

# the Y-12 times

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

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NNSA Administrator Tom D'Agostino (left) talks with Y-12 Site Office Manager Ted Sherry (center) and Steve Little, B&W Y-12's vice president of Facilities, Infrastructure and Services.

## NNSA Administrator D'Agostino visits Y-12 'One of the most important national security sites in the nation'

National Nuclear Security Administration Administrator Tom D'Agostino visited Y-12 Feb. 3-4 as the first stop on a series of trips around the enterprise.

He told employees during an all-hands meeting that he came to see the work they are doing; hear from them and thank them for their work; and let them know there is a well-defined mission that has been confirmed by the Nuclear Posture Review.

"I wanted to start at Y-12 because it epitomizes the shift from a Cold War-era nuclear weapons complex to a 21st century nuclear security enterprise," said D'Agostino. "I've used this term before, but Y-12 really is the 'poster child' for transformation."

D'Agostino remarked on Y-12's unique position in the changing enterprise. "People that work with HEU (highly enriched uranium) are special people, and people that work with people who work with HEU are special people," he said. "You are part of an integrated contractor/federal team that is making the world safer."

He discussed President Obama's commitment to spend \$85 billion during the next decade to modernize nuclear weapons sites. That funding includes design and construction of the Uranium Processing Facility at Y-12.

"This is the first time in my many years in this business that I've seen such broad consensus on the role we play in our nation's security," D'Agostino said. "I've never seen a White House so supportive of NNSA. We're really in a good spot."

But that doesn't mean folks should sit back and be complacent. "We've got to prove we are responsible stewards of the taxpayer dollars," he said. One Y-12 practice that particularly impressed D'Agostino was the 7S program, which has improved productivity sitewide.

D'Agostino also fielded questions from employees.

Cont'd on page 2, NNSA



“I don’t get to hear directly from people when I’m in Washington,” he said. “That’s why it’s very important for me to get to the sites and talk to people in their own environment and hear their concerns.”

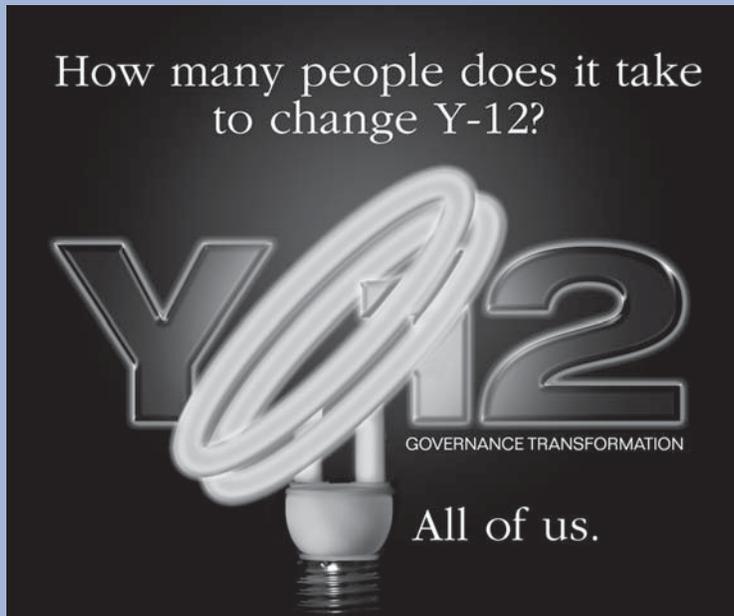
Answering a question regarding the proposed merger of the Y-12 and Pantex contracts, he said NNSA is “not looking to drive people out of jobs” but is trying to increase productivity at both sites, which means resulting resources can be reinvested in much-needed projects.

When discussing Y-12’s role in the recently ratified START treaty, D’Agostino said that not only could it provide dismantlement work for the site, but it provides access and transparency to what’s going on in Russia, which adds to global stability.

“START provides the political environment to invest in infrastructure and the stockpile, which directly links to UPF,” he said. “UPF will not only help us dismantle components, but it also will provide nonproliferation work. It’s not just about weapons—it’s about national security.”

NNSA Administrator Tom D’Agostino (left) and B&W Y-12 President and General Manager Darrel Kohlhorst dress out in personal protective equipment to enter a production facility at Y-12 during the administrator’s visit Feb. 3–4.

## A new kind of reality check



As part of the Governance Transformation effort, the Y-12 Site Office recently revised the Assessment Planning and Scheduling Procedure, incorporating requirements from National Nuclear Security Administration headquarters. Now, rather than the contractor, YSO and NNSA Headquarters each doing process assessments, all three can simultaneously assess the same activity. Elizabeth Hale, YSO, said,

“This will save time, reduce cost and be a more efficient use of resources. With all stakeholders together, we also have the potential to resolve issues more quickly.” The revised approach allows better utilization of federal staff, who can be reallocated to other oversight activities.

Another Governance Transformation task is in the works as YSO and B&W Y-12 review Contractor Requirement Documents, or CRDs. The Joint Operating Requirements Review Board will analyze Y-12’s governing directives to identify requirements necessary to conduct the Y-12 mission with rigor appropriate to the risks.

Y-12 has the advantage of learning from other NNSA sites that were on an earlier track to roll out Governance Transformation. Sandia National Laboratories began implementing Governance Transformation two years ago. Sandia’s Chuck Meyers said, “The greatest local benefit realized from analyzing the CRDs was that we got the site office and contractor subject-matter experts and managers in the same room. Both sides soon realized they only had a shallow understanding of what it took to get the other’s job done.”

Governance Transformation at Y-12 also will require a shift in individual behavior. Hale stresses that trust, at all levels, will be key. “We must build respect and partnership between the YSO staff and the contractor work force so we can openly discuss risk, rigor and cost.”

# Rapid Improvement Event: creating workflows that work

The Productivity Improvement organization has a powerful new approach for work teams to identify and eliminate wasteful, non-value-added activities. This approach, called a Rapid Improvement Event, was derived from the Kaizen Blitz—a term used in quality improvement to describe a focused, intense, short-term initiative to improve a process.

As the name implies, the RIE focuses on rapid operational improvement in a specific work area by applying Lean tools and techniques. “An RIE is an excellent tool for groups that have a high level of commitment to improve and are ready to try new approaches,” said Abe Mathews, Productivity Improvement.

An RIE is typically a one-week event. Teams may have six to 12 members, including a Productivity Black Belt who facilitates the RIE and guides the team through the process. According to Black Belt

Richard Young, “The Black Belt’s knowledge of Lean concepts and the team’s knowledge of the process mean solutions will be developed, implemented and sustained.”

In the last 14 months, nine RIEs have been conducted in organizations from Occupational Health Services to Production, Engineering and Waste Management. One of the most recent RIEs involved the Building 9212 Pack and Ship group. Cheryl Henderson, from Production, and a team of Pack and Ship operators and engineers immediately took ownership of the RIE, and that involvement is credited for the RIE’s success. “The result was a 40-percent reduction in movement between the two workstations,” said Kathy Martin, Production. “This improvement not only increased productivity, it improved the work environment for employees.”

## New access-control system enhances efficiency

Thanks to the recently activated Identity Verification System, or IVS, accessing high-security areas at Y-12 has become much more efficient. Personnel accessing these security areas must abide by a two-person rule, which requires alarm system operators to verify the identity of two authorized personnel before disarming the security area.

With the previous system, requests were handled sequentially, which led to delays during peak operations. “The new system uses a Web interface that allows access requests to be received simultaneously, providing a much more efficient means for requesting and approving access,” said Matt Manrod, IVS program manager.

The solution was both innovative and cost-effective. “We used existing on-site technology to create a new system. The implementation cost was minimal because we didn’t have to buy anything special,” said Manrod. The only hardware procurement for the system was two touch-screen monitors for the operators. The fact that the system runs on the unclassified network and is accessible from any desktop through a Web-based interface also decreased implementation costs.

Mike Lowe, Security Systems Engineering director, praises the process that yielded this solution. “The spiral development of this



Small team scores big efficiencies. Front row from left: Courtney Coker, Julie Hill, Mike Lowe and Brenda Towe. Back row: Ray Buck, Matt Manrod, Danny Gunter and David Clift. Not pictured: Scott Breeden. Coker, Hill and Gunter are with WSI Oak Ridge. Towe and Clift are with Science Applications International Corporation. Buck is with the Y-12 Site Office, and Lowe, Manrod and Breeden are B&W Y-12 employees.

project, from a biometric solution prototype created with plant-directed research and development funds through technology evaluation that identified the cost-effective solution that met security requirements, was both creative and innovative. The partnership among Safeguards and Security, Production, Information Technology (including Cyber Security), PDRD and the Y-12 Site Office was invaluable in creating a workable solution,” said Lowe.

# Downsizing

## A change in behavior



Celebrating a one-year weight-loss anniversary are (front row from left): Sandy Honeycutt, Elaine Warren, Amy Alley, Sue Clevenger, Anna Lisa Conover and Steve Little. Back row from left: Lisa Harris, Laverta Hardin and Teri Spradlen.

It's not every day co-workers can say they have reached a personal milestone together, but that is one thing a group of Y-12 employees have done. Together, they have lost about 400 pounds in a year thanks to their dedication and participation in the LiveWise weight management programs.

The programs (originally Weight Watchers and LA Weight Loss; now Weight Watchers and LIFE Management) began in February 2010. Employees who have been invested since the beginning attribute their success to changing their behavior.

"It is a personal choice. Once your mind is made up, you can do it. A made-up mind is unstoppable," said Laverta Hardin of Production. "I really enjoy it when someone asks me what did I do to lose all this weight, or they say, 'I want to do what you are doing,'" said Hardin, smiling.

Anna Lisa Conover of Public and Governmental Affairs said, "What I've learned and what I continue to learn makes the effort worthwhile. I feel I'm creating a sustainable lifestyle change that will help me throughout my life."

Elaine Warren of Communications Services added, "The whole network of support is the key—you are not alone and help is available anytime you ask the LiveWise staff. I am very thankful to have this program available on-site."

Why should you participate? Communications Services' Lisa Harris summed it up: "It will change your way of thinking and your way of life."

## Roland is a class act



David Roland, standing in front of the new high school at KCS, can be found working at the school nearly every weekend.

When David Roland retired in September 2008, he had plans to build a sailboat, but as he put it, "I ended up building an ark instead."

A few months after retirement, Roland was asked to serve on the board of directors for a place that had always been dear to his heart, Knoxville Christian School.

KCS, which relies fully on private funds, had secured a loan and just broken ground on a new high school, but it was around that time when the economy went south. To keep things moving, Roland volunteered to coordinate the construction at the school and also served a stint as interim principal.

"As a result of our fundraising, advertising, tight adherence to a lean budget and teamwork, we pulled the school back from the brink of economic collapse and meanwhile doubled our student population," Roland said.

Last February, Roland returned to Y-12 as a subcontractor, which allowed him to give more than his time to KCS. "Aside from the wonderful people I work with, this job provides me with discretionary income that I can use to support the school," Roland said.

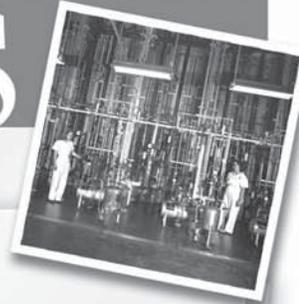
Even though the high school is now built, and students are well into their third semester there, "everywhere I look I see what else needs to be done," he said. That may be why you can still find him at KCS nearly every weekend.

As for that sailboat Roland set out to build, "I'll get it done," he said. "There is a lot to be done at the school first, but I'll be sailing before too long."

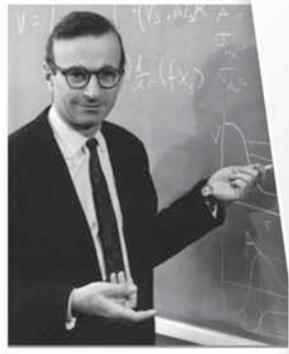


# Y-12 THROUGH THE DECADES

## the 1950s



### INTERNAL MEMORANDUM



Early Y-12 scientist Alex Zucker

In the midst of Y-12 building up a uranium machining capability, a request was received to separate hafnium from zirconium to produce pure zirconium. This special material was needed to serve as cladding for nuclear fuel destined to go into the first nuclear submarine and ultimately all of the nuclear Navy. Building 9211 was used to build the process and perform this work in 1950. Within a year, sufficient pure zirconium was available. Diverse missions were already the rule at Y-12.

In 1951, Alex Zucker, then a young Ph.D., was among the many people coming to work at Y-12 who felt they were very lucky to be able to conduct some of the world's first experiments relative to nuclear explosions. These scientists eventually were grouped with the Graphite Reactor developers who formed Oak Ridge National Laboratory.

However, some scientists remained to form the Development organization and conducted extensive research and development for weapons manufacturing at Y-12. Every production process at Y-12 began with a development team, and often they continued to function right along with the production folks to keep the processes going.

Early in Y-12's history, there were some exciting experiments conducted. One such experiment determined if it was safe to explode a thermonuclear device without fear of destroying the entire world.

The decision had been made and announced by President Truman on Jan. 31, 1950, that the U.S. was going to develop the hydrogen bomb. Scientists feared the possibility that a bomb might be built that would literally destroy the earth's atmosphere.

Young Zucker, in his first job right out of college, inserted a 22-inch cyclotron into one of the magnetic gaps of the beta calutrons and later installed an even larger cyclotron with a triply charged nitrogen source. His goal was to determine if the very hot hydrogen bombs could heat up the atmosphere to a temperature that would ignite the earth's entire atmosphere through the reaction of a hydrogen bomb explosion and the nitrogen in the earth's atmosphere.

In spring 1951, Zucker conducted a new and most challenging experiment. He measured the cross section for the reaction in the cyclotron and concluded that it was too small to make atmospheric ignition a credible threat, so the hydrogen bomb could be used without fear of destroying the earth's atmosphere.

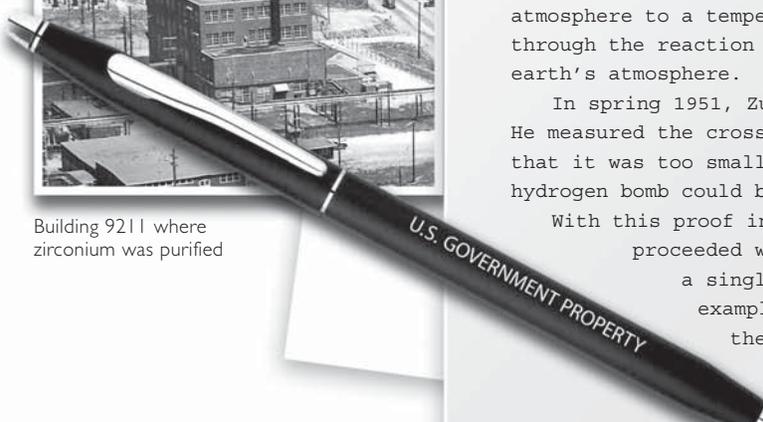
With this proof in hand, the designers of the thermonuclear weapons proceeded with assurance that the world would not be destroyed by a single nuclear blast. Zucker's experiment is yet another example where Y-12 accomplished a challenging task for the benefit of our nation.



The calutrons in Beta 3 where Alex Zucker conducted his first experiments at Y-12



Building 9211 where zirconium was purified



# Around Y-12 ...

- During a recent visit to the Y-12 National Security Complex, **Air Force Gen. Robert Kehler extended a personal thank-you from himself and from the U.S. Senate**, which unanimously confirmed Kehler as the U.S. Strategic Command commander in December. Kehler told workers that members of Congress asked him to visit the nation's nuclear complex to see for himself the work done to maintain and protect the nation's arsenal and to pass along their personal thanks for all that the workers do for the nation. "Not many of us ever will meet a four-star general, and very few will ever get his direct words of praise as civilians," said Bron Johnston, manager of the Assembly/Quality Evaluation Production organization, who said the general's gesture made a huge impression on Y-12 employees.
- **Two Y-12 employees have been recognized for their contributions to the National Nuclear Security Administration's Defense Programs.** Glenn Morris from the Y-12 Site Office and Dan Tracy of B&W Y-12's Production Controls and Scheduling organization have been named NNSA DP Employees of the Quarter. Morris, who serves as the lead operations engineer for the site office, is recognized for coordinating activities required to implement DOE O 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*, and DOE-STD-3006-2010, *Planning and Conducting Readiness Reviews*. Tracy helps ensure all DP's production work at Y-12 is accomplished on time and in accordance with exacting program requirements.
- **B&W Y-12 contributed \$25,000 to Oak Ridge Schools "Measuring and Assessing What Matters" campaign.** B&W Y-12 President and General Manager Darrel Kohlhorst presented the contribution to Thom Mason, Oak Ridge Public Schools Education Foundation board chairman and Oak Ridge National Laboratory director, at the Jan. 28 East Tennessee Economic Council meeting. The campaign is raising funds to purchase a data management program that will help Oak Ridge Schools measure and assess student achievement levels as the system works to meet higher academic standards introduced by the Tennessee Diploma Project. The data management software program will generate "real time" data for teachers and school administrators from a wide range of performance indicators. "The quality of public education has a direct effect on our ability to sustain a skilled technical and scientific work force," Kohlhorst said.
- **Debbie Reed of Strategic Program Development has been appointed to the newly created role of University of Tennessee Liaison Director.** In that position, she will develop new partnerships between the Y-12 National Security Complex and UT. "We want to strengthen our relationship with UT and look for further opportunities to collaborate," she said. Recently, Y-12 began collaborating with the UT Baker Center for Public Policy to create a joint program on nuclear security policy, and Y-12 provides manufacturing-related expertise to regional businesses in the state of Tennessee via the UT Center for Industrial Services.
- **The National Nuclear Security Administration announced Feb. 3 the completion of a transfer of excess material handling equipment that reportedly helped save taxpayers up to \$8 million.** The equipment, purchased by Y-12 in the 1980s, was deemed surplus before it was placed into service and was awaiting disposition. The U.S. Department of Defense's Rock Island Arsenal facility in Illinois now has the equipment and will use it in support of research, development and production activities.
- **The Atomic Trades and Labor Council and B&W Y-12 kicked off this year's combined March of Dimes campaign Feb. 3** for Anderson, Roane and Loudon counties by hosting a luncheon at Y-12's New Hope Center. B&W Y-12 presented a \$20,000 contribution check to MOD representatives as B&W Y-12's and the ATLC's commitment to the organization. "We want to change the statistics in East Tennessee for the better so that nobody has to endure the trauma of a child born too early," said ATLC President Steve Jones. "No child deserves to face these problems when a cure can be found."
- **Dr. Otis Cosby, Y-12's medical director, and Levette Harris-Bethea, Y-12's wellness coordinator, visited with students of Vine Middle School in Knox County Jan. 27 as part of the Vols4STEM Program.** The students learned how to take their blood pressure and calculate their body mass index and what this measurement means relative to their height and weight. Vols4STEM partner organizations include the Knoxville Chamber, Tennessee Society of Professional Engineers, Knox County Schools, Oak Ridge Economic Partnership and Innovation Valley Inc. The mission of Vols4STEM is to facilitate collaboration among area science, technology, engineering and math (or STEM) professionals and STEM educators and students.
- **Facilities, Infrastructure and Services brought the first meeting of the Society for Maintenance and Reliability Professionals' Greater East Tennessee chapter to Y-12 in January.** "We want to bring in industry best practices to Maintenance," said Steve Little, FI&S vice president. Professionals from 43 area companies and 23 vendors participated in the daylong meeting. "By promoting the affiliation, Y-12 allows its employees to remain engaged in maintenance and reliability information exchange through a structured network of professionals," said Paul Durko, chapter board member and Y-12 employee.



From left: B&W Y-12 President and General Manager Darrel Kohlhorst, U.S. Rep. Chuck Fleischmann (R-Tenn.), Tom D'Agostino, administrator of the National Nuclear Security Administration, and Y-12 Site Office Manager Ted Sherry tour the Y-12 National Security Complex Feb. 4.

## MARCH

### 51 Years

Financial Performance Assessment: **William R. Ragland**

### 43 Years

Quality Assurance: **Joseph P. Konopka**  
Strategic Planning and Transformation: **Thomas E. Smith**

### 42 Years

Environmental Compliance: **Sydney H. Coffin**  
Production: **Thomas E. Rowe** and **Robert L. Sloan**

### 41 years

Document and Property Management: **James A. McCleary**  
Production: **William C. Brown Jr., Michael E. Davenport, Homer Gallaher** and **Calvin L. Vowel**  
Quality Assurance: **Carl E. Bennett Jr.** and **Willie T. Thomas**

### 40 years

Compensation Management: **Dennis E. Ball**  
Disposition & Supply Programs: **Roger D. Keck**  
Production: **James R. Ward**  
Projects: **Eunice M. Hobbs**

### 35 years

Communications Services: **Michael D. Shepherd**  
Emergency Services: **Larry E. Alcorn** and **Ronald G. Spitzer**  
Engineering: **Steven E. McGhee**  
Legal: **Kem W. Branum**  
Maintenance Support: **Ruth C. Kear**  
Quality Assurance: **Alan C. Beddingfield** and **Charles R. Horton**  
Procurement Operations: **Danny W. Whitson**



“When I first came to Y-12, everything was new; we were developing new technologies, new equipment. We had to be creative because what we needed wasn't commercially available. Now, technology has caught up with us more. For me, the best years were the early years when you had to be creative. In my way of thinking, those were my golden years.”

—Joe Konopka, an engineering specialist in Quality Assurance, celebrates 43 years of company service in March. He remembers the 1960s and into the early 1980s as a time when innovation was a requirement for getting the job done.

Production: **Gary S. Diggs, Homer J. Foster Jr.** and **Herbert W. Patrick**  
Program Planning: **Thomas N. Walker**  
Resource Management: **Jimmie L. Elliott, Howard R. Gilliam** and **Beverly R. Martin**

### 30 years

Engineering: **Herbert G. Cunningham** and **Donald J. Merkel**  
Quality Assurance: **Gwendolyn Patterson**  
Resource Management: **Curtis H. White**  
Technical Integration: **Albert M. Lokey**  
Technology Development: **George M. Lamance**  
Utilities Management: **James Y. McNabb Jr.**

### 25 years

Communications Services: **Thomas O. Tallant**  
Information Technology: **James D. McClanahan** and **Gary L. Sanders**

### 20 years

Contracts and Special Initiatives: **Clarence C. Hinton**  
Emergency Services: **Van A. Heflin**  
Engineering: **David C. Kuykendall**  
Information Technology: **Paul E. Hargreaves III**  
Maintenance Support: **Charles T. Utley**  
Program Analysis & Evaluation: **Sue C. Clevenger**  
Public & Governmental Affairs: **Debra J. Miller**  
Quality Assurance: **Paige L. Long** and **Mollie G. Russell**  
Resource Management: **Jill P. Jarnigan, Anthony L. Johnson, James M. Walker** and **Danny C. Williams Jr.**

## In memoriam

**M**arshall A. Eaves of Engineering passed away Feb. 17. He had 27 years of company service.

This employee is listed as a member of the organization in which he last worked.

Y-12 offers condolences to his friends and family.

## In memoriam

**H**al E. Galyon of Production passed away Jan. 8. He had 20 years of company service.

“Hal was a very kind person,” said Tom Barnard, also of Production. “He was a great person to work with. Along with his machining duties, he conducted the Hazardous Waste Operations and Emergency Response training for Atomic Trades and Labor Council members. He will be missed by a lot of people.”

Co-worker David Newman added, “Hal’s helpful attitude and contagious smile will be missed by all.”

## In memoriam

**A**nita L. Stensaker of Disability Administration passed away Dec. 21. She had 19 years of company service.

“Anita was truly an asset and a blessing to the Benefits family,” said co-worker Talanda Dobson. “She was also my friend. She is missed dearly.”

“Anyone in the plant who had Anita helping with their short-term disability truly felt that they had a friend in Benefits,” added co-worker Laura Lyles. “Anita was not only a co-worker but a friend, and I dearly miss her; she was the ‘mother’ of our group.”

## Y-12 Day of Volunteering

April 30

Contact: Alice Brandon, 576-2963

## 2011 Tennessee Valley Corridor National Technology Summit

(Y-12 is a Platinum sponsor)

May 15–16

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# 'We're committed' to Safety for Life



Kevin Bailey, keynote speaker for Y-12's Voluntary Protection Program kickoff, holds his prosthetic leg and shares details of the farming accident that left him with only one leg.

"Any safety program that helps to make the workplace safer and to keep the workers from injury is worthwhile," Facilities, Infrastructure and Services' Larry West said when asked his feelings about Y-12's pursuing Voluntary Protection Program Star status. West was one of many employees who attended the kickoff event Jan. 26 at New Hope Center, where speaker Kevin Bailey shared details of a work-related farming accident that left him with only one leg.

Through sharing the lessons he learned, Bailey educates others about the importance of safety. "All of those complaints you have with safety can be summed up here," Bailey said while holding a prosthetic leg. "Working for a facility that is proactive in a safety program is an asset," he said. "VPP is the perfect opportunity to take safety to the next level."

Employees agree with Bailey. "It is nice to know Y-12 is strongly committed to safety and continuing to improve our safety record," Derrick Shaver of Engineering said. "I'm glad to hear that everyone—from the top of the hierarchy to the bottom—is on board with improving safety. I'm happy to work for a company that cares about each and every employee."

The road to VPP Star status takes dedication, involvement and participation from every employee. Atomic Trades and Labor Council Vice President Mike Thompson said, "Everyone at Y-12 needs to be working toward this journey—Safety for Life."

As Deputy General Manager and VPP Champion Bill Klemm said, "There's a long row to hoe. It will take us a while, but we're committed to the duration."

The U.S. Department of Energy's VPP Star-status program promotes safety and health excellence, with a cooperative effort between labor and management at its core. The program is equivalent to the Occupational Safety and Health Administration's program that recognizes employers and workers who have implemented effective safety and health management systems.