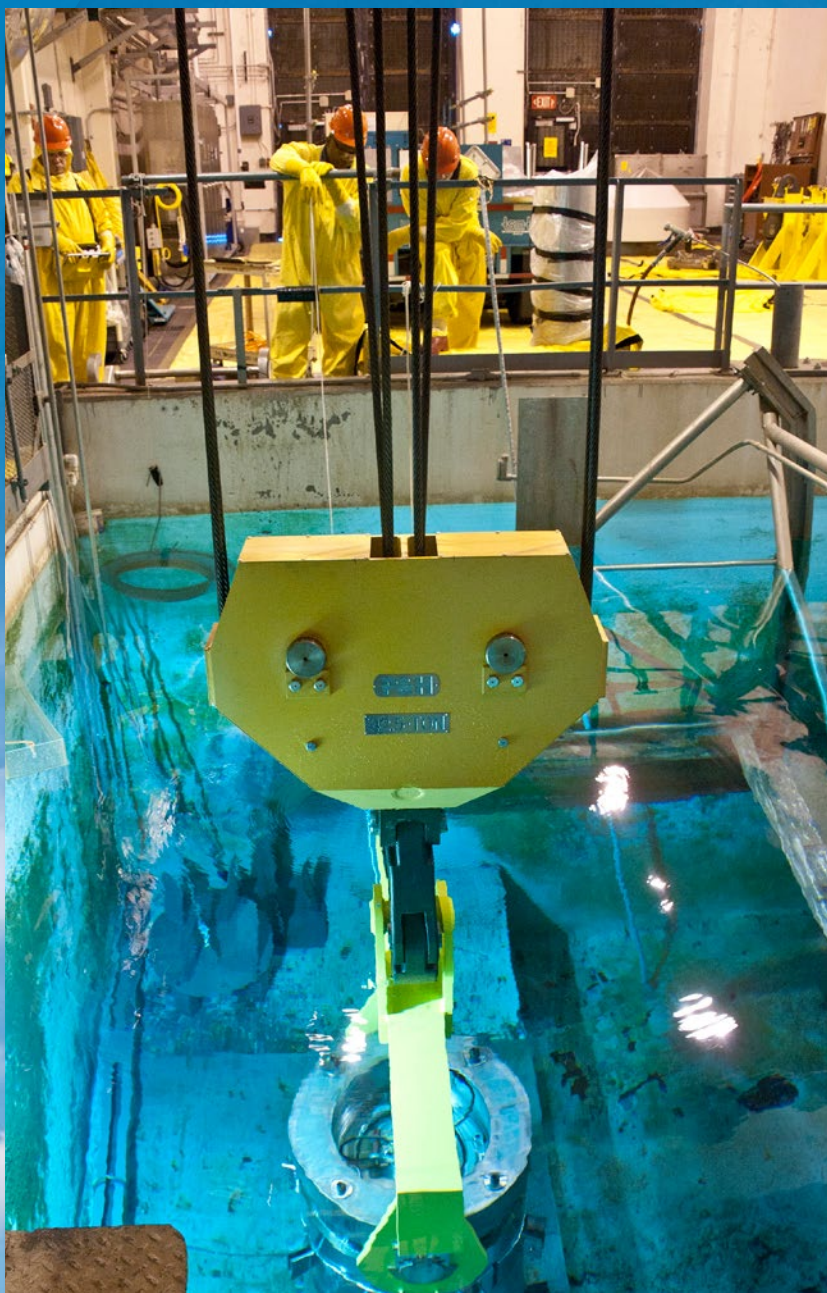


● APRIL 2013

SAVANNAH RIVER NUCLEAR SOLUTIONS

SRNS Today



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Welcome

to the April 2013 edition of

SRNS Today



Dwayne Wilson
SRNS President and CEO

It's good news for H Canyon and L Basin.

Two of our greatest assets at the Savannah River Site are at the center of an amended Record of Decision issued by the Department of Energy Office of Environmental Management. H Canyon and L Basin have both acquired new projects that will extend their mission life for years while playing important roles in global nonproliferation and domestic nuclear energy programs. I'm very pleased with these developments, and urge you to read more on the next page.

During April, we honored our Savannah River National Laboratory scientists for their achievements. Honorees included those whose scientific expertise have resulted in patents, licenses, fellowships and other awards. Please see the story on Page 4, and congratulations to our SRNL employees!

In addition to honoring the scientists of today, SRNS is also helping to educate our scientists of tomorrow. SRNS has provided area teachers with a total of \$75,000 this month through the Innovative Teaching Mini Grants Program. Since 2009, SRNS has given over \$275,000 to area teachers whose proposals merited these monetary awards. For more on this excellent program, please see Page 5.

In this edition of SRNS Today, we're also featuring our employee volunteers at the United Way's Projects Care and Serve (Page 6 and 7); SRNL scientist Dr. Robin Brigmon and his work with the South Carolina Academy of Science (Page 8); and the annual Engineering Teach-Ins (Page 10).

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

About Savannah River Nuclear Solutions, LLC...

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. For additional information about SRNS,



Please visit our website at www.savannahrivernuclearsolutions.com.



EM decision expands use of H Canyon, L Basin at SRS

The DOE Office of Environmental Management (EM) issued an amended Record of Decision (ROD) to the Savannah River Site Spent Nuclear Fuel Environmental Impact Statement to expand the operations of H Canyon at SRS to support a major nuclear nonproliferation goal and save taxpayer dollars.

DOE recently signed a contract allowing Atomic Energy of Canada Limited (AECL) to fund SRS to receive and downblend residual material in H Canyon from Molybdenum-99 production containing U.S. origin liquid highly enriched uranium (HEU).

This agreement is part of the commitment made between Prime Minister Stephen Harper of Canada and President Barack Obama of the United States at the Nuclear Security Summit in Seoul, Republic of Korea, on March 27, 2012, in expanding efforts to return additional inventories of HEU materials currently stored at AECL's Chalk River Laboratories in Ontario to facilities in the United States. The commitment supports international efforts to consolidate and dispose of HEU and to combat the threat of nuclear terrorism.

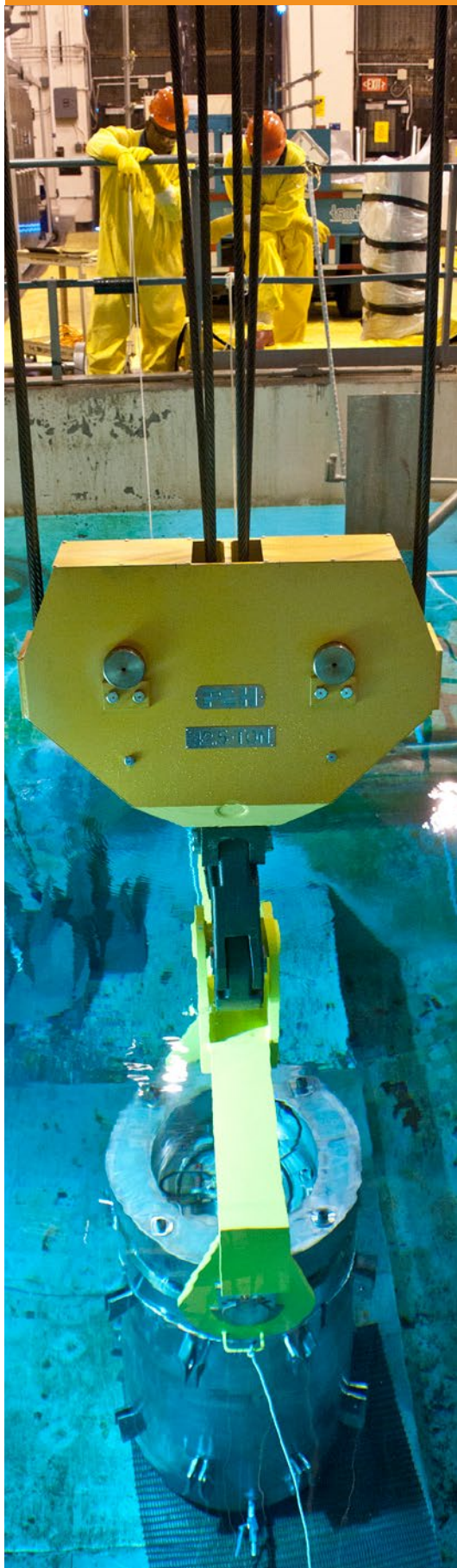
The amended ROD will enable DOE to process the minimum quantity of used nuclear fuel (UNF) from L Basin in H Canyon through 2018 necessary to accommodate future receipts of Foreign Research Reactor (FRR) and Domestic Research Reactor (DRR) spent nuclear fuel. Freeing up storage space in the L Basin for these purposes provides continued support for U.S. nonproliferation goals and avoids the need for costly modifications to L Basin, providing near-term savings of approximately \$40 million to U.S. taxpayers.

L Basin, which is the only operating fuel receipt and storage facility at SRS, plays a vital role supporting receipts of FRR and DRR UNF. L Basin is at storage capacity for High Flux Isotope Reactor (HFIR) cores, which are a different size and configuration than other UNF in L Basin. As early as 2016, L Basin is projected to reach its storage capacity for other UNF.

The amended ROD furthers research efforts under way by the DOE Office of Nuclear Energy (NE) and National Nuclear Security Administration (NNSA). H Canyon provides a live testing environment for two scientific, safety and security programs. NE's Fuel Cycle Research and Development program and NNSA's Advanced Safeguards Instrumentation efforts will collaborate to improve process monitoring instrumentation and promote the strengthening of nuclear safeguards worldwide to help ensure the safe, secure and peaceful implementation of civil nuclear energy programs.

Since 2002, H Canyon has downblended over 22 metric tons of surplus enriched uranium, resulting in enough energy to power every home in the U.S. for 50 days or every home in South Carolina for nine years and permanently eliminating the equivalent of about 500 nuclear weapons.

Photos: L Basin (left) and H Canyon





The Honorees

Don Orth Award of Merit

Joseph V. Cordaro

Patents

Dr. Ragaiy Zidan	Christopher Berry
Dr. Joshua Gray	Dr. Brian D. Riha
Richard W. Swygert	Joseph V. Cordaro
Dr. David P. DiPrete	Dr. Fernando F. Fondeur
Dr. Robin Brigmon	Dr. Samuel D. Fink

CRADAs

Dr. Jake Amoroso	Dr. Fabienne Johnson
Dr. Alex Choi	Dr. Bill Summers
Dr. Jim Marra	Dr. John Steimke
Dr. Tommy Edwards	Dr. Hector Colon-Mercado
Dr. Davis Peeler	

Licenses

Dr. Ragaiy Zidan
Dr. Matthew Wellons
Gerald Blount
Sherrod Maxwell III
Dale Marzolf
Kevin Hera

Laboratory Director's Awards

Matthew Howard	Matthew Parker
Dr. Ted Nichols	Dr. Greg Flach
Dr. Brenda Garcia-Diaz	J. Rusty Coleman
Dr. Kevin Fox	Dr. Elizabeth Hoffman
Dr. Christopher Bagwell	Dr. Lindsay Sexton
Dr. Anna Knox	Dr. Kathryn Taylor-Pashow

Technical Society Fellows

Dr. Mark R. Duignan
Dr. Alex D. Cozzi

SRNL scientists honored for inventions, patents and licenses at annual event

It was a night to celebrate the scientists and researchers.

The annual Research and Technology Recognition reception brought together more than 35 honorees—almost all from SRNL—from multiple disciplines to honor their scientific achievements during the past year.

Held April 25, the reception honored patent award recipients, Cooperative Research and Development Agreement (CRADA) participants, new product licenses, new technical society fellows and special award winners for early career achievement and exceptional scientific and engineering achievement.

Also included was the annual Don Orth Award of Merit, the highest distinction at SRS to recognize technical excellence and leadership. This year's Orth winner is SRNL engineer Joe Cordaro, who is recognized across the DOE complex and internationally as an expert in nuclear instrumentation, process control and high speed data acquisition.

Eight patent awards, covering a range of areas from hydrogen storage techniques to various enhancements for environmental remediation, were also recognized.

"These achievements make a significant statement about the capabilities within SRNL," said Dr. Terry Michalske, SRNS Executive Vice President and SRNL Director. "At SRNL, you're able to work with some of the finest people I've ever seen. The research is world class, and I'm very proud of what's represented here tonight."



Photos: (Above) The honorees at Research and Technology Recognition reception; (right) SRNS President and CEO Dwayne Wilson with Joseph Cordaro, winner of the Don Orth Award of Merit



\$75,000 in SRNS Innovative Teaching Mini Grants presented to area educators

It was way better than an apple for these teachers.

The SRNS Innovative Teaching Mini Grants Program awarded a total of \$75,000 in funding to 172 Central Savannah River Area (CSRA) educators during a reception held April 18 in Aiken, S.C.

SRNS President and CEO Dwayne Wilson was so impressed with the results of last year's program, he requested that an additional \$25,000 be added to the Mini Grants annual budget of \$50,000. "We are proud to reward educators who exhibit a strong passion for helping students better understand math, science and technology through innovative teaching methods," said Wilson.

This increase in budget provides grant awards for an additional 63 educators.

The Innovative Teaching Mini Grants Program recognizes and supports innovative teaching methods by funding projects that enhance elementary and middle school science, mathematics and technology programs directly impacting students in the classroom.

"I'm so excited about our project called AWARE, Areas With Agriculture for a Revived Environment," said Melanie Moore, Guinyard-Butler Middle School, in Barnwell, recipient of a \$1,000 SRNS Mini Grant. "I can't fully express what this gift means to me and my students. Without SRNS, this wouldn't be possible."

Educators from all CSRA elementary and middle schools (public and private) are eligible to apply for a Mini Grant in one of three categories: \$500, \$750 or \$1,000.

A selection committee, comprised of SRS employees, reviewed 385 grant proposals submitted this year and selected 117 projects to collectively receive a total of \$75,000 in funding.

The grants are provided through corporate funding made available by the parent companies of SRNS, LLC (Fluor Federal Services, Newport News Nuclear, and Honeywell).

"I'm so excited about our project called 'AWARE: Areas With Agriculture for a Revived Environment.' I can't fully express what this gift means to me and my students. Without SRNS, this wouldn't be possible."

Melanie Moore

Guinyard-Butler Middle School,
Barnwell, S.C.

Recipient of a \$1,000 SRNS Mini Grant

Photo: SRNS President and CEO Dwayne Wilson stands with (from left) Ivey Peteet, Anna Underwood, Shomoneik Brown and Kimberli Herring, four of the 172 winners of SRNS Mini Grants.



Caring to serve

SRNS employees take the time to help those in need

SRNS volunteers offered their time and talents on April 19 at five local United Way agencies, and their efforts will improve the lives of potentially hundreds of citizens living throughout the Central Savannah River Area and Barnwell County as a part of this year's Project SERVE and Project CARE.

Both initiatives are part of the "Days of Caring" United Way program at SRS.

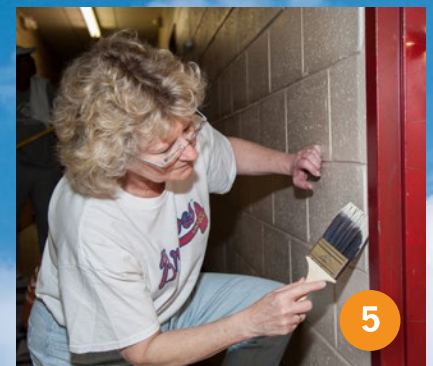
Each year a large number of SRNS employees commit to work during their day off to take on a project that will improve the living conditions of disadvantaged children, low-income senior citizens, the disabled or single-parent homeowners. Frequently, a team of volunteers is assigned a project involving a specific United Way agency.

"This recent effort continues a long tradition of SRS employees organizing into teams one day annually to offer a full day of community service," said Fred Dohse, SRNS Executive Vice President and Chief Operating Officer. "Each year our employees work on a wide variety of projects. It's a full day's work, and we're proud of the values our employees hold and their seemingly endless generosity."

Team projects typically include clearing debris, painting, repairing flooring, putting up dry wall, building wheel chair ramps, installing smoke detectors, fixing faulty plumbing and yard work.

Projects SERVE, CARE and VISION assist United Way agencies found throughout much of the Central Savannah River Area. Project VISION, involving Aiken County residents and United Way services, was successfully completed on March 23.





Photos (clockwise from top left): 1 Stan Maciaszek (left) and Frank Sinclair at the Shiloh Community Center; 2 Cynthia Williams at the Salvation Army; 3 Dannette McClendis at Shiloh; 4 Tim Key at the Red Cross; 5 Pat Padezanin at the Salvation Army; 6 Trina Minnis-Carter and Walter Wilson at Action Ministries.

SRNL

SRNL researcher completes term as head of S.C. Academy of Science

Photo (above): SRNL's Dr. Robin Brigmon explains the workings of a gas chromatograph-mass spectrometer at the Academy's 2013 annual meeting, co-hosted at USC-Aiken by SRNL and SRNS.

Photo (below): SRNL's George King (right) demonstrates how equipment in the SRNL TRAC van can be used for plume and weather monitoring in emergency situations.



When the South Carolina Academy of Science gathered for its annual meeting in April, the organization convened under the leadership of one of the notable members of the SRS scientific and technical community, Dr. Robin Brigmon.

Brigmon, of the SRNL Environmental Biotechnology Section, is the current President of the 89-year-old organization, which promotes the exchange of scientific information, particularly among students with an interest in science.

This year's annual meeting was held April 13 at Benedict College in Columbia. SRNS has been a major financial sponsor of the organization.

Brigmon's term as President of the organization is one of a series of activities reflecting his involvement in science education in South Carolina. An adjunct professor at Clemson and USC-Aiken, Brigmon has mentored students for a number of years, served on graduate student committees, judging competitions and working with student interns at SRNL. The student involvement, he says, has been a satisfying part of his SRNL career, and is one of the hallmarks of the Academy.

"These are the future doctors, researchers, engineers," he said. "These workshops are a win for South Carolina education, as well as for science and engineering."

Financial support from companies such as SRNS is critical as state funding has diminished. "In these lean economic times, it's critical that we get and maintain support from the business community," he said.





Red Cross Hero

The Aiken County Red Cross, in partnership with SRNS, awarded Richard Shelley, lead paramedic for SRNS Engine Company 1, the Aiken County Red Cross Life Saving Hero award in March at the Aiken County Red Cross Heroes Breakfast. Shelley was honored for his response to a heart attack situation in H Area at SRS.

Photo: Dwayne Wilson, SRNS President and CEO, with Richard Shelley

Baker honored for service by Georgia-Carolina Boy Scouts

Giving back is just a way of life for SRNS' Richard Baker. He has served as his division's United Way lead for the past two years and, as Tritium's 2012 Heart Walk team captain, and he has volunteered his time and energy with the SRNS-sponsored Habitat for Humanity projects in Aiken County.



Richard Baker

Recently, the Georgia-Carolina Council of the Boy Scouts of America honored Baker for his volunteer work with the Scouts in the area, presenting him the Silver Beaver Award at the Annual Council Banquet.

The Silver Beaver Award is the highest local council level distinguished service award for a volunteer leader of the Boy Scouts. Recipients are registered adult volunteer leaders who have made an impact on the lives of youth through service given to the council. The Silver Beaver is given to those who implement the Scouting program and perform community service through hard work, self-sacrifice, dedication and many years of service. It is given to those who do not actively seek it.



Raising the roof

The Shiloh Community Center in Augusta, Ga., received a much-needed new roof as a result of several companies' efforts. SRNS asked Garland Roofing Company, a roofing materials supplier in Greenville, S.C., to explore the possibility of assistance with the project. Garland Roofing identified Eskola Roofing of Greenville to do the installation, which was accomplished in record time. Both of these roofing companies contributed to the project through the donation of materials and labor.

SRNS sponsors Aiken NAACP Annual Freedom Fund Banquet

SRNS was the Platinum sponsor of the Aiken Branch NAACP 32nd Annual Freedom Fund Banquet held in April. The keynote speaker, Rev. Dr. Otis Moss, III, is the Senior Pastor of Trinity United Church of Christ in Chicago. As a progressive Christian activist and cultural critic, Dr. Moss continues the work and legacy of Dr. Martin Luther King, Jr and the pastoral ministry of his father, Dr. Otis Moss, Jr of Cleveland, OH. Approximately 350 people attended the event.



SRNS engineers share their knowledge with CSRA students during Teach-Ins

“A value can’t be placed on the exposure to new concepts, intriguing ideas and real world experiences that the Teach-In volunteers from SRNS were willing to share with us. I just can’t thank them enough.”

Elizabeth Noffsinger
Teacher, Aiken Middle School

SRNS employees recently provided science- and engineering-based demonstrations for more than 2,500 students throughout the greater Aiken-Augusta area in honor of the 2013 National Engineers Week.

Known as “Teach-Ins,” 36 SRNS engineers, scientists, and technicians from the Savannah River Site conducted 99 sessions at 15 middle schools with a focus on seventh grade students during March and April.

Teach-Ins have been proven to be instrumental towards promoting the importance of a technical education along with a high level of math, science and technology literacy. SRNS volunteers provide interactive demonstrations and informative discussions to give students a broader understanding of the field of engineering.

According to Aiken Middle School student Ashley Weaver, all of the demonstrations the SRNS employees provided have been interesting and fun. “My favorite was shooting the rockets across the room,” said Weaver. “We’ve learned so much. It’s really nice of them to visit our school and teach us cool things.”

Weaver’s teacher Elizabeth Noffsinger agreed. “A value can’t be placed on the exposure to new concepts, intriguing ideas and real world experiences that the Teach-In volunteers from SRNS were willing to share with us,” said Noffsinger. “I just can’t thank them enough.”

Middle schools in the South Carolina counties of Aiken, Allendale, Bamberg, Barnwell, and Edgefield, plus the Georgia counties of Columbia and Richmond have participated in this outreach program managed and sponsored by SRNS since 2009. It’s estimated that during this time period, over 10,000 students from this region have benefitted from the creative work and hours of effort provided by hundreds of enthusiastic Teach-In volunteers.

National Engineers Week celebrates the positive contributions engineers make to society and is a catalyst for outreach across the country to kids and adults alike.

Photo: Aiken Middle School students Aisha Burrell (second from left) and (right) Aria Harley assist SRNS volunteers Amanda Wright and David Tacchi during a demonstration involving rocket propulsion. With the completion of this year’s SRNS Teach-In Program, nearly 100 demonstration sessions will have been conducted touching the lives of more than 2,500 area students.



SRNS Scenes

Wild dogwoods are among the many species of flora that abound in the thousands of acres of protected forests at the Savannah River Site. (Photograph by Steve Ashe)

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safety and security.



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Watching out for our coworkers.

Focusing on safe and secure performance
from complex jobs to routine tasks.

A world-class safety and security culture
to support local, regional and national
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