

CNTAware



Spring 2021

Points of Interest:

- Kudos to CNTA Members
- Education Committee Updates
- Grants and Scholarships Winners
- Communications Committee Updates
- In Memoria
- Young Professionals Committee Updates
- Up & Atoms
- Charity Golf Tournament
- Radioactive Liquid Waste Structures Closure
- \$1.8 Million in Annual Savings
- Registered Apprenticeship Program
- Progress on Saltstone Disposal Unit
- Technical Fellows Program
- Fire Protection Engineering Program
- Final Module for Vogtle 3 & 4 Project
- Celebrating 70 years of Environmental Stewardship
- CNTA Welcomes New Board Members
- CNTA Committee Descriptions
- Thanks to Our Business Members
- Mission of CNTA
- Board of Directors
- Membership Information
- How YOU Can Help
- Calendar of Events

Update from our Executive Director

As I write this note, we are finalizing attendance for our first in-person Up and Atom event in over a year. The response indicates that we are more than ready to get together again! With that said, CNTA navigated through the pandemic well – we are in a good financial position and were able to conduct most of our programs.

We were recently able to award six scholarships to high school students through our annual essay contest. We had one of the highest number of submissions on record so choosing winners was not easy. Thanks to our many volunteers that arduously reviewed the essays. We also awarded three grants to area educators. These grants will be used by the teachers for in-class activities to excite and engage their students.

The golf tournament fundraiser was a resounding success! More than thirty teams competed on a beautiful May day at Houndslake Country Club. Thanks to our sponsors and players, we were able to raise a record amount to support our education and outreach activities! I would like to give a special thanks to all the CNTA members that supported our Community Gift Card program. We received over \$2000 in donations that directly supported local business and in turn raised a significant sum through the raffle at the tournament. We also received some unique Masters memorabilia items that further helped our fundraising. Finally, I would like to thank the many volunteers that worked the tournament – you are the ones that make it possible to hold the event.

I want to close by thanking Allison for all her efforts during the pandemic. She kept us successfully moving forward and I know is ready for us to get back to some sense of normalness! In addition, due to my recent hip surgery, she has taken on even more including single-handedly running the golf tournament.

We are currently scheduling additional Up and Atom events and our Young Professional group is planning future Tap into Nuclear events and the Oyster Roast and Low County Boil.

Looking forward to seeing everyone again!

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Kudos to CNTA Members

Citizens for Nuclear Technology Awareness annually provides scholarships for high school and college students and provides grants for educators for use in the classroom. Fundraising events are one element that supports these programs.

In 2020, CNTA launched its Community Gift Card Program to help raise funds for their charity raffles and provide much needed cash for local businesses struggling with Covid-19 restrictions. To date, this program has contributed over \$3,500 to local businesses.

The program is a "win-win" for CNTA and local businesses. CNTA receives gift cards and items for their charity raffles and local businesses receive the cash from gift card purchases. The program asks CNTA members to either buy and donate gift cards to CNTA or donate cash and CNTA purchases the gift cards.

In 2021, the program raised over \$2,200 from 21 donors for use as raffle items in the CNTA Charity Golf Tournament. All funds raised were used to purchase gift cards to restaurants and small businesses in the local region.

It is gratifying to see our members and friends (and your neighbors) embrace this program to help local businesses and in return support CNTA's educational outreach efforts.

The Community Gift Card program was born out of the unique circumstances of Covid-19, but plans are to continue this program as CNTA and its members are proud supporters of our community. This simple way of giving back to the businesses who support us will hopefully be around for years to come. More information on the program and options to donate can be found at: https://cntaware.org/about-us/.

Allison Hamilton Molnar Jim Marra Citizens for Nuclear Technology Awareness Page 2 CNTAware

Education Committee Updates

2021 Educator Grant Winners

We recently awarded three \$500 grants to local teachers to help fund science-related curriculum in their classrooms.

The 2021 grant winners are:

Angela Virella, 6th grade ELA and social studies, Jackson STEM Middle School;

Kristina Istre, 8th grade physical science and STEM, A.R. Johnson Health Science and Engineering Magnet School; and, Donita Legoas, 6th grade earth science and STEM, A.R. Johnson Health Science and Engineering Magnet School.

Legoas' project, "Solar, Wind, Water, and Nuclear, Oh My!", will introduce students to the world of nonrenewable and renewable energy. Students will investigate to see how turbines work, how solar energy converts sun energy to mechanical movement, and how homes can use various means of energy conservation and clean energy resources.

In addition to CNTA, sponsors of the CNTA Educator Grants Program are American Nuclear Society-Savannah River, Huntington Ingalls Industries, and Savannah River National Laboratory.

CNTA is excited to establish this educator grants program to facilitate more educational outreach by the organization, said Dr. Jim Marra, CNTA Executive Director.

"These grant awards are part of our continued partnership with area educators to provide instruction in the areas of science and math. We hope students find these activities informative, interesting and most importantly fun," Marra said.

2021 Lifelong Learning Class

CNTA taught a spring class with the Academy for Lifelong Learning to both in-person and virtual students. Held in March the class had approximately 40 students and focused on the Environmental Impact of the Savannah River Site.

Class 1: The SRS Environmental Monitoring Program – this class provides an overview of the environmental monitoring activities that occur at the site and across the CSRA including recent results of these studies and historical data.

Class 2: Ecology at SRS – this class provides a historical review of ecology work at the site from the pioneering work of Dr. Eugene Odum and Dr. Ruth Patrick to current research efforts and outreach initiatives.

Class 3: Environmental Science and Technology – the Savannah River National Laboratory has been at the forefront in the development of environmental remediation and cleanup technologies. These efforts have facilitated the stewardship of the environment at SRS as well as supporting environmental cleanup needs around the world.

Many thanks to the volunteers who helped make this class possible and the presenters: Tim Jannik, Dr. Olin Rhodes, and Dr. Brian Looney. The presentations are available online, and we hope to have the videos of the classes soon!

Maher Memorial Scholarship

Citizens for Nuclear Technology Awareness (CNTA) is seeking applicants for the Robert Maher Memorial Scholarship.

The \$5,000 scholarship is sponsored by Savannah River Remediation (SRR) and parent company Amentum. SRR is the liquid waste contractor for the U.S. Department of Energy at the Savannah River Site (SRS).

This scholarship will be awarded to a Junior or Senior at a college or university in South Carolina or Georgia who demonstrates an outstanding academic achievement in nuclear science/engineering or a directly related field, such as chemical engineering, mechanical engineering, environmental science, materials science, etc., with applications to the nuclear field.

The application is available online at: https://cntaware.org/maher-memorial-scholarship.

The deadline is June 30, 2021.

The Robert Maher Memorial Scholarship is a joint project of CNTA, SRR, and Amentum. Maher, Vice President and General Manager for Strategic Mission Development at SRS, passed away in 2002 after a 48-year career at the Site. A visionary with a broad view of the Site's potential, Maher helped shape SRS.

The annual scholarship was established in Maher's memory to support students pursuing science and engineering degrees in preparation for careers in the nuclear field.

2021 Essay Contest Winners

Six area high school students won scholarships resulting from their winning entries in the 2021 Citizens for Nuclear Technology Awareness (CNTA) High School Essay Contest. Three students won \$1,000 apiece, and three students won \$500 apiece.

The winners of the 15th annual writing contest are:

\$1,000 Winners



Benjamin DiPrete, Greenbrier High School "The Comparative Consequences of Energy."



Richmond County Technical Career Magnet
School
The Four Major Electrical Energy Sources."



Rachel Walden
North Augusta High School
"Environmental Impacts of Coal, Natural
Gas, Nuclear and Solar Power."

\$500 Winners

- Melissa Murph, North Augusta High School, for "Nuclear Technology vs Its Opponents."
- Madison Ackroyd, Aiken Scholars Academy, for "Nuclear Power: A Sustainable and Environmentally Safe Energy Source."
- Kaytlin Sturkey, Richmond County Technical Career Magnet School, for "How We Touch the Earth."

The goal of the CNTA Essay Contest is to increase high school student awareness of nuclear technologies and their impact on society. Each student picked one of three topics for this year's contest: (I) the relative carbon footprints and other by-products from four major electrical generation technologies; (2) current nuclear waste disposition methods and how to deal with this waste safely and securely; or (3) the use and lifecycle of nuclear technology in medicine.

"Successful essays required the integration of science, technology, social understanding, and language arts," said Dr. Marissa Reigel, Chair of the CNTA Essay Committee." Researching a technical topic, relating the information to society, and effectively communicating the information in writing are critical skills for high school students."

Dr. Jim Marra, CNTA Executive Director, positively remarked on this year's nuclear-themed essays. "This year's winners focused primarily on the comparison between nuclear power and other common electrical generation technologies," said Marra. "These students took a hard look at the data, and the overwhelming consensus is that nuclear power is necessary to reduce carbon footprints and to ensure clean, sustainable energy for generations to come."

The contest was open to high school juniors and seniors in Aiken, Allendale, and Barnwell counties in South Carolina and Burke, Columbia, and Richmond counties in Georgia; homeschool students; and students of CNTA member families. The winning students, their parents, and school representative will be honored guests and recognized at an upcoming CNTA event later this year.

CNTA would not be able to conduct this contest each year without the help of our sponsors. The 2021 sponsors include SRR, SRNL, and private donations.

The \$1,000 winning essays are available on the CNTA website at https://cntaware.org/high-school-essay-contest/

ATC Nuclear Scholarship

The CNTA Scholarship recipient for spring 2021 is Laruen N. Stevens, an Associate in Applied Science, Radiation Protection Technology student from Augusta, GA. She was recognized at our virtual Up & Atom in February.

Previously a \$1000 award, the scholarship has been split into two \$500 scholarships awarded each semester. Recipients are deserving second-year students enrolled in a nuclear program at Aiken Technical College. The faculty and staff at ATC identify the students to receive the awards. Information on the ATC Nuclear Scholarship can be found at their Foundation website.

Page 4 CNTAware

Communications Committee Updates

The communications committee has been hard at work this spring writing press releases, letters to the editor, and gearing up for the annual Nuclear Science Week Insert in the *Aiken Standard*. The 2020 Insert is available at: https://cntaware.org/nuclear-science-week/. If you are interested in helping on this committee and/or on this project let CNTA know!

"AHA" Nuclear Clips

To help non-nuclear members of our community understand basic facts of f nuclear technologies and concepts like radiation, CNTA's education and communications committees have teamed up to create "Did You Know" snippets. A few of the early ideas are included here. If you have ideas for inclusion please send them along!

These will be featured on CNTA's social media, in upcoming CNTAware Newsletters, in the Nuclear Science Week Insert etc.







In Memoria

James Malvyn "Mal" McKibben

Born in Buena Vista, GA, Mal graduated with a chemistry degree from Emory University. He moved to North Augusta in 1955 and began a 44 year career at SRS. Mal's work experiences at the site were diverse and included spending 3 years in California working with Bechtel as the Senior Project Manager for the design of the Defense Waste Processing Facility. His work also included international interactions in Russia on plutonium production data and in France on reactor design. He published extensively and was elevated to Fellow of the American Nuclear Society. He was also recognized in 2000 by a joint proclamation from both the SC Senate and House for his distinguished service to his country and community.

After his retirement from SRS, Mal served as the Executive Director of CNTA from 2001 to 2007. As a founding member of CNTA, he had a special bond with our organization. Mal led CNTA through a period of unprecedented growth with a dramatic increase in memberships and company sponsorships. During his tenure, CNTA gained an international reputation for its efforts to improve public knowledge of the benefits and comparative risks of nuclear technologies.

Mal served on the board of the SRS Heritage Foundation from 2009 to 2012. Mal was also an active member of Grace United Methodist Church for over 64 years serving as a Sunday school teacher and a tenor in the Chancel Choir.

Mal is survived by his wife, Sarah, three daughters, nine grandchildren and three great-grandchildren.

John Franklin "Frank" Jordan, Jr.

Born in Atlanta, Frank graduated from the University of Notre Dame with a degree in Aeronautical Engineering. Frank became a submariner after being chosen by Hyman Rickover and served 27 years in the Navy. He rose to the rank of Captain, commanding the USS L. Mendel Rivers, Director of Prospective Commanding Officer School, Submarine Squadron Commander stationed in Charleston, South Carolina, and Director of Operations of the Atlantic Fleet and NATO Submarine Forces.

After his naval career, he came to work at the Savannah River Site holding several managerial positions including head of Radiation Protection and Control. His final assignment was Vice President and General Manager, Nuclear Materials Stabilization and Storage facilities.

After retirement, Frank became very involved in community volunteer work. He was a long-time member and benefactor of CNTA. He was the treasurer/member of the Saint Vincent de Paul Society serving the poor, a member of the Knights of Columbus, and a hospital volunteer at Aiken Regional Medical Center. Frank was a past president of the Aiken Hospital Auxiliary and a visiting member of Mended Hearts. He was also a docent at the Aiken County Historical Museum where he enjoyed sharing stories and secrets of Aiken's past.

Frank is survived by his wife, Laura, two children and four grandchildren.

Young Professionals Committee Updates

Tap Into Nuclear

The young professionals committee of CNTA's two subcommittees have been busy this spring planning a variety of events. The Tap Into Nuclear committee held one virtual event in April and are planning two future events.

Upcoming Tap Into Nuclear events:

- June 17th

 Tap Into Nuclear at Aiken Brewing Company in Aiken SC.
- July 8th- Night out at a Greenjackets ballgame!

Contact cnta@bellsouth.net for information on these events or to get involved with the committee!





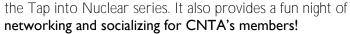
Join us for our first Tap Into Nuclear of 202111
"National Security Strategy as it Relates to SRS"

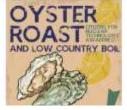
The Savannah River Site plays a critical role in National Security as it relates to nuclear management and material disposition. Chuck Munns will be discussing the posture of the national nuclear strategy and how it impacts work at SRS.

Fall Young Professionals Fundraiser

Celebrating it's 5th Anniversary, the fall young professionals fundraiser is set for October 16th at Palmetto Golf Club. This event will be an Oyster Roast & Low Country Boil provided by JC's Seafood.

The Young Professional Fundraiser is an event with the purpose to raise funds to support our outreach to Young Professionals. The funds go toward free membership for Young Professionals and supports events like







Details on the event will be released in late summer. This event always sells out so if you want to attend buy your tickets early!

Up & Atoms

CNTA held one virtual Up & Atom this spring before returning to in-person meetings in May! Look out for a full summer line-up of great guest speakers!

- February 24th– Admiral Charles Munns
- May 27th— Dave Olson sponsored by SRNS

Our Next Up & Atom is June 23rd at Newberry Hall. Dr. Mahan from Aiken Technical College will present.







CNTA Up & Atom Series is back in person



Page 6 CNTAware

19th Annual CNTA Charity Golf Tournament

The 19th Annual CNTA Charity Golf Tournament was held on May 7, 2021 and saw almost 160 players and volunteers descend on Houndslake Country Club! 33 teams participated in the event and 30 volunteers helped to make the event run smoothly. CNTA raised over \$20,000 for our educational programs from this one-day event!

Sponsors of the Golf Tournament were:

- Shirt Sponsor—SRNS
- Lunch Sponsor—SRNS
- Heritage Sponsor- Model Performance Group
- Prize Sponsor

 Jacobs
- Beverage Sponsors
 — North Wind Group & Globalpundits
- Hole Sponsors

 Amentum, Centerra, EDP, Merrick/SMSI, Southern Nuclear, & SRSCRO

More information and photos available at: https://cntaware.org/annual-golf-tournament/

New for 2021 we offered a putting contest instead of our traditional "Beat the Executive Director" contest. Pictured below our Executive Director Jim Marra did make a cameo appearance after just having hip surgery! That's dedication to

the cause and it was great to see him!





As part of the CNTA Raffle, we received unique masters golf items. These included a 2020 Masters Flag that was signed by the entire CBS broadcasting team. Pictured to the left, this flag was put in a separate raffle. The tickets were **exclusively sold on CNTA's website which drew** golfers to our site and we hope they learned something while they were buying tickets!

The drawing for a winner will take place June 4th!

Congratulations to our 2021 Winners!



Ist Low Net Jacobs Team 2 Brian Wilson Kevin Baker Patrick Cunning

Brian Wilson Josh Pifer
Kevin Baker Jack Pateracki
trick Cunning Robert Schafer
Dan Hicks Carl Scherman

2nd Low Net

READY for Golf

3rd Low Net Habitat for Humanity Shawn Risher Kenny Brown Jarrad Young Rob Strickland

Low Gross UH5 Patrick Gardenhire David Williams Nelson Curry Eric Holmes Closest to the Flag
#3
Alan Dobson (Merrick/SMSI Team 2)
#8
Alan Dobson (Merrick/SMSI Team 2)
#13
Jamie "Bo" Bryant (SREL)
#17
Mike Johnson (Trophies Unlimited)
Straightest Drive

Jill O'Donnell (Model Performance)

Putting Contest Winner Jarrad Young (Habitat)









SRR Takes Steps Toward Operational Closure of Radioactive Liquid Waste Structures

Savannah River Remediation (SRR), the liquid waste contractor at Savannah River Site (SRS), is moving closer to closing the first SRS tank farm structures since the closure of an underground waste tank in April 2016.

SRR received initial federal and state regulatory concurrence to begin the process leading to operational closure of the structures. The South Carolina Department of Health and Environmental Control and U.S. Environmental Protection Agency have preliminarily agreed that no additional waste removal from the structures is necessary, and that SRR may continue to proceed with the formal closure process.

The two structures are known as Diversion Boxes 5 and 6. They are a center of activity, similar in concept to an interstate highway's on- and off-ramps. Each box can connect waste tanks to numerous destinations by way of a series of nozzles and piping that direct radioactive liquid waste between waste tanks or between a waste tank and a facility.

The diversion boxes have been out of operation for more than 30 years. Both are about 15 feet long, 11 feet wide, and 18 feet deep, and they sit on approximately 4-foot-thick concrete slabs about 100 yards apart in the heart of F Tank Farm, one of two tank farms at SRS. There are 14 diversion boxes in the tank farms.

The next phase for Diversion Boxes 5 and 6 is to prepare formal documentation, which will include an opportunity for public comment, leading to a final decision by the agencies that the diversion boxes can be operationally closed by filling them with a cement-like grout. Isolating the boxes and obtaining necessary regulatory approvals for grouting is targeted for completion this year. The goal is to begin filling the boxes with grout in 2022. Diversion Box 5 will require about 94 cubic yards — or about 12 truckloads — of grout; Diversion Box 6, which is slightly larger, will require nearly 113 cubic yards of grout.

Operational closure is a detailed process, as regulatory agencies review plans to ensure thoroughness and safety of the entire process, focusing on safety to human health and the environment for the long term. Closure of the diversion boxes, along with operational closure of waste tanks and other structures, ultimately leads to closure of the entire F Tank Farm.

SRR President and Project Manager Phil Breidenbach said preliminary regulatory concurrence to move forward with operational closure is a significant step in the process of closing diversion boxes and waste tanks.

"Moving forward with another important operational closure would never happen without exceptional teamwork with the state, Department of Energy, and within SRR," Breidenbach said. "Each step we take moves us one step closer to completing our liquid waste mission. I'm proud of this team and the work we're doing."

SRR is a team of companies led by Amentum with partners Bechtel National, Jacobs, and BWX Technologies, Inc. Critical subcontractors for the contract are Orano, Atkins, and Amentum N&E Technical Services.

Utilization of Existing Resources to Monitor Shutdown Facility Results in \$1.8M Annual Savings at SRS

Savannah River Nuclear Solutions (SRNS) employees in the HB Line facility and H Canyon chemical separations facility at the Savannah River Site recently implemented changes in monitoring the recently shutdown HB Line facility, better utilizing existing resources and saving approximately \$1.8M annually.

HB Line, which is located on top of the 835-foot-long H Canyon facility, was placed in safe shutdown status in 2020, at the direction of the Department of Energy. Shutdown scope included inventory reductions and system and equipment shutdowns, allowing a reallocation of **personnel by approximately 75% from the facility's 2017 high**-pace operating posture. However, the facility still required both a Shift Operations Manager as well as an operator be present at all times to ensure the safety of the facility while in shutdown.

In an effort to continue to maximize cost avoidance to the department, HB Line and H Canyon employees developed a revision to the HB Line safety documentation to permit properly qualified and trained H Canyon SOMs and operators to fulfill the HB Line shutdown manning requirements. The team also evaluated measures to allow the facility to be monitored remotely.

"Instead of having to physically man the facility for four shifts a day, we originally had the idea to tie the HB Line control room into the automated control system used in the H Canyon control room so operators there could monitor the alarm panels during the night shifts," said H Canyon Facility Manager Nick Miller. "However, it occurred to us that we could save effort and money by just setting up a camera feed to watch the systems instead."

Installing the camera system in the HB Line control room and training H Canyon operators to monitor the camera while performing their other duties allowed HB Line to be de-manned during night shifts, resulting in a reduction of shifts from four to two. Operators in the H Canyon Outside Facilities were also trained to perform rounds in the facility once per night to verify the safety of the facility and respond to any abnormal conditions experienced. This resulted in the reduction of approximately 14 positions in the facility, which saves approximately \$1.8M. The impacted employees were transferred to other mission essential areas at SRS, including H Canyon.

"The H Area team developed a creative solution to the challenging problem and assumed more work responsibilities all as part of a continuing effort to deliver value to the Department of Energy and to taxpayers," Miller added. "I am proud to be a part of such a creative and highly capable team."

Savannah River Nuclear Solutions, a Fluor-led company with Newport News Nuclear and Honeywell, is responsible for the management and operations of the Department of Energy's Savannah River Site, including the Savannah River National Laboratory, located near Aiken, South Carolina.

Page 8 CNTAware

SRNS Registered Apprenticeship Program Grows to Include More Careers at SRS

Submitted by: Savannah River Nuclear Solutions

AIKEN, S.C., March 15, 2021 – High school and college graduates, and unemployed and underemployed adults are taking charge of their future careers through the Savannah River Nuclear Solutions (SRNS) Registered Apprenticeship Program at the Savannah River Site (SRS).

Seven paid apprentice profiles have been registered with the Department of Labor: Facility/Production Operators, Software Engineers, Records Management Clerks, Process Software Engineers, Systems Engineers, Computer Systems Support and Maintenance Mechanics.

"We have several important missions to fulfill, involving the protection of our nation and the cleanup of Cold War-era waste sites, as the management and operations contractor at SRS," said Sean Alford, SRNS Executive Vice President and Chief of Administration. "And, we have a need to fill a wide range of job pipelines with enthusiastic candidates, to safely and securely accomplish all of this for the Department of Energy."

According to Alford, since SRNS employs more than nearly 7,000 workers, the company needs a vast range of candidates and job skills.

"We have six more apprentice profiles in the works, to include: Electrical and Instrumentation Mechanics; Project Controls personnel; Fire Protection Engineers; Radcon Inspectors; Supply Chain Management Resource employees; and Associate Chemical Management Center Analysts," said Janessa Smith, SRNS Talent Management. "And the list is growing."

"Without a doubt, the credentials you earn as a registered apprentice are invaluable," said Smith. "In fact, depending on the profile you pursue, you can be accepted into our program with zero experience. We will provide all the training you need. At which point, you now own a portable credential proving you can do the work for any company needing that skillset," she added.



Savannah River Nuclear Solutions Senior Training Instructor David Jackson observes as a team of Nuclear Production Operator Apprentices practice work typical of their future job responsibilities as potential full-service employees at the Savannah River Site.

As an example, Smith mentioned the apprentice profile for Maintenance Mechanics. For this apprenticeship, no previous experience or training is required. These positions can be found (beginning March 16) by visiting BrassRing on the SRNS website: https://savannahrivernuclearsolutions.com/, select the "Careers" tab, then click "Apply Now" to be directed to the BrassRing portal.

Openings for all apprenticeship positions at SRNS can be found and applied for at this location as they become available.

An SRNS apprentice enjoys several advantages at SRS. In addition to being paid, apprentices gain job experience, network to obtain references and have an opportunity to test drive an occupation offered by SRNS.

"It's not unusual for us to offer full-time jobs to apprentices, upon completion—or even before—they complete the program," said Smith. "We've recently modified company policy to make this possible."

According to Smith, typically, most apprentices work while obtaining an occupation certificate or degree from a local technical college or university. In some instances, high school students may qualify for the apprenticeship program.

"To ensure the development of a viable workforce in our community, we aspire to establish 300 Registered Apprenticeships throughout organizations in the following counties by Oct. 1, 2021: Aiken, Allendale, Bamberg, Barnwell, Edgefield and Orangeburg," said Alford. "SRNS has committed to ensuring one third of these apprenticeships will be at SRS.

"We're working closely with Apprenticeship Carolina and the Lower Savannah Council of Governments as well to make this a reality. Together, we will be the first to step forward and champion the conduit of apprenticeships to endorse an employment solution with local, regional, state and national impact."

Walls Going Up for Newest Saltstone Disposal Unit at Savannah River Site

Submitted by: Savannah River Remediation

AIKEN, S.C. (March 16, 2021) – The first wall section is now rising from the ground on the newest mega-sized disposal unit being constructed at the Department of Energy (DOE) Environmental Management (EM)'s Savannah River Site (SRS).

Savannah River Remediation (SRR), EM's liquid waste contractor at SRS, continues to make progress on Saltstone Disposal Unit (SDU) 8 with the recent wall and flooring installation. SDU 8 will stand at 43 feet tall and 375 feet in diameter, and have a 33-million-gallon capacity, just like two mega-sized SDUs built at SRS before it. The disposal units are built to safely and permanently contain decontaminated salt solution processed at SRS.



The first wall section of Saltstone Disposal Unit 8 is being constructed at the Savannah River Site.

The 25 wall sections of SDU 8 will be constructed using high-strength, reinforced concrete and will be wrapped with seven layers of more than 300 miles of steel cable for added strength. The flooring of SDU 8 is more than halfway complete. The concrete floor sits on top of a multilayer foundation: a geosynthetic clay liner and high-density plastic liner sandwiched between two concrete layers called "mud mats." The floor is being completed in 14 sections.

SRR is building SDU 9 in parallel with SDU 8. At SDU 9, the lower mud mat is complete with the liner now being installed on top of it. Site prep design is ongoing for SDUs 10-12, the final three units to be built. The site prep design and excavation work for SDUs 7-12 were completed safely by BK All American Company, a locally owned small business.

DOE-Savannah River SDU Federal Project Director Shayne Farrell said waste tank cleanup is a priority for EM, and the SDUs play a key role in that mission, along with the Salt Waste Processing Facility (SWPF) that is now operational and processing waste.

"The Salt Waste Processing Facility will greatly increase waste tank cleanup at the Savannah River Site," Farrell said. "The liquid waste system relies on the capability to safely dispose of the saltstone onsite, and the Saltstone Disposal Units are required to fulfill this mission need."

SRR President and Project Manager Phil Breidenbach said the SDU program is quite a phenomenal construction project, and it is easy to feel awe by the size, the materials, and the magnitude.

"However, it is important to remember that these structures, the Saltstone Disposal Units, are engineered and constructed by people," Breidenbach said. "It takes construction workers, subcontractors, engineers, safety professionals, planners, and more to get the job done. We have a great team at Savannah River Remediation getting this work done the right way — safely."

SRR is building the SDUs to support the increased decontaminated salt solution from the SWPF. Salt waste at SRS is decontaminated through processes that remove radioactive isotopes, such as cesium, at SWPF.



The treated solution is then sent to the Saltstone Production Facility, where it is mixed with dry materials to form a grout. The grout is pumped to the above-ground SDUs where it hardens to a form called saltstone. The first mega-volume unit, SDU 6, is already operational and receiving treated waste. SDU 7 is nearing completion and undergoing testing.

Savannah River Remediation, EM's liquid waste contractor at the Savannah River Site, continues to make progress on the next Saltstone Disposal Units being constructed to support the Salt Waste Processing Facility.

Page 10 CNTAware

BWXT Expands Technical Fellows Program

Diverse Team of Employees Selected for Scientific and Engineering Contributions Submitted by: BWXT

(LYNCHBURG, Va. – April 27, 2021) – BWX Technologies, Inc. (NYSE: BWXT) has expanded its existing technical fellows initiative by selecting 25 additional employees for the program in recognition of their scientific and engineering accomplishments at the company.

Individuals selected as fellows are recognized as senior technical experts and leaders who are in a position to offer ongoing technical advice to other staff and review new products and technology development. In addition, fellows serve as mentors for future technical leaders for the company. Through these two areas of contribution, BWXT can leverage the technical expertise of this broad technical group to reinforce its commitment to excellence within its workforce while also improving diversity and inclusion within our technical leadership.

"There is great power in honoring our top technical employees," said Rex Geveden, BWXT's president and chief executive officer. "It is fitting recognition, and we believe this program will inspire other employees to strive for this distinction in the future."

Jonathan Cirtain, BWXT's chief technology officer, said, "This diverse group includes some of our most talented technologists and engineers. We congratulate these men and women for their achievements, and we look forward to their future contributions in mentoring, intellectual property and business operations."

BWXT's technical fellows program has extensive representation across all of the company's business segments in the United States and Canada. These experts work in areas such as nuclear safety and operations, welding and machining, automation and manufacturing systems, assurance and testing, chemistry/radiochemistry, fuel design and prototyping, and computation engineering.

Learn more about BWXT's technical fellows program and career opportunities here.

About BWXT

At BWX Technologies, Inc. (NYSE: BWXT), we are People Strong, Innovation Driven. Headquartered in Lynchburg, Va., BWXT provides safe and effective nuclear solutions for global security, clean energy, environmental remediation, nuclear medicine and space exploration. With approximately 6,700 employees, BWXT has 12 major operating sites in the U.S. and Canada. In addition, BWXT joint ventures provide management and operations at more than a dozen U.S. Department of Energy and NASA facilities. Follow us on Twitter at @BWXTech and learn more at www.bwxt.com.

SRNS partners with South Carolina State University to create Fire Protection Engineering Program

Savannah River Nuclear Solutions (SRNS) and South Carolina State University are partnering to create a Fire Protection Engineering degree program, which fulfils a workforce need at the Savannah River Site (SRS) and provides new career opportunities for university students.

Hiring Fire Protection Engineers (FPEs) at SRS is a challenge because no regional schools provide the degree. An FPE analyzes fire hazards; performs building analyses, inspections, fire code and engineering evaluations; and approves new fire protection system installations and design documents for facility construction.

"We're excited about the discussions taking place with SC State to create an FPE program. Early on, we provided information to the university about the skills students should have upon graduating, and then the university created the curriculum and proposed courses for a degree program," said Eric Johnson, SRNS Fire Protection Engineer Manager.

To offer this program to their students, SC State must receive approval from the South Carolina Commission on Higher Education and the Southern Association of Colleges and Schools.

"The College of Science, Technology, Engineering, Mathematics, and Transportation is very delighted for the opportunity to partner with Savannah River Nuclear Solutions to find solutions to problems of mutual interest," said Dr. Stanley Ihekweazu, Department of Civil and Mechanical Engineering Technology and Nuclear Engineering Dean.

Both SRNS and SC State will benefit from the new program. SC State will utilize the program as a recruiting tool, and SRNS will grow its talent pipeline. In February 2020, SRNS and the university signed a memorandum of understanding (MOU), ensuring support for mutually beneficial programs. The creation of this Fire Protection Engineering program is one tangible result of the MOU.

"We are looking forward to this new program at SC State getting underway," said Rich Zaharek, SRNS Director of Engineering Technical Services. "It is a great example of how our partnership with the university ensures that graduating students who want to work at SRNS have the skills needed to qualify for these specialized positions. The degree program will also benefit companies throughout the state, region and Department of Energy complex as Fire Protection is a critical element for other industries as well."

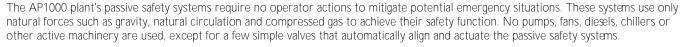
Final module placed for Vogtle 3 & 4 project

720,000-pound water tank placed atop Unit 4 containment vessel Represents last major crane lift for the construction project Submitted by: Southern Company

All modules for Georgia Power's Vogtle 3 & 4 nuclear expansion project near Waynesboro, Georgia, have now been set as a massive water tank has been lifted into place atop the Unit 4 containment vessel and shield building roof. The placement also represents the last major crane lift at the project site.

The Passive Containment Cooling Water Storage Tank, known as CB-20, is a major part of the AP1000 reactor's advanced passive safety system. Standing 35 feet tall and weighing more than 720,000 pounds, the large component will hold approximately 750,000 gallons

of water ready to flow down in the unlikely event of an emergency to help cool the reactor. The water can also be directed into the used fuel pool, while the tank itself can be refilled from water stored elsewhere on site.



The modules used for Vogtle units 3 & 4 were made in advance of arriving to the project site and ready to be assembled into larger components that make up the nuclear units. Since 2011, major modules were delivered to the site by rail and truck and included a range of plant components such as floor and wall sections and supporting structures that surround the containment buildings and reactor vessels.

The final major module arrived at the construction site in late 2019, meaning all 1,485 major modules required to complete construction had been manufactured and safely delivered.

Significant milestones that have been recently achieved include:

- Unit 4 Starting Integrated Flush This test pushes water through the permanent plant system piping that feeds into the reactor vessel and reactor coolant loops. Integrated flush represents a critical step as the process is key to helping ensure the safe startup of Unit 4 and marks the start of extensive testing ahead for the unit's systems.
- Unit 3 Nuclear Fuel Receipt The first nuclear fuel assemblies for Unit 3 arrived at the site in December.
- Unit 3 Condenser Vacuum Test The test was conducted with the main turbine on turning gear and by operating supporting systems to establish the condenser vacuum, which is necessary to demonstrate the steam supply and water-cooling systems operate together and are ready to support hot functional testing and initial fuel load in the reactor.
- Completion of Unit 3 Cold Hydro Testing Confirmed the reactor's coolant system functions as designed and verified the welds, joints, pipes and other components of the coolant system and associated high-pressure systems do not leak when under pressure.

Carbon-free energy source

The new Vogtle units are an essential part of Georgia Power's commitment to deliver safe, clean, reliable and affordable energy for customers and play a significant role in supporting Southern Company's goal of net-zero carbon emissions by 2050.

Once operating, the two new units at Plant Vogtle will be able to power more than 500,000 homes and businesses. A diverse fuel mix, including nuclear, is also essential to maintaining a reliable and affordable energy infrastructure that attracts new investment, supports economic growth and creates jobs.

With more than 7,000 workers on site, and more than 800 permanent jobs available once the units begin operating, Vogtle 3 & 4 is currently the largest jobs-producing construction project in the state of Georgia.

Follow the progress being made at the site of the nation's first new nuclear units in more than 30 years through the Plant Vogtle 3 & 4 Online Photo Gallery and Georgia Power's YouTube channel.

About Georgia Power
Georgia Power is the largest electric subsidiary of Southern Company (NYSE: SO), America's premier energy company. Value, Reliability, Customer Service and Stewardship are the cornerstones of the company's promise to 2.6 million customers in all but four of Georgia's 159 counties. Committed to delivering clean, safe, reliable and affordable energy at rates below the national average, Georgia Power maintains a diverse, innovative generation mix that includes nuclear, coal and natural gas, as well as renewables such as solar, hydroelectric and wind. Georgia Power focuses on delivering world-class service to its customers every day and the company is recognized by J.D. Power as an industry leader in customer satisfaction. For more information, visit www.GeorgiaPower.com and connect with the company on Facebook (Facebook.com/GeorgiaPower), Twitter (Twitter.com/GeorgiaPower) and Instagram (Instagram.com/ga_power).

Cautionary Note Regarding Forward-Looking Statements

Certain information contained in this release is forward-looking information based on current expectations and plans that involve risks and uncertainties. Forward-looking information includes, among other things, statements concerning the

Cartain information contained in this release is forward-looking information based on current expectations and plans that involve risks and uncertainties. Forward-looking information includes, among other things, statements concerning the expected schedule for construction and start-up of Plant Vogtle Units 3 and 4, expected job creation and carbon emissions reduction goals. Georgia Power cautions that there are certain factors that can cause actual results to differ materially from the forward-looking information that has been provided. The reader is cautioned not to put undue reliance on this forward-looking information, which is not a guarantee of future performance and is subject to a number of uncertainties and other factors, many of which are outside the control of Georgia Power: accordingly, there can be no assurance that such suggested results will be realized. The following factors, in addition to those discussed in Georgia Power's Annual Report on Form 10 -r.K for the year noted December 31, 2020, and subsequent securities filings, could cause actual results to differ materially from management expectations as suggested by such forward-looking information: the potential effects of the continued -r.K for the year noted December 31, 2020, and subsequent securities filings, could cause actual results to differ materially from management expectations as suggested by such forward-looking information: the potential effects of the continued -r.K for the year of the management in the projects, including Plant Vogite Units 3 and 4, which includes components based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale, due to current and future challenges which include, but are not limited to, changes in labor costs, availability and productivity, challenges in labor costs, availability and productivity, challenges in labor costs and avoid projects on vendors, subcontractor performance, adverse weather conflicts, short agreements, operation, on

Page 12 CNTAware

Celebrating 70 years of Environmental Stewardship

Submitted by: Savannah River Ecology Laboratory

Seventy years ago this month, Eugene Odum, a zoology professor at the University of Georgia, stepped onto the large landmass of contiguous, agricultural fields allocated for the development of the Savannah River Plant (SRP).

With foresight and a focus on environmental stewardship, the Atomic Energy Commission, known as the AEC, charged Odum with the task of conducting ecological surveys of the plants and animals before the operations began.

That research would later serve as a baseline for comparative study to assess if the operations on the SRP were altering the natural environment surrounding the facility.

Odum received a much smaller grant than he anticipated, but he was not discouraged. He had an innovative plan—he recruited three graduate students to assist with the research. In doing, so,



A sign identifies the field site where Eugene Odum began conducting research on the SRP.

he ignited an education program that has produced more than 500 graduate students to date.

A man of great insight with a holistic view of the environment, Odum was "known as the father of modern ecology." His plan included investigating how radioactive elements would travel through ecosystems and alter plants, animals, land, and aquatic systems.

Odum and his students started their research Saturday, June 23, 1951 in Field 3-412. Their actions led to the start of an ecology laboratory, the Laboratory of Radiation Ecology on the SRP.

In 1964, that laboratory would become known as the University of Georgia's Savannah River Ecology Laboratory (SREL). SREL has continued to serve the role as the independent assessor conducting ecological research on the landscape now known as the Savannah River Site.

That role has grown to one of advisor in providing guidance and strategies for remediation methodologies to executing expertise in various areas of ecology and informing the public through public outreach and education.

SREL's areas of research expertise have grown to include wildlife ecology, disease ecology, biogeochemistry, and forestry and conservation to name a few. That expertise has also led to over 3,000 published articles in peer-reviewed journals and to research partnerships around the world.

The lab's international footprint includes research in Chernobyl and Fukushima as a result of the pioneering work that Odum began in the field of radioecology, studying the impact of radionuclides on ecosystems.

As issues emerge, like climate change, SREL will continue to adjust to address environmental concerns that impact our world. With a footprint of over 70 continuous years of research on the Savannah River Site and a database of research from the very first day in the field to today, SREL is uniquely positioned to do so.

CNTA Welcomes New Board Members

Dr. James Marra, the Executive Director of Citizens for Nuclear Technology Awareness (CNTA), is pleased to announce the election of new members to the CNTA Board of Directors for 2021-2022.



Sally Bartelmo is a Shift Operations Manager at the Saltstone Facility with Savannah River Remediation. Previously, she was a Tank Farm Shift Technical Engineer, a Tank Farm Facility Engineer, and an Associate Structural Design Engineer. She has a Bachelor of Science degree in Civil Engineering from the University of South Carolina. Sally served as the SRR United Way Campaign Treasurer from 2014 to 2016 and was honored with the SRR United Way President's Award in 2016. She is active in numerous organizations including the University of South Carolina Civil and Environmental Engineering Advisory Board, the American Society of Civil Engineers, and Newspring Church.

Dr. Musa Danjani is a Full Professor of Nuclear Engineering at South Carolina State University (SC State). He obtained his B.Sc. and M.Sc. in Physics from Ahmadu Bello University in Nigeria, and his M.S. and Ph.D. in Nuclear Engineering from the University of Illinois at Urbana-Champaign. He is a member of the Governor's Nuclear Advisory Council. He is the Acting Chair of the Department of Engineering and Academic Program Coordinator for the Nuclear Engineering program at SC State. He is also the Director for the Center of Energy Studies at SC State. Dr. Danjani was previously a Professor of Engineering at Clark Atlanta University and held joint appointments at the Army Environmental Policy Institute and the United States Army Construction Engineering Research Laboratory.



Alan Dobson has worked in the Nuclear Industry since 1975. He was the License Holder/Senior Person Responsible on HLW and Vitrification, Chemical Separation, Uranium and Plutonium Production Facilities and several Waste Treatment Plants, including the Advanced Mixed Waste Treatment Plant in Idaho. He pioneered the use of Behavior Based Safety in the UK Nuclear Industry in 1993 and developed a commercial solution meeting DOE's GNEP requirements in 2007. Alan has a degree in Chemical Engineering and is a Vice President of Bechtel National Inc. Alan held leadership roles in numerous organizations across the nuclear industry including the WSRC Senior Advisory Board, the EFCOG Safety Analysis Working Group, the US Nuclear Infrastructure Council, and the IAEA Working Group for Modifications in Used Fuel Facilities.

Jhivaun Freeman-Pollard is the Project Director with Tank Closure and Regulatory Strategies at the Savannah River Site. She has over 25 years of experience managing nuclear-related projects and programs in the U.S. and internationally for DOE, DOD, and several commercial corporations. Ms. Freeman-Pollard has a bachelor's degree in International Relations Operations and Resource Management from the University of California, Davis, and a Master of Engineering in Construction Engineering from the University of Alabama. Jhivauns's successful project executions earned her several awards including PMI Project of the Year, the Women in Construction Award of Excellence, and the Holly Cornell Award of Excellence. She is a credentialed Project Management Professional and LEED AP BD+C.



CNTA also thanks non-returning board members Byron Bush, Sue King, Sunny Lunka, and Fitz Trumble for their dedicated support and contributions over the last several years.

CNTA Committee Descriptions

Detailed information on ALL of our committees available at: https://cntaware.org/committees/

Communications Committee

The Communications Committee is responsible for ensuring accurate and timely information to the media, stakeholders, and the public and to reflect the goals and objectives of CNTA.

Education Committee

The goal of the Education Committee is to educate the public on the benefits, uses, and truths of nuclear technology. This is done through several initiatives: "Bringing Nuclear into the Classroom," Nuclear Blitz teach-ins, Lifelong Learning Academy teaching, and awarding the many scholarships and awards to students and teachers.

Young Professionals Committee

The purpose of the Young Professionals Committee is to recruit and engage young professional members by providing them with mentorship and professional development opportunities as well as raising money to make membership free for those under 40.

Page 14 CNTAware

Thank You Business Members!

DIAMOND

SAVANNAH RIVER NUCLEAR SOLUTIONS

PLATINUM SAVANNAH RIVER REMEDIATION



GOLD

ARTHUR RICH
CENTERRA-SRS
FLUOR GOVERNMENT GROUP
HII NUCLEAR INC.



BRONZE

APPLIED RESERCH CENTER (ARC)

ATKINS

BECHTEL

BWX TECHNOLOGIES INC.

NORTH WIND GROUP

ORANO SOUTHERN NUCLEAR- PLANT VOGTLE SILVER JACOBS

BUSINESS

PARTNERSHIP
MUNNS ADVISEMENT, LLC
SCUREF
SECURITY FEDERAL BANK
SRS COMMUNITY REUSE
ORGANIZATION



Thank you to our Members Plus!

Jeff Allender
Sandra Devoe Bland
Kim Cauthen
Paul Cloessner
Eddie Estochen
Jack Goldenberg

Charles Hansen Lyddie Hansen Joyce Hopperton Jeff Leita David Little Chris Noah

Sharon Rickman Wayne Rickman Ed Sadowski Steve Sheetz Robert Sindelar Clint Wolfe Virginia Wolfe

Mission of CNTA

Citizens for Nuclear Technology Awareness, Inc., is an education and advocacy group promoting the safe and effective use of nuclear power, nuclear research and nuclear medicine.

We provide education, networking, and a voice of understanding from a technical perspective in a world often influenced by *inaccurate* and unwarranted fear.

CNTA membership encompasses individuals, families, and businesses who support the use of nuclear science and technology for many applications, including: energy, national security, nuclear medicine and diagnostics, and industrial applications.

BOARD OF DIRECTORS

Daren Timmons- Board Chair Steve Sheetz- Vice Chair Charles Hansen - Treasurer Susan Wood- Immediate Past Chair

Jeff Allender Joyce Hopperton Sally Bartelmo Fred Humes Roger Burnett Carol Jantzen Dean Campbell Karl Lutterloh Paul Cloessner Forest Mahan Wyatt Clark Zeus Mancilla Musa Danjaji Matt McCoy Mark Davis Craig McMullin Alan Dobson Nick Miller Jhivaun Freeman Pollard Chuck Munns Dara Glass John Veldman

James Corley, Ex-Officio Walt Joseph, Ex-Officio

Directors Emeritus Clint Wolfe

CNTA Staff
Jim Marra— Executive Director
Allison Hamilton Molnar— Director of Operations

MEMBERSHIP INFORMATION

BUSINESS MEMBERSHIP OPTIONS

Diamond: \$25,000 or more Platinum: \$10,000—\$24,999

Gold: \$5,000—\$9,999 Silver: \$2,500—\$4,999 Bronze: \$1,000—\$2,4999

Business Member: \$500 to \$999

INDIVIDUAL MEMBERSHIP OPTIONS

Member Plus—\$250.00 or more

Benefactor—\$125.00 Patron—\$70.00 Sustaining—\$35.00

Young Professional — Free for 1 year

Membership Information is available online at: http://cntaware.org/join-us/

All membership levels include invitations to breakfasts/dinners, other events, quarterly newsletters and opinion letters/editorials. Benefactor and Member Plus also receive one free private reception ticket and one free Teller Lecture banquet ticket when dues are current.

YOUR DUES SUPPORT PUBLIC OUTREACH Federal ID# 57-0953103



1204 Whiskey Rd, Suite B Aiken SC 29803

Phone: 803-649-3456 E-mail: CNTA@bellsouth.net





HOW YOU CAN HELP

CNTA as a charitable non-profit organization can ALWAYS use help.

Opportunities include:

- Donate Items for Raffles/Auctions
 - Donate to Our Community Gift Card Program!
 - Donate to CNTA as a charitable non-profit (https://cntaware.org/ about-us/)
- Volunteer your time
 - Get involved with a CNTA Committee (descriptions on pg. 13)
 - Help the CNTA Education Committee revamp our education outreach to comply with socia
 - Volunteer to help in our Office (there is always work to be done there!)
 - Be an event-specific volunteer
 - Be an educational committee contest judge!
- Sponsor a 2021 Event or Education Outreach!

For information email Allison at office@cntaware.org

CNTA CALENDAR OF EVENTS

June 4, 2021– Signed Masters Flag Raffle winner announced. 5pm. Virtual.

June 8, 2021- Public Information Forum. Come learn about nuclear in your daily life. 5:30-7pm at O'Dell Weeks in Aiken.

June 17, 2021- Tap Into Nuclear. "Starting your own business and consulting within the nuclear field" 5:30-7pm at Aiken Brewing Company in Aiken.

June 23, 2021- Up & Atom- "Workforce Development – Short-Term, Long-Term, Nuclear, and Beyond." Dr. Forest Mahan, President, Aiken Technical College. 7:30am at Newberry Hall in Aiken SC.

July 8, 2021- CNTA Young Professionals Night Out at the GreenJackets!

October 16, 2021- "CNTA's Fall Oyster Roast & Low Country Boil". 6:30pm at Palmetto Golf Club in Aiken SC.

May 6, 2022- 20th Annual CNTA Charity Golf Tournament! Held at Houndslake Country Club in Aiken SC.

Join CNTA and never miss out on an event invitation again!