

● SEPTEMBER 2017

SAVANNAH RIVER NUCLEAR SOLUTIONS



SRNS Today

Annual event draws thousands
to explore the world of higher education

College Night 2017



This month

Hurricane Irma response • Embassy Fellow • 9/11 Day of Service • United Way





Stuart MacVean
SRNS President and CEO

Welcome

to the September 2017 edition of

SRNS Today

The devastation caused by Hurricane Irma in our sister states of Florida and Georgia served as a reminder to me of the importance of the Savannah River Site and the people who work here. Although we were fortunate enough to miss the worst of the storm's impacts, SRNS was prepared before, during and after the storm to keep our Site and its important missions safe and secure, due to a well-executed response by employees.

SRNS employees are always at the heart of our success as we deliver results for our customers. This was recently recognized by the international community, as evidenced by Savannah River National Laboratory's nuclear materials expert Kerry Dunn's assignment as a U.S. Embassy Science Fellow. Dunn will be going to Japan to help eliminate weapons-usable fissile materials from research sites in Japan.

Our employees also provide unparalleled community service, and proved that commitment yet again in September by hosting the CSRA College Night and by raising over \$1 million for local United Way agencies.

Preparation, execution, expertise and commitment to the community—all are SRNS hallmarks, and enable us to make the world safer.

I hope you enjoy this issue of 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 803.952.9584 or visit our website.

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Weathering Irma

Sustaining the site from forecast to cleanup

SRS weathered Hurricane Irma in September with a combination of meticulous preparation and a well-choreographed response from employees.

SRS has many national missions, several one-of-a-kind nuclear facilities, more than 300 square miles of forests and waterways, and a web of two- and four-lane roads spanning Aiken and Barnwell Counties.

"Our community may not realize the extent of SRS' unique capabilities, especially when severe weather impacts our area," said Jack Craig, Manager, DOE Savannah River Operations Office. "We employ our own meteorologists, infrastructure organizations, firefighters, paramedics and an expansive emergency response team that can activate and respond to site needs in less than one hour. When hazardous conditions affect SRS, we have the knowledge and capabilities to sustain the site from forecast to cleanup."

Prior to Irma's arrival, onsite actions were taken to stage critical materials like diesel fuel and heavy equipment. Inside SRS buildings, safety measures were taken to minimize impacts from high winds. Water levels in SRS ponds and lakes were also monitored to ensure the rainfall could be accommodated without risk of flooding.

"Hurricane Irma made her presence known with wind gusts as high as 76 miles per hour and sustained winds more than 35 miles per hour for a period of eight hours," said Craig.

SRNS supported the South Carolina Department of Transportation (SCDOT) with the removal of trees on Hwy 125 and Hwy 278, which allowed SCDOT to focus critical assets on other parts of the state. In addition, Centerra, the site's protective force, provided patrol assistance to the S.C. Highway Patrol, ensuring Hwy 278 was monitored for roadway blockages and citizens in need.

On Site, SRNS Site Services Division cleared 24 downed trees from major SRS roads and 16 trees from secondary roads. An infrastructure team remained on site around the clock.

"The coordinated effort between DOE and all site contractors when emergencies arise is both extraordinary and reassuring to our local communities and stakeholders," said Stuart MacVean, SRNS President and CEO. "From forecasting, to safety preparations and ultimately clean-up, SRS is well postured to respond quickly and effectively to significant events that may come our way."

Destination: Japan

SRNL researcher named Embassy Science Fellow

International plutonium materials management expert Kerry Dunn will assist in removing nuclear materials from research sites in Japan

Savannah River National Laboratory nuclear materials expert Kerry Dunn is going to Japan on a three month assignment as a U.S. Embassy Science Fellow to help eliminate key security risks.

Sponsored by the U.S. Department of Energy (DOE) National Nuclear Security Administration's (NNSA) Office of Nuclear Materials Removal, Dunn will provide her expertise in nuclear materials management, packaging and safe storage as part of a joint Japan-U.S. program to reduce fissile materials. As an Embassy Science Fellow, she will work with Japanese and NNSA counterparts to eliminate weapons usable fissile materials from research sites in Japan that could be used for improvised nuclear devices. She will also advise on continuing research to reduce fissile materials and improve safe storage of nuclear materials.



"SRNL has extensive experience and expertise in working worldwide to secure, remove and disposition legacy excess nuclear materials."

Kerry Dunn



"SRNL has extensive experience and expertise in working worldwide to secure, remove and disposition legacy excess nuclear materials. SRNL is very well positioned to continue providing this expertise for both near-term and longer-term missions related to nuclear nonproliferation. Ultimately, the goal is to demonstrate leadership in strengthening nuclear security worldwide to include minimization and/or elimination of fissile nuclear materials and effective management of fissile nuclear materials," Dunn said.

Dunn has more than 30 years of experience as a materials scientist at SRNL. She is internationally recognized for her expertise in plutonium materials management and leads DOE-NNSA programs on the removal of plutonium worldwide to support U.S. threat reduction initiatives. She has led successful efforts in more than half a dozen countries, working with facility owners and regulators to stabilize, package and remove plutonium materials for ultimate disposition.



Senior Engineering and Technical Support Specialist Ron Seabrooks and Senior Engineer Kerry Dunn inspect O-rings, which are used to provide a leak tight seal on nuclear material containers within a shipping package.

Most recently, Dunn was recognized for cross-cutting activities associated with the U.S. High Performance Research Reactor Convert Program, which is focused on highly enriched uranium minimization. Dunn holds a master's degree in Materials Science and Engineering from Pennsylvania State University.

The Embassy Science Fellows Program allows U.S. embassies to use science and technology experts in the U.S. government to provide expertise to further relationships with host countries and solve real-world problems.



'One-stop college shop' draws thousands of students and parents to annual event

More than 5,000 high school students, parents and educators from the greater Aiken-Augusta area recently met with recruiters from over 130 colleges and universities during this year's CSRA College Night. Scholarships—each worth \$1,000—were awarded to 16 students during drawings held throughout the evening at Augusta's James Brown Arena.

"It's rewarding to see so many students having the opportunity to meet with college representatives of their choice, knowing this night typically has a significant impact on their post high school education," said Gladys Moore, Program Coordinator, SRNS. "To see the joy and excitement in the faces of those receiving one of our college scholarships makes all the work worthwhile."

Highly valued as a "one-stop shopping" opportunity, College Night can help reduce the number of planned college visits for students, potentially saving them thousands in travel costs.

"I really like the variety this event offers, including colleges I wouldn't have thought of previously," said Aubrey Reynolds, a senior at Westminster Schools of Augusta. "The last two years I went home with bags of stuff to look through. I took that information, narrowed down the number of schools I'm interested in and started visiting them. It really helped me decide what I want in a college. Half the schools I'm applying to are a result of visiting College Night."

The event is now entering its third decade of service to area high school students. Over \$300,000 in scholarship funding has been offered to the tens of thousands of students who have attended College Night in the past. "The generosity of our scholarship sponsors and much appreciated help from more than 100 volunteers are major reasons why this effort is consistently so successful each year," said Moore.

"College Night has always been big," said Jody Wilson, Program Director, Military and Veterans Services, Augusta University. "And now, it's a huge event. All colleges look at this event as a great place to visit. And the breakout sessions found at College Night add so much value answering questions like 'How do I pay for it' or 'How do I fill out the FAFSA Federal aid application?' We can sit down one-on-one and answer those types of questions."

Moore acknowledged the contributions made by the members of the CSRA College Night Committee. "They have seen firsthand the positive impact of the resources provided to students from throughout the region," she said.



Students register at College Night, which was attended by thousands this year.



Currently housed at the SRS Curation Facility, robots once in use on site will be transported to the SRS Museum in Aiken as a part of a Nuclear Science Week exhibit.

Robots and Atoms

Nuclear Science Week events to showcase technology, history

Beginning Oct. 16, the City of Aiken, S.C., and a local museum will be visited by some unusual workers from SRS.

Robots once in use at the site will be transported to the SRS Museum in Aiken as a part of a Nuclear Science Week (NSW) exhibit that focuses on the local area's in-depth involvement with nuclear science, history and technology.

Currently housed on site at the SRS Curation Facility in M Area, the robots will be on display at the museum from 4 p.m. on Oct. 16 through Oct. 21.

The robot exhibit will be held in conjunction with a showcase of robots created and operated by students from across the Central Savannah River Area. This new generation of enthusiasts will display their robots from 5-7 p.m. Oct. 16-19 at the SRS Museum.

Those attending the robot exhibit can also view SRS history exhibits and learn about the progress being made at the SRS Museum.

The robot exhibits, student showcase and museum are all free and open to the public. The museum is located at 224 Laurens St. in Aiken, across from the SRNS Aiken Office, also known as the historic "Old Post Office" building.

Also in conjunction with Nuclear Science Week, the "Atoms in the Alley" event will take place Saturday, Oct. 21, to celebrate Aiken County's long and ongoing association with the nuclear industry. "Atoms in the Alley" will also include science-related demonstrations and vendors. Live music by The Kool Katz will take place from 5:30-8:30 p.m. in the Alley. Capping the evening will be an 8:30 p.m. screening of the movie, "Blast from the Past."

Finally, at 5 p.m. on Oct. 21, the SRS Museum and the City of Aiken will unveil an interpretive kiosk to mark a "fall-out" shelter that was built in the 1960s. The ribbon cutting will take place near the underground shelter, located on Park Avenue between Laurens and Newberry streets. Although the shelter will not be open for tours, a future "virtual tour" is in planning.

The Aiken NWS events are family-friendly, hosted by the SRS Museum and sponsored in part by SRNS.

Nuclear Science Week is an international, broadly observed week-long celebration to focus local, regional, national and international interest on all aspects of nuclear science. NSW takes place each year on the third week of October and provides for learning about the contributions, innovations and opportunities that can be found by exploring nuclear science.

Always remember...

SRTE observes 9/11 Day of Service with donations for veterans

SRNS employees in the Savannah River Tritium Enterprise teamed up with National Nuclear Security Administration (NNSA) contractors across the country to observe the 9/11 National Day of Service and Remembrance with a project focused on local military veterans. SRTE and the other seven NNSA nuclear security enterprise sites hosted coordinated donation drives for local organizations that support veterans in their communities.

"Congress designated the 9/11 Day of Service and Remembrance, in part, to recognize those who 'rose up in service' in response to the attacks," said Wallis Spangler, SRNS Senior Vice President for NNSA Operations & Programs. "It just feels right to use this as an opportunity, in our own small way, to express our thanks to those who have served."

SRTE selected as its recipient the Augusta Warrior Project, which provides services for veterans of all military branches and their families, including homeless veterans, in Augusta, Ga., and Aiken, S.C. All donations to AWP stay in the local community, assisting the organization with its commitment to help with housing, employment and education through several critical programs and services.

SRTE employees kicked off their donation drive on Sept. 11, filling boxes with the items that AWP said were most needed, including gift cards, toiletries, snacks and socks.

Other sites across the Nuclear Security Enterprise conducted similar activities and events, including the Kansas City National Security Campus (managed by Honeywell); Sandia National Laboratories; Y-12 National Security Complex in Oak Ridge, Tenn.; the Pantex Plant near Amarillo, Texas; Los Alamos National Laboratory; the Nevada National Security Site; and Lawrence Livermore National Laboratory.



Linda Van Antwerp, NNSA Operations and Programs HR manager, with items donated by SRTE employees.



"Congress designated the 9/11 Day of Service and Remembrance to recognize those who 'rose up in service' in response to the attacks. It just feels right to use this as an opportunity to express our thanks to those who have served."

Wallis Spangler





Exceeding the goal

SRNS employees raise over \$1 million for United Way agencies



On Sept. 14, SRNS employees gathered around the United Way thermometer sign to mark the achievement of exceeding the \$1 million fundraising goal for the annual campaign. The official amount raised will be announced at the campaign celebration in October.

This summer, SRNS employees organized luncheons, silent auctions and other fundraisers in support of the annual United Way campaign. Now, they have something to celebrate – surpassing the 2017 fundraising goal.

“The theme this year was ‘Standing United 65 Years,’ and the funds SRNS employees raised exemplifies the Site’s tradition of giving back to our communities,” said Rich Baker, SRNS United Way Employee Campaign Chair. “Thank you for your contributions and fundraising efforts that will help those in need. We wouldn’t have been able to exceed our goal without the hard work from our volunteers and the campaign and division leads.”

The campaign benefits the following agencies in the region surrounding SRS:

- United Way of Aiken County
- United Way of the CSRA
- United Way of the Midlands
- Barnwell and Allendale County United Way
- United Way of Edgefield County
- United Way of McDuffie and Warren Counties
- Screven United Way
- United Way of the Low Country
- Anderson County United Way

Photo: SRNS employee Randy Powell fills in the United Way thermometer sign to commemorate the success of the 2017 employee-led campaign.

Out-of-box thinking enhances HB Line work environment

After several years of trying different methods to reduce the potential for heat stress in a room used for repacking transuranic (TRU) waste in HB Line at SRS, a team of HB Line personnel used out-of-the-box thinking to develop an alternative solution: relocate the whole operation to a more suitable room.

The conditioned air and the air flow in the room that had previously been used to perform this operation had degraded over time, leaving the air warm, stagnant and humid.

“There are typically seven or eight workers in the room at one time, all in personal protective equipment,” HB Line Day Support Manager Michele Best said. “Working with that many people in a room with less than desired conditioned air can lead to heat stress conditions in a short amount of time. In early spring of 2017, we began discussing the possibility of moving the glovebag to a new location with better climate control.”

Efforts had been made over the years to address the heat issue in the previously used room, including a portable cooling unit, cooling vests, ventilation and airflow studies and changing work schedules to utilize the cooler parts of the day. However, heat stress conditions continued to be a problem.

“The new room has better ventilation and conditioned air supply, which drastically lowers temperatures and humidity levels and improves working conditions,” HB Line Operations Manager Lee Sims said. “Other benefits of using this room include the availability of additional egress options and improved lighting.”

To complete the move, HB Line personnel had to complete several procedures as well as move the equipment to the new location. “The move was a team effort,” Sims said. “With only a minimal



To reduce the risk of heat stress, HB Line recently relocated the glovebag used to repackage TRU waste to a new room, which has better ventilation and conditioned air supply.

amount of downtime, we were able to provide safer and more comfortable working conditions for our employees.”

The term transuranic means those elements with an atomic number greater than that of uranium (92). These wastes typically consist of protective clothing, tools, rags, equipment and miscellaneous items contaminated with small amounts of plutonium. The waste from HB Line is loaded into TRU drums with the work being done inside of a glovebag, a clear plastic containment unit that has fitted glove-port openings to allow contaminated materials handling, and shields and segregates workers from associated hazards. After the waste is packed, it is sent to the Solid Waste Management Facility at SRS for eventual shipment to the Waste Isolation Pilot Plant in New Mexico.

SRNS program brings home 11 awards from IdeasAmerica

SRNS employees won 11 awards at the 75th annual IdeasAmerica Training Summit in Tempe, Ariz. The awards recognized different facets of the SRNS employee suggestion program, Individuals Developing Effective Alternative Solutions (IDEAS).

SRNS Site Services employee David R. Dixon received the Silver Award in the “Green Idea of the Year Award” category for his idea to install solar battery chargers on portable and emergency portable equipment kept in stand-by mode. As a result, the battery life of the equipment has been prolonged, and the Site is projected to save approximately \$17,000 annually.

Environmental Stewardship Safety and Health employee Johnny Lott received the Gold Award for Advocate of the Year. SRNL employee Kenny Franklin received the Silver Award for “Evaluator of the Year.” Brenda Kelly received the Gold Award for the “Best Administrator

of the Year” for her role as IDEAS Program Administrator, and SRS received a 65th Anniversary Award for maintaining an employee suggestion program since 1952, as well as a Gold Sponsor Award.

The SRNS IDEAS program received three SEER Awards as well, (Savings Per Eligible Employee Ratio) based on annual statistical information: Performance Excellence for Total Dollars Saved (Bronze), Performance Excellence for Savings per Implemented Suggestion (Bronze) and Annual Net Savings per Eligible Employee (Honorable Mention).

Three “KUDO” awards were presented to IDEAS leads Laura Barsh, SRNL; Donna Demedicis, Environmental Management Operations; and Veronica Thomas, National Nuclear Security Administration Operations and Programs, for going above and beyond to promote the IDEAS program within their organizations.

TREAT workshop offers teachers insights into SRS water sampling methods

SRNS Environmental Compliance & Area Completion Projects (EC&ACP) employees treated over 40 science and engineering teachers from the Central Savannah River Area to a visual demonstration of the storm water sampling methods SRS employs to ensure the environment and residents of the communities that surround the site remain safe.

The hands-on, question-and-answer exchange was part of the annual three-day Teaching Radiation, Energy, and Technology (TREAT) Workshop held at the University of South Carolina Aiken (USCA).

Lori Coward from Sample Data Management (SDM) familiarized workshop participants with a background lesson on storm water sampling methods and the devices the Site uses to collect samples. One of these is the “Kremlin,” a sports-bottle size vessel with a distinct onion-shaped dome reminiscent of Russian architecture. The Kremlin self-seals and protects the sample once it is full.

James “Yaz” Yascavage, of Environmental Monitoring, and SRNS SDM intern Caleb DiPrete continued the presentation outside with a lively and descriptive show of the capabilities of EC&ACP’s portable sampler. Manufactured by ISCO, the sampler uses text messaging to let EC&ACP personnel know instantly that the equipment has started to collect a sample when it detects an influx of rain.

Although the demonstration location on the pavement in front of a USCA building did not mimic the remote environs of a Site sampling location, the equipment performed in the same manner it would at any of the designated collection locations onsite.

To illustrate this, Yaz used a bucket of water, tinted blue with a colored sports drink to aid in visibility, to act as the rain that would trigger the “real-time” messaging system. Within seconds of sensing the simulated rainwater, the ISCO sampler alerted him with a text message on his cell phone to let him know that it was collecting a sample.

This insight allows EC&ACP to keep track of sampling at all times—whether during the work week or after hours—to achieve a comprehensive “big picture” of the status of the program.

Following the demonstration, Yaz, Caleb, Lori, along with Teresa Eddy, EC&ACP manager, answered the teachers’ questions, ensuring that they understood the significance of and methods the Site’s water sampling program uses. This information serves as a meaningful foundation and firsthand insight for the teachers to share with students who are interested in engineering, nuclear and environmental studies and careers.

The TREAT workshop is a DOE- and EPA-funded environmental justice program, which ensures there is fair treatment and meaningful involvement of all people, regardless of race, color, national origin or income with respect to developing, implementing and enforcing environmental laws, regulations, and policies.



Two workshop attendees examine the “Kremlin” sampling bottle.



Caleb DiPrete (left) and Yaz Yascavage (right) set up the portable sampler that collects water quality data.

LEAP Steering Committee ‘adopts a room’ at Helping Hands

The SRNS Leaders Emerging Among Professionals (LEAP) Steering Committee spent a Saturday volunteering at Helping Hands, a United Way of Aiken County partner agency that provides a safe and structured home for children and young adults in need.

On Sept. 9, the LEAP team tackled a renovation project, designing and furnishing a bedroom for girls through Helping Hands’ Adopt-A-Room Program.

The majority of the project involved taping, priming and painting the walls of the bedroom and adjacent bathroom. The space was previously a boys’ room outfitted with dark blue paint and Transformers wallpaper.

“We initially heard about this opportunity during Project VISION in April. A group of us were touring the facility and decided to pursue this as a teambuilding and outreach project,” said LEAP Outreach Co-Chair Andrew Boggess, who works in Analytical Development at Savannah River National Laboratory. “The two girls who live in this room helped us after we finished painting. It was truly rewarding to work side-by-side with them and see the looks on their faces when the room was completed.”

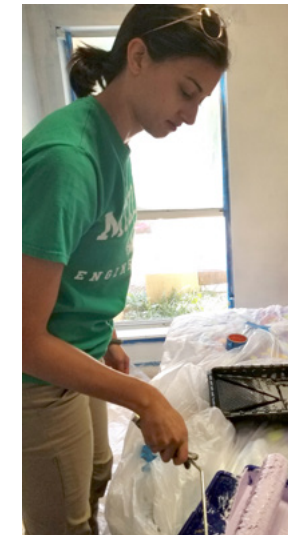
In addition to giving the space a fresh coat of paint, the LEAP group completed the makeover by providing bedding, lamps, rugs, bathroom décor and curtains to coordinate with the new lilac color scheme.

“While initially shy, the girls quickly opened up when given the opportunity to project their personal styles in deciding where and how to place some of the room décor,” said LEAP Outreach Co-Chair Brittany Hodge of Savannah River Tritium Enterprise Process and Shift Engineering. “We hope this new space will help them feel at home while they stay here.”

Helping Hands is a nonprofit organization dedicated to enriching the quality of life and well-being of children, young-adults and families in need to improve health, independent living skills and educational outcomes. The facility serves individuals who are between birth and 21 years of age.

“While volunteering at Helping Hands, we learned they greatly depend on volunteer workers, as many of their grants and funding sources have stipulating requirements for volunteered labor work. Every hour donated by a volunteer worker releases funding into their budget to better serve the community,” Hodge added.

LEAP is a peer-led organization whose members are full-time employees at SRNS and have earned, at a minimum, an associate’s degree within the past seven years. In addition to providing networking and professional development opportunities, LEAP organizes community outreach events for its members.



LEAP Communications Chair Jessica Pedraza helps paint a room at Helping Hands.



SRNS employee and volunteer waitress Brenda Mills checks with the guests at one of her tables during the recent United Way fundraiser.

SRNS provides United Way with over \$6,000 by “Raising the Steaks”

More than 300 Savannah River Site employees and guests from the community recently gathered for Raising the Steaks at the Applied Research Center in Aiken, S.C. The event, catered by Outback Steakhouse, raised \$6,332 for United Way of Aiken County—\$1,933 more than 2016.

“I just want to thank everybody who is involved with selling tickets and waiting tables. It could not be a successful event without everybody at the site coming together,” said Sharon Rodgers, President, United Way of Aiken County. “I also want to extend a special thanks to Heather Farrer and Katie Davis from the SRNS United Way Committee who led the coordination of the event.”

United Way of Aiken County supports over 50 critical need programs through its 35 partner agencies. The critical need areas include access to education and healthcare, financial stability and assistance in crisis. In 2016, nearly 235,000 people in Aiken County received services through United Way partner agencies.

“Raising the Steaks” is part of the SRNS employee United Way campaign, which benefits nine United Way agencies in South Carolina and Georgia. The event was sponsored by SRNS, Savannah River Remediation and Aiken County.



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