SILVER CRESCENT
• FOUNDATION •
Promoting manufacturing vitality and career opportunities in South Carolina

Program of Work for 2010

Executive Summary

The Silver Crescent Foundation is committed to promoting manufacturing vitality and career opportunities in South Carolina. Through a number of programs and initiatives, the Foundation seeks to raise awareness of the importance of manufacturing, engineering and technology in creating jobs, raising our standard of living, and making South Carolina a better place to live.

During the 2010 year the foundation made significant progress in raising its visibility and the general awareness of its mission among business and the general population of South Carolina. This year also gave birth to the Silver Crescent Circle which provides opportunity for businesses and individuals to support the Foundation's mission.

Recognizing achievements of the state's strong manufacturing base continued in 2010 with the collaboration with the South Carolina Chamber of Commerce to present a unified Salute to Manufacturing and the Silver Crescent Manufacturer of the Year Awards.

The Silver Crescent Foundation moved forward with a number of efforts designed to increase its pro-manufacturing and career exploration messages throughout the state. With support from the U.S. Department of Education and a number of local partner institutions, the Foundation continued its Camp Success program allowing approximately 100 middle school students to experience firsthand the excitement and creativity that careers in science, engineering and technology may provide.

The Student Design Challenge once again allowed some 300 students from elementary, middle and high school to discover the world of manufacturing in their local communities and share their vision for what manufacturing means to our state.

This report provides information about the Foundation's new and existing programs as well as highlights some of the organizational operations and partnership development. In 2010 the Foundation remains to be a prudent and lean organization contributing 72 percent of its total expenses to programs.

Program Highlights

Camp Success

Established in 2006, Camp Success is a week-long academic day camp for middle school students designed to create interest in engineering and manufacturing careers. In 2010, the Foundation continued partnerships with several educational institutions to host three sessions of Camp Success across the state (Aiken, Florence, and Greenville). Each partner institution used the Foundation's Camp Success model to provide a unique program focus and tap into local industry resources.

The goals of Camp Success are:

To generate adolescents' interest in engineering and technology that are central to the modern manufacturing sector;

To increase campers' motivation to succeed in school by providing an exciting, hands-on learning experience that has real world applications;

To increase awareness among young people that their desires to solve problems and make the world a better place can be fulfilled by a variety of careers that support the manufacturing sector in South Carolina;

To increase awareness among campers' parents/guardians of the diversity of career opportunities in manufacturing, demonstrate the range of educational preparation required, including two-year technical degrees, advanced technical training, four-year college degrees, and graduate degrees, and show the projected high demand for a well-trained and productive workforce; and

To expose the campers' parents/guardians to ways they can direct their interested middle school age children to prepare themselves for further education and careers that will support the workforce needs of South Carolina's modern manufacturing sector.

Highlights of the 2010 Camp Success season:

For 2010, all sessions included a Discovery Workshop with the LEGO® MINDSTORMS® NXT kit assembly and programming. Additionally, a local manufacturer was designated as industry chairperson to promote industry support at the three established camp locations (Aiken, Florence, and Greenville).

At the Ruth Patrick Science Education Center at USC-Aiken and at Aiken Technical College's campus, campers explored the evolution of manufacturing by focusing on several components: an historical overview linking manufacturing to community growth, expanding the knowledge of automation and electronics, envisioning the future of manufacturing and renewing an interest in manufacturing careers. Campers toured Bridgestone-Firestone Tire production facility and Savannah River Nuclear Solutions facility. Due to the Manufacturing host, BAE Systems' involvement, Discovery workshops were conducted by Kimberly Clark Corporation, Linde LLC, and Automation Engineering Corporation.

Campers at Florence-Darlington Technical College spent the week at the college's Southeastern Institute of Manufacturing and Technology exploring the ways automation and robotics are influencing manufacturing. In addition to Discovery Workshops conducted by Nan Ya Plastics; the Manufacturing host, S & W Manufacturing; Lift Technologies, Automation Engineering Corporation, and Johnson Controls, the campers toured the Honda Manufacturing facility in Timmonsville.

Campers at Greenville Technical College were introduced to Mechatronics while touring the lab at the college's Brashier campus and shown robotics with the LEGO® MINDSTORMS® NXT kit assembly and programming. The manufacturing host, Advanced Technology Services as well as Automation Engineering Corporation conducted Discovery Workshops and facility tours.

Forty-eight at-risk students at Seneca Middle School were shown the benefits of remaining in school through Discovery Workshops and facility tours at Borg Warner, Automation Engineering Corporation and Advanced Technology Services. For the first time in its 5-year history, Camp Success focused on at risk students as Camp Success was included in the curriculum for the Bridge to Graduation Through Positive Choice summer program at Seneca Middle School in Oconee County. At the end of the camp, 32% of the campers showed a new interest in completing their high school education to pursue careers in engineering or to allow them to work at a local manufacturing facility. The Silver Crescent Foundation plans to provide this unique opportunity to more summer bridge programs throughout the state.

Some 96 middle school students attended Camp Success in 2010. More than $50,000 in financial support from the Foundation was provided to the host institutions, including grants made by possible by the U.S. Department of Education and sponsorships provided by Packaging Corporation of America and Johnson Controls.

Camp Success provides an important extended learning opportunity for students and ties in with the South Carolina Education Economic Development Act (EEDA) and the Personal Pathways to Success™ program. By increasing interest in engineering and technology among middle school students, Camp Success can be a vital tool in instilling leadership, problem solving and workforce skills that will prepare them for professional careers that use 21st-century technology to make the world and South Carolina a better place.

Salute to Manufacturing

The 15th annual Salute to Manufacturing awards luncheon was held in Columbia in September with 325 business, education and community leaders in attendance. Pete Mazzaroni, Roche Carolina's Public Affairs Manager emceed the event. Gus Whalen, Chairman of the Warren Featherbone Foundation provided a lively and educational keynote address. The South Carolina Chamber of Commerce President and CEO, Otis Rawl opened the event which was held at the Radisson Hotel and Conference Center.

The awards program included the presentation of the **Silver Crescent Award for Manufacturing Excellence** to three South Carolina manufacturing companies in a small (up to 199 employees), medium (200-499 employees), and large (500 or more employees) category. Nominations were received from across the state and an independent panel of judges selected the three best firms who exhibited excellence in manufacturing, a positive economic impact on its local community and the state, a commitment to workforce development, and strong corporate citizenship and involvement in their local community. The 2010 Silver Crescent Award winners were:

> **Small Manufacturer Silver Crescent Award winner – Caterpillar Precision Pin Products Group**, located in Sumter since 1998 manufactures Linkage Pins and Planetary Shafts which are critical components used to manufacture Caterpillar equipment worldwide.

Medium Manufacturer Silver Crescent Award winner – Bosch Rexroth, located in Fountain Inn has been manufacturing equipment for the mobile hydraulic industry for 21 years.

Large Manufacturer Silver Crescent Award winner – Force Protection, Inc., located in Ladson was formed in 1997 and is the nation's leading center for blast technology and counter improvised explosive device research.

The Silver Crescent Foundation presented the Salute to Manufacturing in partnership with the South Carolina Chamber of Commerce and with major support from the South Carolina Manufacturing Extension Partnership and CPM Federal Credit Union.

South Carolina Design Challenge

Working closely with the South Carolina Department of Education and the Regional Career Specialists, the Foundation once again held its popular South Carolina Design Challenge. This student-centered competition gives young people in grades 5 -12 an opportunity to learn more about the role of manufacturing and engineering in South Carolina. Student winners in first, second and third place categories received scholarship prizes and their schools with first place entries were also presented with monetary awards.

Competitors researched and wrote an essay with an idea to be presented to a South Carolina manufacturer and then provided a design entry depicting the idea in their essay. These designs and essays portrayed a dynamic, positive image of manufacturing in the state and in local communities. In doing so, young people become aware of the importance of local industries in addition to exploring career opportunities within manufacturing, technology and engineering.

The winning design produced by a middle school student was used to produce tote bags. All designs were compiled to illustrate a 12-month calendar with the winning high school design featured on the cover. Scholarships are awarded for the top three designs in each category -- $300 for first place, $200 for second place, and $100 for third place. Additionally, the education department from each school that produces the first-place winner in each category is awarded $200.

2010 highlights include:

Introduced the essay portion of the challenge, students wrote essays on the them “Manufacturing starts with an idea, what’s yours”

Coordinated the participation of more than 300 students statewide representing 11 of the 12 education regions who participated in the South Carolina Design Challenge competition

Recognized 6 winning students and their teachers at the school awards ceremonies

Produced 600 calendars and tote bags imprinted with 1st place designs in each category

Awarded cash scholarships to six students and two teachers totaling $1,600.00

Recognized student and teacher winners statewide through the Silver Crescent Foundation web site and press releases

Recognized the participation of 118 finalists at the local level through certificate awards and press releases

Winners of the **2010 Student Design Challenge** were recognized and presented awards by the Silver Crescent Foundation and their Regional Career Specialist. Nashell Simpson, an eighth grader from McCracken Middle School in Bluffton, won for best design by a middle school student. Edward Fowler, an eleventh grader from Broome High School in Spartanburg, took top honors for the high school category.

Silver Crescent Circle

In 2010, the Silver Crescent Foundation continued to invite industry leaders and community stakeholders, to invest in the future of our children and our economy by joining the **Silver Crescent Circle** to support statewide efforts to grow South Carolina's next generation of manufacturing leaders. Participation in the **Silver Crescent Circle** helps to fund operations that support ongoing outreach and education programs designed to fill the workforce pipeline of the future and keep South Carolina competitive.

In South Carolina, we must accurately portray opportunities to young people, allow them to experience for themselves the creative process that manufacturing supports, and provide them with the technical training that will allow them to become viable members of the workforce.

To create value we must strengthen the knowledge and skill base of our workforce. The process must begin at the secondary school level, so that workers enter the workforce prepared with needed skills. To remain competitive in the global economy, South Carolina must begin to invest in its "Human Capital."

The Silver Crescent Circle has established specific goals and objectives to encourage career exploration and increase workforce readiness:

Create a pipeline, beginning in 6th grade and continuing through high school, that builds a framework for success in the workforce.

Challenge preconceptions and outdated ideas that young people have about engineering and technology and cultivate the desire to explore new technologies.

Encourage a global perspective and social commitment.

Inspire the desire to participate in the world outside of the classroom and to be leaders.

Provide hands-on experience with problem-solving through exploration in engineering, math and science.

Enhance students' self-confidence in their academic abilities and increase their motivation to succeed in school.

Create a connection between today's business leaders and the future workforce that will be vital in maintaining South Carolina's competitive edge.

The Silver Crescent Circle members are Automation Engineering Corporation, BAE Systems, CPM Federal Credit Union, GlaxoSmithKline, GE Energy, Kimberly Clark Corporation, Savannah River Nuclear Solutions, Shaw Industries, and Sonoco Products Company.

Discovering Manufacturing

In 2010, the Foundation organized a Manufacturing Field trip for career education teachers and counselors in the Spartanburg area. The field trip exposed 26 Greenville educators and career counselors to the modern world of manufacturing. Thanks to our friends at Lear Seating, Milliken, and SEW Eurodrive our guests heard firsthand what these companies are looking for in terms of employees, skill sets, and educational attainment and then each provided guided tours and answered a myriad of questions about what it is like to work in today's manufacturing environment.

In 2010, the foundation also participated in the South Carolina Department of Education's career and business summit and the Oconee County Industrial Group's career fair. Between the two events, the foundation distributed information about manufacturing to 3,000+ students and 500+ educators.

Discover Manufacturing, is a multi-disciplinary education and outreach program designed to bring manufacturers and education leaders together to explore the career opportunities that exist in today's modern manufacturing environment. In addition, it emphasizes the benefits manufacturing provides, stresses the urgency of future workforce needs and exposes young people to the creativity and innovation required for these jobs.

The Discover Manufacturing program is based on facts that show manufacturing in America is facing a shortage of bright and skilled workers; a workforce shortage which can negatively impact its competitiveness and the economic strength of local industry. Many Americans don't understand that manufacturing is still an important economic engine for our country, creating wealth and enhancing quality of life. Even worse, educators and parents are not promoting careers in manufacturing to young people. As the aging US workforce retires and fewer young people pursue studies in science, technology, engineering and manufacturing, the impending shortage of an educated and skilled workforce will have negative results for American manufacturing.

The foundation began plans to enhance the program by taking Camp Success to the classroom. Work began on tailoring the camp curriculum to fit into the classroom environment. Planning and curriculum development will continue in 2011.

Governing Board

The Governing Board for the Foundation reflects the diverse community of South Carolina which it serves and includes leaders from several S.C. manufacturing companies, financial institutions, educators, state government and utilities. The Board remains active and involved in the Foundation initiatives.

Silver Crescent Foundation Board of Directors

Gary Foster, Chair, President, Automation Engineering Corporation, Greenville, SC

Robert Kiggans, Vice Chairman, Advanced Technology Institute, North Charleston, SC

George W. Lockwood, Secretary/Treasurer, President, CPM Federal Credit Union, Charleston, SC

Oscar E. Prioleau, Honorary Lifetime member, President, Prioleau Steel (Ret.), Columbia, S.C.

Michael Rose, Vice Chair, Plant Manager, Bridgestone Firestone (Ret.), Graniteville, SC

Shirley Johnson, Manager Corporate Compliance and Privacy, SCE&G, Jenkinsville, S.C.

Partnerships

The Silver Crescent Foundation continues to place a high value on developing partnerships with other organizations that share a commitment to manufacturing's vitality and educating the workforce of the future. Given South Carolina's small size and limited financial resources, the Foundation's staff and board understand the important role collaboration brings to achieving its mission and supporting its programs.

During 2010, both the state and federal Departments of Education provided important funding, support and access for Silver Crescent Foundation programs, particularly the South Carolina Design Challenge and Camp Success. The network of Regional Career Specialists in the Department of Education's Office of Career and Technology Education provide valuable assistance in the statewide implementation of the Design Challenge

The South Carolina Technical College System has long been a partner of the Foundation as have other four-year public colleges. In 2010 the Foundation partnered with Florence-Darlington Technical College and Greenville Technical College along with the University of South Carolina at Aiken and Aiken Technical College to host sessions of Camp Success.

The Silver Crescent Foundation continued to work with South Carolina Manufacturing Extension Partnership (SCMEP) and the South Carolina Chamber of Commerce on the annual Salute to Manufacturing.

Throughout 2010, Silver Crescent Foundation personnel worked closely with the Association for Manufacturing Excellence (AME). The Foundation assisted AME with management and operations support for the annual Learning Resource Center. Silver Crescent Foundation Founder Tony Smith also provided valuable committee leadership

to the national organization as well as its southeastern regional Board of Directors. Mr. Smith's longtime association with AME has been an important partnership that has added valuable exposure to issues affecting the manufacturing world.

Conclusion

In 2010, the Silver Crescent Foundation continued its primary mission and purpose to promote the need for programs that encourage young people to explore careers in manufacturing and engineering and to complete their education. The Foundation's initiatives serve as a conduit between the successful businesses of today and leaders of tomorrow. The Foundation continued it roles as an important advocate for manufacturing and these initiatives supported workforce development and recognized companies that demonstrated the ability to positively impact employees, local communities and the state while achieving excellence within their industry.

The Silver Crescent Foundation collaborated with other nonprofit organizations, business leaders, institutions of higher learning and public school systems to help the next generation of young people understand the fundamental connections between engineering innovation, technology vitality and our high standard of living. It remains the hope of the Foundation that as young people come to understand ways engineering innovation betters people's lives, and as they grasp the connection between manufacturing vitality and a higher standard of living for us all, their interest in these areas will continue to grow.

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