

PANTEXAN

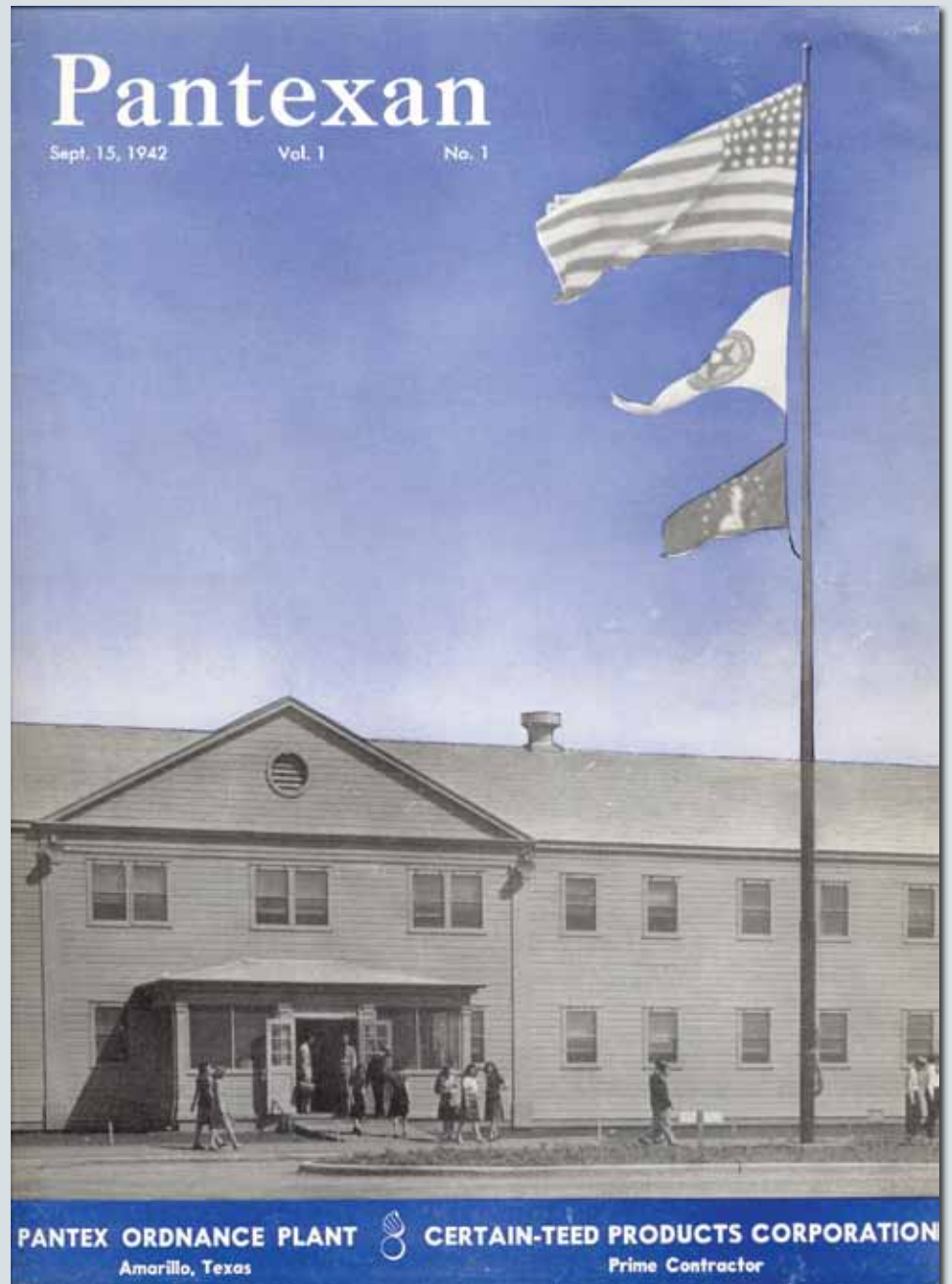
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National Nuclear Security Administration's Pantex Plant

Plant Tradition

First published in 1942, the *Pantexan* served as a medium of expression among self-described “war workers.” It also encouraged them to observe safety rules and endeavored to create enthusiasm and instill American patriotism. This cover photo featured the Administration Building, no longer in existence, with the flagpole displaying the American flag, Pantex Certain-teed pennant and Minute Man flag, which, according to the *Pantexan*, “told the world that 100 percent of Pantex employees invest an average of 10 percent of their salaries in war bonds every payday.”



On the Cover

Operations at Pantex have resumed on the B61 program and all other programs following a near two-thousand-year flood experienced July 7, 2010, during which more than 10 inches of rain fell causing significant equipment and facility damage.

PANTEXAN

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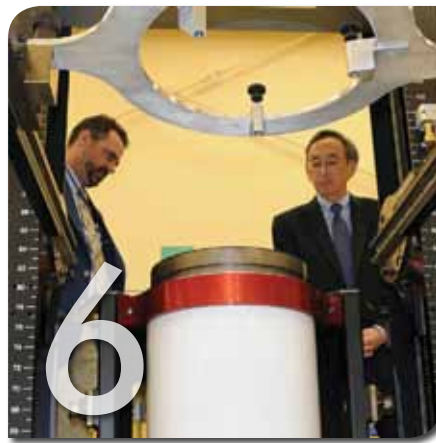
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DOE designates Pantex “STAR” site

Employee-management partnership fosters safety culture

Employees who call attention to safety issues and take action to resolve them are referred to at Pantex as those with the “courage to care.” These employees helped earn B&W Pantex recognition by the U.S. Department of Energy as a Voluntary Protection Program STAR site, the highest safety-related recognition given by the DOE.

Pursuit of STAR status in the VPP began in May 2008 when B&W Pantex formed a steering committee whose membership represented employees from across the Plant. A formal application was submitted to the DOE in early October 2009.

“Sustaining the nation’s nuclear deterrent capability takes empowered employees who go above and beyond every day to fulfill the mission safely,” said Kelley Young, production technician and steering committee member. “Our end goal is zero accidents. STAR status reflects that everyone at Pantex is dedicated to working safely.”

DOE contractors are not required to apply for participation in the VPP, and requirements for VPP participation are based on comprehensive management systems with employees actively involved in assessing, preventing and controlling the potential health and safety hazards at their sites.

Earning the STAR is just the beginning of the VPP process. B&W Pantex must maintain its already high standard for safe performance and demonstrate management’s commitment to continuous improvement. A DOE review team will conduct a triennial evaluation.

“People are our most valuable asset. That’s why safety is one of our core values,” said Scott Kennedy, B&W Pantex deputy general manager. “Labor and management are on the same team and committed to maintaining our status through rigorous self assessment and continual improvement.”

B&W Pantex has the best safety performance record among the National Nuclear Security Administration’s manufacturing sites and recently received the Occupational Excellence Achievement Award from the National Safety Council. In 2007, Pantex was named one of America’s Safest Companies by *Occupational Hazards* magazine.

“Sustaining the nation's nuclear deterrent capability takes empowered employees who go above and beyond every day to fulfill the mission safely.”
Kelley Young,
production technician

Message from the Site Manager and General Manager

Pantexans are a rare breed. We've known this, and have heard it from many visitors to the site, but Pantexans proved it on the night of July 7, 2010 when water from a torrential rain invaded the Material Access Area of the Pantex Plant.

The downpour dumped over 10 inches of water on the Texas Panhandle, but some of the buildings had standing water at the 18-inch level. Other areas of the Plant were also hit hard. As the rain came down, those working in the area soon realized the water was rising at an alarming rate. Because the event happened in the evening, very few employees were at the Plant, but those who were answered the call for help. They manned mops and brooms, and filled sandbags to place around doors and other openings.

Although the flood did impact production work in most areas of the Plant for approximately one month, we were able to complete the W62 dismantlement about a year early and authorize the B53 and W84. Once again, employees are the reason for this accomplishment. Managers constantly worked to ensure the facilities were available, and the workforce maintained a safe and steady pace.

After several years of hard work by a great number of employees, B&W Pantex earned STAR status in the DOE's Voluntary Protection Program. We continue to celebrate this accomplishment because safety is one of our core values.

Rick Hartley, B&W Pantex, is featured in this publication for his work with Pantex's High Reliability Organization program. As the site's HRO expert, he recently shared his knowledge with Statoil Exploration and Production Norway, the world's largest off-shore oil drilling company. Earlier this year, he testified before the National Transportation Safety Board in hearings focused on the subway accident in Washington, D.C.

Back at home, record-setting crops are being harvested thanks to the Pantex's underground irrigation system. The system transports the site's treated wastewater to the fields. Irrigation fulfills the state's desire for businesses to use water in a more beneficial manner.

We hope you take the time to read about Pantex and our outstanding employees in this publication. You'll see that they are truly a rare breed.



Steve Erhart
Pantex Site Office Manager

Pantex is securing America as the NNSA's production integrator and provider of the nuclear deterrent to the Department of Defense; serving the Nuclear Security Enterprise through our highly reliable people, processes, infrastructure and business systems.



John Woolery
B&W Pantex General Manager



Less than a month after a near two-thousand-year flood, most Pantex facilities resume operations.

Downpour floods Pantex facilities

Teamwork key to recovery, sustained performance

A foot of rain water coursed its way through the Material Access Area of the Pantex Plant on July 7, 2010 while employees labored to stop the flow. The Plant received 10 inches of rain in a matter of hours. The deluge caused roughly \$60 million worth of damage and virtually halted nuclear weapons and nuclear explosives operations.

Recovery began immediately. After determining that it was safe to operate, the main question was, “How will this event impact the production schedule?” Although unknown at first, the answer was that it wouldn’t. B&W Pantex, the management and operating contractor at the National Nuclear Security Administration site, began and ended the month of July ahead of schedule although little work was conducted. Less than a month after the flood, most facilities were ready for operations to resume.

“The people at Pantex work miracles every day and this was no exception,” said Brigadier General Garrett Harencak, principal assistant deputy administrator for Military Application in the Office of Defense Programs. General Harencak visited Pantex to survey the damage and thank employees for their work on the night of July 7.

“Sustained production and a constant, positive use of our facilities is the reason we are ahead of schedule,” said John Woolery, B&W Pantex general manager. “The secret is communication, planning and a willingness to work with the other Nuclear Security Enterprise sites.”

Over the past four years, the NNSA has asked B&W Pantex to increase the number of dismantlements in addition to increases in life extension program work, joint test assemblies and annual maintenance on active stockpile weapons programs. This work is needed to

ensure a safe and credible nuclear deterrent and to support the nation’s nonproliferation goals.

In fiscal year 2007, Pantex successfully completed the Defense Programs “Getting the Job Done” Top 10 goal of increasing dismantlements by 49 percent – more than four months ahead of schedule. At year’s end, Pantex achieved a 146-percent increase in dismantlements.

“The people at Pantex work miracles every day and this was no exception.”
Brigadier General Garrett Harencak

Pantex exceeded weapons product delivery commitments established in “Getting the Job Done” goals again in fiscal year 2008, including completing 109 percent of the planned dismantlement deliverables; beating the total number of dismantlements completed in the previous fiscal year by 20 percent.

Fiscal year 2009 was no different. Pantex accomplished 118 percent of NNSA’s goal for planned stockpile dismantlements while meeting or exceeding all other “Getting the Job Done” goals. This was accomplished while achieving a Total Recordable Case rate of 0.43.

In fiscal year 2010, B&W Pantex achieved a safety performance record with a Total Recordable Case Rate of 0.40, the all-time record low at the Plant, and tied the best-ever Lost Time Case Rate of 0.06, continuing to set the operational standard in safe work performance while completing 116 percent of the required weapon deliverables.

Energy Secretary makes first visit to Pantex

Assesses flood damage, acknowledges milestone, examines tooling

U.S. Secretary of Energy Steven Chu spent time at Pantex in early August inspecting damage from the July flood waters. During his visit, Chu also announced the dismantlement of the last W62 thermonuclear warhead at Pantex and examined the site's new B83 tooling system (right), developed to enhance safety, and save time and money.

Dismantlement of the W62 marked a milestone completed seven months ahead of schedule. Designed in the late 1960s by Lawrence Livermore and Sandia National Laboratories, it was manufactured from 1970 to 1976 and used by the Air Force on some Minuteman III Intercontinental Ballistic Missiles.

"I am proud to have had the opportunity to join the outstanding men and women working at NNSA's Pantex Plant for this important milestone. I applaud the team here for working so diligently to ensure that the W62 dismantlement program was safely completed more than one full year ahead of schedule and for their continued commitment to working in challenging environments to advance a critical national security mission," said Chu.

The W62 was set for permanent retirement under the 2002 Nuclear Posture Review. The warheads will be replaced on the Minuteman III with the newer, more modern W87 warheads, which were previously deployed on the MX/Peacekeeper missile.

"Dismantling the last W62 is a significant accomplishment for Pantex and the National Security Enterprise," said Steve Erhart,

Pantex Site Office manager. "Of course it's very important to both our President and to Congress. This moves us closer to the Administration's goal of a nuclear-free world."

"Completion of the W62 dismantlement campaign is a result of more than five years of work in support of the NNSA's Dismantlement Plan as well as President Obama's nonproliferation commitments," said Jeff Yarbrough, B&W Pantex Weapons Program director.

Added John Woolery, B&W Pantex general manager, "This achievement could not have been accomplished without the hard work and dedication of B&W Pantex employees and support from the National Nuclear Security Agency, the DOE national laboratories and other contractor organizations."

Chu also spent time during his visit examining a new system designed by B&W Pantex to dismantle the B83 strategic bomb. The B83 tooling will cut in half the number of facilities needed to process a B83 unit as well as reduce the time it takes to process each unit.

The tooling provides a safe and controlled method of handling the 2,500-pound assembly in a single nuclear explosive operating area without the need for hoisting or rigging equipment. It will be implemented in late 2011 as part of the continuous improvement aspect of the Integrated Safety Management process known as Seamless Safety for the 21st Century.



“...as long as there are nuclear weapons in the world, the U.S. will have nuclear weapons and as long as the U.S. has nuclear weapons, Pantex has a critical role.”
U.S. Secretary of Energy Steven Chu

Oil industry giant seeks Pantex expertise on High Reliability Organizations

Gulf spill prompts proactive approach to safety by Norway's Statoil

Pantex's reputation as one of the few organizations to implement and pursue the practices of a High Reliability Organization has been recognized as far away as Norway. Statoil Exploration and Production Norway, the world's largest off-shore drilling company, recently turned to Pantex for lessons learned in becoming an HRO.

HROs are those that – in spite of the fact that they routinely deal with hazardous, high-consequence operations – successfully and routinely operate without experiencing system accidents, explained Rick Hartley, principal engineer and HRO lead for Pantex.

“Because of the consequences of what we do, Pantex has no choice except to strive to become an HRO,” he said. “Being an HRO requires taking a systems approach to avoiding catastrophic accidents because we cannot rely upon everyone to have a perfect day, every day.”

At NNSA's request, a Pantex team met with senior executives of Statoil in August at their Houston office. The team included Hartley, Janice Tolk and Bill Mairson of B&W Pantex, Karl Waltzer of the NNSA Pantex Site Office and Earl Carnes, DOE/HS31 senior advisor on High Reliability. Prior to the meeting, several Statoil representatives attended the Pantex HRO course at West Texas A&M University.

“Statoil is known throughout the world as perhaps one of the safest operating off-shore drilling companies. With operations in 40 countries, they

continue to identify ways to learn more about improving the safety of their operations and view the pursuit of becoming an HRO as the next level of safe performance,” Hartley said. In doing so, he added, they potentially can avoid a catastrophic event similar to what BP is experiencing.

“The session was an eye opener for many in the management group,” said Ståle Tungesvik, Statoil Exploration and Production Norway Reserves and Business Development senior vice president in a follow-up note. “When returning home from the USA we spent a day discussing how we as leaders should change our approach to demonstrate a new direction in risk management, particularly in the position of being role models for the organization. Based upon our experience with you we would very much like to ask you for collaboration in the future.”

Statoil is the latest organization to seek Pantex's insight in the area of HRO. Others include the National Transportation Safety Board, the American Public Transportation Association, Welstar Healthcare Network of Atlanta, Brookhaven National Laboratory, Y-12, NNSA's Defense Nuclear Security and Defense Programs and the Defense Nuclear Facilities Safety Board.

“We will never say we are there, less we fall. HRO is a journey,” Hartley said of Pantex. “We continue to make operational improvements every day, but we'll never be satisfied. High Reliability is a journey that never ends.”

A middle-aged man with short, graying hair and glasses, wearing a light blue button-down shirt, stands with his arms crossed. He is positioned in front of a large industrial facility, likely a nuclear power plant, with complex piping and structures illuminated against a dark blue night sky. The background shows various levels of the facility, including a tall tower and several walkways with railings.

“Being an HRO requires taking a systems approach to avoiding catastrophic accidents because we cannot rely upon everyone to have a perfect day, every day.”

Rick Hartley, Pantex HRO lead



Crops reap benefits of Pantex irrigation system

Treated wastewater bolsters agriculture

Glistening fields of wheat and lush tracts of corn stretch across Pantex land soaking up the Texas sun. Invisible to the eye is what else they're soaking up – an estimated 900,000 gallons a day of treated wastewater.

Instead of discharging treated wastewater to a playa lake on Pantex property, Pantex uses an underground irrigation system to water crops

grown by Texas Tech University on 300 acres of cultivated land in the northeast section of the Plant. Recent approval by the Texas Commission on Environmental Quality to add another 100-acre tract to the existing three 100-acre tracts will result in more than 1.2 million gallons per day of water being beneficially reused for agricultural purposes beginning in 2011.

The irrigation system is the product of a partnership between the DOE, B&W Pantex and Texas Tech. Since being placed in full operation in 2005, more than 630 million gallons of treated water has been reused. Crops authorized to be grown at Pantex include wheat, corn, grain sorghum, soybeans, cotton and oats.

“This type of beneficial reuse is in keeping with the state of Texas’ goals for more efficient use of water on the Texas High Plains, while serving as an important component in meeting and exceeding the U.S. Government’s goals for environmental stewardship,” said Jeff Flowers, B&W Pantex Environmental Stewardship Department manager.

With the exception of wheat, crops grown at the Pantex subsurface irrigation tracts have been used as components in animal feed. Wheat is combined with other local producer’s wheat and could be distributed nationally or internationally for flour milling purposes.

Yield results from the beneficial use of this treated wastewater have been impressive, according to Flowers, with above Carson County averages in bushel per acre for wheat, and last growing season, a Carson County record in density per bushel for corn.

The 100-acre tract to be added to the underground irrigation system will help dispose of water generated by the Plant’s groundwater remediation efforts. Upgrades to the current three 100-acre tracts also are being implemented, including installation of more robust piping, higher-capacity pumps and new wastewater filter banks.

Commitment to the arts earns B&W Pantex Golden Nail Award

Support enables symphony to train musicians, offers students distance learning

A shining example of a responsible corporate citizen – one that knows the value of a strong cultural scene in its community – that’s how Chip Chandler, Amarillo Symphony Development and Communications director, describes Pantex.

In addition to being the single most generous corporate sponsor of the symphony’s 2009-2010 season, B&W Pantex provides financial assistance to the Amarillo Opera, Don and Sybil Harrington Discovery Center, Amarillo Little Theatre, Lone Star Ballet, Amarillo Museum of Art, Windows on a Wider World and Amarillo Youth Choirs.

For its commitment to the community, B&W Pantex was honored with a Golden Nail Award from the Amarillo Chamber of Commerce. The award recognizes Amarillo and area individuals, businesses, foundations and volunteers for providing financial, in-kind and volunteerism to the fine arts.

B&W Pantex’s support enables the symphony to deliver classical concerts, train young musicians, perform for thousands of young listeners and offer accessible pops concerts that serve a diverse audience. Its support of the Globe-News Center for the Performing Arts’ education outreach program, Windows on a Wider World, offers distance learning to area elementary students.

“Maintaining good arts in Amarillo makes it a better community not just for Pantex employees,” said Debra Halliday, Pantex Community Relations coordinator, “but for everyone.”

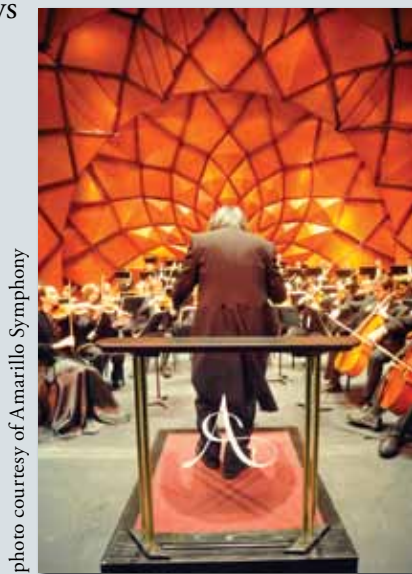


photo courtesy of Amarillo Symphony

Pantex Postscripts

Defense Department recognition:

Pantex received three Defense Program Awards of Excellence for projects that made a significant contribution to the mission of the National Security Enterprise. Projects awarded were Automated Cable Testing, Quality Evaluation Requirements Tracking System and Weapon Trainer Maintenance.

Security force strength:

The Pantex SPOTC Team earned second place at the National Security Competition in Oak Ridge, Tennessee. The team competed against security forces from across the Enterprise in firearms and tactical exercises. Events require shooting, running, climbing and rescue tasks simulating situations security personnel may encounter.

Environmentally friendly moves:

Conserving 18 million gallons of water and recycling 492,520 pounds of scrap metal not only protected natural resources and enhanced Plant operations; it earned Pantex two DOE Pollution Prevention awards.

Feeding local families:

The High Plains Food Bank received more than \$10,000 and 1,500 pounds of donated food to replenish their supplies thanks to the generosity of the Pantex Site Office and B&W Pantex employees. The Food Bank can convert the monetary donations into approximately 50,000 pounds of food. The effort was part of DOE's "Feds Feed Families" campaign.

Inviting interaction:

Connect with the Pantex Plant on Facebook or follow us on Twitter. Our Facebook page showcases the Plant's community outreach activities, and Tweets offer users news releases and emergency information.



Jason Hoppe (left), B&W Pantex Security police officer, earned the Sydnor Award for Motivation during the DOE's Composite Adversary Team's training session at Ft. Hood, Texas. The team is composed of protective forces throughout the DOE complex that train together in terrorist tactics and techniques and serve as the adversary during force-on-force performance tests of DOE protective forces.

Pantex Visitors Center opens

A four-year effort to preserve Pantex's heritage culminated in the recent opening of its historical Visitors Center, which also serves as a welcome center for the site's more than 7,000 annual invited guests.

As the nation's only nuclear weapon assembly and disassembly facility, preservation of Pantex Cold War history is a significant part of the site's preservation mission.

"The Center allows incoming visitors, cleared and uncleared, to understand and experience the site, which provides a framework and a starting point for conveying a broad interpretive story," said Monica Graham, Pantex historian.

Center visitors are immersed in history through interpretive exhibits, unique site design elements and cultural and natural displays. Planned features include a high-level multimedia center offering Pantex oral histories and accompanying visual information.



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NNSA
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