

# SRS HERITAGE FOUNDATION

NEWSLETTER

September, 2015

Preserving & Interpreting Savannah River Site History

## Visitors Enthusiastic About Preview Openings

*The Savannah* River Site Museum has begun opening its door to the public for a series of low-key previews. Major work remains to adapt the building for use as a museum; public access is limited to the first floor at this time because stairs to the second floor do not meet current building codes. Additionally, several exhibits are yet to be completed.

The Foundation has begun “soft openings” to observe the work in progress and learn about the Savannah River Site while construction is ongoing. These openings also help the Foundation evaluate potential changes to the building and exhibits and to develop training and procedures for assisting visitors. The visits are not publicized widely to prevent overcrowding during construction.

The first preview openings have been held Saturdays from 10:00AM to 2:30 PM to facilitate attendance by school-age children and enable staffing by volunteer docents. Fifty-nine visitors attended the first such meeting on July 18<sup>th</sup> and an additional 50 attended the second opening on August 15<sup>th</sup>. Visitors were uniformly enthusiastic about the new museum. Many expressed surprise at the range of Savannah River Site activities displayed including the use of SRS plutonium fuel in space exploration and the extent of SREL contributions to the science of ecology. Volunteer docents were congratulated for bringing the history of SRS to light after years of en-



forced secrecy. Suggestions from the previews also led to creation of a small science area for children and several modifications to Foundation record-keeping.

## Don't Miss

**ANOTHER  
PREVIEW  
OPENING WILL  
BE HELD FROM  
10:00 A.M. TO  
2:30 P.M. ON  
SATURDAY,  
SEPTEMBER  
12TH.**

This opening will be held with the final day of Aiken's Makin'. Plan to attend to see what the Foundation is doing to preserve the history of the Savannah River Site and to learn about our exciting plans for the future.





## Architectural Drawings Will Aid Building Renovations



Justin Swanson of Swanson, Brown and Associates has been contracted to develop digital architectural drawings of the SRS Museum. The only drawing in possession of Aiken County when the Foundation received the keys to the building was a single hand-drawn plan, dated 1952. Mr. Swanson has completed a computer-generated as-built plan of the building and is now adding proposed modifications, including the handicapped-accessible bathroom and the elevator/stairwell addition that will permit access to the second floor.

When the modification drawings are completed and the building elevation has been drawn, they will be reviewed with the City of Aiken Building Inspector before getting bids on individual projects. Having a complete set of computer-generated architectural drawings is expected to simplify and reduce the cost of the bid process.

## Museum Guides/Docents Needed

The Foundation needs volunteers who enjoy meeting people and are willing to work occasional shifts of 3-4 hours when the SRS Museum is opened to the public. Volunteers will work in teams of 3-4 on each shift when the building is open. Docent duties will include:

- Opening or closing the building
- Greeting guests
- Providing a brief description of the building and the Museum arrangement
- Responding to questions
- Answering the telephone

A name badge, a Guide for Docents and a brief training session will be provided. Experience at the Savannah River Site is valuable but not essential.

## SRS Timeline Exhibit Installed



The SRS Timeline Exhibit presents highlights of Site history from 1946 to 2015. The colorful exhibit measures 20 feet long by 8 feet high and occupies the entire north end of the Dibble building. The Timeline was designed by New South Associates of Stone Mountain, Georgia at no cost to the SRS Heritage Foundation. Parallax Digital Studios of Kennesaw, Georgia fabricated and installed the exhibit for \$4,771.70.

The two-person installation team arrived at the Museum July 15<sup>th</sup> and spent the entire day hanging the prefabricated aluminum framework and mounting the seven individual panels. The finished product is a handsome introduction to the Museum and the history of the Savannah River Site.



# Trailer Daze

*The following brief article is excerpted verbatim from a typed manuscript by Ann Casey Health, dated May 20, 1953 in the collection of the Aiken County Historical Museum.*

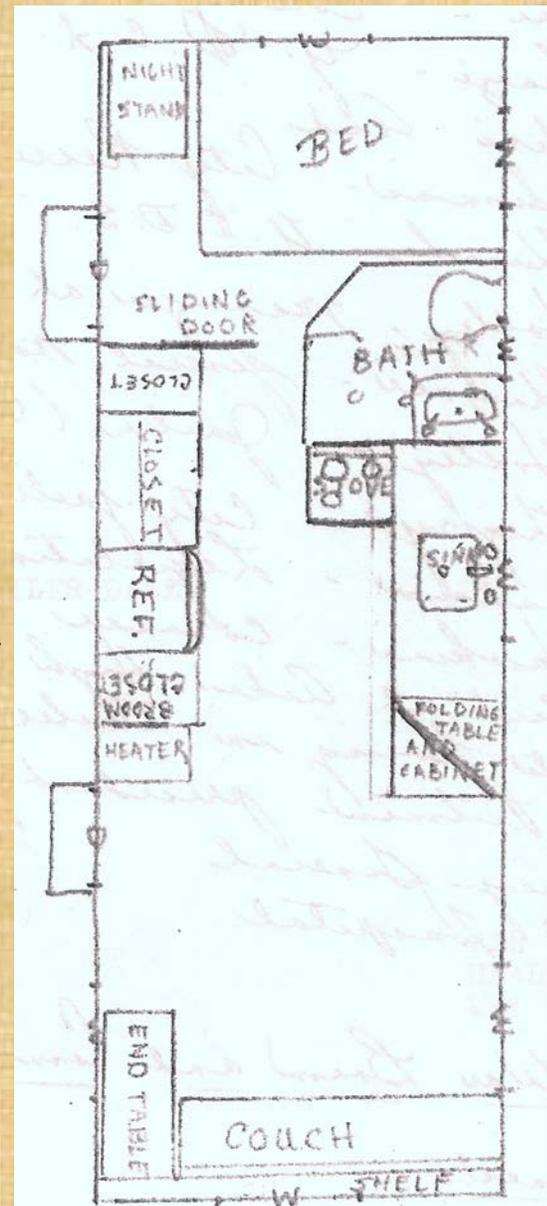
Robbins Trailer City, situated in Aiken County, rose out of a cotton field. It covers 20 acres of land, and is located approximately 3 miles from town (Aiken) and 12 miles to Savannah River Plant. By actually living in the city for 4 months, by associating with the parents, and by teaching their children in school, my into the problems of these people called "shoe box dwellers" were only heightened.

There are 1200 trailers, and at this time about 300 are vacant. On the standard basis of 4 and ½ persons per family, there are approximately 3,500 (people) living in Robbins Trailer City; 2,000 children with a group of 150 high school students. Two buses make a total of four trips to school each morning...two at 7:30 and two at 8:00.

The payroll from Robbins Trailer City weekly runs about \$118,750. The average pay is \$120 a week, not including the fact that about one-fourth of the women work in town as waitresses, beauticians, or clerks.

Here are some of the most important rules:

- Rent paid weekly and a week in advance. \$60 monthly. If not paid on time, warning slips are sent out. If warning not heeded, DuPont takes money from weekly check.
- A deposit fee of \$9.00 and a key deposit of \$1.00 is deposited before occupancy is granted.
- Ten miles per hour traveling speed (this, unfortunately is not enforced on the county road which is a thorough way and a dust and accident hazard
- \$100.00 fine for rifle shooting..



**Floor Plan of Trailers at Robbins Trailer City**

# SRS at Sixty

By Art Osborne

*The material contained in this article was taken from or quoted from a volume written by W. P. Bebbington in 1990 "History of DuPont At The Savannah River Plant"*

Recently the sixtieth anniversary of H Canyon operation was celebrated. The H Canyon is a vital national facility for the safe handling of nuclear materials and the management of current and legacy materials for our national defense. It also serves a critical role in the safe handling and disposition of legacy nuclear materials from around the world.

When you here the term: "Canyon"; many think of the Grand Canyon or some such similar place. The canyons at SRS are manmade and canyon describes them well.

The canyon concept was developed by DuPont engineers at the Hanford Reservation in support of the Manhattan Project during WWII. The concept is a long straight line of process steps that takes irradiated slugs, or perhaps spent nuclear fuel rods, in at one end and delivers adequately purified products at the other. This concept worked well at Hanford and was adopted at Savannah River. The first of the canyon's mission at SRS was to separate Plutonium and Uranium from other fissionable products used in the production process. The process worked well and the national defense needs were met and surpassed. With the end of the cold war , the missions have changed to those associated with down blending and safe handling of legacy materials. It is the only facility in the USA capable of doing the many important things that are accomplished.

Just what is a canyon? H Canyon is a 102 ft wide by 800 ft long four story building constructed with thick reinforced concrete. The thick interior and exterior walls and overheads were required for radiation protection and operation. The canyon is comprised of three interior canyons each one separated from the other by thick concrete. The two process canyons are separated by the central services canyon. The terms Hot Canyon and Warm Canyon designate the canyons based on level of radioactivity All operations are performed remotely by cranes. Even the initial equipment placement was all done remotely as a final operability test. Look carefully at the diagram

and you can see the main canyon components and purposes. Personnel can only work in the service canyon areas and sample aisles. Radiation protection, safety, and management is the top priority.

**(See Page 6 for H Canyon cross-section and Warm Canyon photo )**

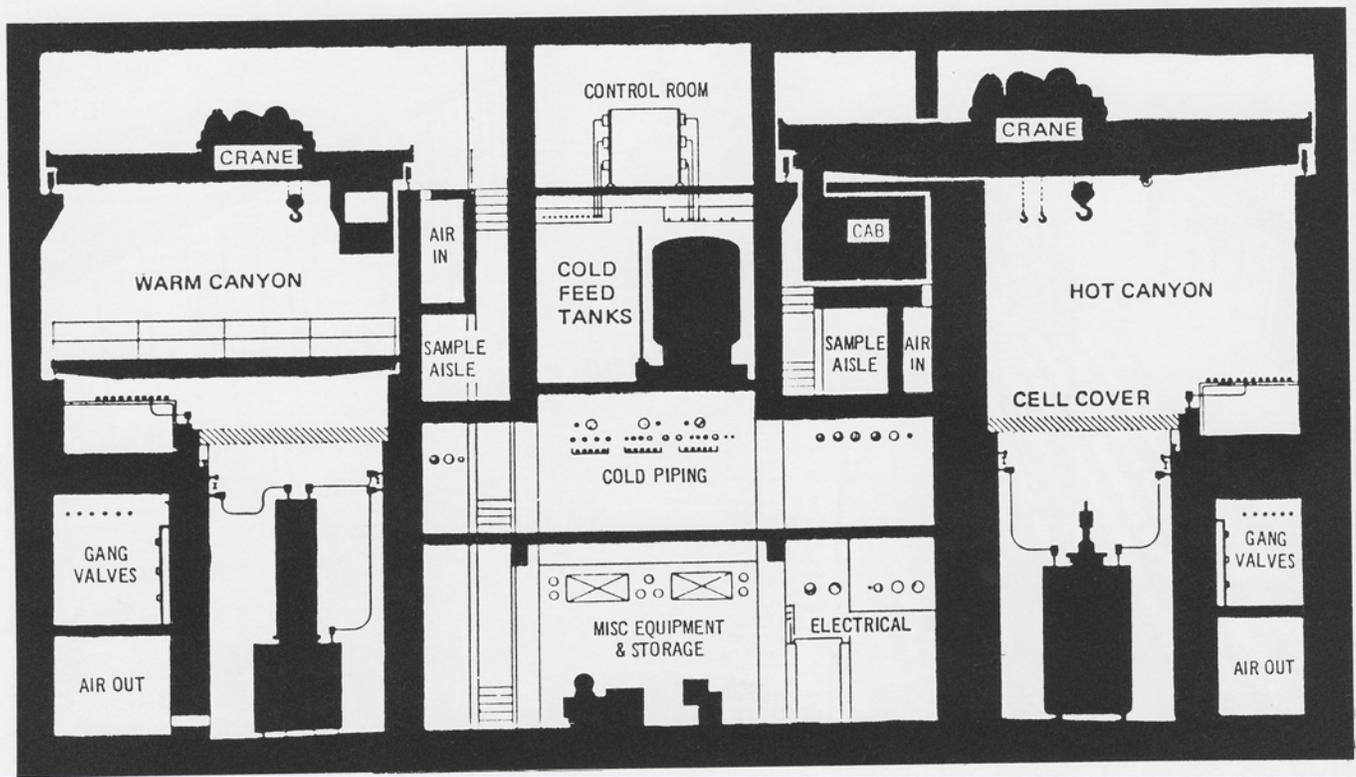
Bebbington describes the central service canyon:

- In the central corridors were: the control rooms,
- equipment for mixing the necessary non radioactive chemical reagents,
- the controls for introducing these reagents into the process equipment in the canyons,
- equipment for withdrawing samples of radioactive process solutions for analysis,
- the facility for producing pure Plutonium metal, and
- such necessary service facilities such as offices, change rooms, and shops, heating and ventilating equipment and air compressors.

The design, construction, process development and equipment of the H Canyon are an engineering marvel and reflect the efforts and contributions of the hundreds of personnel who made it possible. Additional information, photographs and mementos related to canyon design, construction and operation are available at the SRS Museum operated by the SRS Heritage Foundation. The W. P Bebbington book "History of DuPont at the Savannah River Plant" is available for purchase at the Museum.

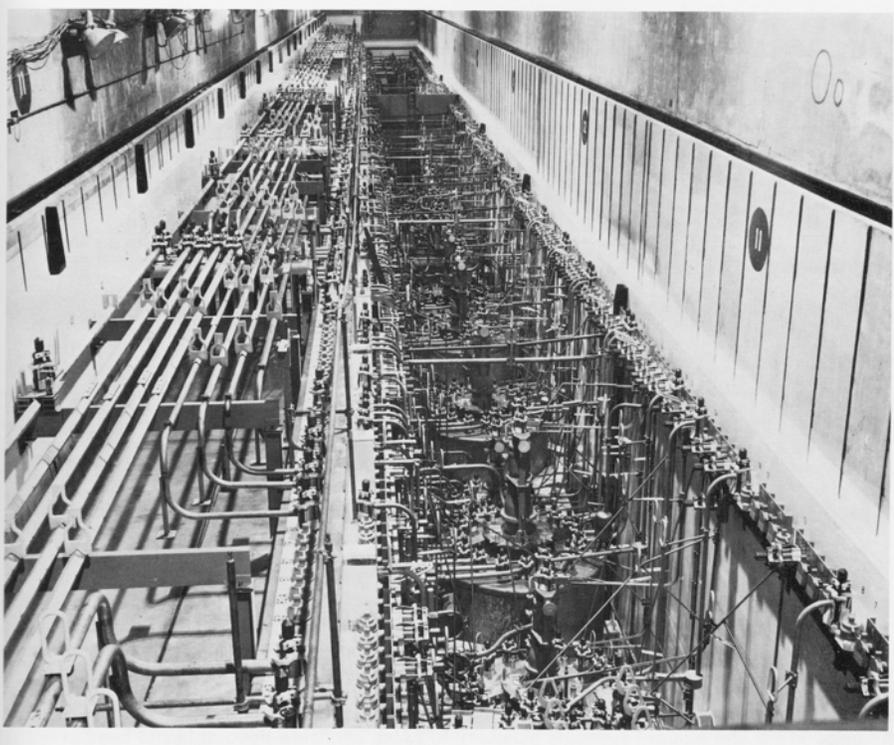
DOE-SR UPDATE—August 12, 2015

The H Canyon Facility at the Department of Energy's (DOE) Savannah River Site (SRS) recently celebrated 60 years of service to the United States; first in producing nuclear materials in support of our nation's defense weapons programs and later, after the Cold War, helping to disposition and stabilize nuclear materials and spent nuclear fuel from legacy cleanup, and both foreign and domestic research reactors.



**Cross Section of Canyon Building**

This building is about 120 feet wide by 800 feet long. Irradiated fuel enters the Hot Canyon, which has heavier shielding (thicker walls) than the Warm Canyon. The center section of the building is normally free from radioactivity and is used for offices, shops and services. Air enters that space and exhausts into the canyons and out from them through large sand filters to a stall stack.



**INTERIOR OF WARM CANYON**—On right of the photo are process vessels connected to permanent nozzles on the canyon walls by precisely fabricated and balanced “jumpers.” On the left is the pipe rack that carries solutions from one vessel to another along the canyon.

These, too, are connected to wall nozzles. All piping and the vessels themselves are installed and removed by the canyon crane. Many connectors and some of the lifting bails are visible, especially along the pipe rack.

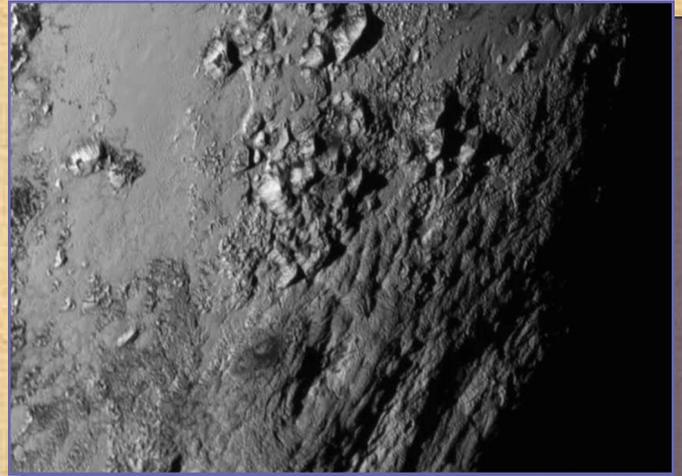
# SRS Plutonium Powers Pluto Visit

Plutonium-238 produced at the Savannah River Site powered the New Horizon spacecraft that photographed Pluto in July, 2015. The first-ever closeup photographs provide amazing images of the frozen planet at the outer edge of our solar system. The New Horizons mission, launched in 2006, is the last of many pioneering space explorations powered by Plutonium-238 produced at SRS.

Global Mosaic of Pluto



Icy Mountain on Pluto



NASA's New Horizons Flyby in July

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*A special thank you to the individual members for their continued support of the Foundation*

**JOIN THE SRS HERITAGE FOUNDATION  
TODAY!! WE NEED YOUR SUPPORT!**

**LIKE US ON FACEBOOK!** We will be posting news and tidbits during these exciting times of Foundation progress. The SRS Heritage Facebook page is open for business. Please join us at <http://www.facebook.com/srs.heritage>. And don't forget the news and archives at the website, <http://www.srsheritage.org/> or check out the [srsmuseum@aikencountysc.gov](mailto:srsmuseum@aikencountysc.gov)

**DON'T MISS OUT ON ALL THE GREAT NEWS AND EVENTS THAT ARE COMING....JOIN TODAY...(use this form to become a member)**



## SRS HERITAGE FOUNDATION MEMBERSHIP APPLICATION

*I would like to become a member of the SRS Heritage Foundation in the following level. (Please Check One)*

- |                          |                   |                          |
|--------------------------|-------------------|--------------------------|
| <i>Benefactor</i>        | <i>\$120.00</i>   | <input type="checkbox"/> |
| <i>Patron</i>            | <i>\$ 60.00</i>   | <input type="checkbox"/> |
| <i>Sustaining</i>        | <i>\$ 35.00</i>   | <input type="checkbox"/> |
| <i>Student</i>           | <i>\$ 15.00</i>   | <input type="checkbox"/> |
| <i>Small Business</i>    | <i>\$ 250.00</i>  | <input type="checkbox"/> |
| <i>Corporate Member</i>  | <i>\$1,000.00</i> | <input type="checkbox"/> |
| <i>Corporate Sponsor</i> | <i>\$5,000.00</i> | <input type="checkbox"/> |

*I would be willing to help with Publications\_\_\_\_, Membership\_\_\_\_,  
Fundraising\_\_\_\_, Publicity\_\_\_\_, other\_\_\_\_*

**This membership is valid through December 2016**

Name:
Address:
City, Zip Code:
Phone:
Email (s):
Fax #:

*My check, made out to the SRS Heritage Foundation, Inc. is enclosed. Contributions to the Foundation are tax exempt. Federal ID#20-1629370*

**Please mail to:**  
**SRS Heritage Foundation, Inc.**  
**P.O. Box 2226**  
**Aiken, SC 29802**

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**Phone: 803-648-1437**