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Managing Editor

Melissa Leinart
865-574-1621 (6ml)

Associate Editors

Amy Alley
Heidi Spurling

Layout/Design

Lisa Harris

Contributors

Ellen Boatner
Ken Davis
Kathy Fahey
Donna Griffith
Kathryn King
Brett Pate
Cindy Robinson
Kate Shaw
Ray Smith

Vicki Walls
Donna Watson
Bill Wilburn
Lisa Xiques

Helping Hands



Allie Metcalf, wife of Financial Management's Larry Metcalf, weeds the garden at the Oak Ridge Art Center. Volunteers from B&W Y-12 were out in force during the annual Day of Volunteering. More than 500 employees and their family members donated helping hands to support 37 projects by painting, landscaping, building handicap ramps, visiting with the elderly and more. See page 4 for more photos.

Exploring potential partnerships

B&W Y-12 and Oak Ridge Associated Universities (ORAU), a consortium of 99 doctoral-granting institutions, recently signed a memorandum of understanding that will allow the two institutions to engage in a number of collaborative research partnerships.

As part of its pursuit to transform into a more responsive and affordable enterprise that supports a broader national security mission, Y-12 has taken its recent designation by the National Nuclear Security Administration (NNSA) as the Uranium Center of Excellence (UCE) and began aggressively pursuing innovative ways to support NNSA's transformation plans. A central part of the UCE business and technology strategy is to form mutually beneficial and long-term alliances with institutions having similar interests.

"ORAU has exceptional capabilities and experience in developing the type of partnerships we envision" said Darrel Kohlhorst, president and general manager. "What Y-12 offers are resources that not only include researchers, engineers and other technical staff, but we also have unique facilities and materials that cannot be found any place else."

"The ultimate goal of this agreement is to build enduring partnerships between Y-12 and premier universities that will enable the Uranium Center of Excellence to leverage the cutting-edge research being conducted at universities," said Ron Townsend, president and chief executive officer of ORAU.



The most important thing we want employees to know is that this is a site inspection—not just an inspection of the Safeguards and Security organization.”

Betsy Crawford
Information Security manager

Security inspection scheduled for fall

Football teams aren't the only ones gearing up for fall. Y-12 is in the throes of preparing for a safeguards and security and cyber inspection in fall 2008.

“Just as with all aspects of security, employee involvement is vital,” said Betsy Crawford, Information Security manager. Dates to be aware of are Sept. 29–Oct. 3 (planning visit), Oct. 13–17 (data collection) and Oct. 27–Nov. 7 (validation and closeout).

Safeguards, Security, & Emergency Services (SS&ES) has taken steps to enhance communication across the site, including establishing a Security Communications Committee. This committee, known as SecCom, consists of employee representatives from across the site. These representatives serve as liaisons between SS&ES and operations. These committee members, as well as other assigned representatives, will be working with SS&ES on the coming inspection.

Crawford said, “SecCom members' involvement is a key component in our communications strategy with regard to this assessment.” SS&ES also will be providing daily tips, an informational website and updates in the *The Y-12 Times* to focus on the preparation. Staff are preparing “smart sheets” that will provide important reminders on various topics like the Human Reliability Program and information control.

SS&ES staff members are available for presentations at staff meetings. To schedule a briefing for your organization, contact Crawford at 576-2842.

AT: out there making things better

The mind of an inventor is full of ideas. The mind of a Y-12 inventor is full of ideas that solve problems. As part of the new Science, Technology & Partnerships organization, Applied Technologies (AT) scientists and engineers don't invent gadgets and new ways of doing things to elevate science to an art form; they do it to solve Y-12's manufacturing dilemmas and outsiders' problems, too.

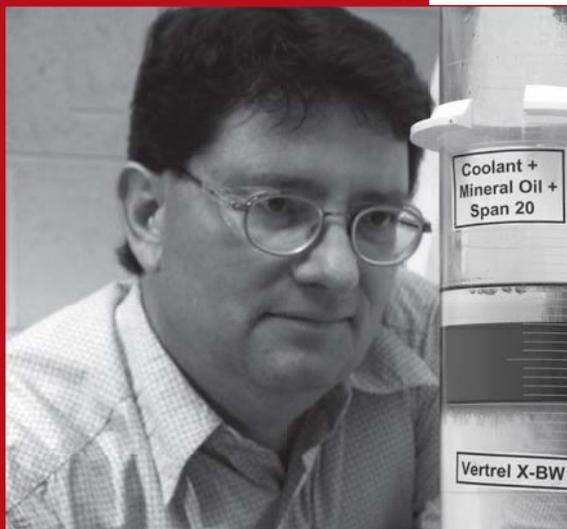
“We do science for a reason,” said Kevin Finney, senior director of AT. “Bring us your big hairy problem, and we'll work with you to fix it.” AT researchers are experts in metallurgy, chemistry, nanostructures, physics, infrared heating, moisture blending, acoustics and many other areas.

“We take pride in our broad skill set for troubleshooting manufacturing problems,” said Mark Richey, manager of AT's Technology Development organization.

AT specializes in uranium and lithium materials sciences and manufacturing technologies. “Although our primary work is new technology development, a major objective is to invest at least 30 percent of our time in directly supporting Y-12 production,” said Finney. “We're out there, and we're making things better.”

These innovators' creative, novel approaches to meeting Y-12's specific needs have benefited the Nuclear Weapons Complex and industry. Moreover, AT staff have received many patents and awards, including *R&D Magazine's* R&D 100 Award and the U.S. Department of Energy's Award of Excellence. They also serve on the boards of several technical societies.

In upcoming YSource (Y-12's intranet) articles, we'll get to know some of AT's researchers to find out how their work keeps Y-12 running. You'll learn how engineer Paul DeMint retrofitted a highly specialized machine that was mothballed for 20 years and how weld expert Ken Nicklas influences weld design from the get-go. Watch YSource for these profiles and more.



As Department Manager of Technology Development in the Applied Technologies division, Mark Richey oversees engineers and scientists whose innovations and problem-solving acumen keep Y-12 in the vanguard of groundbreaking science.

Working **lean**—it's everybody's job

"It's time for everybody to get religion about working lean," said Nancy Johnson, new vice president for Productivity. "We've been doing good work, and we must step up our game. For Y-12 to survive and thrive, we must continually chip away at costs while increasing effectiveness and efficiency."

Part of the strategy is to emphasize efficiency in all organizations, not just the production areas. "We have been very focused on throughput, but every organization needs to help reduce costs," Johnson said.

Because improvements within organizations have been the focus already, one area of opportunity is reducing waste at the organizational interfaces. Johnson is encouraging more cross-organizational activities through productivity reviews by AIM (or assess-improve-manage) teams.

A library of improvement initiatives is a near-term task. Initiatives from the Y-12 Throughput Improvement Plan will be incorporated into the Productivity Program, and previous, as well as future, initiatives will be captured in the library.



Nancy Johnson

Henry to oversee nuclear safety

Meet Joe Henry, Y-12's recently named chief of nuclear safety operations. He is responsible for Y-12's nuclear safety program and conduct-of-operations improvement initiatives.

"I hope to become very involved in all aspects of Y-12 and assist in improving the overall manner in which we conduct our operations," said Henry of his new role. "This is an extremely skilled and professional work force of which I am glad to be a part."

Henry joins B&W Y-12 from EnergySolutions where he served as executive vice president and prior to that, chief operating officer of Duratek. He is a graduate of the United States Naval Academy and retired with the rank of rear admiral. During his naval career, he earned a master's degree in business administration and commanded two nuclear submarines.

"I look forward to being involved in the unique operations at Y-12, which are such a vital part of our national security," he said. "For years I worked with the end products of Y-12, and now I will have the privilege of working with the men and women who make those products."



Joe Henry

Krueger comes home

"Coming to Y-12 feels like returning home," said John Krueger, the new senior director for Waste Operations and the Integrated Facilities Disposition Program (IFDP). Although this is his first time at Y-12, most of his experience has been at U.S. Department of Energy sites, and he has strong ties to the area. He and his family lived here during his four years as president and chief operating officer of WESKEM, LLC. "I learned to love east Tennessee and am very excited about the opportunity to join Y-12 at such a crucial time in its history," he added.

Both Krueger and Darrel Kohlhorst, president and general manager of Y-12, agree that IFDP is essential to the mission of Y-12. "We must clean up our legacy waste and decommission old facilities to modernize the site, save maintenance costs and consolidate the footprint," said Kohlhorst.

Krueger will help win congressional funding for IFDP and will be instrumental in setting the strategy for working with Oak Ridge Operations and Oak Ridge National Laboratory, which is part of the program.



John Krueger

Helping hands

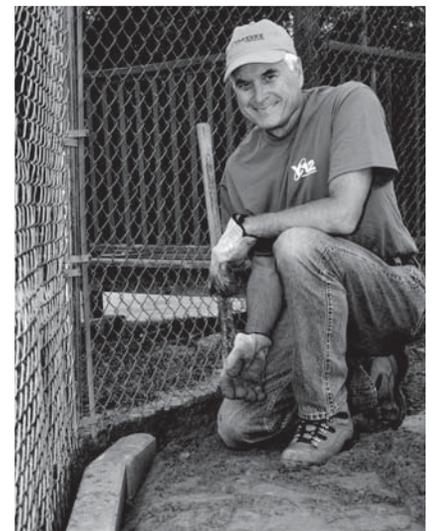
Areas from Oak Ridge to the Cumberland Trail to the Smokies all benefited from the dedication of employees and their family members on the annual Day of Volunteering. Even those who were not available to give their time provided support by donating items to the causes.

inspire

grow

challenge

succeed enrich



How CAN you help?

When you change a process, you wonder if the change will be for the better. During the recent distribution of the Aluminum Beverage Can (ABC) Committee funds (collected from recycling ABCs employees donate), Jan Jackson of Waste Management suggested visiting the nonprofit agencies receiving the contributions—as opposed to the agencies visiting Y-12. The change was for the better and provided a heartwarming experience.

The Emory Valley Center, nominated by Bill Simpson of Engineering, provides services to those with special needs. Simpson said, “With the passing of our parents, my sister Anne was suddenly uprooted from her familiar surroundings. Because of the center’s existence, I don’t worry about her safety as I fulfill my responsibilities at Y-12. I appreciate the center’s staff who provide assistance with compassion and effectiveness.”

The next stop was Tabitha’s Table at Robertsville Baptist Church. Ronnie McMahan of Safeguards, Security, & Emergency Services nominated this organization that serves dinner every Monday to people in need. Director Richard Schulman said the money would be used to buy fruits and vegetables.

The last stop for the day was the Guiding Light Circle, nominated by Gloria Batiste of Human Capital. Circle member Ora McKinnon explained that the group assists families by serving meals after funeral services. Batiste said, “These ladies have always been an inspiration to me and mentors in our community by unselfishly assisting others.”

“It humbles you to see what these organizations do,” Jackson said.

Since 1992, **more than \$74,000 has been donated** to area agencies, thanks to employees recycling their ABCs. A description of the other three deserving agencies will be published in the next issue of *The Y-12 Times*.



The Emory Valley Center in Oak Ridge received an ABC check. From left to right are Anne Simpson (one of the center’s attendees and sister of Y-12 employee Bill Simpson), Nancy Vanderlan and Jennifer Enderson (directors at the center) and Jan Jackson of Waste Management.

Employees + tools = Target Zero

With the recent plantwide formation of employee teams, some people think Behavior-Based Safety (BBS) is going away. It’s not! BBS has been and will remain an integral part of Y-12’s overall safety program.

BBS Manager Doug LeVan said, “By implementing employee teams and restructuring the BEST [Building Everyone Safe Tomorrows] process, Y-12 expects to create a culture that will encourage and reward identifying at-risk behaviors and conditions, which will enable us to prevent even more injuries. Through employee teams, Y-12 will increase communication between management and employees to remove barriers. This process is a win-win for every Y-12 employee.”

The key aspects of the BEST behavioral observation process are still in place, and BBS is still a tool every employee team will be expected to use. It is a no-name, no-blame process that continues to be employee led.

Internal Consultant Vicki Walls added, “This new structure provides a means of ensuring that people take action in their areas of responsibility. Safety must begin at the individual and team level. Because employee teams are groups of people who form a natural work group, this encourages a shared commitment to safety.”

The structure may be changing, but the BEST process will continue to be an important vehicle to help Y-12 reach Target Zero.

Y-12's
WAY TO
TARGET
ZERO

Training to the **extreme**

“It was so cold the hairs in my nose froze.” That’s how Don Bowes, an instructor at Y-12’s Nuclear Radiological Training Facility (NRTF), described his January trip to Fairbanks, Alaska. NRTF offers unique hands-on field training with real nuclear and radiological materials. Specialized military units use NRTF to conduct group training and exercises under realistic conditions.

Most of the training occurs at Y-12, but the National Guard needed training in cold-weather decontamination. If there’s a nuclear, chemical or biological incident at minus 20 degrees, how do you deal with it? Water is usually the solution, but at these temperatures it freezes into a useless solid.

Instead, fuller’s earth—a clay-like, earthy material—is used for decontamination. “You rub it on your instruments, your equipment and your protective suit in case there’s off gas,” said Bowes.

Bowes spent about five hours putting the trainees through their paces in the 20-below temps. Three layers of clothing made the exercise bearable, but Bowes wasn’t eager to head out again after hours. “There are a lot of things I didn’t get to see. There was so little daylight—from about 10 a.m. to 2 p.m.—that we couldn’t get to the beautiful mountain ranges I saw on the flight in.” Although the hotel’s ad showed a lovely lake setting, in January the lake was an ice bridge.

Things warmed up considerably, though, when he flew to his next training site—San Diego.

Pipefitters GO WITH THE FLOW

One thing Y-12 has is thousands of miles of pipes. Water, steam, compressed air, chemicals—they all get where they’re going through piping systems.

As a pipefitter for 27 years, Henry Campbell of Facilities, Infrastructure and Services knows his conduits. Currently, he is chief union steward for about 45 pipefitters and plumbers, who repair and sometimes help build systems, particularly prototypes for Applied Technologies. “Here at Y-12, we have some of the most talented and able craftspeople in the area,” he said.

As chief steward, he answers questions and helps ensure adherence to the contract. The crews work inside and outside, aboveground and belowground.

If pipelines split during freezing conditions or a leak occurs in an operating system, the pipefitters and plumbers work to isolate the section and apply new fittings.

“We may not be visible to a lot of people, but we keep water running to the bathrooms, and everybody can appreciate that!” laughed Campbell.

He also gets to think and solve problems, while emphasizing safety. “We review the safety procedure thoroughly before we start each job,” he said. “Our first priority is for everyone to go home without an injury.”



During his years at Y-12, Henry Campbell has worked in various locations—the only buildings he hasn’t worked in are the two newest.

SERVICE



ANNIVERSARIES

June

47 years

Engineering: James N. Abele

42 years

Uranium Processing Facility: William C. Anderson

41 years

Applied Technologies: George L. Powell

Engineering: Samuel M. O’Neal Jr. and James H. Rollins

Facilities, Infrastructure and Services:

James D. Hensley

Quality Assurance: Eugene E. Clark and Michael W. Poore

40 years

Facilities, Infrastructure and Services: William D. Hazelwood and Jesse McDonald

Quality Assurance: Ralph S. Leete Jr.

35 years

Facilities, Infrastructure and Services: Larry T. Petrowski

Production: Elizabeth L. Cantrell and Jerry L. Hall Sr.

Quality Assurance: Patricia T. Efurud

30 years

Engineering: Donna F. Bennett, Jeanne G. Chamberlin, Robert A. Joseph Jr., Fredrick L. Markham, Robert C. May and Melburn L. Patterson Jr.

Environment, Safety and Health: Robert L. Cox

Facilities, Infrastructure and Services:

Kyle Carpenter, Sharon P. Gasaway and Marcella S. Willis

It's a bird. It's a plane. It's a Y-12 pilot!

You might wonder what aviation has to do with working at Y-12. According to a group of Y-12 pilots, the two activities have a lot in common.

Gary Hagan of Environment, Safety and Health pointed out that there are “remarkable parallels in nuclear operations and aviation.” Careful planning before starting the day’s work is necessary. Continued training and attention to detail are important to both.

Production’s Tony Vermillion said, “Flying has taught me to be safety conscious and to follow rules.” Another similarity: not paying attention to detail can result in catastrophe.

Sam Robinson of Applied Technologies said, “Flying isn’t especially dangerous, but it is unforgiving of mistakes.”

Cash Miller uses his knowledge from aviation in Emergency Management. He has even worked on an aircraft crash scenario for a hazards assessment.

Joe Marshall (Projects), Mike Foley, Mark Joiner (both of Facilities, Infrastructure and Services) and Johnafred Thomas (Production) agree that being a pilot, like working at Y-12, is all about safety. Mary Christofferson (Applied Technologies) described the likeness: “Following the rules, planning ahead, not taking shortcuts and identifying the risks increase the chances of success” at Y-12 and in the air.

Most of these pilots caught the flying bug early in life. Joiner was influenced by his dad, who flew a B-25 in World War II. Miller grew up in the Midwest where “getting my license was just a right of passage—like a driver’s license.” Vermillion said he was practically born in an airplane. His mother flew with his dad while she was pregnant. “Flying is as natural as walking to me,” he said. Robinson remembers sitting in a cardboard box when he was a kid and pretending it was an airplane.

No matter how they got started, all are prepared to take off on the next flight.



Y-12’s cockpit crew includes front row, left to right: Mary Christofferson, Gary Hagan, Joe Marshall and Mike Foley. Back row, left to right: Sam Robinson, Cash Miller and Tony Vermillion. Foley also flies radio-controlled planes (as shown in photo).

Production: James R. Chandler and Lauren L. Jackson

Projects: Frank P. McHenry Jr.

Quality Assurance: Michael W. Darnell

25 years

Applied Technologies: Paul D. DeMint, Edward J. Klages and Roger L. Lawson

Chief Financial Officer Division: Marilyn R.

Presley

Engineering: Jeffrey T. Cleveland and Carolyn H. Fogelman

Environment, Safety and Health: Sandra P. Lyles and Stanley L. Roberts

Facilities, Infrastructure and Services: Sheila D. Culpepper and Roger L. Yeary

Production: James G. Justice

Information Technology: Timothy W. Hickerson and Carolyn H. Miles

Human Capital: Olga P. Henley, Mark B. Keck and Laura D. Lyles

Quality Assurance: Sheila L. Roddy

20 years

Engineering: James A. Henry II and Gail S. James

Environment, Safety and Health: Angelia L.

Gordon and Steven B. Jones

Facilities, Infrastructure and Services: John D. Shipley

Information Technology: Sharon W. Miller

Projects: Gerald L. Bland

Quality Assurance: Thomas J. Oatts

Safeguards, Security, & Emergency Services:

Deborah K. Napier

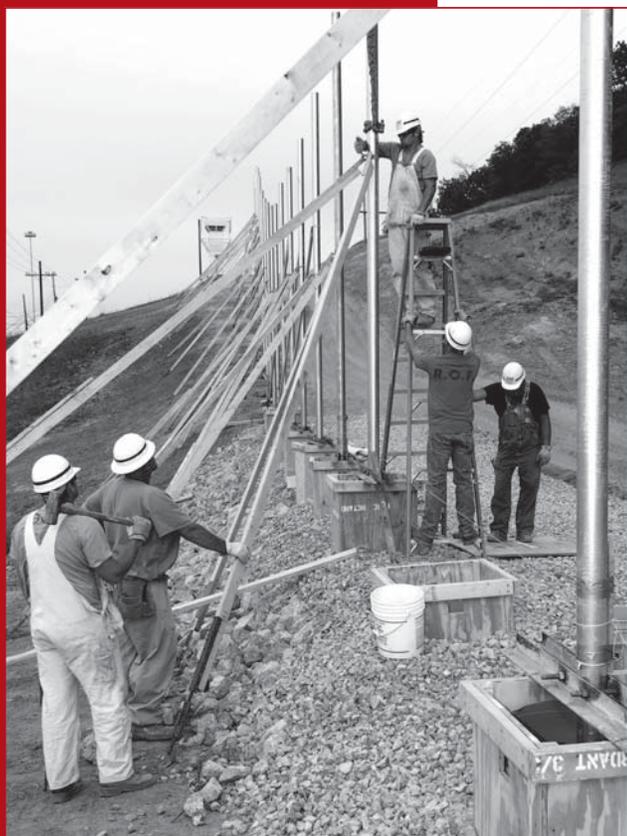
Cell Phone Reminder

Effective July 1

- Tougher disciplinary action for cell phone violations in Limited Areas, Protected Areas or Material Access Areas
- Refer to the YSource announcement, *Change in cell phone policy* (5/14/2008), for details
- Y-12's cell phone policy (Y15-404) is being revised to reflect the change

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During the last four years, Y-12 Direct-Hire Construction craft completed more than 100 projects vital to the Y-12 mission.

Constructing safety Two organizations reach milestones

The Y-12 Direct-Hire Construction team and Y-12's Emergency Services personnel recently celebrated two milestones. The Construction team marked **two million hours** of work, covering a four-year period, without a lost-time injury. Emergency Services celebrated achieving **500,000 hours worked without injury**. These accomplishments are no small feat.

Construction's achievement is significant for any construction operation, but in light of the additional potential hazards at Y-12, it is even more notable.

"Wow! What a great record," said Dennis Grove, vice president of Projects. He told Construction members, "You are leading the way to our goal of zero accidents."

Much credit for the accomplishment goes to the Knoxville Building and Construction Trades Council (KBCTC), which provided well-trained, skilled and safety-conscious personnel who embraced Y-12 safety programs. Ray Whitehead, president of the KBCTC, said, "The construction trade can be one of the most challenging careers. Congratulations to Y-12 Construction; you have earned it."

Just as Construction faces additional potential hazards, Y-12's Emergency Services personnel respond to emergencies of all types in any workspace, including fires and vehicle accidents, and perform necessary actions to assist those involved in the emergency, including transporting injured or ill employees.

Emergency Services personnel are trained to have a "safety first" mentality and to be "in the moment" and more aware of their surroundings and co-workers. "It's ingrained to watch out for the safety of your buddy," said Roger Paul, Fire Protection Operations training officer.