

Y-12 inventors honored

BWXT Y-12 honored 22 inventors for their FY 2006 invention disclosures, patents and copyrights at the third annual BWXT Y-12 Technology Transfer Awards ceremony held recently.

Y-12 technologies and processes recognized at the event include beryllium detection and removal, homeland security devices and new coatings.

One invention allows panels that can be stacked or used as floor or wall panels to become a modular medical system. Another invention removes urethane adhesives or coating in hours instead of days. Another is a new process to minimize metal oxidation during various metal working operations.

Ceremony highlights included a posthumous award to Larry Dickens, Y-12's commercialization manager, to recognize his leadership in Technology Transfer. The award was accepted by his wife, Dianne Dickens.

The sterling silver acorn was presented to Lee Bzorgi for the Rapid Prototype Shelter System. The Acorn Award recognizes inventors for their first issued patent.

A sterling silver scroll and quill pin was presented to Marty Beckerman, Frances Butler and Frank Hammitt for the Virus Propagation Analysis Tool software that helps predict which viruses might attack a computer network and how the system can defend against them. This new award recognizes authors of registered copyrights.

A government-use award, which celebrates significant contributions to the operation of Y-12, was presented to Ron Simandl and Scott Hollenbeck for the Negligible Residue Tack Cloth. The tack cloth, as used at Y-12, has removed beryllium contamination on parts to below detectable levels.

Y-12 team lights the night

The 67-member BWXT Y-12 Light the Night team has raised more than \$16,333 for the Leukemia and Lymphoma Society and was the top Light the Night fundraising team in Tennessee. The team, which participated in a walk held earlier this fall, walked in support or memory of co-workers, family and friends.

Team members include (standing, left to right) Bessie Jowers, Jennifer Luttrell, Terry Carroll, Karren Cochran, Mike Brown, David Roland, Teresa Hensley, Michael Muir, Melissa Buckner, Joel Lesch, Lora Lee Wilcher, Susan Gallion, Frances Butler, Patty Crabtree and Pam Summers. Sitting from left to right are Anne Shanks, Mike Brandon, Terri Thrower and Otis Peterson. Karen Ryan and Donna Ethridge are shown in the front row, left to right.



Y-12 honorees

- Access Rate Control System — Lee Bzorgi
- Banshee — Lee Bzorgi
- Collapsible, Modular Double-Cross Barricade — Jacob Miller
- Contaminated Area/Volume Estimation Assessment Tool — Reid Kress
- Convergence Software Engine — Reid Kress, Greg Phillips, Lee Bzorgi
- Direct Recycle and Purification of Uranium — Gene Bird, Dave Cecala, Jonathan Morrell
- Emergency Validation and Communication Simulator — Reid Kress
- Hardface Coatings on Metal Alloys and other Materials for Corrosion and Wear Applications — Roland Seals, Ed Ripley, Rusty Hallman
- High-Temperature Dielectric Property Probe to Reduce Fringing Effects — Ed Ripley, Brian Warren
- Improved Urethane Adhesive and Coatings Remover or Solvent Blend — Ron Simandl, John Brown, Jerrid Holt
- Infrared Tactical Sensor — Lee Bzorgi
- Interactive Vehicle Undercarriage Examiner — Lee Bzorgi, Bob Ervin
- Light Beam Grid Network Surveillance System — Lee Bzorgi, Reid Kress, Jeff Parrott
- Low Mass, Ultra-High-Temperature, Microwave Heating System — Ed Ripley
- MEMS Sensor Employing Independent Component Analysis and Artificial Neural Networks — Gerald DeVault, Vincent Lamberti
- Method of Manufacture of Lightweight Metal Composite Structure — Ed Ripley, Rusty Hallman
- Negligible-Residue Tack Cloth — Ron Simandl, Scott Hollenbeck
- Plasma Processing for Detection of Beryllium and Beryllium Compounds — Greg Schaaf
- Portable Casualty Transfer Panels — Lee Bzorgi
- Process to Minimize Metal Oxidation During Various Metal Working Operations — Steve Russell, Jonathan Morrell, Jerrid Holt
- SysChip — Lee Bzorgi



- S**trategies
- Achieve a goal of Target Zero.
 - Achieve site Environmental Management System targets and objectives.
 - Establish an employee wellness program.
 - Integrate safety into new equipment and facilities design.

Setting the pace

Every employee has received a copy of the 2006 Strategic Plan that outlines the vision, mission, core values and strategic objectives of the Y-12 National Security Complex. Over the next few weeks, the eight strategic objectives will be introduced with explanations on how those objectives will be implemented.

Michelle Reichert is the champion for Strategic Objective 1, Ensure the safety, health and protection of workers, the public and the environment.

Strategic Objective 1 reaffirms our core value to provide a safe and healthy workplace for our employees and to protect the public and the environment. You've already seen posters and other communications tools around the site declaring President and General Manager George Dials' priorities for Y-12. Safety is at the top of that list. Y-12 Site Office Manager Ted Sherry has also declared safe operations a number one priority.

Reichert believes Y-12 has the people, processes and tools to achieve this objective. "Each of us can make a difference in ensuring that we and our co-workers are not injured at work by participating in programs such as Behavior Based Safety. What better way to show you care and value each other than to take the time to discuss behaviors and barriers that could prevent an injury.

"I know you and I can make Y-12 a safer place to work, but it will take all of us working together to make it happen," Reichert concluded.

Mentor-protégé relationship a win-win

One of Y-12's protégés, G2 Engineering and Management, was recently awarded the Environmental Protection Agency's administrator's award for outstanding accomplishments by an 8(a) business.

"It's great that G2 won this EPA award. It is gratifying to be a mentor to an organization that goes beyond the call to help our environment," Gloria Mencer, Socioeconomic Programs manager, said.

G2 has been a part of the Y-12 Mentor-Protégé Program since July 2005. G2 personnel assist Y-12 in various aspects of project planning.

In addition, the company was awarded the U.S. Department of Energy Secretarial Mentor-Protégé Award for FY 2006. "When a protégé is recognized by DOE as being the best, it shows that Y-12 is accomplishing its goals of being a mentor," Mencer explained.

Jim Henkel, G2 president who is working at Y-12 in National Security and Development Programs, said, "G2 has

resourcefully maximized the benefits of the mentor-protégé program by growing its capabilities in the role of project integrator, supporting facility modifications from conceptual design through readiness preparation and turnover for operations."

Paul Hight of Manufacturing is G2's mentoring contact. "As G2's mentor, Y-12 has worked with G2 to develop a plan for strengthening G2's business structure in areas where BWXT Y-12 has experience." The mentor-protégé relationship allows both companies to learn from the process, and one benefit of the relationship is to help the protégé company expedite its growth.

As it should be, G2 is proud of its accomplishments. "We are constantly looking at other areas of interest within Y-12



Y-12 is proud of G2's recent recognition from the Environmental Protection Agency. Shown are Ray Spears, EPA deputy chief of staff; Wayman B. McLaughlin Jr., G2 vice president of engineering; Michael Twine, G2 chief executive officer; Jim Henkel, G2 president; and Jeanette Brown, director of EPA Office of Small Disadvantaged Business Utilization.

where we can be of value or assistance," said Rose Raney, G2 proposal manager.

For more information on the Mentor-Protégé Program, contact Mencer (gmv; 576-2090).

Nestled between Tennessee ridges

How did Bear Creek Valley become the home of the Y-12 site? Possible answers to that question include proximity, isolation and the quick thinking of Tennessee Sen. Kenneth D. McKellar. And the correct answer is “all of the above.”

The valley was selected because of its proximity to Norris Dam electricity and the Clinch River. The two ridges on either side of the valley, and the distance from the seacoasts, made the location somewhat isolated.

And here is the story of how the senator became involved. In August 1943, President Roosevelt decided to create the Manhattan Project to build the atomic bomb. He needed a way to set aside a large sum of money without it becoming obvious what was being done.

Roosevelt asked Senate Budget Committee Chairman McKellar if this could be done. McKellar is said to have replied, “Yes, Mr. President, I can do that for you ... now just where in Tennessee are you going to put that thing?”

So, while the geographical reasons for the Y-12 location are valid, the political decision where to put it was initiated by the quick-thinking Tennessee senator. McKellar influenced the decision that created the Oak Ridge Reservation essentially overnight and brought a significant economic impact to the region.

Do you have a story to tell? Contact Ray Smith with suggestions for future stories of Y-12’s unique history and heritage (srd; 576-7781).



Ring in the holidays

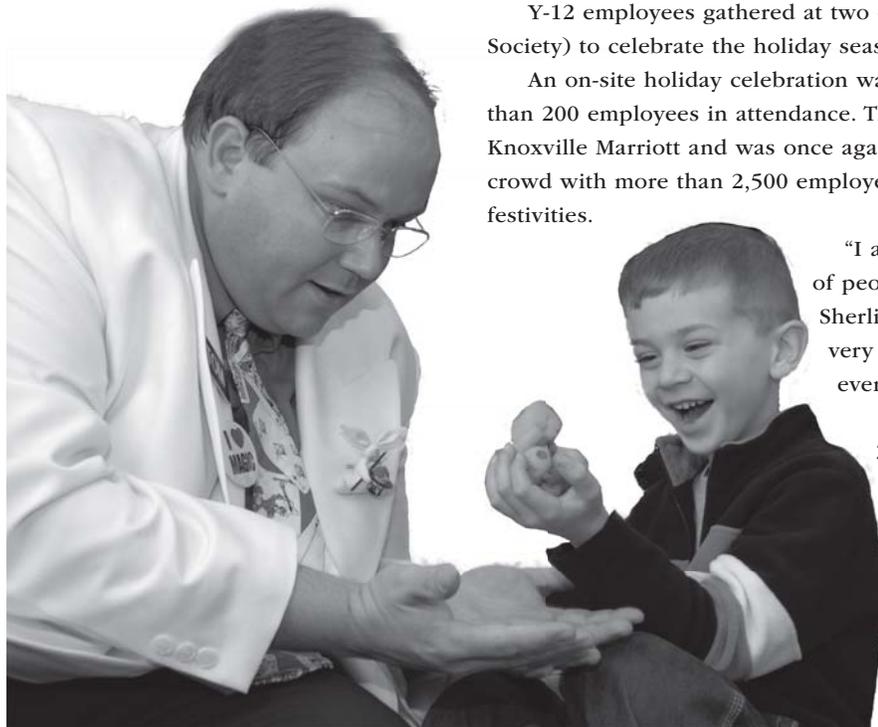
Y-12 employees gathered at two events (sponsored by the Y-12 Employees' Society) to celebrate the holiday season.

An on-site holiday celebration was held Dec. 13 in the cafeteria with more than 200 employees in attendance. The off-site celebration was held Dec. 14 at the Knoxville Marriott and was once again a huge success. This year brought a larger crowd with more than 2,500 employees and their family members enjoying the festivities.

“I appreciated the fellowship and meeting families of people I have known for years,” said Harvey Sherlin of Chief Financial Officer division. “I was very impressed and appreciate YES sponsoring the event.”

Y-12 employees opened their hearts and filled 20 barrels with thousands of canned goods that were donated to Second Harvest Food Bank. Dana Davis of Human Resources said, “I was really glad to see Y-12 employees brought cans of food to share with those who don’t have the blessings that many of us have.”

YES looks forward to serving you in 2007.



Y-12

2005

Benefits Summary Annual Report

2005

Information presented below is a summary of the annual report for the employees of certain employers at the U.S. Department of Energy (Employee Benefits Security Administration, as required under the Employee Retirement Income Security Act of 1974 (ERISA). To obtain a copy of the

Retirement Program

Basic Financial Statement

Benefits under the plan are provided by a trust (benefits are provided in whole from trust funds). Plan expenses were \$172,573,416. These expenses included \$17,170,157 in administrative expenses and \$155,403,259 in benefits paid to participants and beneficiaries. A total of 23,082 persons were participants in or beneficiaries of the plan at the end of the plan year, although not all of these persons had yet earned the right to receive benefits.

The value of plan assets, after subtracting liabilities of the plan, was \$2,943,401,507 as of December 31, 2005, compared to \$2,861,239,681 as of January 1, 2005. During the plan year, the plan experienced an increase in its net assets of \$82,161,826. This increase includes unrealized appreciation or depreciation in the value of plan assets; that is, the difference between the value of the plan's assets at the end of the year and the value of the assets at the beginning of the year, or the cost of assets acquired during the year. The plan had total income of \$257,903,430, including gains of \$4,554,288 from the sale of assets and earnings from investments of \$253,349,142.

The plan has contracts with Metlife and The Prudential Insurance Company of America, which allocate funds toward individual policies.

Minimum Funding Standards

An actuary's statement shows that enough money was contributed to the plan to keep it funded in accordance with the minimum funding standards of ERISA.

Your Rights to Additional Information

You have the right to receive a copy of the full annual report, or any part thereof, on request. The items listed below are included in that report:

1. An accountant's report;
2. Assets held for investment;
3. Transactions in excess of 5 percent of the plan assets;
4. Insurance information including sales commissions paid by insurance carriers;
5. Information regarding any common or collective trust, pooled separate accounts, master trusts or 103-12 investment entities in which the plan participates; and
6. Actuarial information regarding the funding of the plan.

Savings Program

Basic Financial Statement

Benefits under the plan are provided by a trust (benefits are provided in whole from trust funds). Plan expenses were \$68,273,965. These expenses included \$17,170,157 in administrative expenses and \$67,489,431 in benefits paid to participants and beneficiaries. A total of 10,499 persons were participants in or beneficiaries of the plan at the end of the plan year, although not all of these persons had yet earned the right to receive benefits.

The value of plan assets, after subtracting liabilities of the plan, was \$1,339,786,023 as of December 31, 2005, compared to \$1,339,786,023 as of January 1, 2005. During the plan year, the plan experienced an increase in its net assets of \$84,038,269. This increase includes unrealized appreciation or depreciation in the value of plan assets; that is, the difference between the value of the plan's assets at the end of the year and the value of the assets at the beginning of the year, or the cost of assets acquired during the year. The plan had total income of \$19,534,877, including gains of \$12,922,376 from the sale of assets and earnings from investments of \$6,612,501.

The plan has a contract with Metropolitan Life Insurance Company, which allocates funds toward individual policies.

Minimum Funding Standards

Enough money was contributed to the plan to keep it funded in accordance with the minimum funding standards of ERISA.

Your Rights to Additional Information

You have the right to receive a copy of the full annual report, or any part thereof, on request. The items listed below are included in that report:

1. An accountant's report;
2. Financial information and information on payments;
3. Assets held for investment;
4. Insurance information including sales commissions paid by insurance carriers; and
5. Information regarding any common or collective trust, pooled separate accounts, master trusts or 103-12 investment entities in which the plan participates.

Annual Report

2005

2005

Summary of Findings

er Identification No. 54-1987297, Plan No. 001) for the period January 1, 2005, to December 31, 2005. The annual report has been filed with the
he annual report, or any part thereof, write or call the office of BWXT Y-12, L.L.C., P.O. Box 2009, MS 8267, Oak Ridge, Tenn. 37830, 865-574-9110.

Group Welfare Benefit Plan

Basic Financial Statement

The value of plan assets, after subtracting liabilities of the plan, was \$-1,080,014,050 as of December 31, 2005 compared to \$-1,006,970,720 as of January 1, 2005. During the plan year, the plan experienced a decrease in its net assets of \$73,043,330. This decrease includes unrealized appreciation or depreciation in the value of plan assets; that is, the difference between the value of the plan's assets at the end of the year and the value of the assets at the beginning of the year, or the cost of assets acquired during the year. During the plan year, the plan had total income of \$96,801,674. This income included employer contributions of \$117,165,891 and employee contributions of \$52,679,113. Plan expenses were \$169,845,004. These expenses included \$9,929,610 in administrative expenses and \$159,915,394 in benefits paid to participants and beneficiaries.

Your Rights to Additional Information

You have the right to receive a copy of the full annual report, or any part thereof, on request. The items listed below are included in that report:

1. An accountant's report; and
2. Insurance information including sales commissions paid by insurance carriers.

For more information

You also have the right to receive from the plan administrator, on request and at no charge, a statement of the assets and liabilities of the plan and accompanying notes, or a statement of income and expenses of the plan and accompanying notes, or both. If you request a copy of the full annual report from the plan administrator, these two statements and accompanying notes will be included as part of that report. These portions of the report are furnished without charge. You also have the legally protected right to examine the annual report at the main office of the plan: BWXT Y-12, L.L.C., P.O. Box 2009, MS8267 Oak Ridge, TN 37830 and at the U.S. Department of Labor in Washington, D.C., or to obtain a copy from the U.S. Department of Labor upon payment of copying costs. Requests to the Department should be addressed to: U.S. Department of Labor, Employee Benefits Security Administration, Public Disclosure Room, 200 Constitution Avenue, NW, Suite N-1513, Washington, D.C. 20210.

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5. These expenses included \$784,534
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l income of \$152,312,234, including
contributions of \$53,759,337, gains
gs from investments of \$63,827,042.
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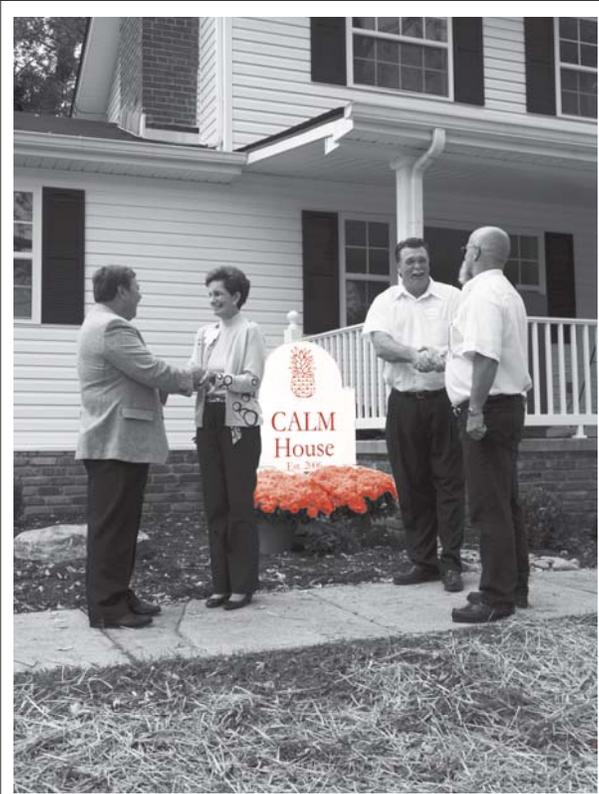
Built by 'Mel & Friends'

A partnership of labor and management

Mel Schuster, Construction Labor Relations, and some of his friends from Y-12 donated their time to turn a degenerating old house into a cozy home for future patients and their caregivers. The home away from home is the second hospitality house for Methodist Medical Center in Oak Ridge.

The Cooperative Agreement of Labor and Management—or CALM—House is a joint labor-management initiative of the Knoxville Building and Construction Trades Council and the various unionized construction employers working on the Oak Ridge Reservation. Members of the building trades at Y-12 provided apprentices and journeymen with experience in carpentry, plumbing, painting and drywall, electrical, sheet-metal, roofing, and sprinkler installation.

Schuster, management co-director of CALM, said the project made him feel good to be part of such a benevolent venture. "I became even more enthused after my own son recently spent time in an intensive care unit in another city. Luckily, we had good friends with whom we stayed," he reflected. "I can now tell you from experience how much it meant just to have a place to shower, eat, relax, and gather one's thoughts, if only for a short time."



From left, Mel Schuster, Labor Relations; Jenny Edgar, Methodist Medical Center Hospitality Houses coordinator; Ray Whitehead, president of the Knoxville Building and Construction Trades Council; and Doug Holman, BWXT Y-12 carpenter and coordinator of the Carpenters Apprenticeship and Training Program, put out the welcome mat at the CALM House opening.

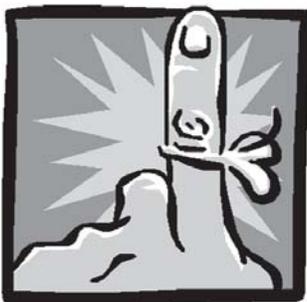
Terry Clark, Y-12 carpenter apprentice, said he feels glad to be a part of a project where his individual contributions count. "It's all about giving back to the community," said Clark.

Ray Whitehead, labor co-director of CALM and president of the Knoxville Building and Construction Trades Council, served as the labor representative for construction. "CALM House is proof positive that labor and management can work together," he said.

This project strengthened relationships between BWXT Y-12 management and construction labor. Almost all of the hours worked on the house were performed by the apprenticeship classes of the various construction craft unions who worked at night after work and/or on weekends. Whitehead said how proud he was to be a part of the building of this facility and of the efforts of all of the construction craft apprentices and their instructors. "Our apprentices

learned something about giving, and they benefited from the opportunity to hone their skills as they worked with seasoned professionals," said Whitehead.

"People working together to help others in need is a good feeling for everyone in our community," said Schuster.



Don't forget!

Time's running out, and the deadline for the "East Tennessee Nature Photography Contest" is fast approaching. Mark your calendars for Feb. 7 and make sure your (or your family member's) top 10 nature-related photos (taken in East Tennessee) are in to Terry Marlar (9766, MS 8113). Digital, film and print images will be accepted.

Top winning photos will be signed by the entrant, dated, framed and displayed in either the Jack Case or New Hope centers. Dozens more will be used as screensavers.

For complete contest rules, contact Marlar (m73; 574-1287). Don't shutter at the thought; expose your talents!

November

40 years

Facilities, Infrastructure and Services:

John C. Hamilton and Arnold M. Watson

35 years

Applied Technologies: William E.

Barkman

30 years

Applied Technologies: Dean K. Little

Chief Financial Officer Division: Stephen E.

McNew and Susan H. Spangler

Engineering: Clark R. Hammond and Reginald E. James

Facilities, Infrastructure and Services: Ersel D. Alexander,

Terry L. Beeler, William L. Beeler, Charles E. Heth, Timothy S. Leach and Michael J. Pickell

Information and Materials: Frances S. Varnadore

Manufacturing: Larry T. Hodge, Leo K. Lugten, Bobby L. Neal,

William A. Ragsdale, Ronald G. Steward, Daniel M. Vance and Judy A. Warren

Quality Assurance: George F. Larson and Luther D. Newman Jr.

25 years

Applied Technologies: William J. Grove

Environment, Safety and Health: Marie A. Collier and Gary F.

Hagan

Facilities, Infrastructure and Services: Arthur O. Brown Jr.

Human Resources: Jean M. Atkinson and Steven D. Weaver

Information Technology: Pamela L. Summers

Manufacturing: Thomas J. Barnard, Boyd A. Bivens and

Christopher L. Lane

Quality Assurance: Karen L. Bowles and Peggy K. Hamby

20 years

Engineering: Bradley K. Walker

Human Resources: Eloise Duff

Manufacturing: Gary R. Burnum and Clifton J. Posey

Planning, Integration and Control: George S. Butler Jr.

Safeguards and Security: Warren L. Willis



December

42 years

Information Technology: Wesley D. Sims

41 years

Facilities, Infrastructure and Services:

Glenn Bryson

35 years

Manufacturing: Clifton D. Guider

30 years

Applied Technologies: David K. Mee and

Larry M. Woodard

Engineering: Ernest L. Lamb and Ronald D. Wall

Environment, Safety and Health: Douglas A. Estes

Facilities, Infrastructure and Services: Theodore A.

Adkins II, John K. Dugger, Carlon G. Fitzhugh and Charles R. Hayes

Human Resources: Joyce M. Price

Information and Materials: Barbara J. Ratledge

National Security and Development

Programs: Marilyn H. Giles

Planning, Integration and Control: Walter K. Hyatt

Public Affairs and Communications: Linda L. Cantrell

Quality Assurance: Pamela W. Gardner

25 years

Applied Technologies: Sam W. Brown

Facilities, Infrastructure and Services: Yulonda G. Wilson

Information and Materials: Deborah L. Ferguson

Manufacturing: Edward E. Chatman Sr.

Quality Assurance: James D. Carnes and William A. Honeycutt

Safeguards and Security: Thomas L. Hudson Jr.

20 years

Applied Technologies: Larry R. Mooney

Engineering: Michael L. Gambrell

Facilities, Infrastructure and Services: Wallace N. Dulling Jr.

Projects: David E. Lind

Quality Assurance: Rhonda G. Goley

Safeguards and Security: Karen W. McCulloch

How to end your holiday in the 'green'

- Fill your dishwasher to capacity before running it. You will run fewer cycles, which saves energy.
- If you decorate with a living evergreen, plant it in your yard after the holidays or have it mulched.
- Keep holiday greeting cards and use the fronts as gift tags or package decorations next year.
- Save and recycle used wrapping paper and gift bags.
- Recycle your aluminum, plastic and glass.
- For more at-home pollution prevention tips, visit <http://www-internal.y12.doe.gov/pp2/p2-holiday.html>.

TIPS!

Did you know?



Ways to prepare for the 'mega move'

As we prepare for the largest move on the Y-12 site since the 1940s, there are many questions to be answered and details to share. Following are snippets of information to answer some of the most frequently asked questions.

- Construction is approximately 70 percent complete. Occupancy is expected to begin in July 2007 and will take place over a 4-week period.
- The "Mega Move" Coordination Team is made up of 15 coordinators. Their names and other important move information can be found on the "Construction" website in the Mega Moves Meeting presentation.
- There is a Systems Transition Task Team coordinating essential Y-12-provided building infrastructure, security and move preparation across organizations.
- There is a Move Integration Team providing administrative and communications support.
- There is a Special Moves Team coordinating complex area moves.
- There is an Art and Artifacts Team selecting and procuring artwork and historic artifacts for display.



Workstations at the Jack Case and New Hope centers may be personalized by employees.

- Begin sorting through your documents to destroy what will not be moved or archived. Betty Robinette and the records management group of Information and Materials will provide specific guidance.

- Your move coordinator will give you a charge number to use for move-related time.
- Badge reader systems will be used in both facilities.
- Jack Case and New Hope centers are private facilities leased by Y-12, but workstations and offices may be personalized.
- Workstation storage will have its own keys; offices will have unique, controlled keys.
- All Knoll work surfaces meet the American National Standards

Institute/Business and Institutional Furniture Manufacturer's Association code of 7 lb per linear inch and 5 lb per linear inch for shelves and overheads.

- If you have a printer and want to use it in your new workspace, you can do that.
- Break rooms will contain a refrigerator, microwave, ice-maker, sinks, vending machines, tables and chairs and a coffee bar. There are multiple break rooms on every floor.

Watch YSource, YLights, *The Y-12 Report* and the *BWXTymes* for more construction and move information.

BWXTymes

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December 2006

<http://www.y12.doe.gov/news/bwxtymes.php>

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