A newsletter for employees and friends of the Y-12 National Security Complex.

JANUARY/FEBRUARY 2014

the Y-12 times

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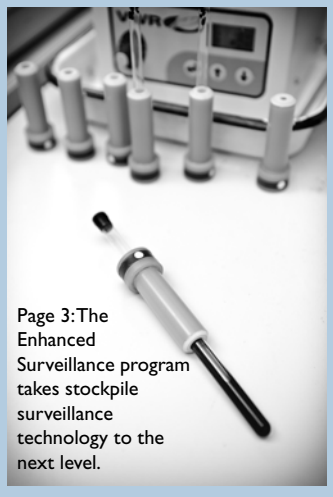


Page 3: The Enhanced Surveillance program takes stockpile surveillance technology to the next level.

Dave Richardson (center), B&W Y-12 president and general manager, gets the latest information about a production process.

Passing the baton

Taking on special assignments is part of most jobs, and it's something Chuck Spencer did when he accepted the role as B&W Y-12's president and general manager in August 2012. "What I thought would be a 3–6 month job turned into 18 months," Spencer said.

On Feb. 1, Dave Richardson assumed the role as president and general manager of B&W Y-12. "Dave has over 33 years of diverse nuclear operations and management experience and has done an outstanding job as our deputy general manager of Operations. I have full confidence in Dave, and I know Y-12 will flourish under his leadership. You'll really enjoy working with him," Spencer said.

When looking back over his tenure at Y-12, Spencer said he was "blessed with a number of things: our customer, the team, and union and community support. All helped me learn a great deal about Y-12."

One thing that won't change with Richardson at the helm is employee communications. In fact, he hopes to have more interaction with employees. "I'll continue to communicate with employees through YSource and e-mail and at our regular supervisors/managers meetings, but I'll also start brown-bag lunch conversations and small group discussions. We want to keep people informed and also get their feedback on ways to improve our operations," Richardson said.

Spencer says he is leaving Y-12 with a deeper understanding of the great work employees do. "I want to thank you all. I will continue to be involved in both Y-12 and Pantex [he will be on the Board of Managers]. I will truly miss all of you."

Held visits Y-12

"The real secret," Acting National Nuclear Security Administration's Administrator and Acting Undersecretary for Nuclear Security Bruce Held said, "is the worst day at Y-12 is better than the best day in Washington." The former CIA spy laughed as he addressed federal and contractor employees on his third visit to Y-12. Accompanying him on the Feb. 4 visit was Captain Geoffrey deBeauclair (Held's military aide) and Associate Principal Deputy Administrator Michael Lempke.

Held cont. on page 3

BUILDING UPF FOR Y-12

The process is working with UPF

Current headlines regarding the Uranium Processing Facility project may have created many questions, but UPF Project Director Carl Strock stresses that the primary question to be addressed is indeed one of affordability. "NNSA [the National Nuclear Security Administration] has a limited budget, and any big project consumes a large portion of that budget," he said.

There is no question regarding the need for UPF. The need to move operations out of Y-12's Building 9212 is indisputable. The question at hand, then, is how much of UPF can NNSA afford in the current budgetary environment.

The last estimate for the project of $4.2 to 6.5 billion was prepared 18 months ago. For reasons ranging from design changes to the mere passage of time, it's clear that the current scope will exceed that estimate. "While it's disappointing that the cost has increased, the process is working as designed," Strock said.

The process Strock is referencing is NNSA's commitment to achieve 90 percent design before starting construction. In part, it is the progress toward 90 percent design that prompted Acting NNSA Administrator Bruce Held to request a peer review (led by Thom Mason of Oak Ridge National Laboratory) to develop and recommend an alternative approach.

While Mason's team focuses on what is needed to maintain the capabilities currently housed in 9212, the project team is exploring how the facility may change in light of constrained cost. "We are proceeding, as directed, toward 90 percent design," Strock said. "However, given the environment, it is only responsible to undertake a parallel pursuit of more affordable alternatives."

Ultimately, Strock asserted, "There will be a UPF." The shape of that facility is what is to be determined in the months to come.

Carl Strock, Uranium Processing Facility Project Director

Continued safe nuclear operations at Y-12

From left: John Eschenberg, Steve Erhart, Bob Raines, Carl Strock, John Gertsen and Kevin Kimball testify before the Defense Nuclear Facilities Safety Board public hearing Dec. 10.

The Defense Nuclear Facilities Safety Board public hearing in Knoxville Dec. 10 was a who's who of names routinely connected to nuclear security: Bruce Held, the National Nuclear Security Administration's acting administrator; Steve Erhart, NNSA Production Office manager; Rory Rauch, a DNFSB site representative at Y-12; and John Eschenberg, UPF Federal Project director.

The hearing focused on the safety of operations in current facilities, integrating safety into the Uranium Processing Facility design, nuclear operations and oversight and emergency preparedness.

In his opening remarks, Held referenced his admiration for the late Admiral Hyman Rickover and noted Rickover's recognition that "(1) there can be no nuclear security without nuclear safety and (2) an uncompromising attitude toward nuclear safety will strengthen nuclear security, not weaken it." Held further acknowledged that the fragility of Y-12's aging facilities was well known, but asserted, "Our bottom line is that we will not operate unless it is safe to do so."

Rauch acknowledged that UPF is the planned, long-term solution; however, the decision to defer scope for buildings extends their operational lifetime 17 years from the initial planning estimates.

The site being proactive is a great benefit. Erhart said the proactive actions in reviewing the aging facilities and systems combined with the actions completed and planned will allow continued safe operations at Y-12 while UPF is being built.

Safety culture is tied to all. With regard to UPF, Eschenberg emphasized the importance of a safety culture that encourages early identification of issues. He also acknowledged that maintaining that culture is a leadership responsibility.

Held, cont. from page 1

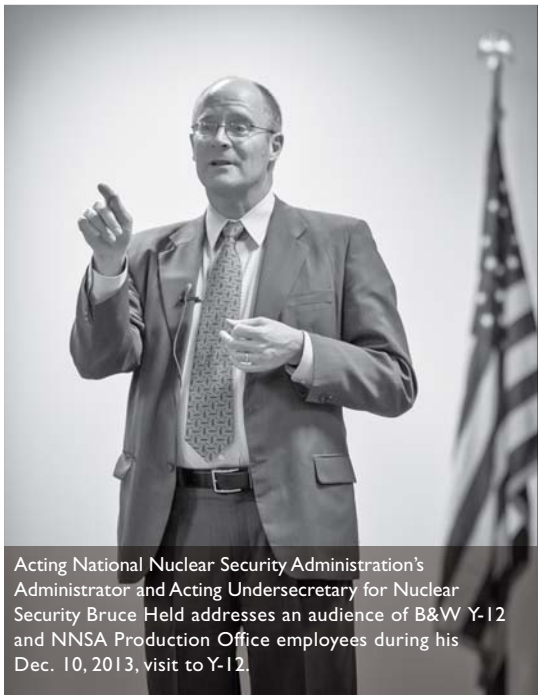
Held told the audience he enjoyed coming to Y-12 and said he admires "the history of this place and what you provide to our national security."

In fact, when Held addressed a recent uranium incident, he had nothing but high praise for the Y-12 security police officers. "The SPOs did exactly what they were supposed to do and really did a good job," he said. "There was never any threat to employee or public safety. But now, I need two things from you guys."

> "The SPOs did exactly what they were supposed to do and really did a good job."
>
> —Bruce Held, Acting NNSA Administrator and Acting Undersecretary for Nuclear Security

First, thank the SPOs for what they do in helping us meet our mission. Second, think of great ways to reduce incidents like these from occurring. Held said, "Humans will always make mistakes, but I need you all to help us improve our processes." Held reminded attendees that, as Admiral Hyman Rickover, the "Father of the Nuclear Navy," explained, you can't have nuclear security without nuclear safety.

"I owe you," he said in closing. "I will get you into a new facility by 2025. It [the Uranium Processing Facility] may not be what was first designed, but it will be a new facility" for Y-12's uranium work. (See related stories, pg. 2.)



Acting National Nuclear Security Administration's Administrator and Acting Undersecretary for Nuclear Security Bruce Held addresses an audience of B&W Y-12 and NNSA Production Office employees during his Dec. 10, 2013, visit to Y-12.

Taking a *CLOSER* look at enhanced surveillance

In the early 1990s, the end of the Cold War and the ban on underground nuclear testing set the stage for advancements in surveillance technology. Monitoring the condition of the U.S. stockpile to ensure a stable nuclear deterrent became an ever-present need. Using science-based research and development, surveillance testing determines how weapons in the active stockpile are aging and predicts reliability.

Core surveillance is an appraisal of the stockpile based on nondestructive evaluation, disassembly and inspection, and component testing of a statistical sampling of systems. This systematic vetting process begins with nondestructive evaluation of the unit, such as a visual inspection, leak test or radiograph. Afterward, the unit undergoes disassembly and inspection, which involves taking the unit apart in a controlled manner and recording observations of the condition of the internal components. During component testing, each part is then individually tested to detect anomalies.

Enhanced surveillance is the development of new or improved technologies using information garnered from core surveillance. "The Enhanced Surveillance program supports annual assessments of the weapon systems by analyzing the surveillance data to see if there are any trends. The information is then used to advance surveillance technology to improve the core surveillance evaluation process," said Pete McKenzie, program manager.

Enhanced Surveillance consists of research and diagnostic development activities. Researchers analyze data derived from core evaluations, observe component testing and perform experiments in collaboration with Los Alamos and Lawrence Livermore national laboratories to gain a more fundamental understanding of the material interactions.

The researchers are currently performing eight investigative studies and developing two diagnostic tools to improve data extraction methods. One study involves developing new experiments to determine how uranium corrosion starts. The two diagnostic tools being evaluated are a component test, which is one of several tests that collectively can determine the hydrogen balance in a system and therefore indicate potential problems, and a prototype nondestructive diagnostic, which detects gross to nanoscale gas leak rates in weapons.

"We are focusing on developing more surveillance technologies that perform at the same level of confidence yet are nondestructive and therefore, less expensive," McKenzie said.

Y-12 welcomes Indonesian visitors

Y-12, in support of the University of Tennessee's Institute for Nuclear Security, recently welcomed a group of professors from Indonesia's Universitas Gadjah Mada, the only university in Indonesia that offers a nuclear engineering program.

As part of a U.S. Department of State Nuclear Security Educator Study Tour, the professors toured U.S. universities and nuclear sites during a month-long visit, where they learned strategies and best practices to help them develop new nuclear security courses to implement in Indonesia.

Through the INS, the visitors were able to see facilities and hear from subject matter experts at Y-12, the University of Tennessee, Oak Ridge Associated Universities and the Oak Ridge National Laboratory. "At Y-12, we talked about the work we do to educate and prepare folks in and around nuclear facilities to keep materials secure. We also discussed the Global Threat Reduction Initiative Alarm Response Training we conduct for first responders," said Toby Williams, Global Security Analysis and Training manager.

The visitors also were briefed on Y-12's history, primary mission work and emerging nonproliferation and global security work.

"By teaming with the INS and participating in events like this, Y-12 can make significant contributions across the world in developing and supporting a strong nuclear culture," said Chris Robinson, Nuclear Materials Initiatives director.

Six Indonesian educators (seated) met with Y-12, UT's Institute for Nuclear Security, and ORNL experts to learn about Y-12's role in U.S. nuclear security.

This was the first of several planned interactions in which Y-12 will provide nuclear security expertise to foreign countries. Through the INS, Y-12 will work with the State Department for similar visits in the near future with Jordan, the United Arab Emirates and others.

Y-12's historian receives
2013 Muddy Boot Award

The next time you see Y-12 historian Ray Smith, ask him if you can see his Muddy Boot – award that is. In December, Smith became one of more than 70 people who have received the East Tennessee Economic Council award that honors individuals who have gone above the call of duty to make the community, the state of Tennessee and the nation a better place to live and work.

According to an ETEC news release, Smith's more than four decades of service to Y-12 "provides him a deep understanding and appreciation of the heritage of Y-12 and the Oak Ridge community."

Smith said, "Getting a Muddy Boot is a tremendous honor and being placed alongside others whom I greatly admire is humbling. Y-12 has a unique heritage, and I am proud to promote better understanding and appreciation for what the people at Y-12 have done in the past and continue to do to serve our nation."

Smith came to Y-12 from the U.S. Air Force (a Vietnam veteran). During his 43 years at Y-12, he has worked his way up through management. In 2005, he became the official Y-12 historian and joined the Public and Governmental Affairs organization.

Ray Smith (left) receives the Muddy Boot Award from Darrel Kohlhorst, a 2011 recipient and 2014 chair-elect of the East Tennessee Economic Council.
Photo courtesy of Lynn Freeny.

From tours of select facilities and a newly updated history center, to video productions and countless public appearances, Smith has educated people around the country about Oak Ridge through his passion and dedication to preserving history. He also has testified in front of congress in support of the Manhattan Project National Historical Park legislation.

A Giving Spirit

With the gift giving season passed, it's good to take a step back and see what all has been accomplished. A local charity was on the receiving end of a $75,000 check from B&W Y-12. The Emory Valley Center of Oak Ridge received a "big boost" to an ongoing capital campaign.

"The Emory Valley Center provides critical services to hundreds of people in our area and has for many, many years," said former B&W Y-12 President and General Manager Chuck Spencer at the check presentation. "All of us at B&W Y-12 are pleased to be able to continue our support, and we challenge others in the community to step up and help the Center reach its goal."

The money will go toward replacing the soon-to-be-vacated building and improving current facilities, specifically replacing the old Daniel Arthur Rehabilitation Center that houses many of Emory Valley Center's programs. EVC, a non-profit agency serving children and adults with disabilities, provides educational, employment and housing services for people across East Tennessee. In addition to financial support, Y-12 employees have volunteered to consult on the design of the new facility.

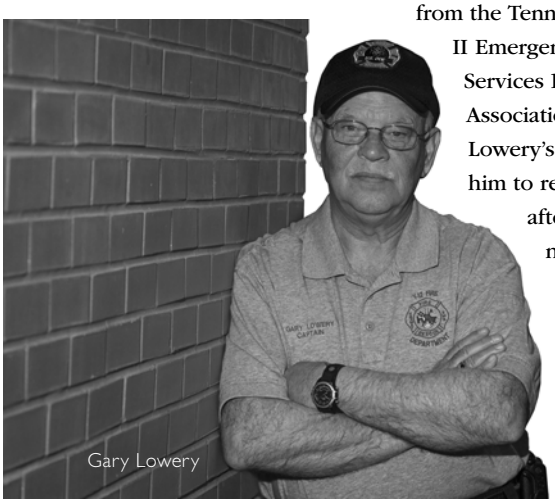
"This is a huge, huge help," EVC president Jennifer Enderson said. "Many of the clients at the (Emory Valley) Center, who have faced many obstacles and challenges in their lives, have outlived their parents and are dependent on Emory Valley Center for their total support."

Former President and General Manager Chuck Spencer (left) and Deputy General Manager of Projects Jim Haynes present Jennifer Enderson with the Emory Valley Center a $75,000 donation.

In addition to the corporate donation, EVC has previously received donations from the employee-led aluminum beverage cans initiative. By recycling ABCs, employees have raised $82,000 for 414 organizations since the program's inception in 2003 and is one of the many ways employees keep up the giving spirit year round.

Recognition for a lifetime of service

Imagine being described as an emergency services professional everyone would want on their side in an emergency. Kick that compliment up a notch: What if your son described you as that professional? That's what happened to Gary Lowery, a Y-12 fire captain and paramedic who recently received the Lifetime Achievement Award from the Tennessee Region II Emergency Medical Services Directors Association. A group of Lowery's peers selected him to receive the award after his son nominated him.



Gary Lowery

"He has gone above and beyond the call of duty, and has remained grounded and true to his craft," his son said in the nomination letter. "He has worked harder and longer, when many others were leaving, and he did it all while being a husband and the best father anyone could ask for."

Lowery began working at Y-12 in 1991 but transferred to the K-25 fire department in 1993. He returned to Y-12 in 1996 as a captain. In addition to his time with the Y-12 and K-25 fire departments, Lowery has served in EMS agencies as a paramedic for various counties and as a firefighter in local communities.

Brock Rains, Lowery's supervisor, has known Lowery since 1979. "I think Gary is a fine individual and has proven himself as a paramedic, and he provides great care for his patients, whether it be here at Y-12 or wherever he is treating a patient," Rains said.

For Y-12 personnel, Lowery's achievement means "they have a paramedic who cares for their outcomes in an emergency," Rains said.

Lowery was humbled by the honor and by the fact it was his son who nominated him.

"You always hope to be a person your children can look up to, and when I read the nomination it was very emotional for me. So many times I had to miss out on some very important things with him and my wife because of my duties to my profession, and he still did this."

Live Wiser in 2014

The LiveWise staff members are here to help you improve your health.

Make 2014 your year to get fit and put the various services offered by the LiveWise program to use.

"We want to help you start the year off right and get focused on your health," LiveWise dietitian Karen Lacey said. She and other members of LiveWise are enhancing the program thanks to comments received from their November survey.

Some of the additions cover healthy eating and exercise. "We're developing classes on meal planning, nutrition for athletes and healthy cooking," Lacey said. The latest LIFE Management session started in late January. This session focuses on starting over or starting from scratch with a plan to reach your health goals.

Survey participants wanted more group exercise classes, and additional classes have been added. Certified athletic trainer Kayla Kroeschen said, "You can sign up for classes on our Events page. We're also planning to add classes on weightlifting and preventing injuries."

A group of strong walkers and runners are using another LiveWise tool to train for an upcoming half-marathon or 5K.

"I know if you asked some of our previous participants, they would tell you they aren't runners," Lacey said. "But by joining our half-marathon training program or our Couch to 5K® program, they've become fast walkers or joggers."

No matter your fitness level, there's something for everyone at the LIFE Centers.

"We are here to help employees. If they've decided it's time to change, there's no better time than now," Kroeschen said.

Thankful... from the bottom of his heart

February is heart month and an important time to evaluate heart health and how to improve it. Heart month hits especially close to home for one Y-12 employee after his health scare this past summer.

June 19 seemed like a normal morning for Walter Baker, a plant designer. A routine call from his wife Suzanne was anything but normal.

"I immediately knew something was wrong," Suzanne said. "He was slurring his words and wasn't able to answer any questions, so I figured out pretty quickly that it was a stroke."

When he began not answering at all, Suzanne started franticly searching for phone numbers. After a few failed attempts, Suzanne got through to an office neighbor, Denise Wade. After the situation was explained, Denise made her way to Walter's office and found him unresponsive.

Denise enlisted the help of Walter's supervisor, Bob Sterling, and building manager, Molly Brewer, who called 911 and escorted emergency personnel in and out of the building.

As soon as a stroke was confirmed at the hospital, Walter was injected with a clot buster drug (tPa), or as the hospital staff referred to it "super Drano." Walter was home three days later with instructions on a new diet and a regular exercise routine. He had surgery a few months later to repair a hole in his heart, which was discovered while treating the stroke.

Walter has now returned to work with gratitude for all involved in his rescue.

"I'm forever thankful."
—Walter Baker

"I credit my wife for knowing me so well, realizing that something was wrong and doing everything in her power to get me help," Walter said. "I also credit Denise and the other people who acted so swiftly to get me the emergency medical help I needed. I'm forever thankful."

If you want to evaluate your heart health or commit to making a life change, contact a member of the LiveWise staff (574.6670).

JANUARY

47 years

Chief Financial Officer Division: **James W. Cox**
Quality Assurance: **John B. Stephens**

45 years

Production: **Carl H. Linginfelter**

43 years

Facilities, Infrastructure and Services: **Ernest E. Johnson** and **Darrell L. Justice**
Production: **Earl D. Dagley**

40 years

Chief Financial Officer Division: **Sharon S. Eason**
Human Resources: **Pamela L. Williamson**

35 years

Business Services and Performance Assurance: **Carol A. Trentham**
Facilities, Infrastructure and Services: **Diann T. Johnson**
Production: **Emmett W. Wade**
Quality Assurance: **David M. Williams**
Safeguards, Security and Emergency Services: **Willard L. Lawson**

30 years

Business Services and Performance Assurance: **Steven W. King**
Facilities, Infrastructure and Services: **Ronald M. Clark** and **Jon T. Foust**
Production: **Alvin D. Cofer** and **Judy A. Cagle**
Projects: **Walter W. Henderson**
Safeguards, Security and Emergency Services: **William D. Beard**

25 years

Environment, Safety and Health: **David E. Somers** and **Carole A. Steelman**
Facilities, Infrastructure and Services: **James F. Stoetzel**
Legal: **Celissa G. Hayes**
Safeguards, Security and Emergency Services: **Harold S. Hackler**

20 years

Facilities, Infrastructure and Services: **Peggy M. Jivelekas**
Production: **David P. Harvey**
Quality Assurance: **Celina A. Forester**

FEBRUARY

44 years

Production: **Neal A. Hill**
Quality Assurance: **Cheryl Y. Ellis**

43 years

Facilities, Infrastructure and Services: **Samuel Carmichael, James M. Fowler** and **Wylie C. King**

42 years

Engineering: **Larry M. Greene**

35 years

Business Services and Performance Assurance: **Robert M. Rees**
Engineering: **Kathy M. Bracic** and **Abie M. Golshani**
Projects: **Candace G. Slagle**
Quality Assurance: **Warner D. Shipley Jr.**
Safeguards, Security and Emergency Services: **Patricia B. Lowe**

30 years

Business Services and Performance Assurance: **Peggy J. Campbell, Karen A. Ryan** and **Anne E. Shanks**
Chief Financial Officer Division: **Beverly T. Gibson**
Environment, Safety and Health: **William A. Sliski**
Ethics and Internal Audit: **James E. White**
Production: **Mitzi A. Barnett** and **Sharon G. Bays**
Program Management: **James L. Bell** and **Gail M. Johnson**
Safeguards, Security and Emergency Services: **Jesse M. Moore**

25 years

Business Services and Performance Assurance: **Lisa J. Xiques**
Facilities, Infrastructure and Services: **Robert A. Jago, Jr., David L. Stone** and **Gregory S. Ward**
Production: **Gregory S. Tye** and **Charles E. Tyson**
Productivity: **David E. Beck**
Safeguards, Security and Emergency Services: **Tony M. Charles** and **William G. Leffew**

20 years

Business Services and Performance Assurance: **Kathy M. Fahey**
Production: **Andrew S. Baker**

- Before you finalize your presentation, make sure you've checked the Y-12 Styles and Standards website and downloaded the latest Y-12 presentation template. The revised presentation template should be used for both internal and external meetings. The updated style incorporates the company's branding standards and is accepted by B&W Y-12 and National Nuclear Security Administration Production Office management. Be sure to bookmark the Styles and Standards site and check back often as company changes affect our business communications.
- When inclement weather occurs, snow routes provide safe roads and walkways for workers. Signs indicating Y-12 snow routes have been posted throughout the site. When needed, announcements will come from the Plant Shift Superintendent's Office to indicate required use of snow routes. Please review the snow route map, and always obey the signs, which indicate the safest route to travel.
- B&W Y-12 will be transitioning the payment of monthly employees to the last business day of the calendar month based on accounting rules. The transition will occur in March 2014 with a payment date of March 31. Subsequent month paydays will be April 30, May 30, etc. For more information, contact Brenda McDuffie at 576.2122 or Kevin Bryant at 576.0042.
- If you have part-time work outside of Y-12, please refer to Y16-018, Outside Employment. Remember some outside activities can create conflicts for you and the company. It is important to minimize this conflict, or avoid it altogether. If you have questions, please contact the Y-12 Ethics Office (Jim Nobles, 574.4199, or Tracy Nelson, 241.5855).
- Employees throughout the site were decked out in red Feb. 6 in recognition of the American Heart Association's Wear Red Day. While the day was recognized by the AHA on Feb. 7, Y-12's LiveWise staff wanted to bring red on-site. "Most employees do not work on Fridays, but that didn't stop us from recognizing the importance of heart health," LiveWise's Kayla Kroeschen said. "According to the AHA, heart disease claims more lives than all forms of cancer combined." Y-12 employees have supported Wear Red Day for more than four years.
- More than 350 DVD movies and some 360 teddy bears were collected by Y-12 employees in December for patients at East Tennessee Children's Hospital in Knoxville. The DVDs were collected as part of the "DVDs for Joy" campaign, which is the brainchild of KelliAnn Corbett, daughter of B&W Y-12's Kevin Corbett. KelliAnn and her sisters invited Y-12ers to join them this year. At the suggestion of John Buck of Communications Services, the Y-12 Employees' Society launched the teddy bear collection at the site. Bears are given to patients during their hospital stay, eventually going home with them.

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This team of employees stopped work and asked questions when something didn't appear right. They exemplify Y-12's solid nuclear safety culture.

Nuclear Safety Culture: A solid foundation

It's no surprise that the responses of the more than 3,100 employees who completed the nuclear safety culture survey in November indicate that employees are willing to report safety issues to supervision.

"Our survey results show the Y-12 safety culture has a solid foundation based on personal accountability and a questioning attitude. These were the highest scoring traits in the survey," Nuclear Safety Culture Program Manager Paul Wasilko said.

Jim Haynes, senior vice president and deputy general manager for Projects and Programs, said, "Participants indicated a high degree of trust in their supervisors and that they were treated with respect. They indicated they are willing to report mistakes and safety issues to their supervisors, and they generally did not perceive retaliation for reporting safety concerns."

Wasilko added, "The aging facilities and funding shortfalls are dynamics that impact our ability to resolve safety issues in a timely manner and may have a negative impact on the safety culture perceptions of some workers."

In the coming weeks, employees can expect to learn the details of the survey. "The report will be distributed and made available on the Nuclear Safety Culture website. Also, employee team leads will receive a presentation to review with their teams," Wasilko said.

Once the results are communicated to all employees, an action plan that will build on the strengths identified in the survey will be developed by the members of our Nuclear Safety Culture Monitoring Panel. The panel will then develop strategies to improve areas needing attention.