Savannah River National Laboratory

We put science to work.™

# SRNL Overview

**Sharon Marra**
Deputy Director, Chief Operating Officer

April 2022

U.S. DEPARTMENT OF ENERGY

*Managed and operated by Battelle Savannah River Alliance, LLC for the U. S. Department of Energy.*

BSRA
Battelle Savannah River Alliance, LLC

# Savannah River National Laboratory

- Established in 1951.
- R&D for the production of nuclear materials needed for weapons – primarily tritium and plutonium-239.

**Cold War**

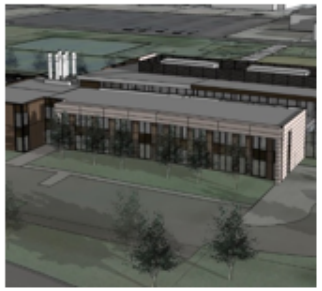
- Evolving emphasis on environmental remediation, tritium processing and nonproliferation.
- Strong efforts to share expertise beyond SRS.

**SRS Clean Up**

- National Laboratory.
- Growth of National Security and Materials Science programs.
- Focus on deployable solutions.

**Multi-program**

- Recognized expert in environmental technologies.
- Emphasis on advanced manufacturing for DOE and NNSA missions.



**Lead Lab EM & LM**

**Fundamental and Discovery Science**

***Extracted from Site Management and Operating Contractor under new Contractor – June 2021***

BSRA
Battelle Savannah River Alliance, LLC
BATTELLE

**SRNL Management & Operations: University Partners**

South Carolina
CLEMSON UNIVERSITY
SC STATE UNIVERSITY 1896
Georgia Tech
UNIVERSITY OF GEORGIA

*South Carolina State University is the First HBCU Management Partner of any National Laboratory*

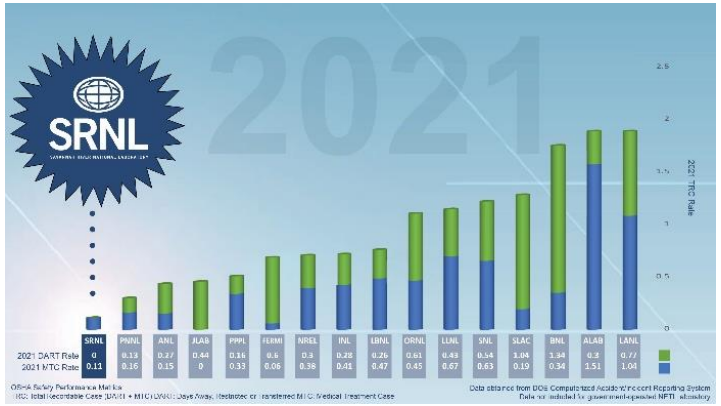
LONGENECKER & ASSOCIATES
TECHSOURCE A Science & Engineering Consultancy

# Simultaneous Excellence


*Meet our Nation's and our customers' needs through outstanding research*

*Effectively execute our mission in a safe, secure, and efficient manner*

*Lead by example of service to our communities: our Laboratory, our Profession, and our Region*



# Excellence in Community Service

- Team SRNL at American Heart Association CSRA Heart Walk
- UAV Team with South Aiken High School Students
- SEED Event

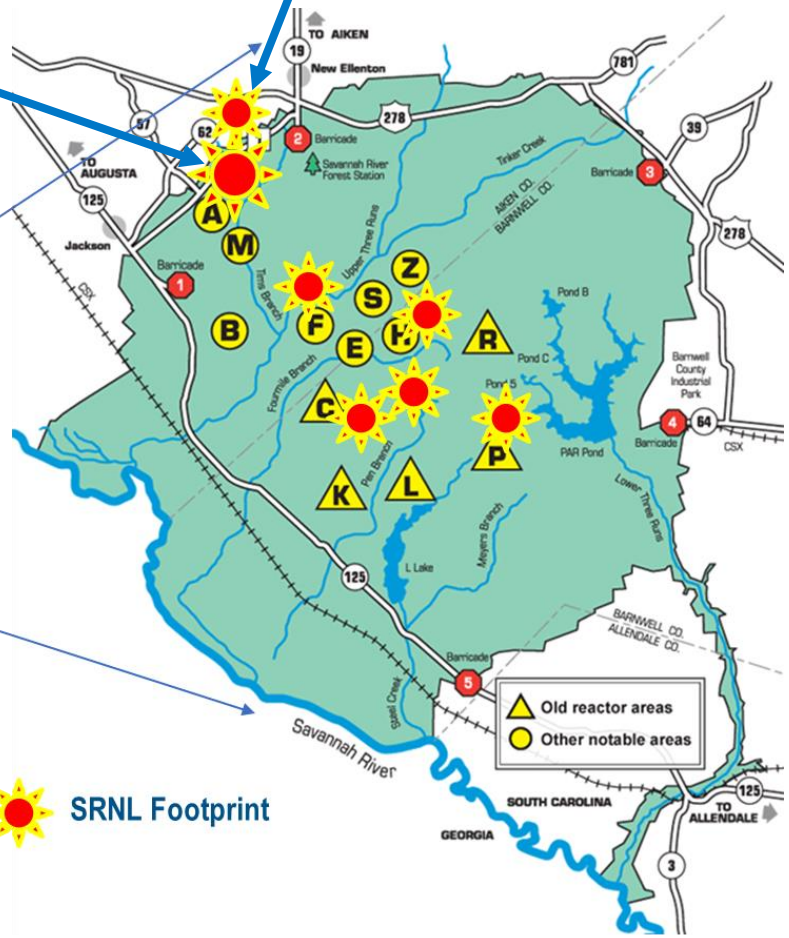




Job Shadow Day 2022

# Where We Are Located


*Aiken County Leased Facilities*




*Future- Advanced Manufacturing Collaborative at USC-Aiken*


*University Partner Collaboration*

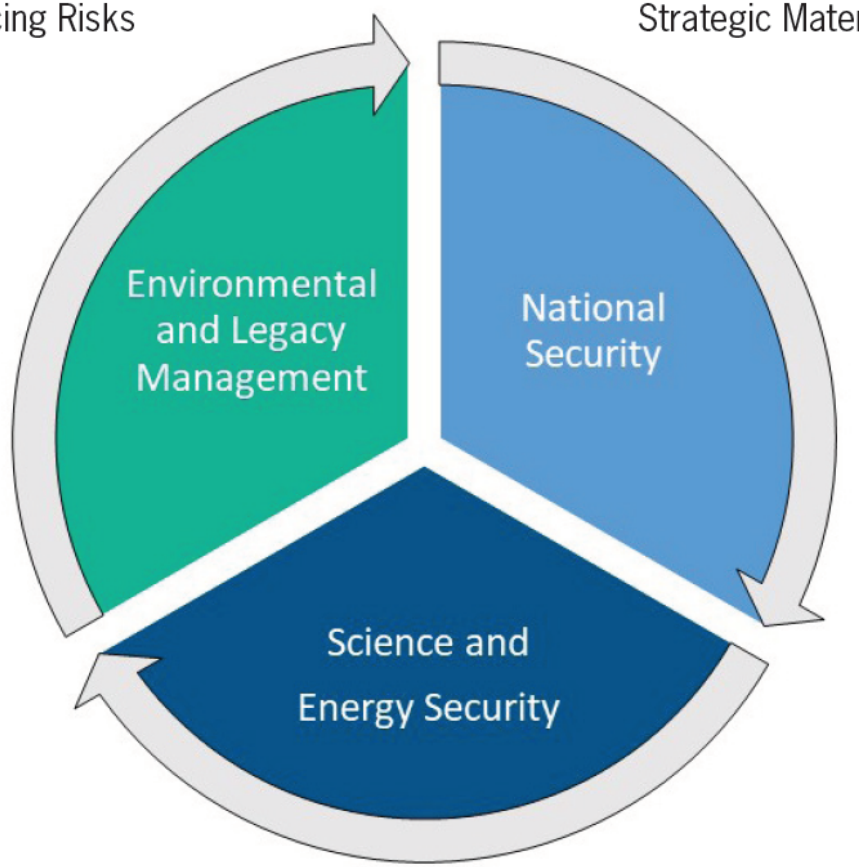

*Georgia Cybersecurity Center*

SRNL Footprint

# Our Vision is Focused on Three Mission Outcomes Enabled by a Workforce Development Initiative

# We Protect Our Nation by Applying Science to the Environment, Energy, National and Global Security Problems

## SRNL's Three Mission Areas and Seven Core Competencies Provide Solutions for DOE and Other Strategic Partners




Accelerating Remediation, Minimizing Waste and Reducing Risks

Assuring Production and Supply of Strategic Materials and Components

Enabling Next-generation Nuclear Materials Processing and Disposition

Sensing, Characterizing, Assessing, and Deterring Nuclear Proliferations

Creating Manufacturing Solutions for Environmental Management, National Nuclear Safety Administration, and Energy Security

Securing Connected Controls Systems and Associated Data

Engineering New Materials and Their Applications with Data-driven Modeling and Simulation

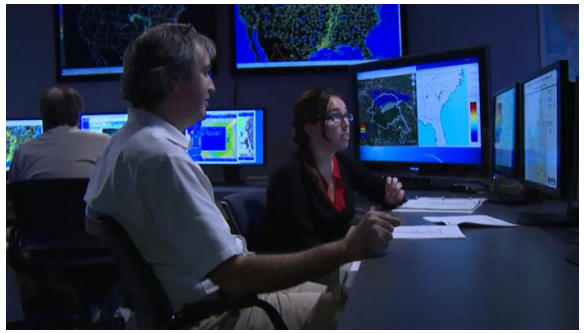
# Unique Capabilities

## Radiological Evidence Examination Facility

- Unique capability designed for forensic analysis of contaminated evidence
  - Traditional and nuclear forensics
- Full-scale training for contaminated evidence collection
- Post-blast investigative training
- FBI certified laboratory

## Atmospheric Data Stations and Modeling

- Atmospheric research, technology development, and operational support for the U.S. Department of Energy and other federal agencies
- Emergency response, international nuclear nonproliferation, climate change, and renewable energy



## Underground Counting Facility

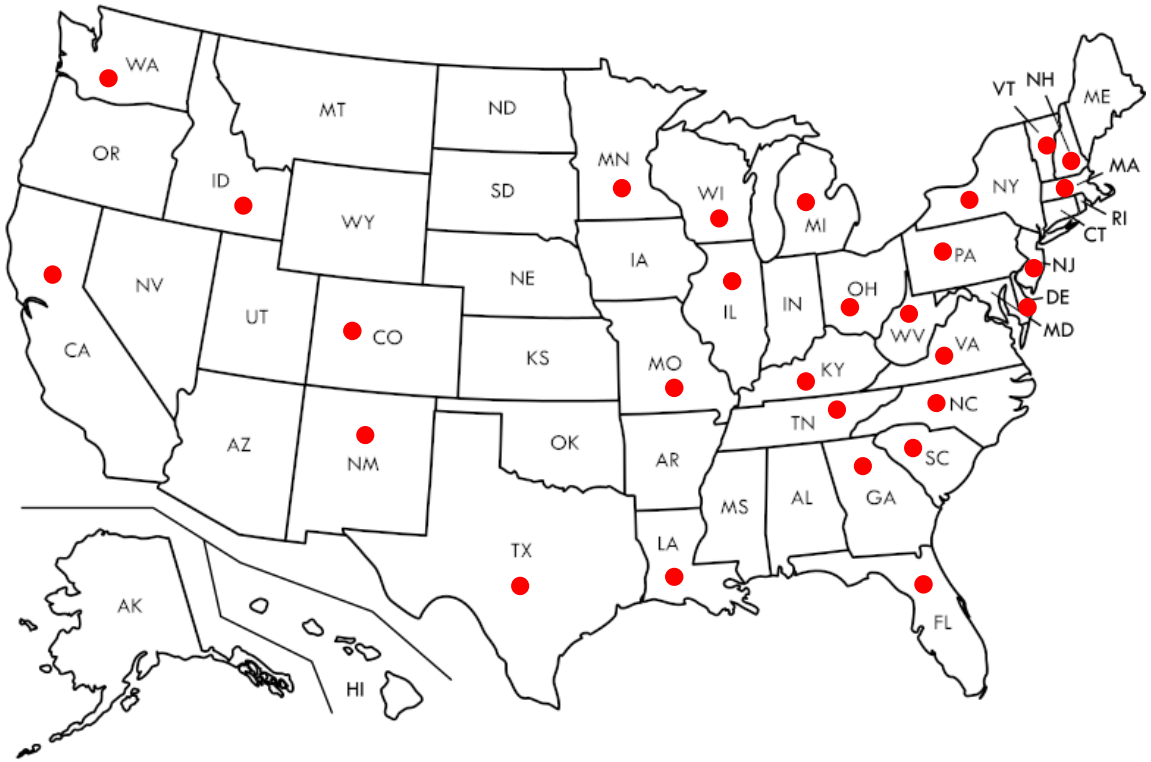
- Located 50 feet below ground level
- Has 4-inch-thick walls of pre-nuclear weapons era steel
- Highly sensitive measurements of ultra-low amounts of environmental radioactivity free from interference by background radiation
- Allows for low-noise nuclear measurements

## Shielded Cells

- Provides the ability to safely work with a wide variety of highly radioactive materials in support of nuclear technology development
- Sixteen 6x6-foot workstations, or cells, that feature exterior walls made of 3-foot-thick, high-density reinforced concrete with a 1/8-inch-thick stainless-steel liner

# SRNL as an Economic Engine

- ~$400M operating budget
- ~1100 Employees
- ~300 additional contract/support personnel
- Recent hiring data summary:
  - ~300 new hires over the past 26 months from multiple locations across the country
  - Increasing number of post doctoral researchers
  - Expanding intern/student program in conjunction with University partners
- Management of Minority Serving Institutions Partnership Program for DOE-EM
  - Recently expanded to include post doctoral researchers
- Construction of Advanced Manufacturing Collaborative will enable increased engagement with industry and academia to develop technology advances in support of DOE and NNSA missions




SRNL retirees predominantly stay in the area.