This month

Nuclear Weapons Council visit • Mark 18A • Water rescue training • Summer interns
Welcome to the August 2019 edition of SRNS Today

Security for the nation, safety in the workplace and assistance in the community: All three of these Savannah River Nuclear Solutions goals were at the forefront of activity during August.

This month, we welcomed the Nuclear Weapons Council to the Savannah River Site. The council toured National Nuclear Security Administration facilities that support the nation’s nuclear deterrent, including the Savannah River Tritium Enterprise and the proposed Savannah River Plutonium Processing Facility. SRNS continues to work diligently for the security of our nation and we were pleased that the council was able to view these current and proposed areas of operations in person.

During August, SRNS was honored by the National Safety Council with two awards. The first honored SRNS for achieving 25 million safe-work hours without a lost work day due to an on-the-job injury. The SRNS team was also awarded the Industry Leader Award for exemplary safety performance in comparison to similar companies in the same industry. Congratulations to our employees and their continued dedication to safety.

In addition, our SRS Fire Department put their water rescue training to good use. Although water rescues are rare, the department recently responded to a call to help boaters in distress on the Savannah River (which borders SRS), putting their training in action while assisting the local community.

I hope you enjoy this edition of SRNS Today, and as always, thank you for your interest in Savannah River Nuclear Solutions.

SRNS Today

Savannah River Nuclear Solutions, LLC, is a Fluor-led company whose members are Fluor Federal Services, Newport News Nuclear and Honeywell. Since August 2008, SRNS has been the management and operating contractor for the Savannah River Site, a Department of Energy-owned site near Aiken, South Carolina, including the Savannah River National Laboratory. The SRNS corporate and community offices are located in the renovated 1912 “Old Post Office” building in Aiken, S.C. The primary initiatives of SRNS are national security, clean energy and environmental stewardship. SRNS Today is published monthly by SRNS Corporate Communications to inform our employees and other stakeholders of the company’s operational- and community-related activities. If you have questions or comments, please contact us at 803.952.6131 or visit our website.

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Nuclear Weapons Council members visit SRS tritium facilities and proposed SRPPF

Members of the Nuclear Weapons Council (NWC) recently visited SRS as part of a tour that included a visit to Los Alamos National Laboratory (LANL).

Together, SRS and LANL are pivotal to the revitalization of the United States’ plutonium pit production capability and the fulfillment of the Department of Defense requirement to produce no fewer than 80 plutonium pits per year by 2030, as outlined in the 2018 Nuclear Posture Review and certified by the NWC in May 2018.

The NWC serves as the focal point of interagency activities to maintain the U.S. nuclear weapons stockpile. Among the members touring SRS facilities were Under Secretary of Defense for Acquisition and Sustainment Ellen Lord, who also serves as NWC Chair, and Commander of U.S. Strategic Command Gen. John E. Hyten.

The group visited National Nuclear Security Administration (NNSA) facilities at SRS related to support for the nation’s nuclear deterrent. This included a first-hand look at the Savannah River Tritium Enterprise (SRTE), which carries out the nation’s work related to the radioactive form of hydrogen used in nuclear weapons, and the proposed Savannah River Plutonium Processing Facility (SRPPF), which has been recommended for the production of plutonium pits.

“Our two-pronged approach at Savannah River and Los Alamos will ensure a more responsive and flexible infrastructure to maintain the nuclear deterrent for future threats,” said Lisa E. Gordon-Hagerty, DOE Under Secretary for Nuclear Security and NNSA Administrator.

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“I am confident that the recommended alternative of repurposing the Mixed Oxide Fuel Fabrication Facility at SRS while maintaining Los Alamos as the Nation’s Plutonium Center of Excellence for Research and Development is the best path forward,” said Lord.

“It was great to have the Nuclear Weapons Council at Savannah River and Los Alamos,” said Gen. Hyten. “Thanks to Undersecretary Lord and Administrator Gordon-Hagerty for making this happen. Great work is being done in the tritium enterprise. Looking at the future of plutonium, pits in particular—no doubt that Los Alamos will lead the way and we must leverage their knowledge and expertise, but we also have to focus in the very near term on ramping up the plutonium operation at Savannah River so the Nuclear Security Enterprise can be more responsive and resilient in order to meet our future military requirements.”
Reallocation of HB Line resources results in $900,000 in cost savings for SRNL’s Modification Project

Resources from HB Line facility recently helped ship analytical samples to and from SRNL from the 772/F laboratory facilities (F/H Laboratories), resulting in a cost savings of more than $900,000 over the next two years. The SRNL Modification Project is a multi-year project to establish the analytical methods currently supporting the customers of SRNL’s historic F/H Laboratories into SRNL’s existing laboratory space, located in SRS’s A Area a few miles away. This will reduce costs, increase personnel efficiency and allow F Area to move to a lower cost surveillance and maintenance mode.

"Part of the Modification Project requires F/H Laboratory to ship nuclear materials from their location to the A Area laboratory," said HB Line First Manager Brooks Hubbard. "Since that capability did not already exist, SRNL would have had to hire and train personnel and purchase a transport vehicle, which would have cost significant amounts of money and delayed SRNL operations. However, when HB Line personnel learned of the transportation needs, they stepped up to offer their help.”

HB Line has most recently been used to support plutonium oxide production, which was to be used either as feed for facilities to make fuel for commercial power reactors or shipped for final disposal in a repository. This mission necessitated a trained shipping and receiving operations staff. As that mission ended, DOE directed the facility to be placed in a safe shutdown state. While the project to place the HB Line facility into layup was being executed, the HB Line shipping and receiving staff used the additional time to support work for the Analytical Labs.

“Our folks were interested in helping out, and it made sense based on the infrequency of shipments,” said Hubbard. “It afforded us additional opportunities to remain proficient in shipping and receiving operations. Working with SRNL, we developed a plan to have our employees support the nuclear material shipments between F/H Laboratory and A Area.”

The first shipment was made by HB Line in November of 2018. There have been 13 safe shipments made since that time.

"SRS is constantly looking for ways to improve processes and to ensure we are being good stewards of taxpayer dollars," said DOE-Savannah River Nuclear Materials Manager Marcine Masted. “This reallocation of resources from HB Line to SRNL is an example of how we accomplish that.”

NSC honors SRNS with two awards for safety excellence

The National Safety Council (NSC) recently honored SRNS for achieving 25 million work hours without a lost workday due to an on-the-job injury; the SRNS team was also awarded the NSC Industry Leader Award for exemplary safety performance in comparison to similar companies in the same industry. On June 6, SRNS achieved a company record-setting milestone of 25 million safe work hours. This record represents the work of more than 6,000 employees working in diverse organizations across SRS. SRNS continued to grow its company record, exceeding more than 27 million safe work hours in July.

In recognition for the team’s safety achievement, SRNS was awarded the NSC “25 million Safe Hour” award. The NSC also recognized SRNS with a 2019 Industry Leader Award. This award benchmarks outstanding safety achievements among member companies, recognizing the top five percent of companies, units and facilities that have met extensive criteria and who have qualified for the NSC 2019 Occupational Excellence Achievement Award, which SRNS recently won in May for the eleventh consecutive year.

“I am really pleased that the 6,500 SRNS employees are being recognized for their efforts to keep one another safe,” said Stuart MacVean, SRNS President and CEO. “Their commitment to each other and to the Savannah River Site’s important missions is remarkable.”

SRNS has received more than 45 awards from the NSC as acknowledgment of their outstanding safety practices and has been the recipient of more than 135 safety awards and recognitions from other nationally-recognized organizations.
Silver bullet
Innovative process cleans up Iodine-129 in SRS groundwater

SRNS has developed, and is currently using, an innovative process using silver chloride to cleanup radioactive Iodine-129 found in groundwater beneath SRS.

According to SRNS Engineer Jeff Thibault, Environmental Compliance & Area Cleanup Projects, the goal is to indefinitely immobilize the iodine underground near its original source.

"In this case, 'the silver lining' is silver chloride, a common industrial product," explained Thibault. "It can capture and lock in place a high percentage of the Iodine nuclides, reducing the amount of contamination in the groundwater within our treatment zone."

Silver chloride is commonly found in the photography industry; however, the material used at SRS is milled to create ultra-fine particles with highly irregular edges, which greatly increases the surface area of the particles. Reduced to about one-quarter micron in size, the silver chloride is then mixed with water and injected into the water table at three-foot intervals, 30 to 60 feet below the surface. A total of 240,000 gallons of domestic water and 165 gallons of silver chloride were used.

"Another benefit of using silver chloride injections to create reactive zones in the subsurface to bind Iodine-129, is that this cleanup technology lends itself to growing the robustness of the remedy, as is needed. This can be accomplished by the injection of additional silver chloride to increase the reactive surface area needed to intercept and halt the migration of Iodine-129 in the groundwater," said Prater.

The silver chloride cleanup process currently in use at SRS was co-developed by SRNL personnel and Environmental Compliance and Area Cleanup Projects engineers.

Innovative process cleans up Iodine-129 in SRS groundwater

Team response prevents tragedy in Savannah River boating accident

It only takes seconds for a fun outing on the river to turn dangerous; one wrong move could spell disaster. Extensive training, an organized response team and a lasting partnership between the SRS Fire Department (SRSF), Centerra-SRS and local authorities prevented such a disaster in a recent boating accident on the Savannah River.

On July 31, around 11:30 p.m., the SRS Operations Center received a mutual aid call from an Aiken County dispatcher requesting emergency response assistance from the SRSFD. The dispatcher stated that three people (non-SRS personnel) had been involved in a boating accident on the Georgia side of the Savannah River and sustained injuries. The accident reportedly took place approximately 10 miles south of the Jackson, S.C., Boat Landing.

The SRSFD and medical personnel were dispatched using the SRSFD Boat-1 to the landing to locate the injured boaters and transport them to land. Additionally, Centerra-SRS provided a helicopter to aid in the search.

Due to the quick response of the Site emergency response personnel and Centerra-SRS, the boaters were found within an hour and were transported by ambulance to a nearby hospital for treatment. It is reported that the injuries were non-life threatening.

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"Water rescues are high risk, especially in the dark, so it was important that the emergency response team took care in navigating the river as safely as possible while still moving quickly," said SRNS Emergency Services Manager Neil Gilmore. "The team needed to get to the injured party while being mindful of the dangers that contributed to the accident."

"Overall, it was an amazing team response between the Operations Center, the Fire Department and Centerra-SRS. The organizations worked efficiently and effectively to locate the people involved and to help prevent a tragedy," continued Gilmore.

SRS has many mutual aid agreements with agencies in South Carolina and Georgia. There have been several instances in the past few years where SRSD has responded to local emergencies and has acted to help keep communities safe.

Training provides platform for effective water rescues

The SRSFD recently held their annual water rescue training at the North Augusta, S.C., Boat Landing to prepare the fire crew for emergency rescue responses on and around the water.

Water rescues are rare for the SRSFD, but the department ensures that they are prepared for these emergency situations by holding annual training sessions to keep the crew ready to respond to emergencies in various environments.

Among the critical skills-packed training session was an exercise on using technical rope systems and throw bags to secure a victim long enough to make rescue possible. In addition to familiarizing the crew with the ropes, the exercise builds teamwork, and highlights individual strengths and weaknesses.

"It’s important that the crew is familiar with navigating the river and driving the boat so that they are able to respond quickly," said Matthew Williams, SRSFD Captain.

As the first response team at SRS, the SRSD follows a strict training schedule to respond to a variety of crisis situations, including fire, structural collapses and hazardous materials scenarios.
SRNS recently hosted its annual Protégé Day, a development event held each year as part of the Mentor-Protégé Center of Excellence program, a DOE initiative providing a framework to enhance small business capabilities with an end goal of priming contracts throughout the DOE complex.

SRNS has put in place the next phase of this program with its Center of Excellence, which focuses on maximizing the strengths of the protégé companies and providing a safe place for sharing best practices and lessons learned with other small businesses. This approach works to collectively maximize growth and development, as well as assisting in cultivating new skill sets and diversifying current capabilities.

SRNS Director of Business Planning and Integration Frederick Grimm welcomed the attendees, saying, “We have committed to your success and we will continue to provide the level of resources and development that this partnership will require to succeed.”

Through this forum, DOE provided a platform to engage local small businesses qualifying for HUBZone certification, as well as those that are already certified. HUBZones are historically underserved business zones.

SRNS Small Business Liaison Officer J. Alex Agemang spoke about the crucial role the attendees play in SRNS missions. Agemang said, “The continued commitment to HUBZones drives local community growth. You are essential to the economic development of our rural communities.”

Following the technical sessions throughout the day, a matchmaking session gave local suppliers the chance to meet one-on-one with buyers as well as experts from government agencies, DOE prime contractors and the Oak Ridge Site’s Small Business Program Managers.

As an upcoming fourth-year nursing student at the University of Alabama, Hannah Butler spends most of her time participating in clinical rotations and studying to become a nurse practitioner. Seeking something different this summer, she is interning with SRNS Radiological Protection Department Health Physics Services in Dosimetry Records.

Before computers, employee records were stored as microimages on rolls of microfilm. The personally identifiable information (PII) on the rolls could only be read by using a special viewer that magnifies images. However, the microfilm rolls, which date back to the site’s creation in 1950, have begun to degrade over time, causing a problem that needed a permanent solution.

Butler has spent her summer converting these records into electronic media, building her resume and educating herself in a field where she typically wouldn’t have gained experience.

“The Savannah River Site has been instrumental in teaching me about the many different forms of PII,” said Butler. “I didn’t realize how extensive the list was until I started my internship; a person’s mother’s maiden name is PII. I’ll be privy to a lot of private patient information, so I’ll need to keep this in mind as I transition into a nursing career.”

One of the highlights of Butler’s summer was presenting her work at the Environmental Stewardship and Safety and Health/ SRNL 2019 Summer Intern Technical Seminar on July 31. Her presentation summarized the process of converting records into electronic media to comply with government records statutes and regulations.

SRNS interns Justice Young and Taylor Kneece have more in common than not, but the nursing students may never have met if they hadn’t interned with the Site Medical organization. Young is a rising junior at Tuskegee University and resides in Alabama, while Kneece is a rising junior at Clemson University.

Their internships gave Young and Kneece the opportunity to practice real-life applications of their studies. A large part of their daily work includes performing physicals for new hires and annual exams for employees. They are also learning the fundamentals of nursing, such as taking vital signs, setting up charts for the nurses and assisting with various medical tests performed onsite.

One of the most important skills the students have learned, Kneece said, is how to effectively communicate with patients. “Being a nurse means learning how to get people to open up to you. Patients won’t always tell you what’s wrong right away, so it’s important to break down those walls and make them feel comfortable. I’m a shy person, but I feel like my experiences at Savannah River Site have really helped me get over my natural hesitance,” said Kneece.

Both students also volunteer for community outreach programs. Young is active in Rebuild Tuskegee, a Tuskegee-based campaign that engages students in community service, and Kneece volunteers through her church, rebuilding and renovating houses in depressed areas of South Carolina.

Young plans on entering the psychiatric field of nursing, while Kneece is considering either pediatrics or neonatal.

SRNS: Proud Partner of DOE HUBZone Business Forum

SRNS Buyers Kevin Fladey (left) and Greg Suvoroff (right) discuss development opportunities with MB Builders Project Manager Sharetta McClaugh and Sales Manager Shawn McClaugh during the annual SRNS Protégé Day.

Hannah Butler

DOISIMETRY RECORDS

Justice Young • Taylor Kneece

SITE MEDICAL

SRNS interns Justice Young and Taylor Kneece learn real-life skills to help future careers
**K Area intern plans to make good use of SRNS experience in classroom**

SRNS summer intern Chandler Corley looks forward to taking the experience he gained with the K Area Complex (KAC) Support Engineering Team back to Georgia Southern University to share the real-world applications with his classmates and professors. Corley, a rising senior, is pursuing a Bachelor of Science degree in mechanical engineering. During the summer, he showcases his athleticism on the baseball field where he plays for the Georgia Southern Fighting Eagles.

Corley was drawn to the wide variety of engineering opportunities offered at SRNS and recognized an opportunity to bring his interests and education to the Site to gain meaningful experience. “SRNS allows young adults to come and learn more about their passion and their field of interest. I am thankful that I have had the opportunity to gain knowledge in nuclear waste management and proper nuclear material safeguards during my internship with SRNS,” said Corley. “By far the most interesting thing about my internship has been learning about the downblending process taking place in KAC.”

Corley gained professional experience while working on two significant projects over the summer. He created a load list for transformers affected during the upcoming outage and supported a cost analysis study on the current HVAC system being used throughout the 105-K building.

Beyond the technical aspects of his work, Corley noted the maturity of the SRNS safety culture as being a valuable lesson he has learned early in his career. He said, “I was surprised by the immensity of the safety precautions implemented across the Site. The number of safe hours between workplace injuries truly speaks for itself. It is comforting to know that everything done at the Site has checked numerous times for potential safety concerns before a task is completed.”

Corley looks forward to sharing the experiences and knowledge gained from the KAC team with his engineering classmates at Georgia Southern University and is interested in pursuing a career with SRNS after graduation.

“I plan to share my experiences from my internship with my classmates and professors and to relate what we are learning to real-world applications at the Site. Beyond that, I hope to be able come back to SRS in the future to be a part of this team.”

**United Way the ultimate winner in SRSEA’s Sports Challenge**

The fifth annual SRS Sports Challenge, hosted by the Savannah River Site Employee Association (SRSEA), was recently held at Citizens Park in Aiken, S.C. SRSEA employees from across the Site came together for a day of friendly competition to benefit United Way agencies in the Central Savannah River Area.

In first place was an SRNS team, “PMCS Kobras,” with a score of 75 out of a possible 100 points. SRNL came in second.

Leeanna Berry, Team Captain of PMCS Kobras, said, “The SRSEA Sports Challenge is such a great event to bring employees together for a fun day, while raising money for a worthy cause.”

Organizing the event was Ben Burnau, SRSEA Executive Director, and Sports Challenge Lead Susie Ferrara of SRNS Site Training. “The Sports Challenge is a friendly competition, where SRS employees come together to have fun and raise funds for real people, real lives in our community,” said Ferrara. “Thank you to all our volunteers and competitors, who make a difference both in our community and where we work; you should be very proud of the accomplishments.”

This year’s event raised over $3,300 for local United Way agencies through corporate sponsorships and concession sales. There was a total of 120 competitors on eight participating teams made up of SRNS employees from all areas on Site, including SRNS, SRNL, Savannah River Remediation, Centeria, NNSA and DOE, as well as one team of United Way staff and employees.

The challenge consisted of 10 field-day-inspired events such as the Boardwalk, where teams strapped their feet to two long boards and raced both in and from the “30-yard line”; and Yardzee, an outdoor version of the popular dice game. Other events included Tag-o-War, Bucket Brigade, Cornhole, Golf Chipping, Relay Medley, Putt Pass & Kick, Football Down & Out and Home Run Derby.

**Mark your calendars: College Night is Sept. 12**

Area high school students will be able to meet recruiters from more than 130 colleges and universities and win scholarships totaling $16,000 at CSRA College Night, Thursday, Sept. 12, 5-8:30 p.m., at the James Brown Arena, Augusta, Ga. Admission is free and open to the public.

Attendees can also network with members of engineering, management, chemical science and nuclear science professional societies.

Last year, approximately 5,000 Central Savannah River Area (CSRA) students, parents and guidance counselors attended the event.

College Night provides a way for area students and parents to:
- Obtain information on educational opportunities, admission requirements and tuition;
- Attend seminars about HOPE and LIFE scholarships, financial aid and essay writing for college admissions, time management, learning styles, scholarships and joint enrollment;
- Get advice about the college application process from high school advisors and admissions professionals;
- Visit a career exploration area, to participate in a quick “card sort” inventory to validate their career choice; and
- Register in a drawing for a $1,000 scholarship. Students must attend and register in person at CSRA College Night to be eligible.

To qualify for a College Night scholarship, students must be high school juniors or seniors and graduate with a GPA equal or above 2.5 on a 4.0 scale or equivalent.

Many College Night volunteers are SRS employees. DOE-SR is a major sponsor of the event.

For more information, visit the College Night web site at http://www.srs.gov, click on Outreach, then Education Outreach Programs, then CSRA College Night:

http://www.srs.gov/general/outreach/edoutrch/coll_night.htm