



National Nuclear Security Administration Monthly News

In T	his Issue
Neile Miller Confirmed as NNSA Deputy Administrator	
NNSA Prevents Terrorism Through Trail	ning4
NNSA's Defense Programs Forms New Council to Explore Cross-cutting Issues	

www.facebook.com/NNSANews www.twitter.com/NNSANews www.youtube.com/NNSANews www.flickr.com/NNSANews

Pantex Completes W62 Dismantlement Program

U.S. Secretary of Energy Steven Chu traveled to NNSA's Pantex Plant in mid-August to participate in the dismantlement of the last W62 nuclear warhead, completing that program one year ahead of schedule and further contributing to the goals President Obama outlined in his landmark 2009

(continued on page 2)



W62 DISMANTLEMENT: Secretary of Energy Steven Chu announced NNSA's dismantlement of the last W62 nuclear warhead during an Aug. 11, 2010, visit to NNSA's Pantex Plant. Pictured left to right are Karl Waltzer, senior scientific & technical advisor, PXSO; Steve Erhart, manager, PXSO; Secretary of Energy Dr. Steven Chu; NNSA Administrator Thomas D'Agostino; John Woolery, general manager, B&W Pantex; Steve Goodrum, assistant deputy administrator for Stockpile Management; and Scott Kennedy, deputy general manager, B&W Pantex.

New Name for NNSA's Nevada Test Site

NNSA Administrator Thomas D'Agostino joined senior administration officials and members of the Nevada Congressional delegation to rename the Nevada National Security Site (NNSS) in a ceremony on Aug. 23.



NNSA ANNOUNCES NEW NAME FOR NTS: Administrator Thomas D'Agostino speaks at the Nevada National Security Site ceremony.

The new name for the former Nevada Test Site better reflects the diversity of nuclear, energy and homeland security activities being conducted there.

"For 60 years, this site has played a critical role in keeping our nation safe and secure," D'Agostino said. "As we adapt to changing national security missions and work to transform a Cold War nuclear weapons complex into a 21st century nuclear security enterprise, this site is growing ever more important. The work being done here in Nevada is a perfect example of the ways our nation's investment in nuclear security is providing the tools to tackle a wide variety of national security challenges."

To commemorate the event, Administrator D'Agostino was joined by Senate Majority Leader Harry Reid; Nevada Representatives Shelley Berkley and Dina Titus; Warren Stern, director of DHS' Domestic

(continued on page 2)

Administrator's Corner

As summer draws to a close, I hope that each of you has taken some well-deserved time off to be with your families and friends and to recharge your batteries to get ready for a busy fall. I had the opportunity to get away from the office with my family, and we really enjoyed ourselves and the break from our daily routines.

Earlier this month, I had the privilege of accompanying Secretary Chu on his first trip to Pantex. The primary purpose of our visit was to see the damage caused by the massive rainstorm that dropped more than 10 inches of rain in a few hours early last month. While major parts of the Plant were flooded and some critical pieces of equipment destroyed, the outstanding on-site leadership and excellent teamwork prevented even more extensive damage.

We also witnessed the dismantlement of the last W62 warhead – this is a major milestone in our efforts to reduce and transform the nuclear weapons stockpile. I am very proud that this dismantlement program was completed more than a full year ahead of schedule and clearly demonstrates the progress we are making in improving our ability to complete our work on time and in the safest, most secure and efficient manner possible. Secretary Chu was very impressed with the management team and staff at Pantex and thanked everyone for their professionalism and commitment to excellence.

On Aug. 23, I hosted Senator Harry Reid (D-NV), Congresswomen Shelley Berkley (D-NV), Dina Titus (D-NV), and a number of officials from the departments of State, Defense and Homeland Security in a ceremony to rename the Nevada Test Site. The new name is the Nevada National Security Site, which clearly recognizes the expanded role this site is playing in providing highly specialized, technical support required by our interagency partners to meet the challenges we face in the post-911 era.



On Aug. 24, I had the privilege of swearing in Neile Miller as NNSA's new principal deputy administrator. Neile is an incredibly capable individual, and it is great to have her on board! We are very close to having our senior leadership team in place with the recent additions of Dr. Don Cook and Neile. Hopefully, Anne Harrington will be confirmed as our deputy administrator for Defense Nuclear Nonproliferation by the Senate in September. I would like to take this opportunity to thank all of you who have ensured that we met all of our major commitments during the recent timeframe that these key positions remained vacant. It will be nice to have everyone on board and for us to work on our team building and to concentrate on meeting the commitments outlined in the President's nuclear security agenda.

As always, I sincerely appreciate all of your hard work and dedication to our very important mission.

Tom D'Agostino

Pantex Completes W62 Dismantlement Program

(continued from page 1)

speech on nuclear security in Prague.

In that speech, the President said "we will reduce the role of nuclear weapons in our national security strategy and urge others to do the same."

"Completing the last W62 dismantlement is a tangible demonstration of our firm commitment to support the President's goal of reducing the number of nuclear weapons and their role in the U.S. national security strategy," said Secretary Chu. "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."

The W62 dismantlement program safely and securely took apart the retired 1970s era warhead, which will never again be a part of the U.S. nuclear weapons stockpile.

During his visit, Secretary Chu also toured several facilities at Pantex and met with employees to reinforce the critical role they play in the President's nuclear security agenda.

New Name for Nevada Test Site

(continued from page 1)

Nuclear Detection Office; Kenneth A. Myers, director of DoD's Defense Threat Reduction Agency; Brian Nordmann, director of the State Department's Verification and Transparency Technologies Office; Stephen Mellington, manager of NNSA's Nevada Site Office; and Stephen Younger, president of National Security Technologies.

The primary mission of the NNSS is to support NNSA's efforts to maintain the safety, security and effectiveness of the nation's nuclear deterrent without underground nuclear testing. Exercising the skills and capabilities required to accomplish that mission also helps provide the nation with a unique capability to support a wide variety of additional national security missions.

Neile Miller Confirmed as NNSA Deputy Administrator

NNSA Principal Deputy Administrator Neile Miller was recently confirmed by the U.S. Senate and has started in her new role overseeing NNSA's daily operations and providing leadership and direction to NNSA's senior staff.

"I am delighted that Neile Miller is joining our NNSA leadership team," said Administrator D'Agostino. "She brings a tremendous amount of program knowledge, management and financial experience to this position. She will play a critical role as we continue to modernize our nuclear security infrastructure and transform a Cold War-era nuclear weapons complex into a 21st century nuclear security enterprise. Having



worked with Neile for many years, I know that her background in national security policy matters will be a tremendous asset in helping to implement President Obama's nuclear security agenda."

Miller most recently served as director of the Office of Budget at the Department of Energy. In this capacity, Miller was responsible for managing the continuous processes of formulating, defending and executing DOE's \$29 billion annual budget.

Prior to being the director of the Office of Budget at DOE, Miller served as a senior program examiner in the National Security Division of the White House Office of Management and Budget. Miller also served in two associate director positions in DOE's Office of Nuclear Energy – first as associate director for Resource Management, and later as associate director for International Nuclear Cooperation.

Miller earned her undergraduate degree in political science from Vassar College and her master's degree in International Affairs from the Georgetown University School of Foreign Service.



PRESIDENTIAL RANK AWARD: Deputy Administrator for Defense Programs Don Cook recently presented Dimitri Kusnezov, director of the NNSA Office of Research and Development for National Security Science and Technology, a Presidential Rank Award. Each year, the President recognizes a small group of senior federal employees with this award. Recipients are strong leaders, professionals and scientists who achieve results and consistently demonstrate strength, integrity, industry, and a relentless commitment to excellence in public service.

New Reform Improves NNSA Security Program

NNSA recently completed the initial phase of a new Security Reform Initiative to help improve NNSA's ability to implement its national security mission while maintaining a robust security posture at all of its sites.

The initiative is focused on improving the effectiveness and efficiency of NNSA's security program by adopting improved risk management approaches.

"NNSA takes its responsibility to secure nuclear weapons, special nuclear material, and classified or sensitive information and components very seriously," said NNSA's Chief of Defense Nuclear Security Brad Peterson. "These reforms will ultimately result in updated security policies and practices that will maintain a robust security posture at all of our sites and improve NNSA's ability to implement our vital national security mission."

The initiative focuses on ensuring that our nuclear security enterprise has both the right policies and the right protection postures in place for an effective and efficient security program. It focuses on three areas: physical security, cyber security, and governance.

Since June 2009, NNSA has collaborated extensively with NNSA sites and DOE's Office of Health, Safety and Security. This collaboration enabled NNSA to examine and analyze the security posture of NNSA as well as determine the appropriate policies for implementation at the NNSA sites.

NNSA Prevents Terrorism Through Training

President Obama has called the danger of a terrorist acquiring nuclear weapons "the most immediate and extreme threat to global security." Part of NNSA's core

protect vulnerable nuclear and radiological materials located at civilian sites - such as hospitals, universities. research reactors, and blood

radiological threats. To date, 17 training sessions have been held with more than 600 responders from 58 sites and local law enforcement agencies. The three-day course, led

by Y-12 experts, covers topics such as radiation fundamentals, attempted theft/sabotage of radioactive materials, and enhanced alarm response.

"This training addresses a critical national security need," said Kenneth Sheely, deputy director of GTRI. "Most civilian nuclear and radiological sites rely

> enforcement to be the first armed responders to possible terrorist attempts to steal this material, but many first responders have not been trained to identify

ENHANCING SECURITY: Working with site personnel, such as this dispatcher, allows for optimal integration of GTRI-funded security equipment.

on local law radiological

sources, protect themselves when responding to sites with potential high levels of radioactivity. or interact with security upgrades provided by GTRI to these sites. We are very proud to be able to work with and help these brave men and women."

The course has received accolades from participating agencies, such as the Department of Homeland Security, Nuclear Regulatory Commission, Federal Bureau of Investigation, the International Atomic Energy Agency, the International Criminal Police



nonproliferation mission is to ensure that nuclear and radiological materials are safe and secure.

Through its specialized Alarm Response Training (ART), NNSA's Global Threat Reduction Initiative (GTRI) maintains a sharp focus on prevention that gives our nation's civilian first responders the training they need to protect themselves and their communities when responding to security alarms at civilian sites with nuclear or radiological materials.

GTRI's mission is to reduce and

banks - worldwide to ensure this material is not stolen and made into an improvised nuclear device or a so-called "dirty bomb." Providing training for local law enforcement and site security guards is the first line of defense in protecting against these threats.

The ART course was established in January 2009, at the Y-12 National Security Complex in Oak Ridge, Tenn... to train on-site and local law enforcement how to respond to

SPECIALIZED TRAINING:

Instructor Justin Kesterson does an after-action review of a scenario that has been performed by fellow class participants.



Organization, and local law enforcement agencies.

"Y-12's training facility allowed us to create and work through real-world scenarios. It allowed us to take our training to a whole new level", said Edward Baldini, a homeland security expert with the Philadelphia Police Department.

Y-12 has supported the national security missions of the U.S. for

more than 60 years, beginning with World War II's Manhattan Project. Today, it continues to use its expertise, facilities and technologies to prevent the proliferation of nuclear weapons,

to secure dangerous materials, and to provide the nation with nuclear counterterrorism and emergency response capabilities.

Because of GTRI's specialized training, our nation's civilian first

responders are better prepared when they hit the streets – armed with crucial knowledge and unmatched experience gained at Y-12.



REAL-WORLD SCENARIOS:

Personnel conduct perimeter security and prepare for entry, while responding to scenario involving theft of radioactive materials.

The Science of Nuclear Security

NNSA's Defense Programs Forms New Science Council to Explore Cross-cutting Issues

As part of the recent reorganization of NNSA's Office of Defense Programs, a new Science Council has been formed to investigate and explore cross-cutting science issues and opportunities that have an impact across the national security enterprise.

The Science Council has representatives from each of the national security labs and one person representing the production sites. Members of the council include Alan Patterson from Los Alamos National Laboratory, Greg Simonson from Lawrence Livermore National Laboratory, John Maenchen from Sandia

"Our new Science Council affirms Defense Program's focus on promoting the best science and technology across the enterprise, and the leadership team in place across our programs will ensure that NNSA is best positioned to promote and strengthen NNSA's mission. I look forward to working with the talented team we have here at NNSA to implement the President's nuclear security vision."

Don Cook, Deputy Administrator for Defense Programs

National Laboratories, and Brenda Hunter from the Y-12 National Security Complex, who will be representing NNSA's production sites on the Council. Dimitri Kusnezov from NNSA headquarters serves as chairperson of the council.

NNSA Defense Programs Reorganizes to Address the Future of the Nuclear Weapon Deterrent

NNSA Defense Programs recently underwent a reorganization aimed at creating a sustainable organizational structure that maximizes the ability to address the future of the nuclear weapon deterrent in an effective manner.

Don Cook, deputy administrator for Defense Programs, made the enterprise announcement during a video conference. Defense Programs now includes six offices headed by assistant deputy administrators who will report to Cook. They include:

- Chris Deeney, assistant deputy administrator for Stockpile Stewardship;
- W. Steven Goodrum, assistant deputy administrator for Stockpile Management;
- Phil Niedzielski-Eichner, assistant deputy administrator for Planning, Resources and Integration;
- Jeff Harrell, assistant deputy administrator for Secure Transportation;
- Mike Thompson, assistant deputy administrator for Infrastructure and Construction; and
- Jim McConnell, assistant deputy administrator for Nuclear Safety, Nuclear Operations, and Governance Reform.

"I am pleased to announce an organizational structure for Defense Programs that increases the visibility of science in our mission, provides a clear understanding of roles and responsibilities, increases attention to infrastructure and major construction needs, and operationalizes the inherent link between delivering on our mission and ensuring safety and security at our sites," said Cook.

NNSA Conducts 85th Silent Thunder Counterterrorism Exercise

It's a routine day at the medical center when an alarm suddenly sounds at the hospital's security station, indicating unusual activity near the center's blood irradiator. The device contains 3,000 curies of the isotope Cesium-137, which is used to ensure the safety of blood supplies. In the wrong hands, this high-activity radiological source could be used in a radiological dispersal device, or so-called "dirty bomb. The footage from the blood bank video cameras show two – or possibly three – individuals who appear to be armed.

Fortunately, this event is entirely fictitious, part of the scenario for a one-day table-top exercise designed to bring together federal, state and local emergency managers and first responders from the organizations with responsibilities in responding to a terrorist incident involving weapons of mass destruction or nuclear or radiological materials. This table-top exercise was part of the "Silent Thunder" series held by the Counterterrorism Exercise Program, which recently concluded its landmark 85th exercise at the Massachusetts Institute of Technology (MIT). The "Silent Thunder" series was co-funded by NNSA's Office of Counterterrorism, NNSA's Global Threat Reduction Initiative and the Federal Bureau of Investigation.

"Silent Thunder illustrates how NNSA's investment in nuclear security is providing the technical knowledge and capabilities to protect our country against terrorist attacks," said Deputy Under Secretary for Counterterrorism Steven Aoki. "These exercises are critical to improving cooperation among federal, state and local officials, and we welcome the opportunity to work with organizations like MIT to ensure effective planning, communication and response coordination."

The exercises give these officials critical, hands-on experience in key areas such as initial response to security alarms from sites with nuclear and radiological materials, crisis management, emergency response, containment, evacuation, threat assessment, tactical resolution, consequence management, media relations, and post-event procedures.

The Counterterrorism Exercise Program, which started in 1999, took on an expanded role following the tragic events of Sept. 11, 2001. Since the program's inception, more than 5,700 federal, state and local officials have participated in 85 different exercises.

Kenneth Powers Named as Associate Administrator for Infrastructure and Environment

Kenneth Powers recently began his tenure as NNSA's new associate administrator for Infrastructure and Environment. In this position, Powers is responsible for managing and integrating NNSA's facilities management policies and programs, project management systems

and environmental management programs.

"Ken's successful track record as a project manager, his excellent leadership qualities and his extensive understanding of NNSA's and the Department of Energy's mission make him an outstanding choice to lead NNSA's infrastructure and environmental



Kenneth Powers

programs," said Administrator D'Agostino. "I welcome Ken back to NNSA and look forward to him serving as a vital part of our leadership team."

Powers most recently served as the director of Project Management in the Department of Energy's Office of Civilian Radioactive Waste Management (OCRWM) in Las Vegas, Nev. Prior to joining OCRWM, Powers held several leadership positions. He served as deputy manager of the Nevada Operations Office from 1999 to 2002 and as deputy director of the NNSA Service Center from 2002 to 2003.

Powers replaces Thad Konopnicki who retired in November 2009. Since then, NNSA's Infrastructure and Environment programs have been led by Deputy Associate Administrator for Infrastructure and Environment Randal Scott, who will continue to serve as Powers' deputy.

Powers holds a Master of Science degree in Business Administration from the University of Northern Colorado. He and his wife Taylor will reside in Alexandria, Virginia.

DARHT Upgrades at Los Alamos Laboratory

This month, NNSA and Los Alamos National Laboratory (LANL) achieved another Dual Axis Radiographic Hydrodynamic Test (DARHT) milestone with a successful two axis, multi-image hydrodynamic test following a period of facility maintenance and several key facility and technical improvements.

The test, number 3648, resulted in five superior-quality radiographs – essentially high-powered X-ray images – of a surrogate-material implosion system.

"The results of this successful DARHT test demonstrate NNSA's commitment to ensuring we have top-quality tools and first-rate people required to ensure the safety, security and effectiveness of nuclear weapons stockpile without testing," said Don Cook, deputy administrator for Defense Programs.

The DARHT facility at LANL is an important piece of NNSA's stockpile stewardship program, which uses cutting-edge science, technology and engineering to experimentally confirm predictions of weapons performance

made from computational simulations. Data sets from DARHT experiments are used to verify nuclear weaponsrelated computer codes by providing multiple X-ray pictures of imploding weapon component mockups from two viewpoints at a 90-degree angle. These images are used to evaluate the hydrodynamics of nuclear weapons components. This area of hydrodynamics is the study of how solid materials behave like liquids under extreme pressures and temperatures.

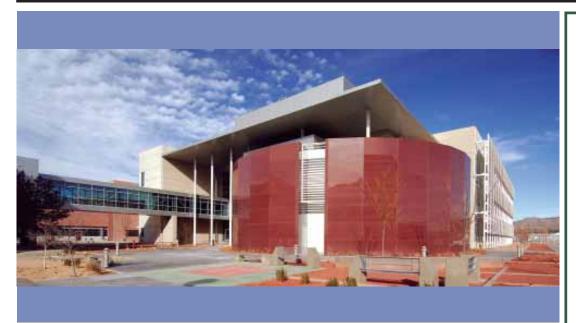
Prior to this latest test, the DARHT facility completed a months-long maintenance and upgrade project. The second axis went through a

refurbishment of the 88-stage Marx bank – a series of 88 large capacitors that can be charged together but discharged in a series, resulting in extremely high voltage pulses. The facility's accelerator and execution control rooms underwent extensive upgrades that included building an all fiber-optic timing, firing and communications system which greatly improved reliability. Energy-efficient, high-definition video monitors were also added.

The DARHT program has two more hydrodynamic tests scheduled in fiscal year 2010, with future plans to improve its multi-image capability – potentially increasing the number of radiographs with each test.

"The recent technical upgrades and facility maintenance at DARHT were important investments in NNSA's infrastructure to help solve tough national challenges. We congratulate the Los Alamos lab for a job well done."

Don Cook, Deputy Administrator for DefensePrograms



MESA DEDICATION: On Aug. 23, NNSA celebrated the three-year anniversary of the Microsystems and Engineering Sciences Applications (MESA) complex at Sandia National Laboratories in Albuquerque, N.M. This \$518 million project, the largest in Sandia history, was formally dedicated on Aug. 23, 2007, and was completed in eight years – three years ahead of schedule – and \$50 million under budget.

NNSA News is published monthly by the Office of Congressional, Intergovernmental and Public Affairs.

EDITORS: William Gibbons, Andrew Hallock, Damien LaVera, Tracy Loughead, Michael Padilla, Al Stotts, Jennifer Wagner

ASSISTANT EDITOR AND DESIGN: Barbara Courtney

CONTRIBUTORS: Vicki Hinkel, Y-12; Heather Looney, NNSA; Kevin Roark, LANL