Remote possibilities

‘Smart tool’ keeps workers safe by monitoring their locations in the far reaches of SRS

This month

USCA donation • Small business opportunities • Radiation Technology Program • Vet’s Day
Welcome to the November 2017 edition of SRNS Today

November starts the holiday season and with it comes opportunities to express gratitude. I am thankful for the talented employees and great work they accomplish at the Savannah River Site every day.

On Veterans Day, SRNS gave thanks to the veterans who now work for Savannah River Nuclear Solutions with a reception. These employees gave to our nation in the military, and we are grateful for their sacrifice. They continue to give to our nation through their work at SRNS, helping to make the world safer.

SRNS appreciates the small businesses that help keep our site running. Improvements in the supply chain approach have led to significant gains in small business subcontracting. SRNS small business managers also held an information session for local small business owners in Barnwell, S.C. Attendees learned about various contractor procurement practices and how to qualify for potential opportunities.

We are also grateful to our employees who find more cost efficient and better ways to do work. A recent effort in K Area extended the design life of a mobile shipping package there, preventing hours of work to repack the material. SRNS also developed an innovative technology that is capable of maintaining communication and location monitoring for remote workers to ensure their safety.

Our employees do not only show their gratitude through their work, but through their philanthropic endeavors, too. The Aspiring Mid-Career Professionals (AMP) recently spent time at South Aiken High School hosting a “Career Assessment Day” for ninth- and tenth-grade students. Our Leaders Emerging Among Professionals (LEAP) group also recently volunteered at the Faith Food Factory in Augusta.

I count myself lucky to work among such great people on such a great mission. I hope you have a happy holiday season.

SRNS completed another investment in the region’s developing workforce on Nov. 27, when Stuart MacVan, SRNS President and CEO, presented the final installment of the organization’s $550,000 endowed engineering professorship to the University of South Carolina (USC) Aiken.

“We recognize the importance of creating and maintaining strong relationships with local colleges and universities,” said MacVan. “We have a great partnership with USC Aiken.

“Though our close ties with USC Aiken go back decades, we continually seek new ways to mutually support one another with the shared goal of ensuring the success of every graduating student. We know that in time, the success of each student could easily be contributing to the future achievements of both USC Aiken and SRNS.”

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Life extension
K Area Complex extends shipping package design life

"The robustness of our surveillance program is yet another way SRS shows that it is committed to safety," said Jeff Jordan, KAC Process Engineering Manager. "We knew we needed to work on extending the life of the packages to ensure the facility did not have to repack them."

As part of the surveillance program for the shipping packages, several 9975s are opened each year and examined to check for and evaluate any signs of degradation. SRNL and KAC engineering used this data along with the results of aging studies performed by SRNL and extensive structural and thermal modeling to determine that the drums can last an additional five years before needing to be repackaged. With the insight gained from this evaluation, there are now efforts underway to increase the life well beyond 20 years.

"The shipping packages were due to reach the end of their design life, the period for which the packages were expected to function at their designated capacity, beginning in July 2017," said Jeff Jordan, KAC Process Engineering Manager. "We knew we needed to work on extending the life of the packages to ensure the facility did not have to repack them."

Repackaging the drums is costly and time consuming. Each drum repack requires significant effort from Operations, RadCon, Engineering and SRNL. Extending the life of these drums results in a savings in annual operational costs as well as avoiding significant personnel exposure.

"The robustness of our surveillance program is yet another way SRS shows that it is committed to safety," said Jordan. "We are being proactive in making sure the nuclear materials are stored in a safe manner."
Small businesses are big winners in supply chain revamp

Small businesses working for SRS are the big winners as a revamp of SRNS’ supply chain approach is yielding significant gains in small business subcontracting in addition to a suite of other improvements.

Following a nearly three-year effort to improve the performance of its supply chain organization, SRNS has exceeded every socio-economic subcontracting goal in FY 2017, including more than doubling its goal for subcontracting to small, woman-owned businesses.

“Our supply chain is a vital part of our success at SRS and exceeding these small business goals is a reflection of our emphasis on continuous improvement,” said SRNS President and CEO Stuart MacLean.

The effort to improve performance of the supply chain organization began in 2014, a time when SRNS had a backlog of more than 5,400 requisitions. SRNS took several initial steps, including establishing a set of metrics to measure performance, increasing training and driving decisionmaking down to the lowest accountable level, said Mike Newman, SRNS’ Senior Director for Supply Chain Management, who joined SRNS in 2014 from Honeywell’s Kansas City Plant.

SRNS has also benchmarked with industry leaders in supply chain to ensure delivery of high value services at a competitive price, while increasing quality, speed and efficiency, Newman said. For example, SRNS supply chain managers traveled to the Kansas City facility to discuss electronic purchasing and cost/time requisitions. SRNS began in May 2017 for significantly driving a $16.9M cost savings in FY16, improving on-time delivery by 20 percent since 2014 and decreasing receipt to delivery cycle time by 50 percent over same period.

Going forward, Newman said SRNS will focus on increasing its performance against small business subcontracting goals even more, with additional staff assigned to that effort in FY 2018. SRNS will also put significant emphasis on furthering partnerships with vendors.

“Sharing the best practices that we’ve incorporated with our vendors will help ensure all of us are in the best possible position to support the SRS mission,” Newman said.

Within a few months, SRNS had eliminated the backlog of 5,400 requisitions and was able to shift the focus to institutionalizing longer-term improvements, including:

• Putting in place strategic agreements instead of completing repetitive buys for the same good or service;
• Taking one hour each week to train staff on procedures and efficient approaches;
• Setting clear business rules and measuring performance with appropriate metrics; and
• More effectively using EM’s Strategic Sourcing Initiative, under which EM prime contractors work together to leverage common commodities, thus enabling pricing and processing efficiencies.

The SRNS Supply Chain organization was recognized by DOE EM in May 2017 for significantly driving a $16.9M cost savings in FY16, which exceeded the goal by 88 percent.

Additionally, SRNS has made marked improvement in two key metrics, improving on-time delivery by 20 percent since 2014 and decreasing receipt to delivery cycle time by 50 percent over same period.

Exceeding our goals by the numbers

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<tr>
<th>Actual</th>
<th>Goal</th>
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<tr>
<td>Overall Subcontracts to Small Businesses</td>
<td>71</td>
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<tr>
<td>Small Disadvantaged</td>
<td>18.8</td>
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<tr>
<td>Small Woman-Owned</td>
<td>23.9</td>
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<tr>
<td>Service Disabled Veteran</td>
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<tr>
<td>HUBZone</td>
<td>4.3</td>
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<td>Small Business subcontracting (FY 2017)</td>
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SRNS Regulatory/Radiation Protection Training Manager Cristie Shuford, a former radiation protection inspector at SRS, explained that the pay and benefits at SRNS are highly valued and the opportunity for promotion is exceptional due to the larger size of the organization and variety of missions and programs. “That’s something that’s very important to the future of nuclear operations,” said Shuford.

SRNS Regulatory/Radiation Protection Training Manager Cristie Shuford, a former radiation protection inspector at SRS, explained that the pay and benefits at SRNS are highly valued and the opportunity for promotion is exceptional due to the larger size of the organization and variety of missions and programs. “That’s something that’s very important to the future of nuclear operations,” said Shuford. “This is a great career for people that’s not just radiation protection jobs, but a potential career here at SRNS that we are offering.”

“We’ve been impressed with the ATC graduates,” added Shuford. She explained that ATC has revised their curriculum to closely match the training used by SRNS when hiring candidates with no experience or education in radiation protection. Last year alone, more than 20 applicants found employment at SRNS as radiation protection inspectors.

“Growing up, I always wanted to do something to help people, but not as a doctor. I’ve found that a career in this field gives me the ability to help people by protecting them from the hazards of radiation. Radiation Protection workers are important to the future of nuclear operations. Hopefully many other students will join us in this wonderful program,” said ATC Radiation Protection Technicians Cassy Jennings and Chungu Sellers.

Tunno noted that at least four or five students who recently joined SRNS as radiation protection inspectors are the sons and daughters of current and former SRNS Inspectors. “This indicates to me that their parents have found this job rewarding and have passed that on to their children,” he said.

“There’s a lot of job security and growth opportunity with this set of skills and abilities,” said Tunno.

According to information from Aiken Tech, the Associate Degree in Applied Science with a Major in Radiation Protection Technology builds the skills necessary to evaluate a nuclear work site where radiation must be monitored and managed.

Students will learn how to minimize exposure to radiation for workers; how to perform required surveys for radiation and radioactive contamination; and how to analyze data to find and correct potential errors at nuclear facilities.

Aiken Technical College offers several financial aid options including South Carolina Lottery Tuition Assistance for eligible South Carolina residents. Students enrolled in Aiken Tech’s Radiation Protection and Control Program may also apply for a $2,000 Workforce Opportunities in Regional Careers grant.

“Our mission is to provide citizens of greater Aiken County with opportunities for educational and workforce development. We’ve worked closely with SRNS to help identify workforce needs and create academic programs to educate and prepare students for careers in the nuclear industry,” said Dr. Forest E. Mahan, President, Aiken Technical College.
Win-win: How STEM at SRNL impacts the nation

In the following, originally published to the U.S. Department of Energy’s STEM Rising blog, SRNL Director Dr. Terry A. Michalske shares how SRNL creates win-win opportunities for students, the DOE National Labs and the nation.

There is a tremendous effort in our educational system to introduce young students to science, technology, engineering and math (STEM) and encourage them to pursue these fields. And rightfully so. We need these bright, energetic, minds poised to answer our nation’s biggest challenges.

While ignoring the passion for STEM is crucial, it is equally important to provide students with balanced training and experience they need to become successful engineers and scientists. This is the guiding philosophy of STEM engagement at Savannah River National Laboratory, where We Put Science to Work™ to provide innovative, cost-effective solutions to our nation’s environmental, nuclear security, energy and manufacturing challenges.

Each summer, our researchers work with university students on real-life problems to ensure they have the tools and skills needed to make immediate impacts when they join the workforce. This year, Savannah River Site was the largest, most diverse, and most productive intern program with 58 students representing 26 colleges and universities from 12 U.S. states and territories. More than 50 of our scientists, engineers and technicians guided these students in completing real work on behalf of our nation.

I can’t tell you how impressed I was with the work these students accomplished. It was evident at the public poster session that marked the end of this summer’s program that these young researchers made scientific discovery ahead in many key areas such as materials science, environmental science, robotics, radiochemistry and energy.

I was inspired by work from student researchers like Rachel Yanoschak from Virginia Tech who explored graphene as a passivation barrier for hydrogen isotopes and Jacoby Shapton from North Carolina Agricultural and Technical State University who studied the water infiltration rates on waste caps at the Savannah River Site. And there’s countless other examples, like Aimee Gonzales from the University of Nevada Las Vegas who studied the degradation of liquid immobilization standards for nuclear materials and Michael Stewart from the University of South Carolina who assessed the impact of cloud cover on the energy output of the Southeastern U.S. solar power grid.

By Dr. Terry A. Michalske
SRNL Executive Vice President and Director, SRNL

Beyond hosting STEM internships here in South Carolina, Savannah River National Lab supports STEM research opportunities nationally through the Department of Energy Office of Environmental Management’s Minority Serving Institution Partnership Program (MSIPP).

Managed by our lab on behalf of DOE’s Office of Environmental Management, the MSIPP program provides DOE National Laboratory internship opportunities to STEM students enrolled at minority serving institutions (MSIs). MSIs are institutions of higher education enrolling significant percentages of minority students or serve certain populations of minority students, such as Historically Black Colleges and Universities and Tribal Colleges and Universities.

This summer a total of 40 MSIPP interns were placed at six DOE National Laboratories including Los Alamos, Oak Ridge, Pacific Northwest, Idaho and Argonne. Savannah River hosted 11 of these MSIPP interns from MSIs as far away as the University of Puerto Rico at Mayaguez. Our MSIPP interns conducted research in areas including environmental modeling, environmental sciences, biotechnology, analytical development, advanced characterization and process technology.

While I like to tout these numbers as a way to quantify the impact we have on the development of young researchers, the real impact of the MSIPP program is what happens after the summer is over. Not only have these students gained invaluable insights into their research areas, they have also gained the hands-on experience and confidence they need to begin their professional careers.

In fact, two summers ago we hosted Brytni Hill, an MSIPP intern from Newberry College, who was able to move directly from her internship into a position at our lab as an associate scientist in our Science and Technology directorate. Today, she is conducting important work for the nation by determining the corrosion chemistry control limits for radioactive liquid waste stored in large, carbon-steel tanks here at Savannah River Site and at the Hanford Site near Richland, Washington.

This is what our investment in STEM is really about. Creating “win-win” situations for students, our National Labs, and our mission.

On Veterans Day, SRNS holds reception to thank those who have served our country

On Nov. 11, veterans across the country were honored with parades, 21-gun salutes and other traditions to pause and acknowledge their willingness to serve. In honor of Veterans Day, SRNS paid tribute to the hundreds of veteran employees within the company during a reception at SRSL.

“I want to thank our veterans for their past service, as well as those who continue to be active in the reserves,” said Stuart MacLean, SRNS President and CEO. “I’m grateful for your time, energy and sacrifice. It can be a big strain on family life, especially when you get deployed. I also appreciate your important work at the Savannah River Site to support our missions, as we protect our nation and the rest of the world by recovering nuclear materials.”

Maranda Glass-Shelhorse is one SRNS employee veteran who attended the event. She served in the U.S. Air Force for 21 years. The first person in her family to join the military, Glass-Shelhorse served two tours in Iraq and lived in England for four years, where she had the opportunity to visit 25 countries.

“When you interact with people here at work, you don’t really know who is a veteran and who isn’t,” said Glass-Shelhorse. “This event has enabled me to connect with fellow veterans, talk about shared experiences and help build a network to lean on and ask questions, which can help ease the transition from military to civilian life.”

Her role as a talent management specialist at SRNS is her second job after retiring from the Air Force, and she relied on her coworkers and another veteran in her group to become acclimated to work life at SRSL.

On Veterans Day, SRNS holds reception to thank those who have served our country.

“While I like to tout these numbers as a way to quantify the impact we have at SRNS,” she added. “You find someone who has been there before you to help navigate your path, and it’s equally important to mentor those coming along behind you, so they know what struggles you faced and how you overcame certain obstacles.”

As also transitioning from military to civilian life is Mark Davis, Deputy Director of NNSA Operations and Programs, Davis, who served in the U.S. Navy for 36 years, began immediately working at SRNS after retiring in June 2017. “Overall, I’ve been fortunate to work with a mission and purpose during my recent transition from military to civilian life,” said Davis. “All of the attributes that are important in the Navy are equally important here. My coworkers at SRNS operate at a high level, are dedicated and focused, pay very close attention to detail, and see the value in keeping commitments and having integrity.”

During the past year, SRNS has targeted recruiting for veterans at career fairs throughout the Central Savannah River Area. As a result, 11 percent of full-service employee hires were veterans in 2017, exceeding the Office of Federal Contract Compliance Programs’ goal of 6.8 percent. Ten percent of the SRNS workforce are veterans, and the company has veterans represented in all job categories. The top three professional groups are “Operations/Technical Specialists” with 76, “Program and Planning Services” with 33 and “Computer” with 32 veterans. The non-exempt job with the highest number of veterans in their group is “Production Operators” with 36.
SRNS "Aspiring Mid-Career Professionals (AMP) recently spent their Friday off at South Aiken High School and hosted a "Career Assessment Day" for ninth- and tenth-grade students.

During the event, AMP members shared their career choices, obstacles in their professions and life lessons as they led six sessions throughout the day reaching 410 students, guidance counselors and teachers.

"There were a ton of students! It was nice having so many fellow AMP members there to help," said Carter Hopkins, AMP Outreach Committee. "We had folks with many different backgrounds: military, scientists, engineers, business majors, IT, craft—you name it."

The AMP members engaged with the students by playing the card game "Deal Me In."

"As we move on to other schools, I hope to see passion and sincere concern for these students. We are the example, and we can't just talk—we have to show them success," said Adriene "A.D." Bollig, AMP Outreach Committee. "As we move on to other schools, I hope to see passion and sincere concern for these students. We are the example, and we can't just talk—we have to show them success."

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Eugene White was recently recognized by the South Carolina Chamber of Commerce as a 2017 recipient of the Manufacturing Employee of the Year award at a ceremony held in Greenville, S.C.

This award is bestowed upon South Carolina workers and showcases their contributions in the areas of innovation, teamwork, community service and leadership.

"Eugene's contributions to performance excellence at work are impressive and appreciated," said K esos McNeel, SRNS Senior Vice President for Environmental Stewardship and Safety and Health.

"What is even more noteworthy is Eugene carries that same level of energy into the community where he applies his talents to improve our local area."

As a Program Planner for the Environmental Stewardship organization, known as Environmental Compliance and Area Completion Projects, White has maximized available resources to deliver innovative results for SRS Environmental Remediation.

"Eugene is not one to accept the status quo. He demonstrates a commitment to exploring ways to conduct our work more efficiently. He is also a strong leader who becomes very engaged in team success," said McNeel.

Outside of the office, White applies those same character traits to philanthropic work, with desire to improve the quality of life for citizens in the CSRA. White is the current president of the Aiken County Branch of the NAACP. He is also involved with Taekwondo2Xcell, an alternative juvenile correction program that teaches taekwondo to at-risk youth, and serves on the Aiken County Public Schools Area One Advisory Council.
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