

● SEPTEMBER 2016

SAVANNAH RIVER NUCLEAR SOLUTIONS



SRNS Today



Meet our new
President and CEO

**Stuart
MacVean**

This month

Farewell to Carol Johnson • SRS Environmental Report • National Lab Day • Virtual Reality Training





Carol Johnson
SRNS President and CEO

Welcome

to the September 2016 edition of

SRNS Today



“Why SRS Matters”

To see the H Canyon segment of our video series “Why SRS Matters,” please [click here](#) or visit www.savannahrivernuclearsolutions.com/annual/Why_H-AREA_Matters.mp4

Yogi Berra once said:
“When you come to a fork in the road, take it.”

And so it's time for me to take another path, to get back on the retirement road I left in order to serve as the President and CEO of Savannah River Nuclear Solutions.

And what a ride it's been!

I've seen H Canyon come back to life, running operational units that have long been still. And I've seen the pride in the faces of the people who work there.

I've seen L Area receive shipments of spent nuclear fuel from this country and across the world, holding them safely and securely against proliferation threats. And I've seen the dedication in the faces of the people who work there.

I've seen the K Area vaults expand, the D Ash Basin closed and the Savannah River National Laboratory reach out across the globe to share innovations. And I've seen the satisfaction of a job well done on the faces of the people who work there.

From administrative employees to workers in risky cleanup projects, I've watched their faces. Their patriotism, commitment and dedication—all reflected in faces that mirror pride. Concern. Determination. And love for their communities and co-workers.

Stuart MacVean is now the new SRNS President and CEO. He and I, along with the SRNS Executive Team, have discussed the shape of the next chapter of this company, and I'm excited to see that future of success and challenge unfold.

And now, I bid you farewell. The goal of SRNS is: “We make the world safer.” As my husband Mike and I head out across this great nation, I can look out across the towns and fields, and know that, along with the thousands of SRNS employees, we have truly made the world safer.

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

Carol



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 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.

www.savannahrivernuclearsolutions.com



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Employees say goodbye to Carol

Employees from across SRS took the time to visit with Carol Johnson before her departure. Pictured are:

- 1: Kela Lofton in F Area
- 2: Ryan Cullum (left) and Bob Hess in H Area
- 3: Chuck Reames (from left), Steve Glover, George Zachmann and Janessa Smith in H Area



SRNS brings home two national safety, health awards

SRNS has added two national safety awards to the company's impressive safety record since winning the Site contract in 2008.

The company was recognized at the 32nd annual National Voluntary Protection Program Participants' Association (VPPPA) conference in Kissimmee, Fla., where they received their 15th Star of Excellence Award in Health and Safety.

SRNS' Candice Williams was also recognized with a Safety and Health Achievement Award.

“I am honored to have been selected to receive the VPPPA Safety and Health Achievement Award. I am also proud to work for a company that holds safety as a core value, striving daily to ensure that all of our employees return to their homes in the same condition they arrived to work that day,” said Williams.

Williams was selected for the award after demonstrating a non-negotiable commitment to safety and health leadership as well as



Candice Williams

her involvement with an SRNS Local Safety Improvement Team, where she served as chairwoman.

SRNS received its 15th Star of Excellence from the DOE VPPPA program, which recognizes companies that maintain a total recordable injury case rate that is 75 percent lower than industry average. Recipient companies must also demonstrate excellence in the five tenants of the VPPPA program: Worksite Analysis, Hazard Prevention and Control, Safety and Health Training, Management Leadership and Employee Involvement.

“The DOE VPPPA Star of Excellence and the Health and Safety Achievement Award are examples of SRNS' ongoing commitment to providing the safest possible environment for our employees, as well as the community. The program closely monitors recipient companies to ensure that nuclear safety, site security, and worker health and safety are continuous core values. I am proud to say that these elements of a healthy safety program are pillars of the SRNS business model, and always will be,” said Carol Johnson, SRNS President and CEO.

SRNS will see a change in its leadership ranks on October 1. Current President and CEO Carol Johnson will retire, and Stuart MacVean will assume the leadership of SRNS. We caught up with these leaders to get their perspectives on the company, and their once and future roles.



the changing of the guard



thoughts from Carol Johnson

Q What do you count as your greatest achievement while in leadership at SRNS?

A I think probably one of the greatest achievements has been the Focused Improvement Transformation initiative, which really took Continuous Improvement here to a new level. It was particularly important for me because of the workforce engagement that's necessary for the process to work when people who are directly involved in business practices come together to solve problems within their respective areas. The innovation, creativity and solutions that come from that really drive positive change. For me, just bringing that in and seeing it flourish and continue to grow across the Site is one of the things that I'll take away.

Q What will you miss the most about SRNS and the Site?

A Well, that's an easy one. It's the people. It's all of the people. Those who I worked with on a daily basis, but also people out in the facilities and across the Site who have very demanding and challenging work. And I value what every person brings to the Site's mission. I'll miss the many long-term friendships and relationships with people who were here when I was here before and the people who I've met over the past two and a half years.

Q What advice would you give to anyone considering a career here at SRS?

A Well, I think first of all there's so much diversity to the Site. You can be in a support function, directly supporting the mission or you can be working in one of the facilities, whether it's operations, engineering, maintenance or RadCon. The diversity and the importance of our work provide a lot of opportunity for people to learn, grow and advance. Also, people should think about the bigger picture of what we really do for the country, whether it's defense programs, nonproliferation or environmental cleanup. We leave a legacy of doing something very important, and to me, that's a differentiator from working somewhere else. So I think my advice is to come here and make the most of it. Don't be afraid to move around to different jobs, to take on new challenges or stretch assignments.

Q What "lesson learned" has had the most impact on your career?

A There is a personal one for me. For the longest time, I had these huge insecurities, so getting past those insecurities to realize that I was really doing a good job was a big lesson learned for me. I was really doing okay. I think for the longest time I tried to emulate other people as opposed to just being confident in who I am and using my skills, talents and abilities. I wouldn't say I'm a perfectionist, but I really do like things done well. I was so hard on myself for so long and I think, in some ways, it just held me back.

Q What do you feel should be the primary focus for the remainder of the contract?

A It has got to be on operational excellence in delivering our mission safely, securely and in a very professional manner. The SRNS vision states we will "be the standard of excellence in nuclear materials management by delivering knowledge, innovation and experience." In order to achieve that vision, it is essential all SRNS employees understand what is expected of them and hold both themselves and their co-workers accountable. The SRNS Standard of Excellence that we rolled out should be used as the toolkit for delivering on excellent operational performance.

Q What words of wisdom would you like to share with Stuart as he assumes this role?

A Good luck. Farewell. Have fun. Seriously, I think the most important thing is remember, and it's a kind of a cliché, but remember we're in the people business. Even though we do high-hazard, very important operations, that's being done by people. So my words of wisdom are to value and appreciate our workforce.

The only other wisdom I would share is that it is very important to work with the Department of Energy in a partnering, collaborative way. We're not always going to agree or have the same view of things, but coming together to resolve those problems and issues is absolutely essential for the success of the Site.



thoughts from Stuart MacVean

Q What are you looking forward to most in leading SRNS?

A I'm really looking forward to working with people I've worked with before and meeting with new folks. It's all about people.

Q What do you think is the biggest challenge for SRNS until the end of this contract?

A I think the biggest challenge is continuing strong performance. We want to be able to do as much as we can in terms of forwarding the mission for the Department of Energy. As we come to the end of the contract it's easy to get distracted, but we want to do the best we can with the amount of budget that the government provides us.

Q What advice would you give to anyone considering a career at SRS?

A Sign up—it's great! This Site provides a significant service to the United States of America. It always has and it always will. I think for people who are looking to be a part of a compelling story, this is a great place to work.

Also, SRS is a full service business. If you think about SRNS from that perspective, there are opportunities for every type of person who might want to come to work here. We work in some of the most complicated engineering facilities in the country. You can learn tons here or you can come and work day in, day out at a good job. We have everything from really challenging job opportunities to just good, steady employment.

It's important for people to recognize that we need everything from educators to accountants and everything in between. We need every discipline. We're not just an engineering and operations company.

Q What "lesson learned" has had the most impact on your career?

A The biggest lesson learned is to respect the people you work with. Engaging people, respecting their capabilities and understanding that bringing different people together will definitely get you a better answer than just coming up with the answer yourself.

Q How have your past career opportunities prepared you for the role of SRNS President and CEO?

A I've been really blessed with the kind of job opportunities I've had in the past. I worked for some companies that moved me around and gave me a real breadth of experience. I started as an engineer, but I ended up working as an operator, a project manager, a trainer, a shift worker, an emergency management worker and as a professional in Human Resources. I have had huge opportunities working within the various companies, and each one was a step closer to being able to take on a role like this. I also learned a lot about leadership from my volunteer jobs. I would highly recommend volunteering as a career development opportunity.

Q What is your vision for the future of the missions at the Savannah River Site?

A I think we need to focus on delivering good, high-value services to the government for nuclear materials, environmental cleanup, nuclear nonproliferation and putting science to work at the Savannah River National Laboratory. If we deliver well on those, the rest will come. I'm a firm believer new scope is requested of those who are delivering the work. I focus on today. Do I have vision for the future? Yes. Does it matter? Not if we're not delivering.

Q Is there anything else that you'd like to say about the leadership change?

A Carol and I have worked together and are good friends. We've worked in some very difficult circumstances together, and the alignment between us is pretty close. She and I learned a lot of the same lessons and had a lot of the same experiences. Carol recommended areas that she would like to see the Executive Team continue, and I'm 100 percent in alignment, although we may present them differently. I want to reinforce Lean, which we now call FIT. I'm big on making sure the Site is fully prepared to provide all the services, including emergency management, that it needs to provide. I think strong performance and having really good conduct of operations and business excellence are key. People should not expect big changes as I take over. I'm going to leverage what she's been doing because I believe in the path she set up for the company.



SRNL's Carol Eddy-Dilek speaks with Sen. Tom Udall (New Mexico) about technology that supports radioactive waste cleanup.



SRNS Executive Vice President and SRNL Director Dr. Terry Michalske (left), Assistant Secretary for Environmental Management Dr. Monica C. Regalbuto, and incoming SRNS President and CEO Stuart MacVean discuss EM technologies at National Lab Day.

SRNL at National Lab Day

Savannah River National Laboratory was the lead lab at the DOE National Laboratory Day on Capitol Hill in Washington, D.C., on Sept. 13. The event was themed "Advancing U.S. Environmental Stewardship through Innovation" and a number of SRNL technologies were featured, including 3-D virtual reality, robotics, and innovative chemical treatment and separations technologies used in the tank farm and the environment. SRNL organized the event, which supports the Secretary's goal of engaging members of Congress on national lab innovations.

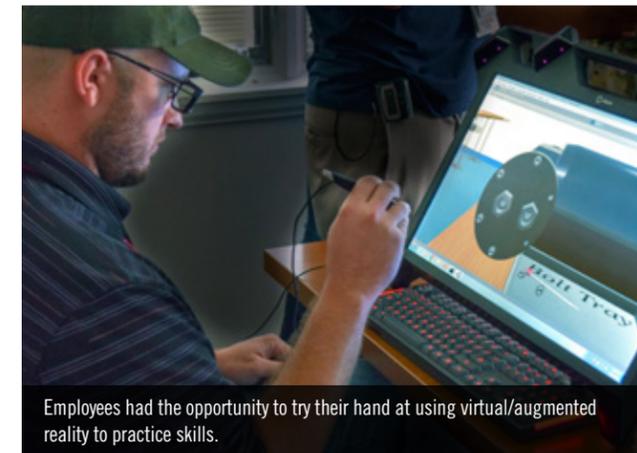
Virtual reality opens up a whole new world for Tritium training

It may look like a video game. It may even feel like a video game. But in reality, it's a way to build skills for performing complex tasks on sophisticated equipment.

The Savannah River Tritium Enterprise (SRTE) is working with Savannah River National Laboratory to adapt virtual and augmented reality capabilities for training Tritium personnel. "NASA has been using this technology for many years to train astronauts for space, and they're helping us to develop the models for our use," said Eric Richardson, SRNS Tritium Deputy Training Manager. "It's a great way to bridge the gap from education to experience. It can get people prepared for the task much more quickly."

Virtual/augmented reality allows employees to see a 3-D image of a piece of equipment, either on a computer screen or tablet, or through goggles. They can then manipulate that image as they would in real life: taking it apart, putting it back together. Because they would be working in virtual space, employees can learn a task and repeat it as many times as necessary to become proficient, without danger of injury, damage or loss.

SRTE Training and SRNL held a couple of demonstration days, allowing SRTE employees to try their hands at sample tasks and provide feedback on the experience. The next step is to determine what tasks to turn into pilot projects.



Employees had the opportunity to try their hand at using virtual/augmented reality to practice skills.

Although one of the key drivers is the influx of new employees SRNS has hired to work in Tritium, use of virtual/augmented reality offers benefits for experienced employees as well. For example, it allows them to stay proficient at tasks that are only performed occasionally. It can also reduce the amount of time spent in radiological areas, by providing a way to practice tasks in a clean environment.

"We learned the value of 3-D models when we were planning the grouting of R Reactor," said John Bobbitt of SRNL. "It's easy to misinterpret a flat drawing. By having 3-D models, you can avoid a lot of that misinterpretation. Here, we're taking it a step further by putting the model into virtual reality, which we can do a lot faster and cheaper than building a physical model."

Bobbitt said that computer gaming is driving down the cost of virtual/augmented reality systems by creating huge markets for simulators and other devices, making it a more affordable approach than ever before.

SRNS employees take home six awards at IdeasAmerica

SRNS employees won six awards at the 74th annual IdeasAmerica Training Summit in Atlanta, Ga. The awards, presented by IdeasAmerica (IA), recognized different facets of the SRNS incentive-based employee suggestion program, Individuals Developing Effective Alternative Solutions (IDEAS).

"The SRNS IDEAS program is about people working together to remove non-value added work while keeping safety considerations at the forefront," said Norm Powell, Senior Vice President, SRNS Business Services. "Our award winners are truly ambassadors of Continuous Improvement, and I want to extend my thanks to them for successfully applying their knowledge and experience to make their work safer and more efficient."

SRNS Site Services (SS) employees David Dixon and Tommy D. Gleaton received the Silver Award in the "Green Idea of the Year Award" category for their suggestion, "Cleaning Diesel Engine Exhaust Particulate Filters." Dixon and Gleaton developed an innovative solution for cleaning filters for diesel trucks known as "Tier 4" filters, which are required by the Environmental Protection Agency's emissions standards. The process can effectively and

safely clean the Tier 4 filters in-house rather than sending the filters to the manufacturer for cleaning, which will save the company over \$90,000 a year.

The SRNS IDEAS program received two Savings Per Eligible Employee Ratio Awards, including two Silver Awards in the "Total Dollars Saved" and "Savings Per Implemented Suggestion" categories, and an honorable mention for "Savings Per Eligible Employee." Two "KUDO" awards were presented to SRNS IDEAS leads Joe Legge and Paula Croom.

In 2015, SRNS implemented a Lean business methodology called the Focused Improvement Transformation (FIT). "The IDEAS program is the starting point for many of our employees," said Brenda Kelly, IDEAS Program Administrator, SRNS Continuous Improvement. "The impact of their ideas is sometimes larger than they expect and move on to become very successful FIT initiatives. Every employee has the opportunity to make suggestions to improve our business processes and make work safer through the IDEAS program."

SRNL engineer John Bobbitt (right) shows Secretary of Energy Dr. Ernest Moniz how 3D virtual reality is used to train workers in highly radioactive facilities.

Photos courtesy of Pacific Northwest National Laboratory

College Night

7,500 participants turn out for annual event

More than 7,500 high school students, parents and educators from the greater Aiken-Augusta area 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.

"We're excited about the amazing turnout from throughout the entire region," said Gladys Moore, SRNS Program Coordinator. "We use virtually every square inch of the arena to help college recruiters provide much needed information to the students. One recruiter described it as the 'Super Bowl of all college recruiting events.'"

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.

The event is now entering its third decade of service to area high school students. "Well over \$250,000 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.



Nathaniel Owens of Midland Valley (S.C.) High School is presented with a certificate for a \$1,000 scholarship by SRNS Chief Engineer and Nuclear Safety Officer J.C. Wallace. Owens was one of 16 scholarship recipients.

Environmentally safe

Annual SRS environmental report provides details and data about conditions, compliance, monitoring

Last year, SRS continued to safely complete its missions while maintaining a record of environmental excellence. The site's radioactive and chemical discharges during 2015 were well below federal and state standards, designed to protect the public, environment and site workers.

The maximum radioactive dose from SRS operations to a representative member of the public in 2015 was less than one percent (0.18%) of the federal exposure limit.

SRS prepares an Annual Site Environmental Report (ASER) in accordance with DOE requirements. This report provides detailed information regarding environmental conditions at SRS for the calendar year and is available for use by the public and SRS regulators.

The report also summarizes SRS environmental data; environmental sustainability performance; compliance with applicable DOE, federal and state regulations; and remediation and surveillance monitoring programs.

SRS has monitored environmental conditions since the site was built in the early 1950s and has prepared an ASER for more than five decades.

"SRS has a longstanding commitment to environmental quality, safety, and health for our community," said Teresa Eddy, Savannah River Nuclear Solutions manager, Sample Data Management. "Our comprehensive environmental monitoring program demonstrates our operations have minimal impacts to the environment and public."

Each year, management and operations contractor SRNS collects more than 5,000 samples found both on and off site to include air, water, soil, sediment, food products, freshwater fish, seafood, wildlife, plants and trees. Samples are collected from neighboring cities, towns and counties located in Georgia and South Carolina.

A condensed version of the ASER, referred to as the Summary Report, is also available. The Summary Report, written in plain terminology, is used to provide information to the public in support of SRS's educational and community outreach programs.



SRS environmental technician Jesse Pierce records data from air monitoring equipment.



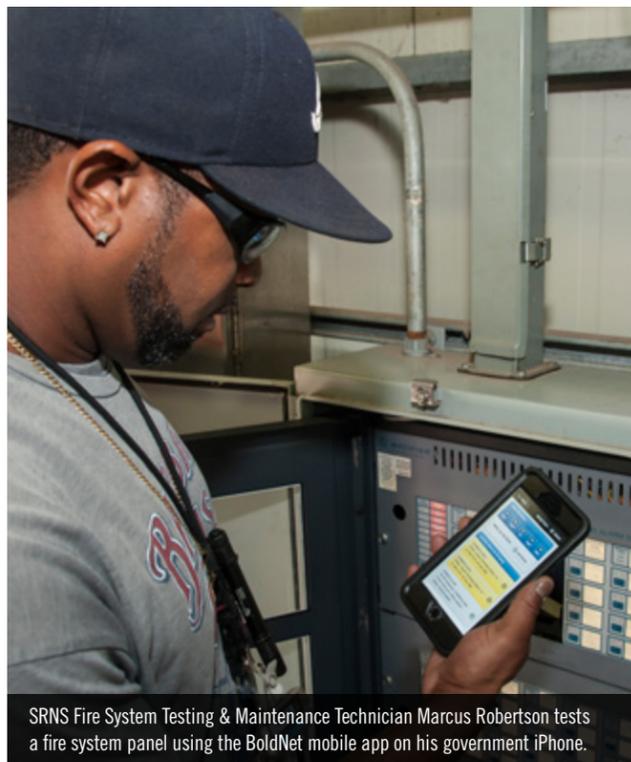
Get it online!

Both the 2015 SRS Annual Site Environmental Report and the summary are available online at

<http://www.srs.gov/general/pubs/ERsum/index.html>

The lines were long for participants outside the James Brown Arena in Augusta, Ga.

Use of cell phones improves efficiency for SRNS fire system testing, maintenance and operations



SRNS Fire System Testing & Maintenance Technician Marcus Robertson tests a fire system panel using the BoldNet mobile app on his government iPhone.

The SRNS Site Services' (SS) Fire System Testing & Maintenance (FST&M) and Fire Water Operations (FWO) departments are completing their work more efficiently now, thanks to a new mobile application and their government cell phones.

More than 600 systems are monitored in nuclear and non-nuclear facilities across SRS. All systems are monitored at the SRS Operations Center (SRSOC) using an application called BoldNet. If an abnormal condition such as a fire alarm or trouble signal occurs, SRSOC receives a signal, prompting the appropriate action to be taken. Each fire system has its own account on BoldNet, providing a user with an activity log that details all events on that system.

When a technician is performing testing or maintenance on the fire system or pump, typically they would contact SRSOC to place the system in test mode, wait for the system to be placed in this mode, and then contact the SRSOC to place it back in operating mode. FWO is able to monitor and maintain their systems via the same program. A recent upgrade in software—BoldNet Mobile—now gives a technician access to the activity log and allows the user to place systems in and out of test mode by using their Android or iPhone.

Prior to BoldNet Mobile, technicians and operators would have to stage one person at an available computer in the facility to monitor the activity log, while another technician or operator would perform maintenance/testing. The update allows an employee (whether on- or off-site) to monitor the activity log on their government iPhone or Android, eliminating the need for a computer.



● Legislative Delegation tours SRS

The Aiken County Legislative Delegation visited SRS on Sept. 12, and received briefings on SRNS, SRNL and MOX. Members of the delegation also toured the Plutonium Blend Down Mockup in K Area and the Defense Waste Processing Facility. Participants included (front row, from left) Senator Nikki Setzler, Senator Tom Young, Representative Bill Hixon, Representative Bill Clyburn, (back row, from left) Senator Shane Massey, Representative Bill Taylor and Representative-elect Bart Blackwell.

Marra named ACerS Fellow

SRNL Deputy Director Sharon Marra has been named a Fellow with the American Ceramic Society (ACerS). Marra received the distinction because of her accomplishments and long-standing service to the society as an officer and member.



Sharon Marra

As Deputy Director, Marra helps as the lab moves forward in creating innovative solutions for nuclear chemical manufacturing. "With new technologies, SRNL will be able to reduce risk in meeting our mission and moral obligation in providing new options in environmental stewardship. Partnerships through organizations such as the American Ceramics Society are vital in sharing knowledge and challenging researchers to work together for viable solutions. I am honored to be named a Fellow in such a highly respected organization," Marra said.

Marra has almost 30 years experience in the engineering and research field with 25 of those years in the DOE complex primarily in the high-level waste environmental management area. She has been a member of ACerS for over 30 years and has served in all officer positions of the organization's Nuclear and Environmental Technology Division. She has also chaired or served on several Society committees.

Marra will be recognized at the ACerS Annual Honors and Awards Banquet on Oct. 24 in Salt Lake City, Utah. The event is part of the Society's Annual Meeting, which will be held in conjunction with the Materials Science and Technology 2016 Technical Meeting and Exhibition.

ACerS is the leading professional membership organization for ceramic and materials scientists, engineers, researchers, manufacturers, plant personnel, educators and students.



● \$1 million UW goal surpassed by SRNS employee campaign

SRNS employees surpassed the 2016 United Way campaign fundraising goal of \$1 million. "Our local United Way agencies make a tremendous difference in the lives of people in need," said Carter Hopkins, SRNS United Way Employee Campaign Chair. "The theme this year was 'Be a Hero, Change a Life,' and when you look at the positive impacts United Way partner agencies have on the surrounding communities, it's heroic. I want to extend my thanks to employees who donated their time and money, and I'm also grateful for the ongoing support from SRS retirees who have supported us, past and present." The total amount of funds raised will be revealed in October at the United Way celebration event.

● Mentoring early-career professionals

SRNS President and CEO Carol Johnson and Mike Johnson, Executive Director, Citizens for Nuclear Technology Awareness (CNTA), hosted a mentoring session on careers for members of CNTA, Leaders Emerging Among Professionals (LEAP) and Aspiring Mid-Career Professionals (AMP) on Sept. 16 in Aiken, S.C. LEAP and AMP are SRNS-sponsored organizations focused on professional development, networking and community outreach.



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