well, FIRST® is much more than that, and so is our team. We are also involved with many of the other various awards given by FIRST®, one being the Chairman's Award. Chairman's Award, the most prestigious award given by FIRST®, is given for the commitment to spreading the principles of the FIRST® organization. Three members are chosen to represent our team for this award and they work diligently on the presentation and award submission. Along with Chairman's, other awards are written and submitted by the awards team. These members are always busy writing and updating the award submissions.

Though our team is a nonprofit organization, a business sense is still needed. Managing our budget can become hard for coaches because they are busy helping with other areas of the team, so our business team deals with all financial transactions. This subdivision controls, but is not limited to, sponsorships, fundraisers, and expenses such as traveling fees, entrance fees, and material fees. In addition, the business team manages documentation of building expenses. Other than managing our budget, the business team is responsible for writing a well-structured business plan on the complete workings of our team. This document is presented to the officials at a regional or national competition to be judged. This subcategory helps keep our team financially organized.

All of these divisions are fundamental to the progress of Team 341. Students show professionalism and hard work within each of these subcategories. The students are allowed to be in more than one division at a time, as long as they manage their time well and complete the tasks given to them. As team members are busy drilling, preparing

awards, and working with numbers, advisors watch over the team and offer assistance when needed, but allow the students to drive the team's direction. Without the advisors, the team would be nothing.

As a team comprised of many students, these subcategories are very important to the growth of Team 341. They bring organization to the team and offer guidance along the path to success.

Marketing Plan

There are a number of markets that Team 341 will need to reach out to during the 2005 competition season. In order to be successful in having these markets know who we are and what we do, specific strategies have to be created to satisfy each group's need. The four Ps of production (price, product, position, and promotion) must be designed to satisfy these needs. Some of our markets, especially sponsor and community markets invest both time and financial support into the creation of Miss Daisy. In addition, we have enhanced our marketing position by increasing community involvement over the years.

During each season, over $55,000.00 is needed in order to build a robot and its components. Due to the rising costs of keeping Team 341 in production, Miss Daisy requires support from outside sources and fundraisers. Sponsors not only assist a team by supplying monetary funds, but also equipment, mentorship, and community exposure. In order to receive these benefits, Team 341 needs to approach potential sponsors and demonstrate that a relationship with a high school FIRST® Robotics team will be rewarding. With each of our successes, sponsors will see that their investment in the team enhance the future growth of industry.

Many of Team 341's sponsors have gone above and beyond to ensure Miss Daisy's continued accomplishments and in appreciation of the sponsorships, members of the team honor our sponsors by giving presentations to the companies, representing the companies with banners, and hosting other special events. Members of Miss Daisy solely obtain sponsorships, and therefore no promotions are used specifically to gain sponsors.

After receiving Chairman's Award Honorable Mention at the FIRST® Robotics Competition in Atlanta during the 2004 season, Miss Daisy continued the initiative to promote the team, and the FIRST® organization throughout our local community. Television specials have been created by members of the team and played across the school district's television station to allow members of the community to learn more about our team and our happenings. Because of

this additional information, citizens of the area have stepped up in any way that they can to help Team 341. Most recently the Wissahickon Educational Opportunities Foundation (WEOF) has become an activist for Team 341 by searching for grants and sponsorships to allow Miss Daisy to continue to be a positive influence in so many of the team's member's lives. The local newspaper has also written numerous articles over the past six years to highlight Miss Daisy's accomplishments both locally and nationally.

Our involvement within the area has gained the team great respectability. Team 341 hopes to continue to receive the support of our entire community while providing an exciting experience for those interested in robotics, mathematics, science, business, and technology.

When Miss Daisy was founded in 1999, originally named Tom Servo, the team was comprised of fifteen members, only four of those fifteen being female. Now, six years later, the 'Daisy Garden' proudly boast almost forty members with over forty per-
cent of the members being girls. In additions to the present high school students on the team, seven graduated members of Team 341 return to help train new members and assist where needed. To prevent exclusion from the team due to economic reasons, Miss Daisy provides financial assistance for dedicated members to attend regional and national events.

Team 341 promotes itself by appearing as an extracurricular activity that has numerous benefits. A varsity letter is awarded to those members of the team who have maintained a full-time status for two years. Students may also be enticed with the opportunity to receive scholarships, to learn skills in a career field they are interested in, and to meet new people. The easiest way to propagate our robotics team is through world of mouth. This eliminates the price issue since it is absolutely free and members of the team do it subconsciously by boasting the team's winning record. In addition, announcements are made to inform the school population about the team's achievements and upcoming events.

The cost of joining Team 341 can vary greatly from member to member.

Members of Miss Daisy spend almost twenty-nine hours a week, a combined 8,700 hours of the six week build season, working on various tasks to put the entire robot and its components together. Students must be cautious of their grades during this time period to make sure that they stay eligible to participate academically. Being a member of Team 341 is a fun and rewarding experience that makes the long hours and dedication the crew puts in worthwhile.

Miss Daisy's largest group to market to is that of other FIRST® teams. After not even being recognized during our first few seasons, Team 341 has created a name for us among teams in the United States and Canada. The majority of our time and money goes into creating pins, hats, shirts, and other miscellaneous apparel to distribute to during competitions. When creating a pit design, choosing uniforms, and decorating our robot, we keep a uniformed theme so we are easily recognized.

During the off-season, Team 341 hosts, what some teams and regional director, Mike Robbins, call "the only off-season competition that feels like a Regional event", Ramp Riot. By hosting this enormous event, teams have come to realize that Miss Daisy is a tough competitor and an amazing alliance partner. Most recently the 'Daisy Garden' has complied a template CD for rookie teams to use during their introductory seasons.

Since Wissahickon Senior High School's robotics team was founded in the late 1990s, Miss Daisy has continued to flourish from a little team to one of Ambler, Pennsylvania's finest teams by executing the four Ps of production.

Competitive Analysis

When FIRST® was created in 1989, founder Dead Kamen would have never been able to realize what a huge success it would become. With over seventeen hundred teams throughout Brazil, Canada, Great Britain, Israel, and the United States, FIRST® Robotics has become a competitive event that high school students across the world get excited about. In the Philadelphia suburban area, many teams became involved during the 2000 season with the game "Co-Operation FIRST". Throughout the years, our biggest competitors have become teams located in Pennsylvania, New Jersey, and Delaware, who all started their robotics teams between 1997 and 2000. It is important for Team 341 to identify and analyze their competition's strengths and weaknesses to be able to determine how they will compete at regional competitions.

One of the teams that is our biggest competitors, but also a strong allies, is Team 357 PECO-Exelon and Upper Darby High School Robotics Team. Their team consists of thirty-five students members, who were formed in 2000 along with Miss Daisy. The team receives the help of PECO engineers to assist the team in various aspects of planning and building their robot. Over the past few years, Upper Darby Assault has won numerous awards: "Driving for Technology", Leadership in Controls, Engineering Inspiration, AutoDesk Award for Visualization, and Regional Chairman's Award.

Another team from Pennsylvania that Miss Daisy competes against in season and off-season competitions is Team 222 Ronco Machine/Proctor & Gamble/North East PA Tech Prep Consortium and Tunkhannock Area High School. Consisting of thirty students, Team 222 was formed in 1999, and has been successful ever since. Engineers from both Ronco Machine and Proctor & Gamble help the Tunkhannock Robotics Team with the planning and building of their robot. Since they began their program Team 222 was recognized as the regional finalist at competitions in Maryland, Pennsylvania, and New Jersey, Delphi's "Driving Tomorrow's Technology", Daimler-Chrysler's Team Spirit, and KPC&B Entrepreneurship awards.

Bristol-Myers Squibb and North Brunswick Township High School, Team 25, is another of Miss Daisy's competitors. Comprised of forty-five students, Team 25 has won several Judge's Awards, been Regional Champions, received the Engineering Inspiration Award, Xerox's Creativity Awards, and were National Champions. This team was the first of our competitors formed, in 1997, and have had the support of Bristol-Myers Squibb tradesmen to plan and construct the robot since.

The last, but certainly not the least, of our local competitors is Team 365 DuPont/First State Robotics, Inc. and MOE Robotics Group. Created in 2000, MOE has thirty-five students and a core of DuPont engineers that design and build their robot. Since the program was started, Team 365 has won many regional events, the Woodie Flowers Regional Award, Daimler-Chrysler's Team Spirit Award, Website Design Awards, Imagery Awards and the Regional Chairman's Award.

A major difference between Team 341 and all of her competitors is that Miss Daisy's robots are completely built by students and receive no exterior support from
engineers. Over the past five years, the 'Daisy Garden' crew has won various Chairman's Awards at Regional Competitions, Daimler-Chrysler's Team Spirit Awards, Judge's Award, along with others. All of these accomplishments have been achieved without the assistance of engineers, which makes Team 341 who they are.

Using all of the information we have obtained in the previous years about how a team competes, Team 341's scouts can begin to create a game plan for how the team wants to design, build and play to be successful. By being able to identify and analyze the strengths and weaknesses of our major competition, Miss Daisy is able to perform to our maximum.

Community Work

Over the past six years, it has become the moral responsibility of Team 341 to go out into the neighboring communities to promote our team and FIRST®. Although, the motivation for such acts of good will is altruistic, there are also economic benefits for improvement of the community. By improving the outlying community, Miss Daisy not only has enhanced its reputation, but also has increased the market's ability to financially support and engender the growth of the team. Through these contributions to the Philadelphia suburbs, Team 341 not only has furthered the industry of FIRST®, but also sowed the seeds for future assets.

In affiliation with the Montgomery County School Partnership Program, Team 341 has opened its doors to students who do not have robotics teams associated with their regular schools. On our current team, three members were introduced to the team by the North Montco Technical Career Center, and Miss Daisy has welcomed these students with open arms. Throughout the years that these members have been connected with the team, Team 341 has discovered that the students are valuable resources for the experience and knowledge they possess with metalwork and design.

For the past four years, Miss Daisy started and has been a part of the National Hearing Impaired Network where deaf students and signers are able to keep in contact, discuss issues related to FIRST®, and meet at competitive events. While all the deaf members of Team 341 have since graduated, the Wissahickon Robotics program will always be accepting of those in the student body who wish to join the tea that are hearing impaired.

During the course of the off-season, members of the Daisy crew attend special presentations at elementary, middle and high schools in the area, sponsorships, and local businesses to provide demonstrations about our award-winning program. In the past, demonstrations have been conducted at DeVry University, Siemens Corporation, and Rohm & Haas, and most recently displays have been scheduled for the Ambler Rotary and Mattison Avenue Elementary

School. These area appearances are used to educate community members about the FIRST® organization and inspire the youth to get involved with math, science, or technology programs in their schools.

When Miss Daisy hosts Ramp Riot, besides putting on an off-season competition that looks and feels like a regional, the team tries to better the community by asking all teams and spectators to bring nonperishable canned goods for the Ambler Community Cupboard. At Ramp Riot 2004, over 900 canned goods were brought for the team to donate during the holiday season. Other various charity activities that Team 341 has been a part of is collecting equipment for sports players who do not have enough money to buy proper gear and raise money for a fallen police officer of the area's family. The Daisy crew's most recent charity even is that of collecting school supplies for children in Iraq. A former Wissahickon student, and present Army officer, contacted the team to find out whether we would be interested in running this event. Team 341 graciously accepted the opportunity, and collected supplies during the month of December in the school districts elementary and middle schools. The school communities have donated 200 various school supplies, ranging from pencils and pens to notebooks and binders, to send to Iraq.

Yet, one of the largest programs that Team 341 has taken part of is becoming a mentor for rookie FIRST® teams. Since the fall of 2002, Team 341 has mentored Team 1218, Chestnut Hill Academy and Springside School. This mentorship consisted of teaching them how to be a FIRST® Robotics team and how to be successful. During the 2004 season, just their second year of officially being a FIRST® team, Team 1218 was part of the top four alliances at the National Competition in Atlanta. While Miss Daisy has assisted other teams, the bond between Team 341 and Team 1218 is stronger than those of others. Team 341 will be taking on the task of mentoring rookie Team 1656, NASA/AIS/UPenn & The Haverford School during this upcoming season. Our team is going to provide valuable information about being a successful FIRST® Robotics team and competing at regional competitions.

Being an active part of the community is one of the key qualities of Team

341. The community involvement never ends, since the crew of Miss Daisy is always going out and looking for ways to spread the FIRST® organization, help others, and thank everyone who has been there for us over the past six years

Long Term Growth

Since the team's beginning in late 1999, Team 341's crew has increased members over 166% during the six-year span. In order to be as successful as possible, team must limit their size for productivity and safety reasons. According to the economic law of diminishing returns, there is a point where the addition of more members will only decrease the output rate. By using this law, advisors of Miss Daisy needed to decide on the maximum number of team members that would allow for success of the team.

Teams within FIRST® vary in their size. Team 341 and its advisors believe the team will benefit from a certain amount of team members, depending on how many coaches and mentors the team has. For the 2005 year, Miss Daisy's advisors decided it was best not to exceed more then forty members because they have seen the most progress with this amount or less. This is essential so that each student will receive the most out of their experience on Team 341. Over the years we have grown from a team of about fifteen student to a team containing forty.

Miss Daisies advisors factor in the safety of the students along with experience. The safety of the students is the number one priority for all of our mentors. Making sure there always is a coach or mentor around to watch the students, along with helping them is always in mind. Once safety is covered, the students and mentors go hard at work on the robot and awards.

Not only did our team grow in the size of students, but the number of female students enrolling in the program has reached a remarkable amount. Going from four females to about eighteen females. They have obtained many leadership roles over the years. This year out of our two captains, one is a three-year female member. Team 341 hopes to continue drawing in females in the years to come and show them what science and technology has to offer.

Over the past years advisors have come and gone. This year we lost two advisors from North Montco Technical Career Center, but we gained one from our high school. Mr. Dixon opened up his shop and experience to Team 341.

Without his help we could not have made it as far as we have this year. Not only has Mr. Dixon offered his help, but many college students, who use to be on the team, came back with their skills and knowledge to help the new daises through the build season. Team 341 is always on the look out for more mentors and advisors to expand the amount of subdivisions our team has to offer.

The teams progress has grown each and every year, along with the diversity and amount of team members. It will continue to grow along with the spirit of FIRST®.

Income Statement

Income

Opening Balance: $ **withheld**
Activities Fund: $ **withheld**
Donations: $ **withheld**
Fundraiser: $ **withheld**
- Advertisements: $ **withheld**
- Banners$ **withheld**
- Candy: $ **withheld**
  - Raffle Tickets: $ **withheld**
- Ramp Riot: $ **withheld**
- Sponsorships: $ **withheld**
  - BAE Systems: $ **withheld**
  - DeVry University: $ **withheld**
  - Johnson & Johnson: $ **withheld**
- Network Events: $ **withheld**
  - Rohm & Haas: $ **withheld**
  - SIEMENS: $ **withheld**
- Student Travel Income: $ **withheld**
  - Championship Event: $ **withheld**
- Chesapeake Regional Competition: $ **withheld**
- Summer Frenzy Champions: $ **withheld**
- Uniform Income: $ **withheld**

Total Income: $ Withheld

Expenses

Building Materials and Workshop Equipment: $ **withheld**
Candy Fundraiser: $ **withheld**
FIRST® Competition Fees: $ **withheld**
- Championship Event: $ **withheld**
- Chesapeake Regional Competition: $ **withheld**
- Philadelphia Alliance Regional Competition: $ **withheld**

Ramp Riot: $ **withheld**
- Art Supplies: $ **withheld**
- Backdrop: $ **withheld**
- Disc Jockey: $ **withheld**

Photo Supplies: $ **withheld**
- Projector Screen: $ **withheld**
- T-Shirts: $ **withheld**
- Tables: $ **withheld**
- Trophies: $ **withheld**

Travel Expenses: $ **withheld**
- Championship Event Accommodations: $ **withheld**
- Championship Event Transportation: $ **withheld**
- Chesapeake Regional Competition Accommodations: $ **withheld**

Chesapeake Regional Competition Transportation: $ **withheld**
Uniforms: $ **withheld**

Total Expenses: $Withheld

Net Income

Total Income: $ **withheld**

Total Expenses: $ **withheld** -

Total Net Income: $ **withheld**