



# ONE VOICE

October 2015

A Publication for the Nevada Enterprise (NvE) Complex

## 65th Anniversary Merchandise Available

Get your commemorative shirts, hats and patches at the NSTEA Outlet.



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## NSTec Celebrates its First Postdoc

Postdoctoral hire Sarah Thomas is interviewed by Howard Bender.



See page 6.

## Active Shooter! Now what?

Help protect yourself with these crucial L.I.V.E. tips.



See page 7.

# NNSS Disposes of Atlas Oil, Other Excess to Help Reduce Environmental Impacts

By Jeff Donaldson, NSTec

An effort that began at the Nevada National Security Site (NNSS) in 2011 to identify and dispose of surplus equipment and materials led to eliminating excess oil this year – oil that could have posed an environmental risk to the Site. The effort also realized more than \$4 million in revenue.

As well, National Security Technologies (NSTec)'s Craig Mercadante, manager in the Asset and Material Management Department, said the initiative to recycle and remove unused equipment and materials at the Site has resulted in a reduction in the environmental management costs by more than \$9 million.

That effort includes this year's recycling of more than

150,000 gallons of oil from the retired Atlas pulse power machine. The Atlas machine has been in cold standby for 10 years, and had developed leaks. Disposing of the oil not only reduced the environmental liability, selling it to a recycling company resulted in close to \$200,000 in revenue, Mercadante said.

"One of the things this program allows us to do is identify areas that could be of use to potential customers using the Site for their work," Mercadante said. "Not only are we reducing the environmental footprint of the NNSS, we're paving the way for future missions."

He added, "Also, we're cleaning out areas where, if

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## OneVoice Wins Awards for Writing

By OneVoice Staff Reports

Two OneVoice writers and an editor have been recognized by the Nevada Press Association (NPA) for outstanding achievements in writing. This marks the second consecutive year that the three-year-old newspaper has won major awards from the NPA.

Editor Lory Jones was awarded first place in the Best News Feature Story category for her August 2014 story on National Security Technologies (NSTec)'s James Walker becoming the Nevada National Guard's first black battalion commander. Jones also won a third place for Best News Feature Story for her September 2014 article on the Leda stockpile stewardship experiment.

Writer Jeff Donaldson won second place in the Community Service category for his September 2014 story on Nevada Enterprise (NvE) employees supporting the community for its back-to-school drive. Writer David Pacheco won third place in Best Explanatory Journalism for his article, "They Dropped the Ball... for National Security" from June 2014.

The awards were presented at an Oct. 2 banquet at the Sparks Nugget Casino in Sparks, Nev.

About a dozen OneVoice stories and layouts from the past year were submitted to the NPA's 2015 Better Newspaper Contest. A panel of judges comprised of out-of-state newspaper editors judged hundreds of entries from Nevada's newspapers.

"OneVoice continues to set high standards in reporting the news and events at the Nevada National Security Site (NNSS). These awards prove the dedication of our staff in keeping our employees and the public informed," said Darwin Morgan, director of Public Affairs for the National Nuclear Security Administration Nevada Field Office (NNSA/NFO), whose office provides primary oversight for OneVoice.

OneVoice has a circulation of about 3,500 readers that include employees of the NNSS and its outlying locations, as well as some "subscribers" that include government and civic organizations. The newspaper is posted online every month at [www.nstec.com](http://www.nstec.com) and at [www.nv.energy.gov](http://www.nv.energy.gov), as well as on NSTec's intranet site, inSite.



Pipefitter foreman John Olds (background) transfers fuel oil from the holding tank (right) into the tanker operated by customer Emerald Transformer Inc. The customer then transports the oil off the Site for recycling.

Photo: James Wiley

## 65<sup>th</sup> Anniversary of the Nevada National Security Site

# CELEBRATING 65 YEARS OF PROTECTING AMERICA'S NATIONAL SECURITY INTERESTS

The Nevada National Security Site (NNSS) is celebrating 65 years of atomic testing and homeland security history. In tribute to the men and women who served the Site, *OneVoice* is featuring a series of historical stories. Below are excerpts from the *Nevada Test Site (NTS) News*:

## MX PROJECTS

The Nevada National Security Site was selected for several Air Force Peacekeeper (MX) research and testing experiments

from 1978 through 1982. The U.S. Air Force, Westinghouse, Martin Marietta, Thiokol, EG&G Energy Measurements, Inc., Reynolds Electrical &

Engineering Co., Inc. (REECo) and Department of Energy employees worked on the project in Area 25.

One of the first MX projects was the Vertical Shelter Ground System Definition Program which required REECo to build an 18-foot diameter, 130-foot deep vertical silo for missile loading and egress (exit) tests.

The egress mechanism was built to thrust a 348,000-pound simulated missile and canister out of the silo to a height of 40 feet above ground after it burst through a layer of soil weighing 50,000 pounds.

In other experiments, an extensive network of experimental roads was built to evaluate construction methods in native desert soils. Scientists needed to make sure the roads would accommodate the heavy loads associated with transporting 200 MX missiles among 4,600 shelters. These tests were part of the Multiple Protective Shelter System (more commonly referred to as the "shell game system" or "race track model.")

When the Carter administration decided to use the horizontal shelter basing mode, an extensive program was started to develop this design. The R.M. Parsons Company, proposed "precast" construction and the R.A. Hanson Company proposed a "cast-in-place" method.

The shelter segments used about 220 yards of concrete per segment and weighed between 240 and 300 tons each. Studies into this basing mode were canceled by the Reagan administration in October 1981.



Photo: Pan Am

Another extensive experiment was the MX Canister Assembly Launch Test Program (CALTP) designed to test MX missile launch parameters. This program required extensive rehabilitation and modification to the research and development facilities in Area 25.

Construction to support the tests involved building a 125-foot assembly and launch tower, camera towers, auxiliary test pads for gas generator tests and missile component handling, and installation of a 200-ton, stiff-leg crane to support the project operations.

The first of five launches in January 1982 was witnessed by 60 distinguished guests. A 71-foot-long, 92-inch-diameter, 195,000-pound missile, without propellants, was thrust more than 300 feet into the air at a 5-degree angle and nearly 100 feet down range into a large earthen pit.

In 1983 REECo miners, used a 256-ton tunnel boring machine to drill a 750-foot tunnel into Little Skull Mountain as part of the project. The tunnel was later used by the Air Force to investigate equipment and methods for post-attack "dig-out" from underground missile complexes.

## In Memoriam

Steve Nolan, NSTec  
1951 - 2015

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# ONE VOICE

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

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# Employee Takes NSTec's Issues Management Initiative to Heart

By Dawn Negrete, NSTec

Recently, National Security Technologies (NSTec)'s Operations & Infrastructure (O&I) directorate held several all-hands meetings with their employees to further communication as well as narrow in on "Issues Management and Continuous Improvement."

The "hot topic" discussed at the O&I meeting reiterated that all employees were encouraged to submit issues for tracking and correction. This is a convenient method to document issues, ensuring that management knows there is a problem, the issue can be tracked, and corrective actions can be taken for completion. This helps NSTec identify repeated problem and trends so that any weaknesses can be corrected.

Rigging Inspector Ted Sargent took this message to heart. He inquired about the process for submitting a training issue regarding rigging inspection training qualifications, which he had been trying to get fixed for some time. The issue was submitted June 16, and the following week, Doug Clark from the Training Department responded. After completing a comprehensive Needs Analysis by Training, line management and a subject matter expert, it was determined that the Rigging Inspection Training Course did need to have the required frequency changed.

The issues management system worked. Sargent voiced a serious concern, and with his entry into the system, the concern was heard, analyzed and rectified to reflect the need for a change in the course frequency to make sure that all rigging inspectors are up-to-date on code requirements. Thanks to Sargent's persistence, NSTec avoided a potentially serious issue.

For his efforts, Sargent received the Safe Employee of the Month award for the month of August (coworkers John Gimble and Alan Niegsch were also awarded).

This is a reminder that all Nevada Enterprise employees need to stay vigilant throughout our daily work lives, ensuring that we call attention to even the smallest concerns which can become large, serious events.



Photo: Jen Mankins

## Atlas Oil, Excess Disposal

Continued from page 1

a customer comes out, they don't incur any cost using that facility. We're doing the cleanup work for them," Mercadante said. "For that reason, we're jumping into projects to see where we can save money on potential work they could be bringing to the NNSS."

The Atlas machine was previously moved from Los Alamos, but sat unused for more than a decade. Pure, high grade oil settled in the machine, which over time developed slight leaks from the hot and cold temperature changes at the NNSS.

Mercadante said he approached NSTec's Defense Experimentation and Stockpile Stewardship directorate about first offering the oil to universities or other groups that might need it. Because there were no takers, the oil instead was put up for sale.

The oil was drained from the Atlas machine into a

40,000 gallon holding tank outside the Atlas shop. The last shipment of oil occurred in August.

"We're getting a million dollars in excess sales this year and in the process stopped the leakage and got rid of hazardous waste that we now don't have to dispose of," Mercadante said. "It's cost avoidance in that we prevented the high cost of a cleanup had there been a spill."

The recycling program at the NNSS has been so successful that National Nuclear Security Administration officials have heralded it as an example for all to follow. But Mercadante said they're not done.

The NNSS still has to recycle electrical transformers from Area 25, ground-laid service cable from Areas 6, 2, 9 and 15, and various other materials sitting in scrap yards and abandoned facilities around the Site.

## News Briefs

### NSTec Receives VPP Star Certification

It's official! At the end of August, National Security Technologies (NSTec) received word that the company has been re-certified at the Star level by the Department of Energy's (DOE) Voluntary Protection Program (VPP). The Star Certificate of Achievement and VPP flag were presented Sept. 1 to NSTec President Ray Juzaitis by Nevada Field Office Manager Steve Lawrence. The DOE established the VPP to recognize and encourage excellence by DOE contractors in occupational safety and health protection.

This is NSTec's second re-certification at the Star level.

### Centerra-Nevada Launches its Thanksgiving Basket Contest and Food Drive

Each year, Centerra-Nevada holds its Annual Thanksgiving Basket Contest and Food Drive in support of a local school. This year, the basket contest and food drive begins Oct. 13. Centerra employees will create colorful and amusing baskets, filled with donated food in support of Jacob E. Manch Elementary School's students and families.

The Thanksgiving Basket contest and food drive will end Nov. 12; voting by Nevada Enterprise employees for the best basket begins Nov. 16. All of the Thanksgiving baskets and donated gift cards will be delivered to the school Nov. 19, where the staff will distribute the food to those families needing assistance.

## NvE Calendar of Events

- **Oct. 29 – NSTec's Mission Assurance & Safety Expo, Fire Station 1, Mercury**
- **Nov. 7 – Magical Forest tree decorating at Opportunity Village (NSTec)**
- **Nov. 10 – NvE Blood Drive, North Las Vegas Facility**
- **Nov. 16 – Christmas Angel Tree kickoff (Centerra-Nevada)**

# Roy Bridges Shares Astronaut Experiences with Students

*His instituting a NASA safety center reinvigorated engineering excellence*

By Lory Jones, *OneVoice* Editor

Students at the University of Nevada, Las Vegas (UNLV) recently packed into a classroom in the Science and Engineering Building to hear Roy Bridges discuss his experiences at NASA. Bridges, the vice president for strategic management at National Security Technologies (NSTec), spent 14 years of his career with NASA as an astronaut, and later as a center director at NASA's Kennedy Space Center in Florida and Langley Research Center in Hampton, Va.



Bridges weightless in space.

As part of the Engineering Sciences Seminar Series co-hosted by NSTec, Bridges talked about the engineering aspect of the space flight program and his experience as a pilot aboard the Space Shuttle *Challenger*. He got some chuckles when recounting his landing on earth. "I felt like I weighed 300 pounds after being weightless for so long in space. After a couple of weeks on earth, you reacclimatize. All of this happened 30 years ago, but it seems like yesterday," he said.

Particularly, Bridges gave his opinion on why NASA space flights were defined by soaring achievements and tragedies.

He recounted the Apollo program, the most famous

program responsible for landing man on the moon in 1969. "The Apollo program's goal to land men on the moon and return them safely by the end of the 1960s was put in jeopardy by the Apollo 1 fire that killed three astronauts in a ground test. NASA came back from that and landed man on the moon many times."

He mentioned NASA's chronological history at its zenith:

- Recovering the Apollo 13 mission
- Creating the world's first reusable orbital vehicle, flying it 135 times
- Building and orbiting the International Space Station with international crews since 1998.

However, these achievements were "marred by the *Apollo 1* and Space Shuttles *Challenger* and *Columbia* mishaps, which killed 17 of my friends and colleagues," he said.

On Jan. 27, 1986, *Challenger* broke apart more than a minute into its flight, killing five NASA astronauts and two payload specialists. The cause: an O-ring seal in the right solid rocket booster failed at liftoff. On Feb. 1, 2003, *Columbia* was completing its 28th mission before breaking apart during re-entry to earth, killing all seven crew members. A piece of insulating foam from the external fuel tank tiles peeled off during the launch and struck the shuttle's left wing. This permitted hot gases to penetrate the wing's interior, destroying the support structure and causing the shuttle to disintegrate.

One of the issues tying together these tragedies: NASA's culture, said Bridges. "We were not curious enough about warning signals, which were dismissed as unlikely to cause a major mishap. During flights before the mishaps, there was evidence of charring of O rings in the solid rocket joints, and minor damage to shuttle tile from small pieces of foam from the external fuel tank. Underlying that was that some NASA managers used



The payload bay on Roy Bridges' mission, STS 51F, Spacelab 2 (the 19th mission in the Space Shuttle program).

fear of reprisal to keep the troops in line."

After the *Columbia* incident, Bridges was sent to set up the NASA Engineering and Safety Center at Langley. As of their 10th anniversary in 2013, the Center has conducted 500 reviews of NASA missions and engineering issues and continues to troubleshoot potential problems before they become disasters.

"What is the application for you today?" he asked the UNLV students. "Encourage and celebrate diverse opinions. Be curious about small anomalies in tests or operations. Ask why it is happening. Investigate them thoroughly and get to the root cause. Understand that even low levels of threats of reprisal are a huge threat to safety and cannot be tolerated in engineering organizations."

Bridges further acknowledged that "the NASA of today understands that engineering excellence is the basis of a strong safety program."

## NSTec Signs Two More CRADAs

By *OneVoice* Staff Reports

Recently, National Security Technologies (NSTec) signed two more Cooperative Research and Development Agreements, or CRADAs.

The CRADA partnership with General Atomics will advance technologies for critical weapons systems and sensors to address U.S. capability gaps in the future. This agreement is an "umbrella" CRADA, which means multiple projects can be executed under the terms of this agreement. The areas of interest that are currently under discussion include test range and logistics support, data processing, exploitation and

dissemination, independent verification and validation, and sensor testing and analysis.

NSTec's partnership with SenseAgility includes collaborations on software development and engineering, software product management, software architecture, and graphic design related to software development. A specific area of interest uses applications leveraging blended reality advanced technologies. These applications will enhance national security training and experimentation through seamless integration of high-definition holograms with physical places, spaces, and

objects.

"These CRADAs complement our missions and allow us to use NSTec's expertise and capabilities not found in industry or other governmental agencies. They foster mutually beneficial partnerships to facilitate cutting-edge research and development, enable U.S. scientific discovery and economic competitiveness, and improve our security and quality of life through innovations in science and technology," said Robert Koss, manager of NSTec's Strategic Development Office who oversees the CRADAs.

# Visual Noise Signage Presentation a Star at VPPPA Conference

By Lory Jones, *OneVoice* Editor

Sign, sign, everywhere a sign. They all look the same, don't they? They inform, educate, warn... and not much else. National Security Technologies (NSTec)'s Mark Hitechew, Jacob Schelebo and Mike Kinney (who served as moderator) want to change all that – and they got a good head start in August.

Hitechew and Schelebo made their presentation at the 31st Annual National VPPPA Safety & Health Conference in Grapevine, Texas. The VPPPA (Voluntary Protection Programs Participants' Association) is a global safety and health organization dedicated to cooperative occupational safety, health and environmental management systems. The VPPPA conference brought together safety and health experts from more than 400 industries united in creating safer work environments.

Hitechew and Schelebo shared with about 200 attendees how to avoid “visual noise” – that is, posters that not only don't attract your eyeballs, they also don't engage your mind, and therefore are forgettable. Hitechew and Schelebo emphasized that, when it comes to safety, it's important to create a safety poster that amuses or impacts the viewer. Sometimes, the posters warn about the consequences if the rule of safety is ignored.

“Personnel can be slow to embrace changes. We recognize that old habits are hard to break,” said Hitechew, lead maintenance engineer. “We're faced with different types of personal protection equipment based on our work activities. We needed to have a method to keep personnel engaged, not be on autopilot. Look out for each other and be each other's eyes and ears. To help address and enhance safety awareness, we decided to initiate a new safety poster campaign to drive home the message, ‘I am my brothers'/sisters' keeper’.”

The presentation addressed methods being used to

enhance safety awareness for workers at the North Las Vegas Facility (NLVF) in Nevada. At the NLVF, craft work is performed by union operating engineers from Local 501 and Local 12. These include machinists, welders and maintenance personnel of various age groups and perspectives.

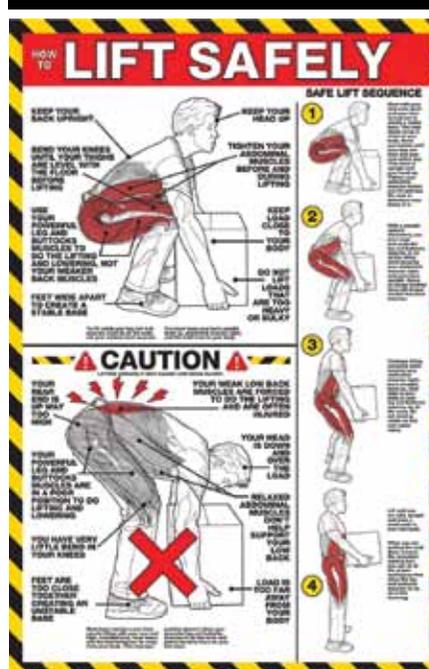
What made this presentation memorable was that Hitechew and Schelebo involved their fellow workers to act out for a PowerPoint presentation demonstrations of what's safe and what isn't. This helped give them a voice in the safety program – and it lightened their day.

“This presentation would not have been possible without the enthusiastic involvement of the Downtown Safety Committee and our maintenance crew at the NLVF. They acted out and posed for many of the presentation slides, and had a lot of fun doing it – and it shows. They proved how to get rid of poster ‘visual noise.’ Plus, their words of encouragement and helpful suggestions in polishing our presentation beforehand helped Mark and me successfully achieve what we set out to do,” added Schelebo, a machinist. “I also thank Wolf Exner, our safety profes-

sional at the NLVF, for putting together the presentation for us. He was totally supportive and patient throughout the process, and believe me, it was a process.”

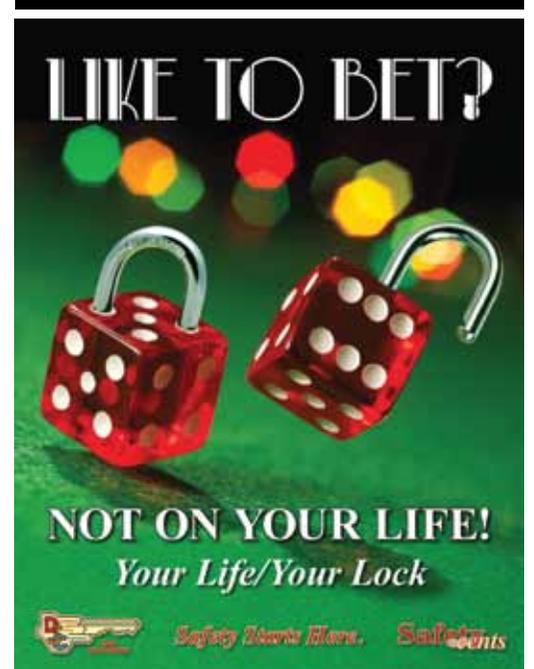
During the conference's awards ceremony, former NSTec employee Tony Renk, who worked in the Occupational Safety & Health division, was honored with the Department of Energy's Voluntary Protection Program (DOE VPP) Contractors' Champions Award. Tony was recognized for his outstanding performance and leadership in furthering the advancement of DOE VPP efforts.

What's “too much visual noise”?



Too much text, hard to read, message not clear. Simply put: too much information to digest.

What's “less visual noise”?



The poster engages the viewer with a life-or-death question. Graphics are eye-catching and colorful. Only 11 words make up the message. Logos and motto are brief and placed on the bottom, out of the way of the message. Graphics: Dave Wieand



## Celebrate the NNSS 65th Anniversary in Style!



**Limited edition: 65th Anniversary shirts, hats and patches are now on sale!**

**Red polo shirt** – \$30 (Sizes S – XL) • \$32 (Size XXL) • \$34 (Size XXXL)  
**White polo shirt** – \$30 (Sizes S – XL) • \$32 (Size XXL) • \$34 (Size XXXL)  
**Denim shirt** – \$25 (Sizes M – XL) • \$27 (Size XXL) • \$29 (Size XXXL)  
**Charcoal Gray Hat** – \$15 One size • Mesh panel  
**65th Anniversary Logo Patch** – \$5

When they're gone, they're gone!

Contact your nearest NSTEA rep to purchase.

# An Interview with Sarah Thomas, NSTec's First Postdoc

By Howard Bender, NSTec

Sarah Thomas is National Security Technologies (NSTec)'s first postdoctoral hire. She began her position in August and will be based mainly at the New Mexico Operations' Los Alamos Office, though her research will often take her to the Special Technologies Laboratory (STL) in Santa Barbara, Calif.

Howard Bender, Site-Directed Research & Development (SDRD) program manager, sat down with Thomas to ask about her background, what her areas of research will be, and her fascinating job history so far.

"Having a postdoc is significant to NSTec because a postdoc helps support our R&D effort, showing its growth and maturity," said Bender.



Photo: Randall Moss

Sarah Thomas

**Howard Bender (HB):** Can you tell us your background and what you have been doing recently?

**Sarah Thomas (ST):** I'm originally from Birmingham, Ala. My mom (Becky) was a history teacher at Jefferson County International Baccalaureate School (now retired) and my dad (John) is an accountant at the American Cast Iron Pipe Company. I graduated from the University of Alabama, Birmingham, in 2013 with my Ph.D. in physics. After graduating, I was appointed a postdoctoral fellow at the University of Edinburgh, Scotland. I spent one and a half years there, studying novel nitrogen-rich explosives under high pressure.

**HB:** Can you describe what a postdoc is and does?

**ST:** A postdoc is a newly graduated Ph.D. student. Typically, you might hold one or two postdoc positions before moving on to a permanent position. The point of being a postdoc is to gain real-world experience in your area of research. Postdocs typically conduct research,

write papers and often write grants to secure funding. A postdoctoral appointment typically lasts from one to three years. My appointment will be for one year.

**HB:** What will you work on at NSTec?

**ST:** I will be studying materials under dynamic compression, which fits into my previous studies of high-pressure materials research. My dissertation was on the effects of high pressure on magnetic transitions in heavy rare earth metals.

I am here as a postdoc to gain experience in dynamic compression, or shock physics, another way of achieving high pressures. In my first year as an NSTec postdoc, I plan to learn more about the theory of shock physics, as well as gain hands-on experience conducting experiments in the field. By the end of my first year, I plan to have written a paper on my research.

**HB:** Can you tell us something about the dynamic materials science you'll be exploring? Does that have to do with the current gas gun R&D?

**ST:** Yes. I will be working with NSTec's [Distinguished Scientist] Rob Hixson to learn the fundamentals of shock compression physics, and how it complements static high-pressure research. We will be designing a series of gas gun experiments to obtain fundamental shock properties for aluminum and copper metal. This research will be done on the gas guns at STL and the North Las Vegas Facility. There is also a possibility that I may help support shock physics experiments at the Dynamic Integrated Compression Experimental facility at Sandia National Laboratories. By the end of the year, I will have drafted an article about this work for a peer-reviewed journal.

**HB:** How does your past technical experience support this postdoc appointment? Can you talk about the diamond anvil cells, or DACs, you've worked with?

**ST:** My experience has been in static high-pressure materials research. We typically take small amounts of a material to pressures on the scale of those at the center of the earth. We achieve these pressures using DACs. A DAC is comprised of two gem-quality, brilliant-cut diamonds, typically around 0.2 carats, that are positioned with their culets (the flat surface on the small back end of the diamond's pointy end) facing each other. The culets are typically from 10 to 300 microns in size. Because pressure equals force/area, we can apply a somewhat large force to the diamonds, so that over the very small culet area, a very large force is generated. The force is typically generated with either a gas membrane, or screws. Once we take materials up to these extreme pressures, we can study them with a variety of techniques, from X-ray and neutron diffraction to Raman spectroscopy to electrical resistance measurements.

**HB:** I'm sure you have research interests of your own that you will pursue while you are at NSTec. What can you say about those?

**ST:** My research interests are fairly broad. I have worked with metals and explosives in the past, and carry an interest for both. I am very much interested in learning more about shock physics and its applications, which is why I came here. I think I'll be able to learn a lot from Rob [Hixson] and the guys out at Santa Barbara.

**HB:** How are you enjoying Los Alamos and what do you like to do outside of work?

**ST:** I really enjoy playing the new wave of board games that have come out, like "Settlers of Catan" and "Ticket to Ride." I think it's a great way to spend time with friends in a way that gets you interacting with each other rather than with technology. I enjoy playing with my two cats that traveled with me to Scotland. I also like to read a lot of science fiction and fantasy novels.

## NSTec Donates to California Schools Supporting STEM

By Lory Jones, *OneVoice* Editor

Supporting our mission also means supporting our mission's future.

Last month, the North Central Valley STEM Center in Stockton, Calif., received a \$2,500 donation from National Security Technologies (NSTec). NSTec's Mike Cardenas (photo, right) presented the "big check" to Bret States, STEM coordinator and SIMMS (Secondary Integration of Modeling in Math and Science) project director at the San Joaquin County Office of Education. SIMMS targets science, math and technology professional development with local 9th- to 12th- grade teachers.

STEM, which stands for Science, Technology, Engineering and Mathematics, promotes educational competitiveness of such disciplines in U.S. schools. The North Central Valley STEM Center is a regional collaborative partnership among leaders in education, industry and business

throughout California's North Central Valley and beyond.

NSTec was recently added as a regional network of California STEM Learning Network (CSLNet) with a mission to help California prepare the nation's most STEM-capable graduates. CSLNet provides and/or facilitates exposure, opportunities and encouragement to K-12 students in STEM subjects.

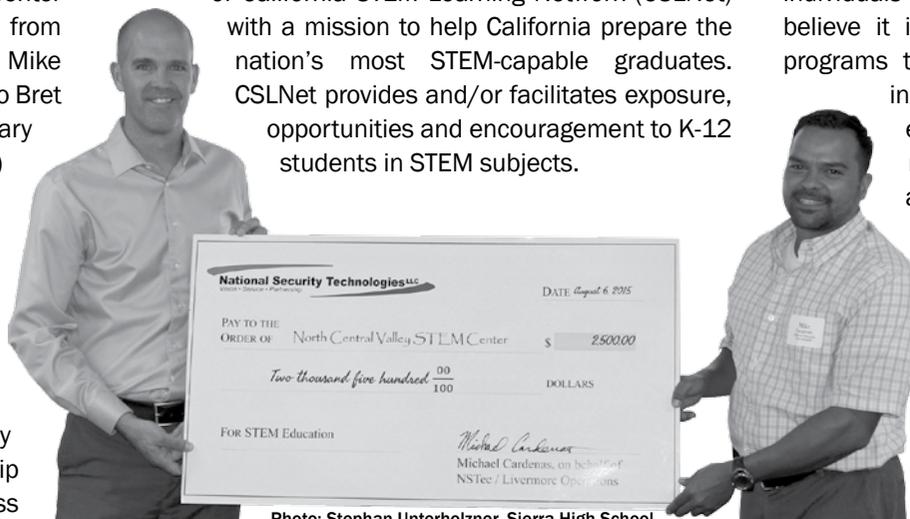


Photo: Stephan Unterholzner, Sierra High School

"Our mission for national security requires that we recruit, employ and retain the most technically talented individuals that our nation has to offer. This is why I believe it is extremely important to actively support programs that make it their mission to inspire and increase the amount of high school graduates entering the fields of STEM," said Cardenas, manager of Calibration & Applied Analysis at LO. He has dedicated his personal time to STEM programs in Northern California for at least five years. He is also executive board member for the North Central Valley STEM Center.

Cardenas will give a presentation on STEM and its importance to NSTec at the 3rd Annual California STEM Symposium Oct. 29-30 in Anaheim, Calif.

# E&WM Safety Fair Raises Awareness of Safety, Donations for Charities

By Elizabeth Atkins, NSTec

The Environmental & Waste Management (E&WM) 4th Annual Safety Fair and Fundraiser took place Sept. 17 at the Nevada National Security Site (NNSS)'s Area 5 Radioactive Waste Management Complex. The fair was attended by more than 100 E&WM employees, the senior management team and many support personnel.

"The Safety Fair is a reward for the E&WM organization's excellent safety performance throughout the year and a way to keep our focus on safety and continuous improvement," said E&WM Director Teri Browdy.

During the E&WM fundraiser, more than \$12,000 was raised to support two local military charities, "Las

Vegas Pets for Vets" and "Operation Warm Heart."

"Pets for Vets" helps military veterans reclaim normalcy in their lives through companion dogs. Each companion dog is rescued from a local shelter in connection with several local animal rescue groups. The dogs are given basic obedience training and additional training that will help them assimilate into their new roles as companion dogs. Then they are placed in their "forever" home. A donation of more than \$6,000 will go toward "Pets for Vets" this year to adopt several trained companion dogs for military personnel suffering from post-traumatic stress disorders.

The remaining funds will be used during the holiday season to support military families with toys, clothing and gift cards through "Operation Warm Heart," which services Nellis and Creech Air Force Bases.

The Las Vegas Metropolitan Police Department also returned this year to teach the importance of being safe and sober when driving.

Due to the success of the Safety Fair and the charities that were supported, NSTec Cares approved an additional \$2,500 for "Pets for Vets"!

What a tremendous show of support both for E&WM personnel working safely and for two great charities. See you next year!

Photo: Reed Podaris



Front row, l-r: Katie Tanaka, service dog Cooper and Yim Liu-Bacon. Back row: Mike McCullough, Teri Browdy, Air Force Major Abbi Johnson (Cooper's recipient), Stefan Duke, Jeanne Poling, Pat Arnold, Elizabeth Atkins, Rick Wagner and Nicole Mantu from "Pets for Vets."

## Stay Alert, Alive through L.I.V.E.

By Lory Jones, *OneVoice* Editor

We don't need to search the news for stories on violence – in our workplaces, public places and educational institutions. They occur too often. The Oct. 1 active shooter incident at Umpqua Community College in Roseburg, Ore., is a prime example.

This is why the Nevada Enterprise is promoting the L.I.V.E. campaign – Leave, Invisible, Violence, Evade.

"The whole point of employees understanding L.I.V.E. is to be prepared on what to do should there be a sudden incident of violence in the workplace," said Hugh Holland, director of Field Services at Centerra-Nevada and manager of the L.I.V.E. campaign. "L.I.V.E. helps us to plan our escape route in case we need to leave quickly, hide in a preplanned, secured area out of harm's way, know when to meet violence with violence as a last resort, and how to evade being detected by a perpetrator."

Also important, Holland stressed that, in case you're approached by security or police personnel, keep your hands visible.

As well, the Nevada Enterprise wants employees to follow these recommendations for personal safety, in and out of the workplace:

- Be aware of your surroundings. Maintain situational awareness.
- Look for anomalies, especially since the Office of Personnel Management (OPM) cyber intrusion. These anomalies include:
  - People asking unusual questions
  - People having information about you they shouldn't have
  - Surveillance in and around your work areas and at home
- Report unusual occurrences:
  - To supervisor
  - To security/police
  - Incident of Security Concern Hotline (702) 295-10SC (4672)
- Talk with your immediate family members, especially those identified in your personnel records at OPM, and share this same guidance. Ask them to tell you about any suspicious activities and contacts they experience.
- Understand that our adversaries are willing to spend months or years developing relationships with people who have access to the information they want, including using family members. Their initial interactions may seem benign, but they may be nurturing the relationship and trying to earn your trust in small unrelated matters.
  - When traveling overseas, be particularly vigilant. Assume that your affiliation with the U.S. government is known to the foreign country you are visiting. Contact the Counterintelligence Office at (702) 295-7700.

## Koch Receives "MVP" Award for SDRD

By Lory Jones, *OneVoice* Editor

National Security Technologies (NSTec)'s Jeff Koch (in photo, right) was recently honored with a Site-Directed Research & Development (SDRD) "Most Valuable Project/Principal Investigator" award. Koch's award noted his "outstanding performance and contributions to the science of X-ray spectroscopy, high-energy density plasma diagnostics, and SDRD program development."

Chris Deeney (left), NSTec vice president for program integration, lauded SDRD as "a real jewel of NSTec. Every year we like to award the shiniest facet. This year, that facet was Jeff Koch." He presented the award to Koch at the SDRD Project Review "Ground Truth and Discovery" conference Sept. 17 at the Nevada Support Facility in North Las Vegas, Nev. "SDRD is driving new capabilities that sustain and grow our missions. Jeff made contributions by some very innovative work that will give NSTec an important role in the national stockpile stewardship program," Deeney added.

Up to 1992, NSTec created high-energy density plasmas in underground nuclear tests. Now they are created on a much smaller scale on big machines such as Z and the National Ignition Facility.

"NSTec is trusted by the National Nuclear Security

Administration to make sure that diagnostics for these machines are calibrated – an important mission. Now, Jeff's SDRD will also make sure we are creating new diagnostics that solve national needs, just like we do at U1a," said Deeney.

A manager in the Science and Advanced Technology department at Livermore Operations, Koch is responsible for maintaining and enhancing capabilities and work scope related to stockpile stewardship missions in NSTec's Defense Experimentation & Stockpile Stewardship directorate, as well as career guidance for a team of 10 scientists.

The SDRD Program is NSTec's primary source for new discovery and innovation in support of national security needs, with more than 25 R&D projects in the works.



Photo: Lory Jones



A Publication for the Nevada Enterprise (NvE) Complex

## NFO Food Drive Helps Knock Out Hunger

By **OneVoice Staff Reports**

Nevada Enterprise employees recently hauled in bags of food to the Nevada Field Office (NFO) facility in North Las Vegas in support of “Feds Feed Families,” a local campaign that benefitted the Las Vegas Rescue Mission, a non-profit reach-out organization that feeds and shelters the homeless and those in need.

By Oct. 16, the NFO gathered more than 3,250 pounds of donations, exceeding its goal of 3,000 pounds. “We kept going until we reached that 3,000 mark,” said LaTonya Burke, administrative assistant and training operator for NFO’s Site Operations office. Burke oversees the food drive.



Line dancing to burn off those cupcake calories! In photo (l-r): LaTonya Burke, Angela Colarusso, Laura Tomlinson, Kim Clark, Jasmine Lawson, Tiffany Lantow, Don Seaborg and Patty Neese.

Photo: Christy Morris



The 2015 Food Sculpting theme is Nevada, the Silver State. Canned and bagged food and water bottles illustrate significant landmarks of the state. Right in the middle of the state: cans forming Mercury and the Nevada National Security Site.

Photo: Lory Jones

To make the food drive fun, the NFO’s “Feds Feed Families” team set up a time and place for a few events. On Wednesdays, grown adults were children again at BB’s Café by coloring in books to relieve stress. On Thursdays, employees gathered in the Sedan conference room to dance off

calories. The team also created a sculpture, according to theme, comprised of donated items.

The “Feds Feed Families” team included Ed Forness, Desiree Ang, Tiffany Lantow, Jason Julian, Carol Sohn and LaTonya Burke.

## NSTec Donates to Organization Honoring WWII Vets

By **OneVoice Staff Reports**

National Security Technologies (NSTec) recently donated \$5,000 to Honor Flight Southern Nevada (HFSN), a non-profit organization that flew five World War II veterans to the nation’s capital this month.

The trip, running October 2-4, consisted of travel and spending one full day visiting the World War II Memorial and other Washington D.C. landmarks, such as the Korean War Memorial, Vietnam Wall, Lincoln Memorial and the Marine Corps War Memorial. The goal is to make this a trip to remember and to acknowledge the sacrifices that the veterans made to secure America’s freedom.

“Many veterans who served our nation during the Cold War worked at the Nevada National Security Site,” said NSTec President Ray Juzaitis. “We’re pleased that our

contribution to Honor Flight pays tribute to the service and sacrifice of these five veterans and others like them, and helped fund this special visit to the veterans’ memorials in Washington, D.C.”

“We are incredibly grateful for NSTec’s generosity,” said HFSN Executive Director Belinda Morse.

HFSN has taken 145 WWII veterans on four flights since October 2013. With a high demand, the veterans are chosen on a first-come, first-served basis. Honor Flight is strictly supported by donations and will continue to organize flights as long as there is financial support. Donations can be made through their Go Fund Me account at: <http://www.gofundme.com/hfsouthern-nv>.

For more information about HFSN, visit: [www.honorflightsouthernnevada.org](http://www.honorflightsouthernnevada.org).

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