



ONE VOICE

November 2012

A Publication for the Entire Nevada Enterprise (NvE) Complex

Secretary's Award

Several NNSA employees were recognized by the Secretary of Energy.



See page 3.

20-Year Anniversary

The last underground test at the NNSA was conducted two decades ago.



See page 5.

Local Hero

NNSA firefighter saves the life of an elderly Las Vegas man.



See page 12.

Feds Feed Families Program Exceeds 2012 Goals in Nevada and Across Nation

By Jeff Donaldson, *OneVoice* Editor

With food banks around the country facing severe shortages of non-perishable items, Nevada did its part this year to support local relief agencies by exceeding the annual goal set for the Feds Feed Families program.

unfortunate circumstances.

"The Las Vegas Rescue Mission has 128 full-time residents and more than 100 emergency beds. They provide breakfast, lunch and dinner for families housed



The Nevada Site Office was recognized with a first place trophy for their Tower Bridge of London exhibit. From left to right: Ed Forness, Denise Ashurst, Steve Lawrence, LaTonya Burke, Steve Mellington, Kathy Lynn and Clark Weaver.

Federal employees at the National Nuclear Security Administration Nevada Site Office (NNSA/NSO) Nevada Support Facility (NSF) collected more than 1,700 pounds of food in August for the Las Vegas Rescue Mission (LVRM). The final poundage collected by the U.S. Department of Energy (DOE) this year was 211,186 and it was in the top six of 58 participating agencies. The total poundage collected government-wide was more than 7.2 million pounds.

Now in its fourth year, Nevada Site Office Feds Feed Families Coordinator, LaTonya Burke, said the program calls for each site in the NNSA to select a local agency to donate food. The LVRM was selected because of its hands-on approach to helping families facing

at the mission. In addition, they serve dinner to more than 800 people in need on a daily basis," Burke said. "We're pleased that we can do our part to support the community and help people who are experiencing difficult times."

Collection bins were placed in main traffic areas of the NSF. The amount exceeded the goal of 1,302 pounds set for the campaign in Las Vegas, which runs from June to August each year. "The program counts August as its busiest month, and while NSO had a goal of 413 pounds for the month of August - more than 1,300 pounds was collected," Burke said.

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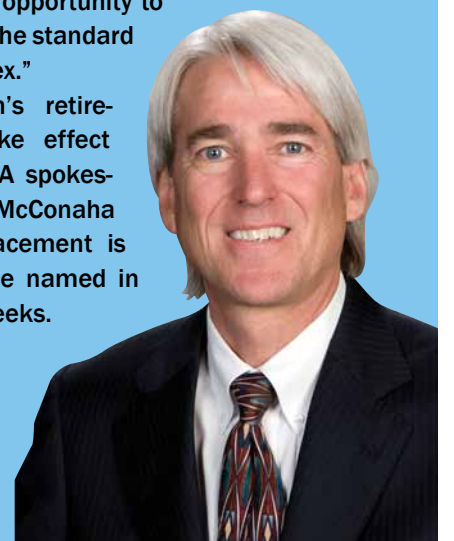
NSO Manager Mellington Announces Retirement

By Darwin Morgan, Nevada Site Office

Steve Mellington, the manager of the National Nuclear Security Administration Nevada Site Office (NNSA/NSO), is retiring at the end of the year, he told colleagues in October.

Mellington, a 25-year veteran of the NSO, has served as its manager or acting manager for nearly five years. "Together we have taken this office to the next level and helped it to become one of the leading Site offices in the NNSA complex," Mellington said in his message. "I believe in and support the new vision of our NNSA leadership. I know that change is hard and sometimes uncomfortable, but it is necessary in our current environment if we are to maintain a viable nuclear weapons enterprise. I ask that you embrace this change as an opportunity to excel and set the standard for the complex."

Mellington's retirement will take effect Dec. 29. NNSA spokesman Josh McConaha said his replacement is expected to be named in the coming weeks.



NvE Executive's Corner

Raymond J. Juzaitis,
NSTec President



Back Office Consolidation Takes Hold

The drive to make the work of the Nevada National Security Site (NNSS) more cost effective is a continuous effort that spans across all contractors and organizations at the NNSS. One initiative that is helping to achieve this goal is Back Office Consolidation.

This initiative began in October 2010 as a follow-on to the site Governance program initiated in 2009. A team comprised of the National Nuclear Security Administration/Nevada Site Office (NNSA/NSO) and Nevada Enterprise contractors – NSTec, WSI-Nevada (WSI), and Navarro-Intera (N-I) – was established to analyze opportunities to leverage back-office support functions such as training, information technology and administrative functions (i.e., mail services, duplicating, leased copiers and communications).

The team was championed by NNSA/NSO Deputy Manager Steven Lawrence NSTec Chief Financial Office Director Jack Stumpf, N-I Program Manager Dave Taylor and WSI-Nevada General Manager Dave Bradley. Subject matter experts who represent each functional area defined the “to be” requirements along with the project execution plan.

In the spirit of the consolidation, NSTec has been working toward this goal with our customer and has made progress in many areas this year.

A sample of the plans implemented in 2012 include: full integration into NSTec e-mail infrastructure for N-I, a centralized issues management system, consolidated employee communication methods for the entire Nevada Enterprise, and consolidation of existing NNSA/NSO and NSTec processes and systems in the areas of document control and records management. These plans will lead to an overarching document management strategy for the site, reduce redundant processes between NSTec and NNSA/NSO and increase efficiency in electronic document review and records management.

More specifically included in Back Office Consolidation was the tour program at the NNSS. The responsibility for coordinating tours and visits has traditionally resided with the Public Affairs director for the NNSA/NSO. Consistent with NvE's new approach to Governance, that responsibility has been transferred to NSTec's Office of Public Affairs. While NSO will maintain its oversight function, day-to-day coordination of the program has shifted. Consolidation of the NvE publications into *OneVoice* is an example of cost savings.

NNSA Nevada Support Facility Receives LEED Gold Certificate

By Darwin Morgan, Nevada Site Office

The National Nuclear Security Administration/Nevada Site Office (NNSA/NSO) has achieved a significant milestone with the naming of its Nevada Support Facility (NSF) as Leadership in Energy and Environmental Design (LEED) Gold certified for existing buildings. Built in 1997, the NSF, located in North Las Vegas, houses federal and contractor employees.

The LEED rating system, developed by the U.S. Green Building Council, is the foremost program for buildings, homes and communities that are designed, constructed, maintained and operated for improved environmental and human health performance.

“Several hundreds of hours were worked to develop a complete building application and provide documentation to the Green Building Council to get this prestigious award,” said Angela Colarusso, NNSA/NSO assistant manager for Site Operations. “This truly shows our commitment to demonstrate sustainability and find ways to reduce energy costs.”

The NSF achieved LEED certification for implementing practical and measurable strategies and solutions aimed at achieving high performance in such areas as water savings, energy efficiency, materials selection and indoor environmental quality. The three-story NSF is approximately 170,068 gross square feet in size.

All exterior windows are insulated and have been upgraded with window tinting. The building has sun

shading devices, such as aluminum solar screening and horizontal louvers to cut down on sun glare to interior spaces. Perimeter office partitions have been constructed with glass panels, allowing daylight into the interior open office space, and occupants to enjoy natural lighting. Light sensors are used extensively throughout the facility to automatically turn off lights in vacated spaces.

The NSF has water efficient fixtures, which not only lower the cost of purchasing water but affect the treatment of less water for the community. Water is metered inside the facility and with separate water metering for the water efficient landscaping.

Another attribute that led to the certificate was the commitment to purchase sustainable goods, as well as recycle and reuse products. Credit was given for the innovative method of working with a vendor that recycles grease trap materials from the building's cafeteria into candles. The facility was noted for its strong recycling program of glass, metal, paper, plastic and batteries.

In addition to the LEED Gold certification, the building was certified as an Energy Star facility in 2010. This is the fourth LEED certification for the NNSA/NSO. In addition, the North Las Vegas B3 building earned the LEED Silver certification, and the agency's two fire stations at the Nevada National Security Site were honored with LEED Gold certifications.

This is a multi-year plan and will continue to develop. The focus areas for the coming year include a continued effort to identify consolidation opportunities, developing a strategy and business case for an Enterprise Content Management System – an electronic document and records management system, implementing information technology

integration solutions for systems/processes that have been consolidated, and coordination with other NvE contractors to expand on opportunities to fortify the One Nevada Enterprise approach to doing business.

Until next time,
Ray

ONE VOICE

Published for all members of the Nevada Enterprise (NvE) Complex

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Secretary of Energy Honors NNSS Employees for Accomplishments

By *OneVoice Staff Reports*

Several Nevada National Security Site (NNSS) employees were honored recently for their efforts in supporting U.S. Department of Energy (DOE) projects.

Jhon T. Carilli, Frank DiSanza, Ben Garcia, Dirk Schmidhofer and Scott Wade were recognized for their part in the Uranium-233 Disposition Alternatives Analysis. Colleen O'Laughlin was recognized for her work on the Mars Science Laboratory Multi-Mission Radioisotope Thermoelectric Generator.

Since 1977, DOE employees have worked to deliver the innovation and expertise needed to advance the nation's science and technology sectors, boost advancements in clean energy, and ensure national security through nuclear nonproliferation initiatives and environmental cleanup. In October, DOE employees and officials gathered for the annual Secretary's Honor Awards ceremony to applaud their

colleagues' achievements and commemorate 35 years of this important endeavor.

Secretary of Energy Steven Chu, presented awards to more than 240 individuals for their contributions. The Honorable Dr. James R. Schlesinger, the first Energy Secretary, reflected on the early years of the department, and presented an award to Eric Fygi, deputy general counsel and charter member of the department. The Honorable Spencer Abraham (who served as DOE Secretary from 2001 to 2005) also shared insight from his time at the department.

NNSS employees received the Secretary of Energy's Achievement Award, which is bestowed on a group or team of employees who together accomplished significant achievements on behalf of the DOE, demonstrating cooperation and teamwork in attaining their goals.

Environmental Management and Health Safety and Security personnel from Idaho National Laboratory, the Nevada Site Office and Oak Ridge Office were recognized for their extraordinary efforts to find cost effective and technically viable alternatives for disposition of the U-233 stored at Oak Ridge National Laboratory. These contributions resulted in acceleration of the project schedule and reduction of the cost and risk to the department and to the public.

The U-233 Alternative Analysis Team's willingness to re-examine long-held assumptions, establish partnerships, and solve significant challenges have resulted in a lasting contribution to the DOE's environmental, science and national security missions, Chu said.

Between late June and late November 2011, the Mars Science Laboratory Multi-Mission Radioisotope Thermoelectric Generator team delivered the Multi-Mission Radioisotope Thermoelectric Generator for the NASA Mars Science Laboratory mission, which launched on Nov. 26, 2011. Much planning went into the unit's delivery. This included a "hot fit check" in July's Curiosity, the JPL Mars rover, and careful monitoring of the power system until it was integrated with Curiosity in November.

Activities included implementing a documented safety analysis for three temporary nuclear facilities at Kennedy Space Center, implementing a rigorous Unreviewed Safety Question process for the DOE, Kennedy Space Center and Jet Propulsion Laboratory procedures, and actively participating in radiological contingency planning and implementation for launch.



Jhon Carilli, NSO (far left) and Scott Wade, NSO (far right) represent Nevada team members who were recognized for their part in the Uranium-233 Disposition Alternatives Analysis. Secretary of Energy Steven Chu (second from right) presented the award to representatives from Nevada, Oak Ridge and Idaho.

Row, Row, Row Your Boat for a Good Cause

By *OneVoice Staff Reports*

In recognition of Breast Cancer Awareness month in October, several Nevada National Security Site (NNSS) employees joined hundreds of eager supporters who recently grabbed a paddle and took to the lake.

On Oct. 13, folks from all over the country and Canada participated in the 4th Annual *Rose Regatta Dragon Boat Race and Festival*, held at the Lake Las Vegas Marina.

Navarro-Intera Public Involvement Specialist Angela Ramsey and her team, Manny's Marauders, were among the more than 70 teams competing in 40-foot long Chinese-style dragon boats racing throughout the day in two separate heats.

The event raises money each year to support ongoing breast health services provided by St. Rose Dominican Hospitals and the Barbara Greenspun WomensCare Centers of Excellence in Las Vegas.

"Providing inspiration to all of us were the four boat teams composed entirely of breast cancer survivors," Ramsey said. "These people definitely know how to rally

for a cause. They've motivated me so much, in fact, that I've decided to start brushing up on my rowing skills for next year's Regatta."

Scores for each 250-meter heat were tallied into one final score. The onshore party was equally festive. The streets of The Village were crowded with good food, handmade crafts, dancing and music.

Regatta teams ranged from corporate groups to clubs, families and friends. The boat's 20-person crew included a drummer and a steersperson for good measure.

Ramsey and Manny's Marauders were a loose assortment of co-workers, family members and Zumba fitness enthusiasts. And although they looked fierce in their pink t-shirts—generously donated by CT Salon in Las Vegas—the Marauders fell to much more seasoned

opponents in the end.

"My team may have come up short this time around, but like so many of these brave survivors we're not giving up!" Ramsey said.



Manny's Marauders compete during the 4th Annual Rose Regatta Dragon Boat Race in October, in support of Breast Cancer Awareness.

WSI-Nevada Holds Annual Safety Summit

By Chris York, ES&H Specialist, WSI-Nevada

WSI-Nevada held its 4th Annual Safety Summit on Oct. 23, bringing together a cross-section of senior managers, line supervisors and employee leaders that represent the company's Safety Triad committees: Senior Safety, Protective Force and Employee Safety. Welcomed guests included representatives from the NNSA/NSO Assistant Manager for Safety and Security (AMSS) and Navarro-Intera safety staff.

The Safety Summit, led by WSI-Nevada General Manager Dave Bradley, provides an opportunity for the Safety Triad leadership to assess the company safety program performance; discuss key lessons learned and the yield from implemented actions; and this year, introduce the Department of Energy Secretary's Safety Conscious Work Environment program. The all-encompassing objective of this summit was focusing the effort in making 2013 performance even better. The summit agenda included:

- Briefing on the 2012 Voluntary Protection Program Participants Association (VPPPA) Annual Conference
- Safety Office review of the Voluntary Protection Program (VPP) self-assessment
- General manager review of motor vehicle operations, weapons operations and injury statistics
- Reports from the Safety Committee chairpersons
- Update on safety program initiatives
- Introduction to the DOE Safety-Conscious Work Environment program.

The summit started with a discussion on the VPPPA conference topic, "Complacency at Work," which

challenged everyone to think about different ways we can become complacent, both at work and home. Becoming complacent not only affects us but those working or living with us. The discussion centered on the idea of changing one's mindset from "I've always done it this way," to "Is this the safest way to do this?" to help prevent complacency and accidents.

Speakers emphasized the importance of taking home what we learn on the job. One final reminder on this topic came from Tony Crow, a speaker at the 2012 VPPPA Conference, who was accidentally shot in the face by his son during a hunting trip and is now legally blind. He said, "Applying safety to everyday life affects everyone, and you must always remember the caution: 'It's Not Just About Me (INJAM).'"

When reviewing the operational performance of the company, Bradley further emphasized how complacency can become a distraction to task focus. A review of the company motor vehicle and weapons operations, along with injury statistics indicating overall how the WSI-Nevada safety program has engaged leaders, shows that employees are being more careful. However, it also emphasized the importance of avoiding lapses in task focus, that can result in minor safety incidents - precursors that require our focused attention and effort toward preventing a recurrence.

For example, the company is a few miles short of achieving two million miles without a recordable traffic accident. Yet, we experienced minor accidents resulting from improper backing and failure to clear an obstacle, all without injury, Bradley said. Although driving is a common task for most adults, and human nature tends to make a repetitive task routine, this is

the perfect condition for complacency to creep into our personal conduct of operations. "We would all desire the two million mile achievement without a recordable and preventable accident," Bradley said. "Just as with driving a vehicle, weapons manipulation can become second nature over time. On average, an armed security police officer performs roughly 600 manipulations of some type of weapon system in a single year. The entire security force conducts more than 150,000 in a year."

However, a single instance of an unauthorized discharge (UD) of a weapon can result in a very dangerous condition, and this lapse in task focus can start to erode the confidence of a professional security force. "We cannot have a weapon UD, period. Likewise, we are fighting a timeless battle in averting improper lifting activities," Bradley said.

The annual Safety Summit was a successful opportunity to hold an open and candid review of the company's safety culture and performance. Looking forward to 2013, the company will focus on sustaining a Safety Conscious Work Environment through sound practices, leadership involvement and employee commitment.

"We will leverage our achievements, such as our 2012 recertification as a VPP Star organization, along with our continuing activities under the DOE Integrated Safety Management umbrella, all toward making 2013 an even better safety performance year," Bradley said. He closed the summit with a clear safety vision: "We can and should always do better by taking care of ourselves, and each other."

Annual Environmental Monitoring Report Released

By *OneVoice* Staff Reports

The National Nuclear Security Administration Nevada Site Office (NNSA/NSO) has released the *Nevada National Security Site Environmental Report 2011* which states: No airborne radioactivity from current site activities was detected off site in 2011. Groundwater monitoring results confirmed the public is not exposed to groundwater contaminated with man-made radionuclides from Site activities.

"We are committed to ensuring the validity and accuracy of our monitoring data and in sharing the data with the public," said Pete Sanders, NNSA/NSO Environmental Monitoring task manager.

The report summarizes the results of air and groundwater monitoring during calendar year 2011 of the Nevada National Security Site (NNSS). It also reports the estimated radiological dose to the public from releases of radioactive material from the NNSS and summarizes the overall environmental compliance and management performance of NNSA/NSO at the NNSS and its two support facilities, the North Las Vegas Facility and the Remote Sensing Laboratory-Nellis.

Air and groundwater monitoring is conducted by

National Security Technologies, LLC, and the Community Environmental Monitoring Program (CEMP) under the direction of the Desert Research Institute of the Nevada System of Higher Education. The CEMP, which is operated by local citizens, uses a network of 29 air sampling stations that surround the NNSS to monitor airborne radioactivity.

"Each year, we use this report as one of our tools to inform the public regarding how we are protecting the public, the environment and our workers," Sanders said. "It is the one place that summarizes all of our monitoring programs. It also tells the public about our environmental cleanup and waste management operations, and the Site's efforts to prevent pollution, minimize wastes and reduce water, fossil fuel and energy usage at our facilities."

The report is available in the NNSA/NSO Public Reading Facility, located at 755 East Flamingo Road, Las Vegas, as well as on the NNSA/NSO website at: www.nv.energy.gov. For more information on the off-site air monitoring program, visit: www.cemp.dri.edu.

Feds Feed Families

Continued from page 1

The food was collected each week and weighed, then packaged for pickup on Aug. 30. Nationwide, 7,286,845 pounds of food was collected.

Feds Feed Families is a government-wide effort led by the Chief Human Capital Officers (CHCO) Council, in partnership with the Office of Personnel Management (OPM), the U.S. Department of Defense (DOD), and the U.S. Department of Agriculture (USDA). Various other federal agencies participate, identifying local relief groups to which food can be donated.

Feds Feed Families encourages donations by establishing Heavy Hitter and Hall of Fame categories for donations. NSO Manager Steve Mellington donated 313 pounds, earning him a spot in the Hall of Fame.

The NNSA/NSO Feds Feed Families Team, that consisted of Jason Julian, Denise Ashurst, Ed Forness, Tiffany Lantow and Clark Weaver, won first place in the construction of a food sculpture replica of the Tower Bridge of London in honor of the 2012 Olympics in London. All of the efforts are designed to get everyone involved and motivate employees to give all they can to help those in need.

WSI Training Academy Staff Recognized

By William Colley, WSI Training Academy Coordinator

The WSI Training Academy Staff has been recognized for its efforts in helping train six new Nye County Sheriff's Office (NCSO) cadets at the Nevada National Security Site (NNSS).

WSI-Nevada and the NCSO have been working together for many years to help provide a safe and secure environment at the NNSS. "The relationship has truly evolved into a professional friendship that can only be accomplished by both agencies supporting one another to get the job done," said WSI-Nevada General Manager Dave Bradley.

WSI-Nevada provides security at the NNSS; NCSO is responsible for law enforcement. Lt. Bill Wagon, range master for NCSO, ensures that all personnel assigned to NCSO maintain their annual weapons qualifications. Wagon is also the primary firearms instructor for the NCSO's Regional Training Academy. With this title comes the responsibility of training and qualifying all law enforcement cadets attending the academy.

In March and April 2012, the WSI Training Academy provided instructor and range support for a new class of six cadets. After eight long days and nights of intensive firearms training, all six cadets successfully qualified on all of their assigned weapons systems and went on to graduate.

In appreciation of the support provided by the National Nuclear Security Administration/Nevada Site Office Assistant Manager of Safety and Security and WSI-Nevada, the NCSO graduating class of 2012 recently presented WSI-Nevada with a plaque on behalf of Nye County Sheriff Anthony L. DeMeo.

Special recognition goes out to Training Specialists Todd Breitigan, Paul Journic and Bruce Radel for their tireless support. These three instructors ensured that NCSO received the resources necessary for success.

And of course, congratulations to the 2012 graduating class of the Nye County Sheriff's Office.



From left to right: Bruce Radel, Paul Journic, and Todd Breitigan.

U.S. Marks 20-Year Anniversary of End of Underground Testing

By *OneVoice* Staff Reports

The Nevada National Security Site (NNSS) in October marked the 20-year anniversary of the end of underground nuclear testing in the United States. The NNSS remains at the forefront of more modern high-tech methods of ensuring the safety, security and reliability of the nation's nuclear weapons stockpile.

"Over the past 20 years, the United States has been able to innovate and develop the tools we need to keep our stockpile safe, secure and effective without underground testing," said National Nuclear Security Administration (NNSA) Administrator Thomas D'Agostino. "In April 2009, President Obama shared his vision of a world without nuclear weapons. As we work toward that goal, we have the world's leading scientific facilities, the world's fastest computers and the world's brightest minds working to ensure that we never again have to perform nuclear explosive testing with U.S. nuclear weapons."

On Sept. 23, 1992, the United States conducted its last underground nuclear explosive test at the NNSS. Following that, the NNSA created the Stockpile Stewardship Program so that successive presidents could remain confident in the safety, security and effectiveness of the stockpile.

Scientists and weapons experts at Los Alamos National Laboratory (LANL), Lawrence Livermore National Laboratory (LLNL), Sandia National Laboratories (SNL) and the NNSS have significantly advanced the nation's ability to understand the stockpile without nuclear explosive testing through legacy data, new data from non-nuclear experiments, supercomputer simulations and modeling, laboratory testing and data analysis.

Ongoing investments in one-of-a-kind facilities at each of the sites have added to tools and techniques available to researchers. For example, the National Ignition Facility at LLNL, the Z Machine at SNL and the Dual-Axis Radiographic Hydrodynamic Test Facility at LANL allow for the

re-creation and study of specific phenomena that would be found in a nuclear detonation.

The NNSS plays a significant role as part of the Stockpile Stewardship Program with facilities such as the Joint Actinide Shock Physics Experimental Research (JASPER) Facility and U1a. Combined with increases in supercomputing capacity, scientists have been able to employ computer simulations and other non-nuclear experiments to achieve high confidence in the stockpile, without the need for nuclear explosive testing.

In addition, because of the continual improvement



Workers prepare the Divider underground test (1992).

of science and technology, the United States has been able to extend the life of its weapons systems. Life Extension Programs conducted by NNSA allow for existing designs to be maintained without the need for additional explosive testing or weapons development.

"Our contribution over these last 20 years has included 101 JASPER shots and 26 subcritical experiments at U1a," said Nevada Site Office Manager Steve Mellington. "All of these efforts have gone far to ensure our nation's weapons stockpile remains reliable without the need for underground testing."

NNSS Celebrates Latest Operations Successes in Defense Experimentation, Stockpile Stewardship

By **OneVoice Staff Reports**

Each month, the Defense Experimentation and Stockpile Stewardship (DE&SS) directorate for National Security Technologies (NSTec) summarizes their recent progress and achievements with projects that are important to our mission in national security.

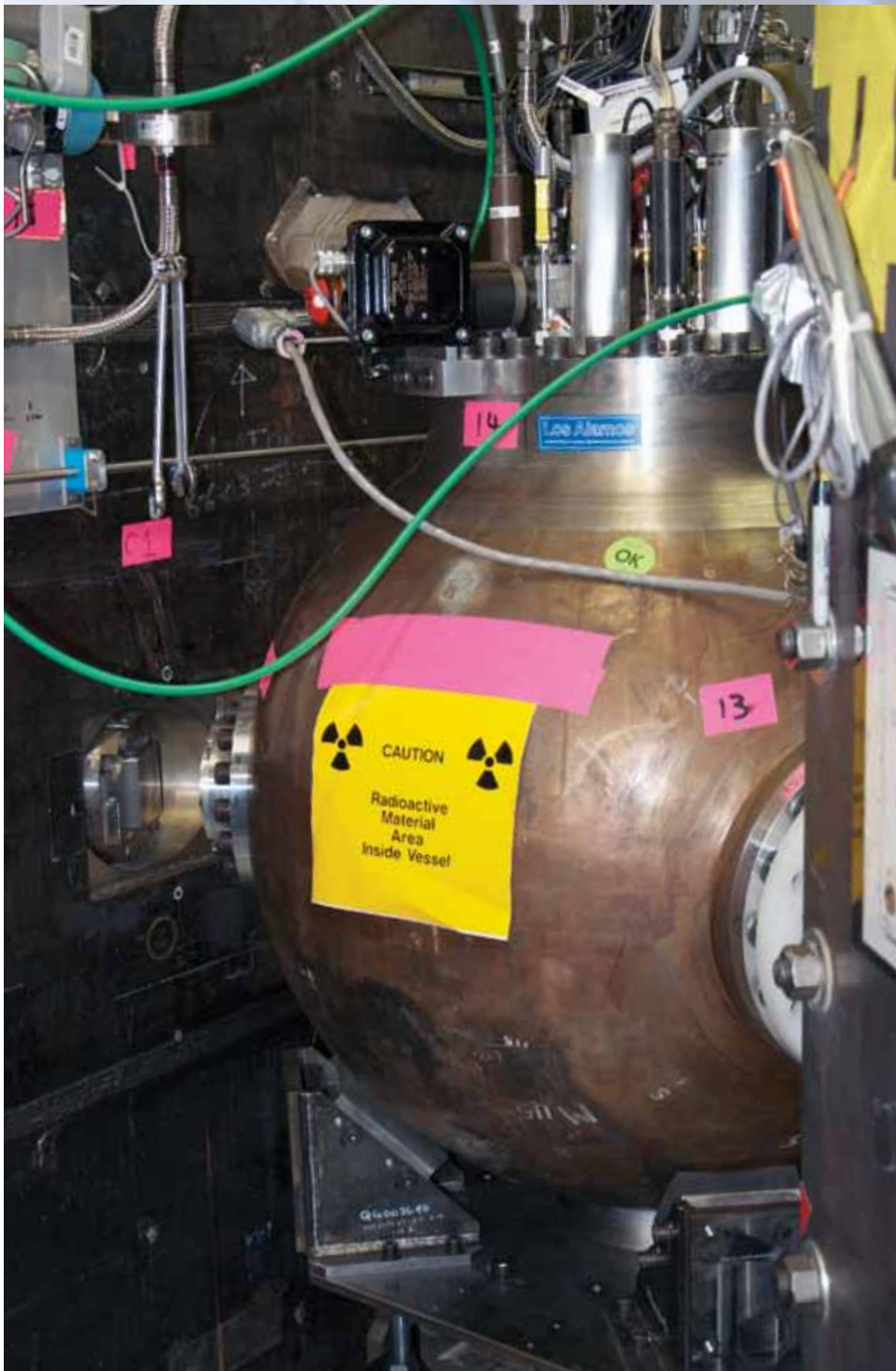
DE&SS helps maintain the integrity of the U.S. nuclear weapons stockpile by providing management and technical support for weapons experiments without nuclear detonation. Many types of experiments are conducted at various locations to explore the extreme states of matter created by weapon environments. One class involving high explosives and Special Nuclear Materials, termed subcritical experiments, is conducted at the NNSS by world-class scientists and engineers from the Department of Energy (DOE) and the National Security Enterprise laboratories.

Some of DE&SS's latest achievements include:

- **Joint Actinide Shock Physics Experimental Research (JASPER) Facility Special Nuclear Material Experiments: Shot #100** – JASPER Plutonium Shot #100 was successfully executed on Sept. 25. All data were recorded, and the diagnostic quality was excellent. This shot completes JASPER's Level-2 Milestones for fiscal year 2012.
- **Gemini Experiments: Vessel #2** – During September, NSTec and Los Alamos National Laboratory (LANL) representatives were at the Newport News Industrial vendor to observe the final Ultrasonic Testing (UT) of Vessel #2, in which a subcritical experiment will be conducted. After the UT is completed, LANL will conduct non-destructive evaluations.

Awards/Achievements:

- **Missions & Projects (M&P) Quarterly Performance Evaluations:** The M&P Division received excellent performance evaluations for the fourth quarter of fiscal year 2012. M&P customers rated each of 11 major projects supporting experiments, diagnostics research and development, and data post-processing according to their level of satisfaction with project performance in environment, security, safety & health/compliance; communications; responsiveness; teamwork; cost controls; technical performance; and deliverables/quality. Of the 225 total ratings, 58 percent were designated as highly satisfied, and 42 percent were satisfied. There were no dissatisfactory reports from any M&P customers.
- **NSTec Employee Receives Lean Six Sigma Yellow Belt Certification:** Jackie Meeker, a Livermore Operations' (LO) National Ignition Facility (NIF) manager, received her Lean Six Sigma Yellow Belt Certification Sept. 10 for her "exemplary leadership" and her determination in implementing the NIF neutron time-of-flight (nTOF) diagnostic configuration process management system. Steve Grace, Lawrence Livermore National Laboratory (LLNL) Master Yellow Belt, wrote Jackie's certification announcement and noted: "the skills she demonstrated during completion of her certification project resulted in defining the process, identifying process outcome and upstream indicators, and determining specific deficiencies and corrective actions." Jackie collected and analyzed nTOF configuration data and met with operations managers to identify and implement improvements. In citing her achievements, Grace said: "I am certain that her efforts will benefit NIF's Target Area Operations group and overall mission by providing valuable decision-making data for continuous improvement."
- **NSTec Employees Receive Team Awards from LLNL**
On Sept. 7, four LO employees received NIF and Photon Science Directorate Performance Awards for their contributions to the NIF. The awards were presented by Ed Moses, principal associate director of the NIF and Photon Science Directorate. Employees who received awards were:
 - **John Duncan**, senior technical staff, for "Outstanding Performance on the Polar Diagnostic Instrument Manipulator Cable Track Upgrade," in conducting this complicated upgrade in two shifts with zero defects.
 - **Jackie Meeker**, manager, received two awards: 1) "Exemplary Re-evaluation of the Lockout/Tagout Program," a team effort that resulted in reducing the lockout/tagout cycle time from three hours for shot cycle recovery to 10 minutes for the work team, and 2) "Developing and Implementing a Target Diagnostic Transaction Metrics Process" that resulted in a data-driven continuous process improvement. This yielded significant time savings for target diagnostic transactions - a cost savings of hundreds of thousands of dollars.



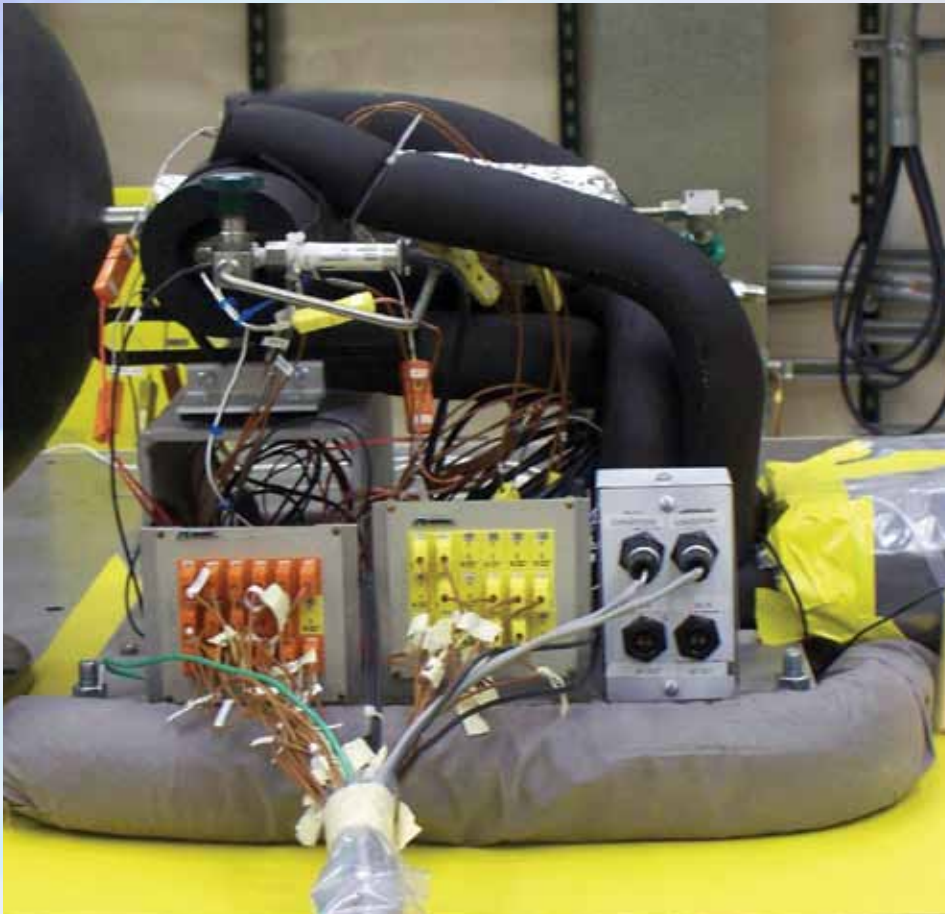
This Vessel #1 was used on the successful August 2012 Gemini "Castor" confirmatory experiment as part of the U1a Subcritical Experiment Series.

– **Cody Carr**, supervisor, for “Performance as a Field Supervisor Supporting the Field Maintenance and Reconfiguration Project,” for retrofitting target diagnostics and more than 200 of NIF’s final optics assemblies.

– **Adam Langro**, supervisor, for “Blending Work Teams to Increase Program Efficiency,” a cross-training effort between target area and transport and handling work centers that potentially reduces the shot cycle turnaround time for DT* shots from 58-plus hours to 21 hours. According to former LO Senior Manager Ken Cooke, “These awards are not given very often” and it took a lot of effort to achieve this kind of recognition from our customer.

• **NSTec’s Leapfrog Photon Doppler Velocimetry (PDV) on Successful SNL Z Shot:**

On Sept. 14, Sandia National Laboratories (SNL) successfully executed a radial velocity shot on its Z machine. The data return was excellent, particularly the velocity data from the on-axis PDV diagnostic developed by an integrated NSTec/SNL team. NSTec’s Scott Walker, a Sandia Operations technician, combined NSTec and SNL parts to assemble and test the leapfrog PDV; then he built and tested the hardware to SNL specifications. A typical PDV uses one laser as a reference; the leapfrog PDV uses multiple reference lasers, shifted in frequency to measure the higher velocities. This diagnostic was fielded with the PDV probe inside the imploding liner for the Z shot conducted to assess the possible benefits of dynamic materials program/equation of state measurements in cylindrically convergent geometries (imploding liner is the material sample under test). The on-axis PDV diagnostic continuously tracked the motion (“radial velocity”) of the imploding liner’s inner surface, providing scientists with a new technique for making equation of state measurements using the solid liner platform.



A fission project designed to further advancement of NASA engines was one milestone recently celebrated by the DE&SS program.

• **NNSS Experiment Successfully Demonstrates Prototype Robust Space Reactor:**

On Sept. 13, NSTec played a key role in demonstrating the first use of a heat pipe for reactor cooling as well as the first use of a Sterling engine to produce power using heat from a nuclear system. The experiment was performed at the Nuclear Criticality Experimental Research Center (NCERC) within the Device Assembly Facility at the NNSS. NSTec and LANL researchers configured an existing nuclear experiment at NCERC with a water-based heat pipe that cooled the nuclear system as it produced heat. Then the heat was transferred from the heat pipe to the hot end of a small Sterling engine, successfully producing a few tens of watts of electrical energy. According to Patrick McClure, LANL project lead, “In the realm of space exploration and research, the ability to produce enough power to sustain essential spacecraft operating systems in deep space has always been of critical importance. We hope that this proof of concept will someday soon move from the desert of Nevada to the frontier of outer space.”

* Deuterium/Tritium – a mixture, refers to interaction between nuclei. It could be Deuterium-Tritium fusion, or the molecule DT, or the mixture of D and T in a gas bottle. Deuterium is an isotope of Hydrogen with an extra neutron, and Tritium is an isotope of Hydrogen with two extra neutrons.



The above photo shows the Primary Target Chamber at the end of the JASPER gun barrel, inside of which a plutonium sample is shocked to high pressure to study materials properties.

Workplace Violence: Plan Now to Improve Your Survival Chances

By Bill Knipper, NSTec

Gunfire in the workplace... it's the last sound you'd expect to hear. The odds of being involved in a workplace violence incident are similar to being struck by lightning. Though the chance of experiencing an active shooter incident is very remote, the consequences can be so catastrophic that it makes good sense to spend some time now preparing.

An active shooter can strike in the workplace at any time. You will need the proper mindset and tools to react with purpose and maximize your chance of survival. In studies of workplace shootings, many of these incidents are often over in less than 15 minutes. You need to take direct responsibility for your personal safety and security through awareness, preparation and rehearsal.

Awareness – Active shooter incidents happen at the workplace to everyday people. The 2009 Fort Hood massacre – site of the largest active duty armored post in the U.S. Armed Forces – is a startling example of what could go wrong with one perpetrator. Developing a survival mindset now is the starting point for good self-defense.



Local police review procedures during a recent Active Shooter exercise at the North Las Vegas facility.

Preparation – There is no substitute for preparation. It includes looking at your work environment through a survival lens that focuses on the “what if” questions. “What if” questions are critical in developing effective response strategies.

Rehearsal – Practice your plan. Practicing may include either mentally and/or physically “walking through” your “what if” plan. Rehearsing your plan will reduce your response time and build your confidence. In essence, your rehearsal serves as a survival inoculation.

Unless you see the shooter, you may not recognize the sound of gunshots. For most of us, our experience with gunshots is from Hollywood movies and television that use special sound effects. Real gunshots can sound artificial. Law enforcement recommends that if you hear popping noises that you think may be gunshots, do not waste time trying to validate your own instinct. They recommend you act on the chance that they may be gunshots and evacuate immediately through the nearest door or window. It's far better to err on the side of caution.

What should you do during an active shooting? First, figure out what's going on and make immediate decisions. If you determine that you can get out to a safer area, then do so. Get out fast; don't wait for others, and leave your belongings behind. Don't be where the shooter is and where he can see you.

Next, immediately call authorities to let them know what's going on. Do not assume that someone else has called. Dial 911 and calmly tell them where you are and what's occurring. Be persistent when calling since the phone lines may be jammed with other calls.

If you can't get out, then you must find a place to hide out from the shooter's view and provide some measure of protection should the shooter fire in your direction. If possible, avoid places that might trap you or restrict your options of movement.

Once you've found your hideout, keep out the shooter. Hide in a room that can be locked and that has plenty of things to hide behind. Block the door with heavy furniture (even if the door can be locked). If the shooter is nearby, just lock the door and become totally silent. Turn out the lights. Turn off any radios or other noise-producing sources that might alert the shooter to your presence. Don't forget to silence your cell phone or pager. As soon as you have the opportunity, and without attracting the shooter's attention, call 911.

If there are two or more of you in the same place, do not huddle together for mutual protection or moral support. Spread out! It's much easier for a shooter to fire on a group of people who are huddled in one place than it is to fire on those who are scattered throughout the room.

Help others escape as you go. Help prevent others from entering the danger zone. If someone near you has a life-threatening injury, and you can provide them first-aid, do so. Demonstrating calmness can have a contagious effect on others; it will help them to remain focused on survival.

If there are two or more of you, spread out and make a plan. Act as a team to overcome the shooter. Once again, you and the group will have to make a total commitment to your chosen action and do absolutely whatever it takes, without hesitation.

Remote Sensing Laboratory Leads Radiation Training Course in Denmark for NNSA

By OneVoice Staff Reports

Participants from five countries took part in a National Nuclear Security Administration (NNSA) International Training Course on Consequence Management (I-CM) in October in Denmark. The training was conducted by staff from the Remote Sensing Laboratory (RSL) at Nellis Air Force Base in Las Vegas.

The four day I-CM training was hosted by the Danish Emergency Management Agency. It was attended by 21 participants from Denmark, Sweden, Poland, France and Lithuania.

“The training was part of NNSA's broader effort to build and enhance nuclear emergency management systems worldwide,” said NNSA Associate Administrator for Emergency Operations Joseph Krol. “The international course provided commonly accepted methods in



RaJah Mena (Senior Scientist from RSL) demonstrates the use of a *In Situ* Gamma Spectrometry system and explains why it is used to a group of trainees attending the International Consequence Management course in Snekersten, Denmark.

addition to lessons learned by NNSA responders in Japan during the Fukushima incident.”

RSL, managed by National Security Technologies (NSTec), is a national leader in radiological emergency response, nuclear and radiological detection, and related technology and electronics development.

The NNSA's primary mission is to ensure the safety, security and reliability of the U.S. nuclear weapons stockpile without underground nuclear testing. Because of this expertise, NNSA also provides nuclear emergency response support to local law enforcement, Department of Homeland Security, the FBI and emergency responders in other countries. They joined RSL in carrying out the training.

Continued on page 10

Recent Report Sheds Light on Cougar Survival in NNSS Region

By Angela Ramsey, Navarro-Intera

The U.S. Geological Survey (USGS) has released a new report detailing the progress of seven cougars that are part of a biological study on the Nevada National Security Site (NNSS). Though preliminary, the results are already challenging some expectations.

The study, conducted by USGS scientists in cooperation with NNSS biologists, involved four major tracking efforts conducted from 2010 to 2012. These efforts resulted in capturing and collaring three female and four male cougars, one of which was a juvenile.

Scientists' main objective was to observe the roaming and eating patterns of cougars living in the NNSS insulated environment. They also set out to document the weights and ages of the cougars in comparison to big cats currently studied in the Grand Canyon National Park.

Preliminary Findings

Ranging Behaviors

Contrary to expectation, researchers discovered that relatively low numbers of cougars are using the NNSS as a home range, and that the cats trapped on the NNSS are ranging well beyond the study area. Even the female cougars, which generally confine themselves to smaller areas than males, are routinely roaming outside the boundaries of the NNSS. One male ventured as far as the Panamint Mountains in California. Such roaming behaviors result in certain vulnerabilities, according to the report, as they increase exposure to offsite sport hunting and other dangers.

Diet

In addition to nearly 50 documented kills of mule deer, which are the cougars' primary prey, scientists reported several noteworthy kills, including a pronghorn antelope and a wild horse foal.

The antelope kill is noteworthy "simply because it is rare," explained NNSS biologist Derek Hall of National Security Technologies (NSTec). "The horse is

significant because it supports the theory that predatory behavior among cougars may be controlling the wild horse population on the NNSS, which is what we've long suspected." Hall went on to explain that since the report, the same cougar has killed two more foals, which is significant considering that only five to 11 foals per year are born on the NNSS.

Documented bighorn sheep kill sites (15) are also important, according to Hall, in that they give first-time evidence of a reproducing population of desert bighorn sheep on the NNSS. Existence of this population was not known prior to the capture of the first cougar in the study. Researchers are already exploring the possibility of conducting a future investigation on desert bighorn sheep at the NNSS.

Weight and Age

Weight was of particular interest to scientists, who had speculated that cougars living in the harsh desert conditions at the NNSS would be lighter than cougars living in more productive hunting environments. Preliminary findings, however, suggest that weights of NNSS cougars do not differ from weights of cougars in hunted populations, and that they were actually heavier than cougars in the prey-dense and protected Grand Canyon National Park.

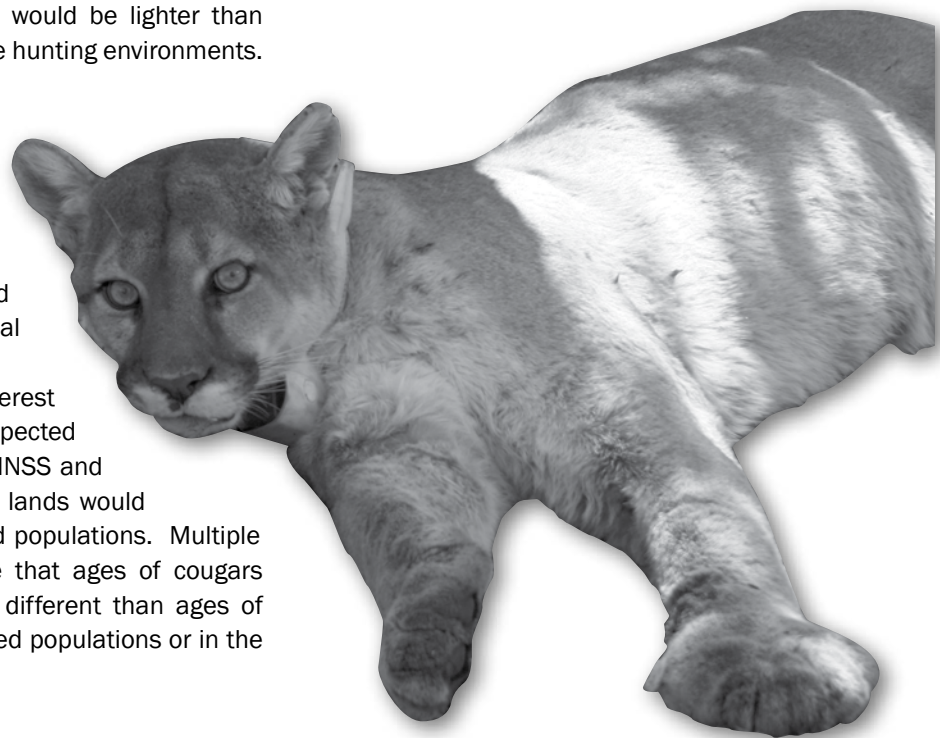
The topic of age is of interest because researchers had suspected that cougars on the restricted NNSS and surrounding federally-controlled lands would be older than cougars in hunted populations. Multiple comparisons, however, indicate that ages of cougars captured on the NNSS are no different than ages of cougars captured either in hunted populations or in the Grand Canyon National Park.

Ongoing Work

Hall explained that although these findings are intriguing, more information is needed before researchers can add meaningful comparisons to the existing body of data relating to cougars in the region. "These are great preliminary data, and we hope to learn a lot more as the study progresses," he said.

During the winter months, researchers plan to continue documenting kills and other behaviors of the three remaining cougars in the study. Of the original seven cougars, three died (one from possible starvation, one from a fall, and one from unknown causes), and one cannot be tracked due to a malfunctioning radio collar.

Trappers will attempt to recollar the three remaining participants in the spring so researchers can continue monitoring them for another year. They will also attempt to trap an additional cougar, bringing the total of monitored cougars to four by the summer of 2013.



NNSS Calendar of Events

Nov. 12 – Veterans Day

Nov. 22 – Thanksgiving Holiday

Nov 28 – 5 p.m.

Nevada Site Specific Advisory Board Full Board Meeting
National Atomic Testing Museum
755 E. Flamingo, Las Vegas

NvE's In Memorium

Walter "Russ" Eberwein Jr.
Radiological Emergency Response Department

Linda Fletcher
Accounting

George Henckel
Project Controls, Environmental Management

Kenneth Platzkow
Fleet, Fuel and Equipment Services

NSTec Hosts Company “Fiesta” for Employees

By Lory Jones, *OneVoice* Editor

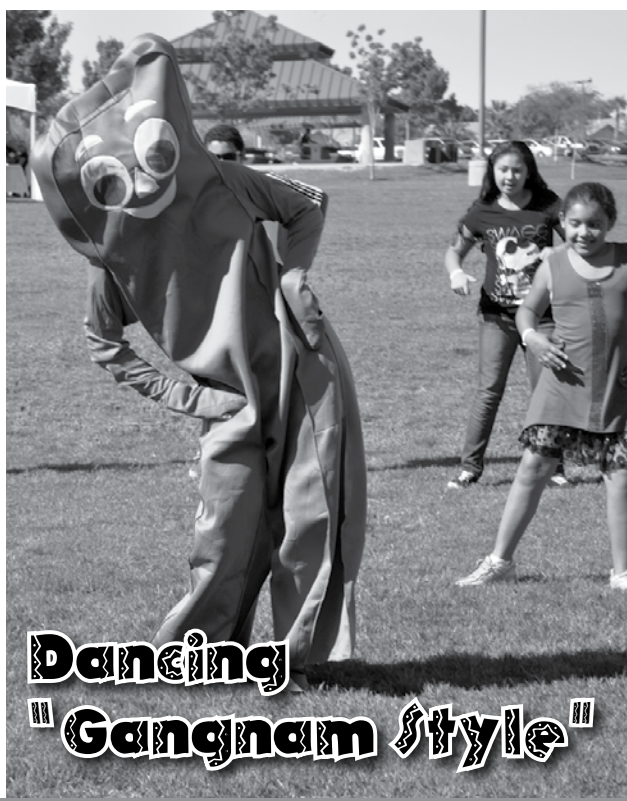
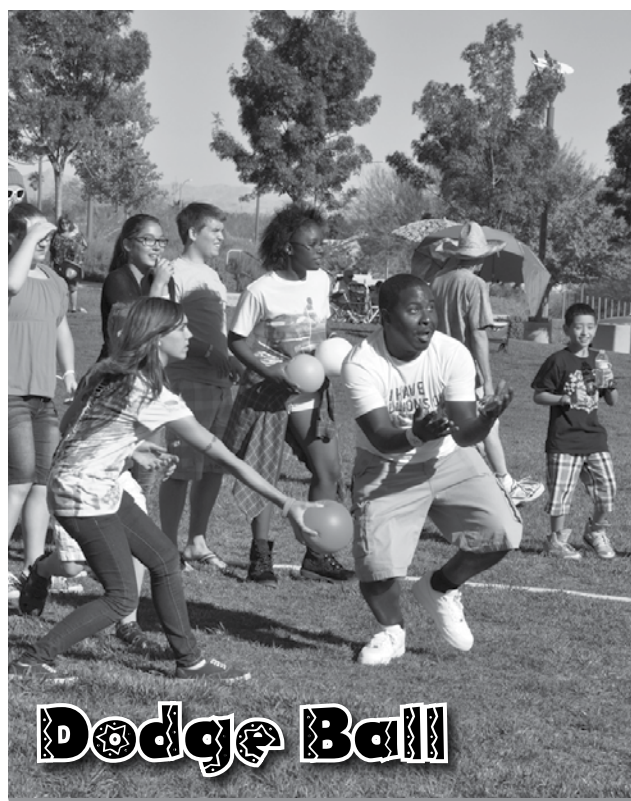
On Oct. 20, more than 400 employees and their families of National Security Technologies (NSTec) enjoyed themselves at the company “fiesta.” Held at Centennial Hills Park in Las Vegas, the picnic featured delicious Mexican cuisine, a mariachi band and many activities, including face painting, the limbo, water balloon toss, tug of war and bingo.

Children’s artwork for NSTec’s 2013 Safety Calendar was displayed, with the winners receiving a \$25 Target gift card, plus other prizes. The winners include: Clara Brienza-Larsen (George Brienza-Larsen, father), Joel and Bridget Guevara (Frediee Guevara, father), Teagan McInnis (John McInnis, father), Priscilla and Marco Morales (Alberto Morales, father), Courtnie Barlow

(Jared Barlow, father), Airius Faafiu (Nicole Faafiu, mother), Makayla Beebe (Everett Poore, grandfather), Sarah Koppenjan (Steven Koppenjan, father), Quincy Bunch (Elaine Hawkins, grandmother), Camryn Bishop (Corey Bishop, father), and Hollie Mahlum (Michael Mahlum, father).



NSTec Vice President of Operations Mike Butchko posed with the 2013 Safety Calendar artists who participated in the calendar contest.



Radiation Training Course in Denmark

Continued from page 8

The course was primarily intended for staff personnel working with radiation emergency response. The aim was to provide attendees with information and data on means and methods for setting up and establishing a monitoring and assessment program following a nuclear/radiological event. The course was conducted in two parts: a first part that focused on monitoring and sampling, and a second part that focused on dose assessment. Participants received hands-on equipment training in techniques for monitoring as well

as instruction in data collection and analysis. NNSA’s Office of Emergency Operations currently collaborates with more than 80 foreign governments and 10 international organizations with projects ranging from providing assistance to foreign governments in improving their emergency preparedness and response programs, to joint collaborative activities to improve emergency management infrastructure worldwide. “The International Emergency Management Cooperation (IEMC) Program builds standard methods

and equipment to respond to nuclear emergencies around the world,” said Steve Henry, director, Global Security for NSTec. “More important, these equipment demonstrations and training help to build a solid professional collaboration with our international partners that encourages trust and understanding among the international nuclear emergency response community.”

NVE VOICES

Nohemi (Noey) Brewer



Current Position

As the Packaging & Transportation (P&T) program manager for the National Nuclear Security Administration Nevada Site Office (NNSA/NSO), Noey's responsibilities include oversight of transportation activities for National Security Technologies, WSI-Nevada and Navarro-Intera, as well as coordination with Los Alamos National Laboratory and Lawrence Livermore

National Laboratory. She reviews applicable requirements, contracts, performance evaluations, planning documents, dashboard metrics, work progress, assessment schedules, corporate operating experience, occurrence reporting, issues management data, trending analyses, risk assessments and continuous improvement activities as they relate to P&T.

Career Path (past 10 years)

- Nuclear Safety Engineer, Department of Energy/Office of Civilian Radioactive Waste Management, Las Vegas (2008-2010)
- Electrical Engineer, Bechtel SAIC (2006-2008)
- Nuclear Safety Engineer, Bechtel SAIC, Las Vegas, Nev. (2004-2006)

Notables (awards, honors, achievements, published works, etc.)

Licensed Professional Engineer (PE) in Nevada

Education

- Bachelor of Science, Electrical Engineering, University of Nevada, Las Vegas
- Master of Business Administration, University of Phoenix, Las Vegas

Noey, why did you join the NSO?

"The Yucca Mountain project had come to an end in 2010, and I was very blessed to find a permanent job here."

What was your first impression as a new employee?

"The culture here is slightly different due to the Nevada Site Office not being regulated by the Nuclear Regulatory Commission. It took me a while to adjust, but my coworkers were very hospitable."

What do people NOT know about you (special talent, hobby, desire, etc.)?

"The last two times I was hired for jobs, I was pregnant during the interviews."

What or who inspires you, and why?

"My husband inspires me. Together we completed our electrical engineering degrees, our masters' degrees and passed our PE exams, all while raising our four kids. We are inseparable and are very dedicated to our family."

Simon Sirin



Current Position

As a senior engineer of NSTec's Operations and Infrastructure Department, Simon is responsible for ensuring the successful completion of projects in the Operations & Infrastructure directorate.

Career Path (past 10 years)

- Program Manager, WSI-Nevada, Las Vegas, Nev. (2008 - 2011)
- Engineering Manager, Las Vegas Gaming Inc., Las Vegas (2006 - 2008)
- Engineer, The Delphi Group, Las Vegas (2005 - 2006)
- Engineer, Bechtel Nevada, Las Vegas (2001 - 2005)

Education

Bachelor of Science, Electrical Engineering, University of Nevada, Las Vegas

Simon, you're relatively new to the Site mission. Why did you join NSTec?

"During the 2005 economic boom, many people talked about how much better the job market was outside of the Nevada National Security Site. Having worked for various companies in Las Vegas, I looked at the solid employment and benefits NSTec provides. Our programs and missions are cutting edge."

What was your first impression as a new employee?

"NSTec has a special relationship with the Nevada Site Office that allows us to overcome what seem like insurmountable hurdles. I don't know if it's a combination of effective communication and dedication, but when the chips are down, I've seen multiple departments across NSTec come together to support a project and see it through to completion."

What do people NOT know about you (special talent, hobby, desire, etc.)?

"I've been working on a race car for 10+ years and I tell everyone that asks, 'It's almost done!'"

Favorite motivational saying?

"Do or Do not. There is no try." - Yoda from "Star Wars"

What or who inspires you, and why?

"My daughter Sydney inspires me. She had three heart surgeries before turning 2 years old and suffered a stroke. Somehow, none of this stops her from being a completely active 5-year old with her two sisters, and driving their mother and I completely crazy."



NNSS Firefighter Honored for Lifesaving Efforts

By Jeff Donaldson, *OneVoice* Editor

The Southern Nevada Chapter of the American Red Cross recently recognized Nevada National Security Site (NNSS) Fire and Rescue firefighter Terry Choyce for his efforts in saving the life of an elderly man in Las Vegas.

Choyce was off duty and running errands with his wife, Denise, when she noticed a person lying face down in the road. Choyce said the man, Bob Weethee, had apparently gone out to check the mail when he suffered a heart attack and collapsed in the travel lane of a side road.

Choyce, a 12-year veteran of the NNSS, immediately used his car to block traffic and ran to assist the elderly man, who at first appeared to be breathing. "My wife went to call 911 and that's when I heard his breathing stop," Choyce says. "After checking his pulse, I decided it was time to start CPR."

NNSS Fire Chief Chuck Fauerbach said he was impressed that it only took Choyce one or two minutes of compressions before Choyce heard the man take

his first gasp of air. Choyce then waited with him until paramedics arrived.

"Firefighter Choyce was reluctant to receive any recognition for his life-saving efforts and required a significant amount of convincing before he would allow a submission of his story to the Red Cross," Fauerbach said. "He is the type of person that doesn't seek awards and honors but is soft spoken, eager to help anyone in need and dedicated to his chosen profession."

Denise Choyce had gotten help at the home of Weethee's daughter, who stayed in touch with the couple and kept them apprised of his recovery. A few weeks later, Weethee met the Choyces, and they have remained friends ever since. "He was in the right place at the right moment to save this man's life, and now he has a friend for life," Fauerbach said.

Choyce entered the fire service in 1976 in the Air Force and has worked 35 years as a firefighter. Although he's administered CPR numerous times, he

said this was the first time he was actually able to save a life.

"I loved it - knowing I could give Bob and his family some more time," Choyce said.

"He and his family are terrific.

My wife and I are happy to know them."



Bob Weethee with Terry Choyce.

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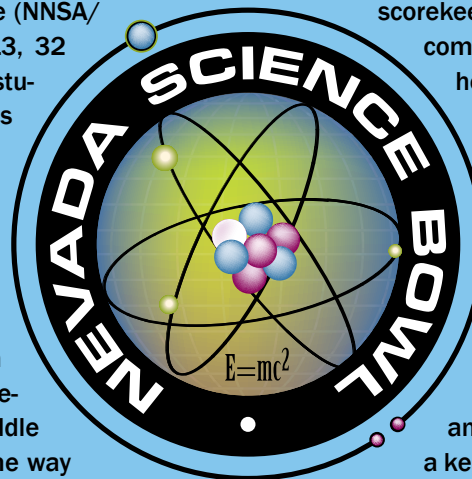
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Calling All Volunteers... For Nevada Science Bowl

By Dan Burns, NSTec

Nevada Science Bowl is a showcase event for the National Nuclear Security Administration Nevada Site Office (NNSA/NSO). On Feb. 1-2, 2013, 32 teams of high school students will gather in Las Vegas to test their knowledge of science, math, biology, physics and more. It's a fast-paced "Jeopardy-style" double-elimination competition where students buzz in with their answers. The Nevada Science Bowl for middle schools is set up the same way and will be held March 1-2, 2013.



how can I help? Nevada Science Bowl needs volunteers. Needed are timers, judges, runners, scorekeepers and moderators for the competitions, plus extra hands to help out with preparations prior to the competitions and assistance during and after the events. If you'd like to help out, just send an email to: nevadasciencebowl@nv.doe.gov.

Volunteering for Nevada Science Bowl will give you great satisfaction for encouraging kids to appreciate math and science. Also, you will receive a keen certificate of appreciation you can show your supervisor during your next evaluation!

Right now, you are probably wondering: evaluation!