Ask any new hire, and they will say the same thing: the physical vastness of the Y-12 National Security Complex can be daunting. More than 500 buildings sit on 811 acres, and while most buildings are operational, others are dark and empty and awaiting demolition. A layered security approach increases the complexity of Y-12's physical infrastructure, and adding to that are a wide variety of projects with the intent to further alter the site. These changes are integrated through a master planning process. The Strategic Planning and Transformation division, managed by Tom Smith, is the organizational group that manages the site's transformation, and Master Site Planning Manager Joe Boudreaux has the primary responsibility for ensuring the changes that significantly affect the site's physical infrastructure are consistent with Y-12's vision. The Site Planning Council, comprised of senior management from key functional areas, assists in creating and executing Y-12's changing landscape.

"HEUMF [the Highly Enriched Uranium Materials Facility] becoming operational is the most recent transformation success, but several others are coming soon," explained Boudreaux. "Reconfiguring Bear Creek Road and the groundbreaking for the Uranium Processing Facility will soon impact travel on Y-12's primary thoroughfare and employee parking.

"To plan for the impacts from the road work and the beginning of UPF construction, additional parking will be opened on Y-12's east end," said Boudreaux. "The recent demolition of Building 9755 now makes available all the slabs from Engineering Row. Additional lots as well as some security changes will allow us to mitigate the effects of losing the large Bear Creek Portal parking lot."

Employees can learn more about Y-12's transformational activities from the Y-12 Master Plan on the internal Web at https://home1.y12.doe.gov/masterplan/. See page 2 for projects key to Y-12's transformation and for more on the HEUMF dedication.
March 22 was a historic day at the Y-12 National Security Complex: the Highly Enriched Uranium Materials Facility (HEUMF), Y-12’s largest construction project in more than 40 years, was dedicated. HEUMF is the storage facility for the nation’s supply of highly enriched uranium. U.S. Department of Energy Secretary Dr. Steven Chu gave the keynote address. Thomas D’Agostino, administrator of the National Nuclear Security Administration; U.S. Rep. Zach Wamp and U.S. Rep. Lincoln Davis also attended and congratulated Y-12 employees on meeting this transformation milestone.

TRANSFORMING Y-12—
the HEUMF dedication

From left: Bob Cochran, president of the B&W Technical Services Group, Oak Ridge Mayor Tom Beehan, National Nuclear Security Administrator (NNSA) Administrator Thomas D’Agostino, U.S. Rep. Lincoln Davis, U.S. Rep. Zach Wamp, Energy Secretary Steven Chu, NNSA Y-12 Site Office manager Ted Sherry, and B&W Y-12 President and General Manager Darrel Kohlhorst pose with the plaque commemorating the dedication of HEUMF. D’Agostino told Y-12 employees, “When a ship or command does a particularly good job, the commanding officer hoists two signal flags up the yardarm. One flag represents the letter ‘B’ and the other the letter ‘Z.’ For the past 90 years, ‘BZ’ or Bravo Zulu, signifies exceptional work. And commanding officers, when conveying a job well done, typically end their message with this phrase. As administrator for the NNSA and your commanding officer, I thank you for getting the job done here at Y-12. Bravo Zulu.”

Paul Hight (far right) of Y-12’s Material Management organization demonstrates the rackable can storage system that will be used in HEUMF to U.S. Department of Energy Secretary Steven Chu (center) as (from left) U.S. Rep. Lincoln Davis, B&W Y-12 President and General Manager Darrel Kohlhorst and U.S. Rep. Zach Wamp look on.
Through the years, the men and women at Y-12 have consistently answered this country’s calls to protect our nation’s security, whether it was World War II, the Cold War or our current struggle against terrorism. Y-12’s long list of accomplishments is astounding, and HEUMF certainly ranks high on the list.

—Darrel Kohlhorst, president and general manager of Y-12
How important are criticality safety calculations at Y-12? Well, let's just say they're "critical" for safe storage of nuclear materials.

A key link between those computer calculations and the criticality safety engineers is Anthony Wheaton of Engineering. He is the system administrator who makes sure the high-powered computer hardware and software run continuously and without error.

"There might be a question about the safety basis in a nuclear facility at anytime, and the computer programs must be available 24/7 to provide data," said Wheaton, who has a B.S. in math from the University of Tennessee.

There's another reason for continuous availability. "These are complicated calculations that often need to run throughout several days and can extend into the weekends," he explained.

Wheaton's current project is setting up several new replacement servers (or workstations) to go online. A major effort is installation of the new Intel® Itanium platform, which is used specifically for scientific applications. "I spend a lot of time solving compatibility issues between the Itanium microprocessor and the nuclear physics codes that are used by the government and nuclear industry and have to run on the workstations," Wheaton noted.

Of course, he juggles all that with day-to-day help to users, department computer security officer duties and periodic verification and testing of codes.

"The best parts of the job are solving any glitches quickly and writing program scripts, which are codes that automate tasks, so the engineers can easily get output in the format they need," he said.

Meet ARRA workers
Y-12 has the seventh largest American Recovery and Reinvestment Act (ARRA) contract in the nation. New people, and what are they doing?

WHO
Teresa Summers, Facilities, Infrastructure and Services, temporary laborer
"I had done demolitions before and could relate to the [ARRA] job. It's really interesting work."

HOW LONG AT Y-12
Approximately five months

PREVIOUS EMPLOYMENT
H-S Whitson Construction Co. Inc., at B&W Clinch River

RECOVERY ACT PROJECTS WORKED
Working on legacy waste removal from Alpha 5 (Building 9201-5) and Beta 4 (Building 9204-4) by supporting Radiological Control, Waste Management, Industrial Hygiene and other areas

FURTHER THOUGHTS ON PROJECTS
"I like a lot of the people I work with here. Everything is going great. Working with the guys has been a great experience. We're told what we have to do, and we do it."

Critical calculations
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Vintage water system—now better than new

Direct-hire construction crews and plant support personnel recently completed renovating Y-12's original water distribution system on time and under budget. Upgrade of the underground piping is an essential part of the Potable Water System Upgrades Project, which includes the water towers beside Bear Creek Road.

“The direct-hire crews worked tirelessly,” said Melissa Portwood, project manager. “Tremendous support was also provided by the Fire Department, which worked weekly with us to help ensure the project stayed on schedule.”

The original cast-iron water mains and laterals that had deteriorated were either repaired or replaced, and the sprinkler systems that contain antifreeze were modified to include a backflow preventer to ensure no cross-connections with potable water. In the area of the water towers, some pressure-relief valve installations, isolations and tie-ins remain to be done.

As with any infrastructure work, accessing operating facilities was a major coordination hurdle. “When you take down a safety system, such as the fire protection sprinklers, work in certain areas has to stop,” Construction’s Donald Hayes said.

All in all, 14 antifreeze loops were isolated and 52 backflow preventers were installed. About 2,700 linear feet of piping was replaced. At peak time last summer, more than 75 direct-hire craftspeople were on-site supporting potable water activities. “Every trade group from the Knoxville Building Trades worked on this project,” noted Steve Lett of Construction.

“It was a great experience to work with such an outstanding group of people,” Hayes said.
Ethics—Doing the right thing

Perhaps ethical behavior can be summed up as “Doing the right thing—even when no one is watching.” The “right thing” often comes down to treating others with respect, being true to your word, and observing the rules. “One test is to ask yourself ‘How would I or my family feel about reading of my actions in the newspaper tomorrow,’” said Y-12 Ethics Officer Jim Nobles.

Employees can encourage an atmosphere of respect and trust by personalizing Y-12’s core values and questioning inappropriate behavior in the workplace. Nobles said that talking with the individual about such behavior is the first, and often least intrusive, option and then, if necessary, elevating the issue with the supervisor or Ethics Office.

Conflict of interest is an important consideration in ethical behavior as well. If you are contemplating part-time employment outside of Y-12, you may want to seek guidance from the Ethics Office. “A conflict of interest may arise when there is even the perception of preferential treatment,” said Tracy Nelson of the Ethics staff.

“What do we mean by ethics, and why is it important?”

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“We encourage employees to complete a Conflict of Interest Certificate to provide a level of protection for both the individual and the company,” Nobles added.

Contact Nobles or Nelson for questions or call the 24-hour Helpline at 576-1900. Anonymous concerns may also be submitted to the Ethics Office through the Helpline or by plant mail.

Y-12 gets fit

Y-12’s health and wellness program is kicking into high gear and expanding its offerings. “I am very excited about our new focus on personal wellness,” said President Darrel Kohlhorst. “Everything we do in life has an impact on our health and well-being.”

Many employees have already benefitted from Live Wise’s walking programs, health and wellness seminars, and healthier offerings available in the cafeteria and vending machines. Now, Y-12 is going further by offering health risk assessments to employees.

“These assessments allow the health and wellness staff to determine what each person needs specifically to improve his or her health or wellness,” said Michelle Reichert, vice president of Environment, Safety and Health.

If employees choose to participate, after the assessment they will receive wellness coaching to find the best course of action. The overall program includes providing integrated services to promote employee health or assist with injury, illness or work-life balance.

Increasing morale is also a goal.

What’s planned for this year? Later this year, three on-site fitness centers called LIFE (Lifestyle Intervention For Employees) centers will open. Each center will have treadmills and elliptical machines, a circuit of resistance equipment and a minimal amount of free weights. The east end and west end centers are conveniently located near changehouses.

HEALTH (Helping Employees Achieve Long-Term Health) Promotion will begin offering mentoring groups for diseases or medical conditions (e.g., diabetes and heart disease) prevalent among Y-12 employees. The groups will allow employees to learn and share knowledge so they can better understand the disease process and the importance of self-care and management.

As Live Wise continues to mature, participants will see benefits in their waistlines, stress levels and overall emotional well-being.
• The National Nuclear Security Administration (NNSA) announced its acquisition strategy for contracts at sites including Y-12. Management of Y-12 and Pantex would be consolidated in one contract under the strategy. No request for proposals has been issued and no decision was announced regarding an extension of the sites’ current contracts. B&W will work in the weeks ahead to keep employees up to date on developments as more information becomes available. “We’ll stay focused on operating the plant in a safe and secure manner and achieving all of our deliverables for fiscal 2010,” said Darrel Kohlhorst, B&W Y-12 president and general manager.
• Y-12 and the Pantex Plant in Amarillo, Texas, have combined human resources organizations to improve efficiency. The shared-services agreement serves as a pilot program to determine whether similar efforts should be undertaken in other areas at the sister facilities. Efforts focus on five areas: pension administration, work force planning, talent management, compensation and human resources generalists. The new effort is headed by Y-12’s Donna Hampton.
• Dax Jolly of Engineering was one of more than 30 Y-12 engineers participating in National Engineering Week Feb. 14–20. The engineers visited more than 30 area schools to talk to almost 3,700 students about engineering careers. “We want to let students who might not have been considering engineering to know that this is a viable option,” he said. “It’s good to be part of a company that [encourages employees to participate in Engineering Week],” Jolly said. The Y-12 engineers coordinated activities related to math or science such as building moon landers for marshmallow astronauts, showing students how to apply what they are learning.
• Knoxville company Broadway Electric Service Corporation has joined the East Tennessee consortium that provides engineering employment and educational opportunity for military veterans. The program, known as America’s Veterans to Tennessee Engineers, is a Scientific, Technology, Engineering and Mathematics, or STEM, program that provides an opportunity for veterans completing their active duty service or who are in the national guard or reserves to complete their engineering degrees. B&W Y-12 is a participating company of the consortium.
• In fiscal year 2009, 72 percent of Facilities, Infrastructure and Services crews achieved Target Zero, meaning the crews had no Occupational Safety and Health Administration recordable accidents or lost work days for the entire fiscal year.
• B&W Y-12 recently donated $7,500 to set up a computer learning center at the Volunteer Ministry Center (VMC) in Knoxville. The ten computer systems purchased with the company’s donation will be used to help teach clients job skills. The VMC, which serves the area’s homeless, dedicated its new computer room to B&W Y-12 and the Y-12 volunteers who have supported the center.

SERVICE ANNIVERSARIES

April
42 years
Emergency Services: Donnie W. Burney

41 years
Facilities, Infrastructure and Services: Brian A. Shanks and Frank A. Young
Production: Terry W. Barnes, Douglas Chandler, Susie M. Collier and James R. Queener
Programs and Quality: Emmett J. Walker

40 years
Engineering: John R. Jackson
Facilities, Infrastructure and Services: James A. Montgomery
Information Technology: Richard D. Jarrell
Production: Duane L. Craig

35 years
Facilities, Infrastructure and Services: Steven D. Elkins and Charles C. Roberts
Fire Protection Engineering: Janice S. Gardner
Production: Donald E. Voiles
Programs and Quality: Robert A. Spahr
Projects: Deborah W. Long

30 years
Accounts Payable, Travel, and Treasury: Karl E. Rapp III
Document and Property Management: Rebecca S. Bevins
Engineering: Gerald A. Byington
Information Technology: James M. Rouse
Programs and Quality: Allen K. Headrick and Gregory G. Howard

25 years
Programs and Quality: Donna K. Briscoe and Karen S. Grant

20 years
Communications Services: Kathryn H. King
Diversity and Employee Concerns: Mary B. Radford
Industrial Hygiene: Leighton E. Cooke
Information Technology: Frances H. Butler
Production: Cheryl A. Ballew and Emily E. Braswell
Radiological Control: Terry W. Long

Around Y-12 ...

In memoriam

Linda K. Barkley, a laboratory technician in Analytical Chemistry, passed away March 5. She had 21 years of company service.

“Linda was the type of person who never met a stranger and took time to say hello to everyone,” said her longtime co-worker, Beth Cole. “She was a very kind person who would take the time to help anyone who needed it. I will miss her humor and wit.”
Twenty U.S. Department of Energy (DOE) employees reviewing electronic files and documents plus interviewing a handful of employees for a week might make a manager a little nervous. But for Sue Jones, director of Y-12’s Earned Value Management Systems (EVMS) and Services, it confirmed what she already knew: She leads a strong team of highly qualified personnel.

The weeklong review, conducted by DOE’s Office of Engineering and Construction Management, was to see whether or not Y-12’s EVMS should be recertified. The team’s conclusion? “This was the best review we have ever had, and in five years it was the first review to have no CARS (corrective action requests).”

The team cited four noteworthy areas: (1) support of EVMS at the highest levels, (2) a senior-level EVMS director, (3) comprehensive monthly progress reports and (4) a close working relationship with Y-12 Site Office federal project directors to maintain ongoing communication.

The outstanding review will be confirmed in a formal report and a letter of continued EVMS certification. Jones credits the success to the EVMS Process and Procedures group, led by Sandi Tracy, as well as the project managers and project controls personnel for the Steam Plant Life Extension, Potable Water Systems Upgrades and Security Improvements projects.

With a strong EVMS, Y-12’s performance metrics are consistent and credible and help to predict performance. Y-12’s initial EVMS certification was received in November 2007, and the recertification represents an important accomplishment for the Transformation and Projects Division.

John Howanitz, senior vice president for Transformation and Projects, added, “There is nothing better than a thorough external review to validate that your efforts and investments are paying off. Once again, Y-12 is demonstrating that performance counts … and we know how to measure it!”