



# ONE VOICE

February 2013

A Publication for the Entire Nevada Enterprise (NvE) Complex

## Safer Las Vegas

RSL takes public affairs on a ride to see detection mission.



See pages 4-5.

## NNSS Futures

Site contractor supports high school engineering competition.



See page 8.

## Recycled Oil

Recycled motor oil will be used to heat some buildings at the NNSA.



See page 12.

# D'Agostino Retires After 36 Years of Federal Service

By **OneVoice Staff Reports**

National Nuclear Security Administration (NNSA) Administrator Tom D'Agostino retired on Jan. 18, 2013, after more than 36 years of Federal service.

D'Agostino began his career in the U.S. Navy before leading the nation's nuclear security efforts for the U.S. Department of Energy. He has spent the last five and a half years as the NNSA Administrator and Under Secretary for Nuclear Security, and two years as Deputy Administrator for Defense Programs.



"Tom's support of the Nevada National Security Site (NNSS) runs deep — dating back to his family's history of working here at the NNSS," said Nevada Site Office Acting Manager Steve Lawrence. Neile Miller will be acting Administrator until D'Agostino's replacement is confirmed.

Secretary of Energy Stephen Chu hailed D'Agostino's accomplishments in serving missions of the NNSA, the Environmental Management Organization (EM) and the Office of Legacy Management (LM). Chu said his commitment led one major news outlet to give him the title "Undersecretary for Saving the World."

"I have greatly enjoyed working with Tom over the last four years," Chu wrote in a statement. "From leading a vast acceleration of the Department's efforts to reduce nuclear dangers at home and abroad, to overseeing our efforts to protect public health and safety by cleaning up the nation's Cold War nuclear legacy, Tom has led

NNSA, EM and LM through a period of unprecedented international attention and complex transition."

Chu cited several examples of D'Agostino's accomplishments. They included eliminating or securing hundreds of nuclear weapons worth of nuclear material; reducing the number of deployed warheads to the lowest level since the 1950s — an approximate reduction of 85 percent from the darkest days of the Cold War — while successfully maintaining the safety, security and effectiveness of a shrinking stockpile; and through EM, permanently cleaning up 690 square miles of contaminated land — an area more than 30 times the size of Manhattan — and completing the cleanup of 22 transuranic waste sites across the nation, permanently eliminating an environmental risk and reducing the cost of monitoring and storing waste.

In a statement, D'Agostino thanked everyone for their support and said he was looking forward to spending time with his wife, Beth. "I am a strong believer that organizations are healthier when leadership changes on a periodic basis. The time is right for this change," D'Agostino wrote. "The ability to serve our nation is a privilege and I have been blessed to be able to do so for many years. I want to thank you for your support to me over the nearly eight years in these positions. I deeply appreciate your commitment to the mission, for keeping an eye on what is important, and for taking care of each other."

# The Meadows School Wins Nevada Science Bowl Tournament

By **Jeff Donaldson, OneVoice Editor**

The Meadows School of Las Vegas battled through a 32-team, double-elimination tournament to win the U.S. Department of Energy's Nevada Science Bowl Tournament. Held Feb. 2 at Vegas PBS Studios, The Meadows School team claimed a trip to Washington D.C. to represent the region and a \$5,000 check for their school.

"As always, the competition was fierce, but our teams were well-prepared and ready to show their academic excellence," said Dan Burns, Science Bowl coordinator. "We're very pleased with all the support shown by our sponsors and volunteers who helped make this year's event a success."

Continued on page 7



Moderator Nate Tannenbaum (left) congratulates teams at the conclusion of this year's Nevada Science Bowl.

## NvE Executive's Corner

**Richard L. Higgs**  
 Manager, Joint Laboratory  
 Office - Nevada (JLON)



### It's All About Team Work

The Nevada National Security Site (NNSS) has a rich history in nuclear testing. It has a powerful and meaningful history that changed the face of the nation and the world. The Lawrence Livermore National Laboratory and the Los Alamos National Laboratory have a long-standing model of working in Nevada that required engineers and scientists to travel from their home labs to work alongside a cadre of lab and contractor employees living in Nevada. For many of the workers, their favorite stories at the NNSS are reminders to us of how motivated teams working toward shared goals can overcome significant technical challenges and accomplish great things. For every experiment, people from many companies and organizations worked passionately – together is the only way they succeeded.

Today's generation will look back someday and reflect on the success of the work we conduct now. They may refer to 2013 as "back in the day," but I believe that many of our favorite stories will reflect how workers from the entire Nevada Enterprise (NvE) came together to remove the obstacles and reform the way we work.

Our mission set today continues to have a strong underpinning from the Weapons Program, including our major experimental "data producers," such as the Joint Actinide Shock Physics Experimental Research facility and the Gemini subcritical experiments. Both laboratories are working actively with National Security Technologies and our Federal customers to define the next generation of dynamic experiments and how to work more effectively. Additionally, the NNSS supports a much broader national security enterprise. The laboratories' "global security" programs continue to expand their efforts to work at the NNSS. The National Criticality Experimental Research Center (NCERC) is yet to reach full operating authorization but is, in the shopping mall analogy, the "anchor business" in the Device Assembly Facility. This NCERC body of work is continuing to expand and support new customers as they contribute to national security in an important and significant way. All of our projects require people from different NvE organizations for success. Together is still the only way we succeed.

It is this same mantra of teamwork and shared outcomes that bind us together. Today's obstacles are not just technical and fielding related but challenges we face due to declining budgets, program uncertainties and sometimes stricter requirements and regulations. I believe our history and our future share a reliance on integrated teams and integrated solutions. It is not merely new jargon; NvE, OneVoice, Governance, safety conscious work environment, Crucial Conversations and others are the philosophies and tools helping us move forward. It's about removing obstacles; it's about working smarter and conducting experiments more efficiently. It's about everyone's good ideas and everyone's commitment. It's all about team work.

And a quick plug for the National Atomic Testing Museum – it is definitely worth a visit!

Rick

# NSTec Awards Grants to Local Teachers Supporting Science, Technology, Engineering and Math

By Jen Mankins, NSTec

National Security Technologies, LLC (NSTec), has awarded more than \$60,000 in grants to local schoolteachers for innovations in science, technology, engineering and math (STEM).

The new grants, known as STEM Innovative Instruction Grants, were available to teachers in grades kindergarten through 12, in counties where NSTec operates. The grant money must be used in support of STEM programs outlined by a teacher, in a formal proposal. "This type of outreach expands our existing business-education partnerships from the lower grades to the competitive environment of higher education," says NSTec President Raymond J. Juzaitis.

"It is our hope that these grant recipients will help develop students in science, technology, math, and engineering who may one day become members of our professional team."

NSTec, which employs more than 525 scientists, engineers and technology professionals, has actively supported education in these areas in education grants and charitable contributions.

NSTec awarded the following teachers with various amounts based on submitted proposals:

- Heather Bennett, Gifted And Talented Education (GATE), Fay Herron Elementary, Las Vegas, Nev. - \$1,150
- William Gilluly (GATE), John C. Vanderburg Elementary, Las Vegas - \$9,180
- Filomena Vine (Physical and Biological Sciences), Ed W. Clark High School, Las Vegas - three grants totaling \$8,184
- Elisabeth Williams (Science), Southwest Career & Technical Academy, Las Vegas - \$5,000

- Michael Thomas Smith (GATE), Smalley Elementary, Las Vegas - \$1,357
- Sarah Andres & Richard Sandoval (Humanities) Forbuss Elementary, Las Vegas - \$1,399
- Maria Carver (Earth Science), Jim Bridger Middle, Las Vegas - \$6,000
- Stephen McKinney (Geometry & AP Calculus), Cimarron-Memorial High, Las Vegas - \$7,243
- Laura Doughty (Biology, Botany, French II, & Marine Sciences), West Career & Technical Academy, Las Vegas - \$1,157
- Jeannette Lee (English & Math) Sunrise Mountain High, Las Vegas - \$7,740
- Angelo Pappano (Entertainment Engineering) Southwest Career & Technical Academy, Las Vegas - \$2,374
- Jason Gonzales (Epidemiology, Zoology, & Biology) West Career & Technical Academy, Las Vegas - \$4,406
- Edralin Pagarigan (Science), Nicholas Orem Middle, Prince George's County Hyattsville, Md. - \$4,358
- Natasha Heinrich, Goleta Family School, Santa Barbara, Calif. - \$370.

NSTec is dedicated to devising integrated solutions and forging new partnerships at the Nevada National Security Site and its related facilities and laboratories for the Department of Energy, National Nuclear Security Administration, Nevada Site Office. NSTec strives to meet customer needs through strategic vision, exemplary service, and best-in-class tools to achieve missions including Stockpile Stewardship, Homeland Security and Defense Applications, and Environmental Management.

# ONE VOICE

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

Steve Lawrence, Acting Manager, NNSA/Nevada Site Office • Darwin Morgan, Director, Office of Public Affairs

Editors: Jeff Donaldson and Lory Jones. Submit articles or ideas to: donaldjw@nv.doe.gov.

Publication Management: NSTec Public Affairs and Community Relations and Workforce Enhancement and Communications

Layout and graphics: David Wieand

Contributors: Tom Andrews, Dan Burns, Marc Klein, Jen Mankins, Dona Merritt, Darwin Morgan, Angela Ramsey and August Schellhase

**U.S. Department of Energy**  
**National Nuclear Security Administration/Nevada Site Office**  
**P.O. Box 98518, Las Vegas, NV 89193-8518**  
**Phone: 702-295-3521**



# NNSS Cleanup Information is Just a Click Away

## New Interactive Map Makes NNSS Data More Accessible to the Public

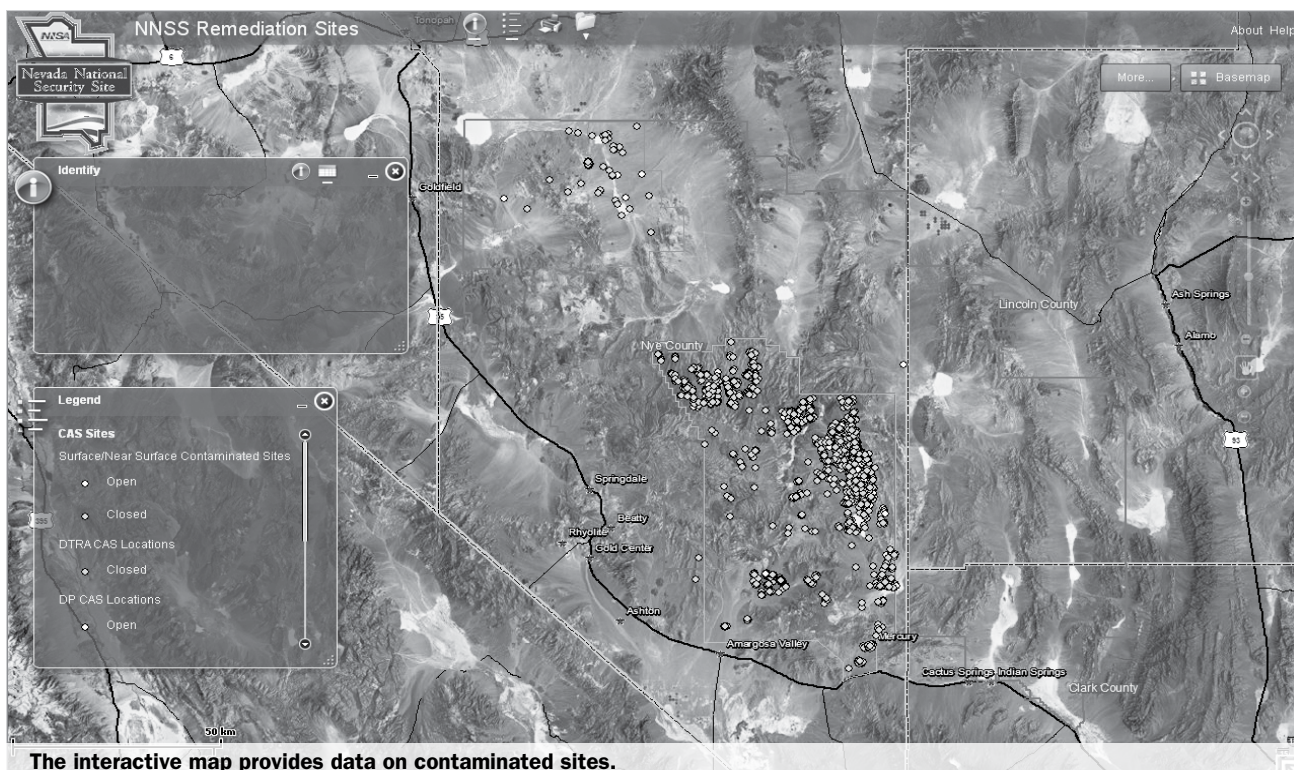
By Dona Merritt, Navarro-Intera

For decades, the Nevada Site Office (NSO) has been investigating, characterizing, identifying and performing corrective actions in areas contaminated by historical nuclear research, development and testing. More recently, the NSO has consolidated this body of work into a single, accessible information repository for stakeholders.

Now with the help of a the new computer map/

to Surface/Near Surface Contamination, Defense Threat Reduction Agency (DTRA) Locations, Defense Programs (DP) Locations, Environmental Restoration (ER) Locations, Deep Sub-Surface Contamination, All Locations, and/or a combination of all the options.

The idea for the map originated from discussions with stakeholders during public meetings in September



The interactive map provides data on contaminated sites.

database known as the Nevada National Security Site (NNSS) Remediation Sites map, interested members of the public can literally open the book on thousands of sites located on the NNSS and surrounding Nevada Test and Training Range. These sites have undergone or will undergo corrective actions in accordance with the Federal Facility Agreement and Consent Order, a formal agreement between the NSO and the State of Nevada Division of Environmental Protection.

By simply clicking on a specific historical test location on the map, users can activate an information box that identifies the type and quantity of contaminated substance present at that location. Additional hyperlinks allow the user to access more in-depth reports that include information on the various cleanup approaches and closure methods used at each site as well as a thoroughly — researched site history.

These site reports are housed in the U.S. Department of Energy Scientific and Technical Information (OSTI) library. The library, known as the OSTI Information Bridge, includes approximately 2,000 NSO documents, published as early as 1982, that address historical NNSS contamination challenges.

The interactive map was designed to give users flexibility. Clicking the More button will activate options for altering the map's detail, to include/exclude roads, boundaries, etc. Users can also group sites according

to 2011. "As we shared the progress of our cleanup efforts, we realized that locating relevant documents and reports wasn't as easy as it could be," NSO Environmental Management Operations Manager Rob Boehlecke explained. "Our hope is that the interactive map not only makes information more readily available, but that it also gives users a visual context for the quantity and variety of work being accomplished at the NNSS."

Though fully operational, the interactive map is a pilot program. Over the next few months, the NSO will evaluate its use and seek feedback from the public. "We want to make sure stakeholders are satisfied with the map's overall utility and ease of use," said Boehlecke.

Additional information on the NSO Environmental Management mission can be found at [www.nv.energy.gov/envmgt](http://www.nv.energy.gov/envmgt). To submit comments or suggestions relating to the map, please e-mail [envmgt@nnsa.doe.gov](mailto:envmgt@nnsa.doe.gov), or call 702-295-3521.

# NNSS Contractors Support Red Cross' Fire Victims

By Dan Burns, NSTec

When a fire destroys or damages a home or apartment, families are left to cope with disaster. The Southern Nevada Chapter of the American Red Cross works to make sure those families aren't alone. Every 23 hours, volunteers from the Red Cross in Las Vegas provide fire relief services to families suffering through the devastating impacts of a fire.

When the Red Cross sends out a call for help, the contractors at the Nevada National Security Site (NNSS) are ready to respond. National Security Technologies, LLC (NSTec), Navarro-Intera, Chugach World Services and WSI-Nevada recently teamed up to donate \$8,100 to the "Fire Hurts, Red Cross Helps" campaign.

The Southern Nevada Chapter of the American Red Cross is trying to raise \$300,000 through this year's campaign. The NNSS has donated more than \$74,000 to the campaign since it began six years ago. NNSS Fire Chief Charles Fauerbach believes this cause is so important, he added a personal contribution to the effort. The fire relief services provided by the local Red Cross are funded exclusively through these local contributions with 100 percent of all dollars contributed going directly to the fire victims.



Presenting an \$8,100 "big check" (from left): CEO Scott Emerson, Southern Nevada Red Cross; Board Chair Andrew McNeil, Southern Nevada Red Cross; Manager Shari Morrison, NSTec; Vice President of Operations Mike Butchko, NSTec; General Manager Dave Taylor, Navarro-Intera; and NNSS Fire Chief Chuck Fauerbach.

# RSL Aviation Team Working to

By Jeff Donaldson, *OneVoice* Editor

*Note: NSTec Public Affairs was invited on a Remote Sensing Laboratory (RSL) survey mission of Las Vegas in January to film the mission and record activities for use by media or other agencies. This is a first-person account of the flight.*



Pilots Ray Arsenault (left) and Bill Duncan fly the Bell 412 toward the Las Vegas skyline.

**Nellis Air Force Base — 6 a.m.** The crisp morning air greets Pilot Ray Arsenault and this writer as we step onto the flight line outside RSL en route to the Bell 412 helicopter. We're heading out to set up cameras and to review safety regulations — an integral part of company and federal oversight in the Remote Sensing Laboratory's award-winning aviation program.

The Bell 412 is one of two helicopters maintained by RSL-Nellis and RSL-Andrews. It is frequently used for radiation detection missions, along with wildland firefighting operations at the Nevada National Security Site. It sits alongside two B-200 fixed wing aircraft that also make up the RSL fleet.

Most companies can fly today's mission with one pilot — National Security Technologies and the National Nuclear Security Administration (NNSA) require that two pilots fly at all times. This extra safety precaution will take on new relevance as the mission proceeds.

Arsenault is a relatively new addition to the RSL crew, bringing with him thousands of hours and years of flying experience in both helicopter and fixed-wing aircraft. He briefs that today's 2.5-hour mission has been flown at least twice before, and resembles many missions RSL has conducted over the past several years.

Today's mission will carry us first over Lake Mead to test equipment, and then on to a box grid-like pattern over a portion of Las Vegas between Spring Mountain Road and Tropicana, just southwest of Interstate 15. We will be accompanied by Chief Pilot Bill Duncan and two aerial measuring scientists, Ashlee Dailey and Tom Stampahar.

RSL's Consequence Management program works with city governments and police agencies to map radiation levels across the city by flying over and recording characteristics of the landscape. Agencies use the data to map the radiation footprint so that detection systems can pick up potential threats that might be present at later dates.

This radiation detection survey mission has become so heralded that RSL's services have been hired by cities such as Seattle, San Francisco, New York and Washington D.C. Their helicopters are ever-present at major events throughout the year — from the Presidential Inauguration to the Super Bowl. RSL's teams even played a major role in detection after Japan's Fukushima Nuclear Plant disaster resulting from a tsunami in 2011.

**Takeoff — 8 a.m.**

Cameras are set up in the cockpit and rear compartment to film the mission, and after a mission briefing, the crew is ready to begin. Arsenault and Duncan conduct an extensive pre-flight safety check with blades spinning, while Dailey and Stampahar power up their systems in the back.

The scientists use laptops and GPS systems to track the helicopter as we pass over the landscape near the

Rio All Suite Hotel and Casino. The first passes will be at 600 feet and the second set will be done at 900 feet.

The helicopter is equipped with two large pods on the left and right side that contain the detection equipment. The data they record is not obvious during the flight. The information will be downloaded later and analyzed.

Stampahar is a veteran RSL technician who has conducted dozens of detection survey missions. "We'll fly the lake, then try to pick up our starting point on the grid," Stampahar says over our headsets. "That's about where the excitement will stop for you." He's referencing the mission itself, which will consist of numerous back-and-forth passes over the same spots on the grid — seemingly monotonous to the unknowing bystander.

"We'll keep it exciting up here," Duncan quips, in the cockpit.

The helicopter finally lifts off and veers right over northern most part of Nellis Air Force Base, away from the base's busy flight line and off toward the mountains.

**In-Flight — 8:10 a.m.** Stampahar and Dailey have their equipment up and running and Duncan takes the Bell 412 low over the ground just west of Lake Mead. The helicopter will first pass over a land target to calibrate the tracking system. The line they fly is less than a mile and takes just than a minute to complete.

Dailey is also relatively new to RSL, having joined its scientist ranks just one year ago. A graduate of the University of Nevada, Las Vegas, Dailey helps Stampahar ensure the maps are synchronized. "The pilots will use digital displays on the cockpit dashboard to hold within a number of feet of the map line," Dailey explains. "It's our



The Bell 412 conducts its first survey line along I-15.

# Keep Las Vegas, Nation Safe

job to make sure they get the proper spacing.”

The next flyover is a portion of Lake Mead, just over the surface at about 300 feet. They use the water line to subtract out natural, or terrestrial, radiation. The view is picturesque, but it takes only a few minutes to finish checking out the equipment. “Clear to proceed,” Stampahar tells the pilots, and Duncan and Arsenault steer the aircraft toward the Vegas skyline.

**Survey — 8:35 a.m.** Duncan brings the 412 out of the hillside above Lake Mead, he’s making a beeline for the Stratosphere. We’re flying over Northeast Las Vegas – the homes and pools slowly pass beneath us. The Bell 412, after all, is not known for speed. “Flying at the speed of snail,” one pilot jokes.

But we won’t need speed today – the passes will be meticulous and measured. We pass close enough to the Stratosphere to see the faces of patrons on the various rides. The helicopter turns left at I-15 and heads south along the freeway.

Here is where the mission gets tricky, making the presence of two pilots important.

To the left of us, seemingly within seconds and minutes apart, and hovering over the Vegas strip are tour helicopters or police helicopter, and news helicopters. As we pass the Mirage, Caesars, the Bellagio on our left, we get closer to the airport – and the pilots watch as numerous commercial airplanes depart. The sky will be filled with traffic all mission.

“ATC (Air Traffic Control) is requesting updates on each pass,” Arsenault says, as his headset crackles with activity. It will be a constant endeavor of the pilots to ensure flight safety. “Picking up a helicopter at 10 o’clock,” Arsenault adds noting the helicopter’s left



The mission crew discusses the flight before take off.

position in the sky. “Got it,” Duncan assures him.

The helicopter finally reaches the southern-most boundary of the grid at Tropicana. At once, Duncan banks the helicopter into a 40-degree turn. His digital display is flashing numbers. Behind him Stampahar calls out the first line within feet.

“Starting in three, two, one....” Stampahar says. Today’s survey mission has begun. The Bell 412 flies first at 600 feet, north along the I-15 – the Rio on the left – the Vegas strip on the right. The morning sun reflects off the pods and bathes the cabin in light as Dailey and Stampahar track the line on their GPS. “Done,” Stampahar says and at once Duncan banks the aircraft at 40 degrees and brings it around for the next line.

To anyone on the ground, the Bell 412 looks like all the other helicopters filling the Vegas skies. Unbeknownst



RSL Scientist Ashlee Dailey helps track positioning during the mission.

to bystanders, the work being done today will help protect and prevent the possibility of a radiological attack, especially during the busy New Year’s holiday.

Each year, thousands of revelers fill the streets of Las Vegas to ring in the New Year – and RSL is there patrolling the skies. Scientists can use the radiological map they’re creating today to ensure that unknown threats would be detected.

“We know where our sensitive areas are – hospitals – places where you’d expect to see a return,” Stampahar says. The system is so sensitive that a patient walking out of a hospital with an X-ray film under their arms would be picked up. “It’s the stuff we don’t see that we’ll be looking for later,” the technician says.

**Mission complete — 10 a.m.** Duncan and Arsenault have taken turns piloting the Bell, first making 600 foot passes at 600 feet apart. They then fly 900-foot passes at 900 feet apart.

One of the more dramatic passes is a direct flyover of the Rio. Another pass took us right between towers at the Palms. Late in the day, the crew will fly another mission at 300 feet, dramatically rising and dropping the aircraft over the Rio tower.

All the while, the two men have been calling out potential flight hazards and their lines. Their GPS systems

are painted with the zig-zag, back-and-forth lines of the various passes.

After ensuring that the scientists have all the data they need, Duncan turns the aircraft north and flies along the I-15. He’ll turn right at the Stratosphere, and fly back exactly the way we came. The scientists re-calibrate their equipment over Lake Mead, then the land target. By 10:30, we’re back on the ground at Nellis.

Scientist Piotr Wasiolek is one of the first to greet the crew upon our return. He verifies that they successfully completed the flight track, and then confers with the pilots about the afternoon mission plans. They have flown a flawless mission, and their experience has shown in their teamwork and discipline.

Later, as this writer heads downtown to film the helicopter’s 300-foot passes from the rooftop at the Rio, Wasiolek at RSL sums up the significance of today’s observations.

“We are conducting the most important national security work here,” Wasiolek says. “It probably doesn’t look like much to the outsider, but the information we’re gathering will keep people in this area safe during some of the most potentially dangerous times. It is a vital mission, and we’re all proud to be a part of it.”



The RSL survey mission passes by the Mirage in Las Vegas.

# A-Tech Effort Demonstrates Dedication, Difficulty in Achieving Science Bowl Success

By Jeff Donaldson, *OneVoice* Editor

Team Captain Alexander Koo bites his lip and rolls his eyes up to the ceiling as he thinks about the energy question posed to his team by Moderator Steve Curtis. "Five seconds," the time keeper says, and at once – and without hesitation – Koo has the answer.

"That is correct," Curtis says, and with that the



Participants check out the brackets to see competition results.

Advanced Technologies Academy, or A-Tech, moves into the lead over Big Pine. The A-Tech team settles comfortably into their chairs, their coach Becky Colledge sighs her relief, and at once the players from Big Pine feel the pressure – some doodling on pads and at least one digging his fingernails into the table.

The stakes are high in this consolation round – both teams have already suffered one loss – and the match, with its two 8-minute halves is winding down. A few short minutes later, last year's Science Bowl champion turns its slim halftime lead into a 34-16 drumming of the visitors from California in the 22nd Annual Nevada Science Bowl, held at VegasPBS.

"We just had to overcome the nervousness and regain our confidence," Koo said afterwards as the

players shake hands and offer congratulations all around. "The answers were there, we just needed them to come out."

Such is the case for a lot of teams who turned out in Las Vegas the weekend of Feb. 2 to compete in the 32-team double-elimination tournament that tests the minds of some of the Western regions brightest students. After all, the Nevada Science Bowl winner gets the distinction of taking back to its school \$5,000 – and the team will head to Washington D.C. in April to compete in the national event.

Koo and Colledge know all too well what's at stake – A-Tech slammed the competition last year in Nevada to earn the trip to Washington for the Super Bowl of math and science events. A-Tech's team this year is comprised of three players from last year's team, among them Koo, Adam Tarr and Mateusz Podzorski. They are joined this year by Michelle Chiu and Victor DelValle.

The team has worked hard – 2-hour practices twice a week using their own buzzer system – and hundreds of hours of preparation by the students, who dedicate time to studying sample questions downloaded from the National Science Bowl website. And of course, Colledge uses her 25 years' experience teaching science to help steer the team.

The final four teams will compete inside VegasPBS' studios, with the finals taped for television. In the studio, the players sit in a game-show style setting, complete with buzzers and monitors – and Las Vegas television personality and weatherman Nate Tannenbaum is calling the shots.

It's an exciting event, and while winning at the



Dozens of volunteers helped prepare materials for Science Bowl.

regional level is tough enough, Colledge says going all the way takes something extra – mainly the ability to reach out to gain additional knowledge in earth and space science, as well as energy. "We really didn't have any experience with energy questions when we won here last year and that hurt us at Nationals," Colledge says. "Some students take it on themselves to learn that."

A-Tech won several matches but not enough to qualify for the championship round in the National Competition. It's a grueling round-robin event that pits Nevada's winner against some of the smartest people in the country.

"The kids at Nationals are outstanding – young minds are overflowing everywhere," Colledge says. "It's fabulous knowing that there are some real smart kids out there that are going to help this country."

Making it to the National competition is not going to happen for A-Tech this year, which knocked off Cheyenne High School before falling to Spanish Springs to be eliminated. But like so many of the coaches, Colledge gains so much from helping the students realize their potential.

"We help keep their confidence up, and we're always a cheerleader for them," Colledge says. "When you have really good kids too, it's such a pleasure to be involved in this type of event."

Many of the students who compete in Science Bowl go on to become doctors, engineers and scientists. Each of them gets asked often during competition what their future goals are and most already know the schools they plan to attend.

Eventually this year's competition gets whittled down to just four: The Meadows School, Northwest Career and Technical Academy, Green Valley High School and Coronado High School.



A-Tech team members listen to a question in a consolation round match.



A-Tech team members loosen up before the next round.

The Meadows School, which used to dominate Science Bowl competition and won back-to-back competitions in 2008-09, gets in through the winners bracket and sits and watch the other three opponents battle. Green Valley knocks off Coronado, then falls to Northwest – Northwest enters the finals with The Meadows School battle-hardened.

Despite Meadows jumping out to a 40-12 lead at halftime, Northwest battles back to within six points on the final question, with Meadows pulling out the victory to advance. But if you think their intelligence keeps them from being nervous... the victory reduces at least one Meadows player to tears.

“We won three or four years ago – it’s great to be back,” a smiling Meadows Coach David Santo Pietro says.

By the time the cameras stop rolling on the finals, A-Tech’s players have long since gone home with a 9th place check for \$100. But as Colledge points out,



Science Bowl brings hundreds of students together from around the region.

the experience itself has given them something that all of the kids will use as they pursue their dreams.

“We’re disappointed – all the kids could think about since last year was winning back-to-back championships,” Colledge said. “It’s okay if you don’t win though, there’s always next year. This year someone else gets to make the trip of a lifetime.”



Moderator Nate Tannenbaum (left) and National Security Technologies President Raymond J. Juzaitis (right) pose with Coral Academy of Science of Henderson – winners of Best Sportsmanship.

# The Meadows School

Continued from page 1

It was a return to the top for a team that last won back-to-back Science Bowls in 2008-09. The Meadows School did it in dramatic fashion, winning on the last question of the competition with time expired. Meadows actually took a 40-12 lead into half, only to have Northwest Career Technical Academy (CTA) come back.

“We won three or four years ago; it’s great to be back,” Meadows Coach David Santo Pietro said immediately following his team’s close victory over Northwest. “We put in a lot of work, but the kids are so smart. That makes it easy.”

The teams from Nevada, Arizona and Utah tested their math and science knowledge during the competition.

High school teams were quizzed on all science disciplines, including astronomy, biology, chemistry, earth science, general science, mathematics and physics. Each team of students was tested in a fast-paced question and answer format resembling the TV game show *Jeopardy*.

This year marked the second time Vegas PBS taped the afternoon rounds of competition, as well as the “Final Four,” in a new partnership with the National Nuclear Security Administration Nevada Site Office (NNSA/NSO) and National Security Technologies (NSTec), which coordinates the event. The final round coverage will air on VegasPBS on March 21 at 7:30 p.m.

Northwest CTA placed second and won a prize of \$2,500. Third place and a \$1,500 check went to Green Valley High School, Las Vegas. Coronado High School of Las Vegas took fourth and won \$1,000. Other teams that placed in the tournament were:

**Fifth Place - \$500**

- Rancho High School, Las Vegas

**Seventh Place - \$300**

- Coral Academy of Science, Henderson, Nevada
- Reno High School, Reno, Nevada

**Ninth Place - \$100**

- Advanced Technologies Academy (Las Vegas)
- Bishop Manogue High School (Reno)
- Centennial High School (Las Vegas)

**Good Sportsmanship**

- Coral Academy of Science, Henderson

The Nevada Science Bowl winning team will participate in the U.S. Department of Energy’s National Science Bowl Competition, April 25-29, 2013, in Washington D.C. The local event was sponsored by the National Nuclear Security Administration, Northrop Grumman, NSTec, the U.S. Bureau of Reclamation, Cox Communications, Caesars Entertainment, NVEnergy, Barrick Gold, WSI, Navarro-Intera, CH2M Hill Foundation and the National Atomic Testing Museum.

# Operation Clean Desert Teams Up with the Nevada Science Bowl

By Angela Ramsey, Navarro-Intera

On Jan. 18 and 19, Nevada Enterprise (NVE) representatives participated in the Southern Nevada Math & Science Conference, *Moving into the Next Generation of Math and Science*, at Rancho High School in Las Vegas. Representatives Dona Merritt (Navarro-Intera) and Dan Burns, National Security Technologies (NSTec), made it their mission to engage educators in the Nevada Site Office Environmental Management Program's Operation Clean Desert learning materials and this month's Nevada Science Bowl.

During the one-and-a-half-day conference, which is designed to expand enthusiasm for teaching, learning and information sharing, educators explored a variety of classroom-oriented exhibits, including the Operation Clean Desert/Nevada Science Bowl booth.

"It's such a unique opportunity to have direct access to the educators so we can showcase our efforts to enhance science and math education in our community," said Nevada Science Bowl Coordinator Burns. "Our objective is to make Nevada Science Bowl bigger and better. We can do that by getting more middle and high school teachers participating in the Nevada Science Bowl."

Operation Clean Desert developer Merritt added, "It is important to bring about awareness of ongoing cleanup at the Nevada National Security Site, which has played such an important part in the history of our community and nation. By providing the Operation Clean Desert activity books and the companion Teacher's Guide for free, we hope that teachers will appreciate the aligning

of educational standards with real-world science activities to pique the interest of students in the classroom."

Dozens of teachers visited the booth, which drew in the crowds with its colorful depiction of Operation Clean Desert mascots, Dr. Proton and Adam the Atom. The message for students? Science is not only changing the face of environmental cleanup in Nevada, science is cool!

Even educators visiting Nevada from as far away as Pennsylvania were excited by the quality and student-friendly nature of the materials. Several of the teachers obtained copies of the activity book for each of their students, and many others picked up a set to review. In total, 538 activity books and 33 Teacher's Guides were distributed with more requests anticipated. In addition, several teachers expressed interest in participating in next year's Nevada Science Bowl, which is a nation-wide science competition sponsored by the U.S. Department of Energy (see cover story).



Advanced Technologies Academy (A-Tech) science teacher Becky Colledge (center) poses with Dona Merritt and Dan Burns during the Southern Nevada Math & Science Conference. Colledge's team won first place in the 2012 Nevada Science Bowl and looked forward to this year's event.

Officially calling the experience a success, both Merritt and Burns look forward to future events. "Our goal is to make sure all schools in Southern Nevada are aware of and have the opportunity to access our programs," Merritt said.

To get more information on the Nevada Science Bowl or Operation Clean Desert learning materials, contact the Nevada Site Office at **(702) 295-3521**.

# Operations Security (OPSEC) Thinks Digital

By August Schellhase, OPSEC Specialist

Walk through a mall during a crowded shopping day, and at least a half-dozen people will bump and brush by you before your shopping experience is complete. These brushes may seem harmless, but could there be malice in an innocent bump?

Contactless credit cards have allowed technology originally used for product tracking and electronic banking to become available to the average American consumer. But these technological advancements have the potential to make us victims of identity theft. This technology can be found everywhere from credit cards to passports, and has the potential to open up enterprise employees to information security nightmares that we can do without.

## About RFID

RFID, or Radio Frequency Identification, is the technology that lets you simply wave your credit card, passport or license in front of a nearby scanner instead of having to slide the magnetic stripe through it. It's a fairly simple concept. The electronic scanner sends a signal that is received by an antenna embedded into the card, which is connected to the card's RFID chip, thus

activating it.

## Credit Card "Skimming"

Where credit card "skimming" is used to require the thief to get his hands on your card, acquiring your personal data is now as easy as passing you on the street.

RFID readers are employed by convenience stores, pharmacies, restaurants, fast food markets and many other places of business. Credit card companies say it keeps your identity safer, because your card is never in the hands of a stranger. Readers include safety features



The RFID symbol.

to keep your data from being intercepted once it has been read from your card.

However, these same readers can be freely purchased and attached to a laptop or cell phone with very little technical knowledge required. Protecting your credit cards can be as easy as slipping them into an RFID blocking sleeve, or wrapping them with aluminum foil (which might draw unwanted attention at the checkout counter).

## Government Employee Personal Identification Verification (PIV) Card

Homeland Security Presidential Directive-12 (HSPD-12), required all government agencies, starting in Oct. 2006, to issue standard cards with a contactless interface. Your DOE HSPD-12 badge was issued with a specific badge holder designed to protect it from this type of vulnerability. Protect your badge and your sensitive information.

For more information on how you can protect your credit cards, contact [OPSEC@nnsa.doe.gov](mailto:OPSEC@nnsa.doe.gov).



# Math and Science Conferences Help Shape Education in the Community

By Dona Merritt, Navarro-Intera

Operation Clean Desert/Nevada Science Bowl and other teacher resources exhibited by vendors were just a portion of the Math and Science Conference held at Rancho High School on Jan. 18 and 19. The conference also gave attendees the choice to participate in hands-on training or other, more formal informational sessions with experienced presenters. Digging deeper into the heart of the event, Dona Merritt posed some questions to Jenelle Hopkins, a science teacher and member of the Southern Nevada Science Teachers Association (SNSTA), to learn more about how this conference and its supporters help shape science education in the community.

**Merritt:** How many teachers attended?

**Hopkins:** In the past, we had around 600, including volunteers, presenters and attendees. They are K-12, from both public and private schools.

**Merritt:** From where did some of the out-of-town teachers travel?

**Hopkins:** We have some teachers from the Reno area and surrounding states. We usually get a few from the Northwest and Midwest, too. I think that Canada may be the furthest a teacher travels. Some of our out-of-state teachers come every year.

**Merritt:** How did Navarro-Intera's \$750 sponsorship of lunch help the teachers in attendance?

**Hopkins:** Just having an organization like Navarro-Intera show that they are in support of teachers is a great boost to morale. I know that I personally feel respected when industry

and researchers will take the time to support our conference.

**Merritt:** What is the greatest benefit to teachers who attend the conference?

**Hopkins:** Teachers have more than 80 sessions from which to choose. They will be learning something new — everything from a lesson that they can put into place next week, to content that deepens their understanding of what they teach, to educational pedagogy. These sessions are led by university researchers, industry professionals and fellow teachers who share their tried-and-true lessons. This year, our keynote speaker was Dr. Stuart Sumida from California State University. Vendors also showcase math and science resources.

**Merritt:** What do teachers hope to gain by attending the conference?

**Hopkins:** I would say that our overall objective is to try to provide a professional development session that meets the particular need of that teacher. We also offer PDE — which is professional development education credit that teachers can use to renew their license or move up the salary schedule. We are showcasing the new Math Standards and previewing the Next Generation Science standards. This is important because there have been curriculum changes as we align with these new documents. This gives teachers a chance to see what these changes will entail and to get ideas as to how to implement them.

**Merritt:** What is the Southern Nevada Science Teachers Association and how does it contribute to curriculum development for Clark County?

**Hopkins:** I feel that we are a group of teachers who like to learn and share ideas about science. We are truly life-long learners who are always interested in staying on the cutting edge of science research and information. Our teachers care about what is happening in the classroom, and by participating on curriculum committees, we can contribute our expertise and understanding of what goes on in the classroom, who our students are, what they are capable of and how to provide the best possible learning environment. We also like to mentor new science teachers by showcasing the outstanding science resources that we have here in Las Vegas.

**Merritt:** What would you like the community to know about your organization?

**Hopkins:** I am hoping that we can show our commitment and professionalism. We are all interested in bringing the best lessons and activities that we can to our classroom so that students can learn the concept in the best possible environment. I am passionate about how valuable this conference is to our teachers, and there are about 20 of us volunteer teachers who have been working on this for about six months. We really bring together so many different entities — educational, non-profit, industry, researchers — all who are interested in educating our students.

## DE&SS Wins Excellence Award for FY 12 Project

By Tom Andrews, NSTec

On Dec. 13, 2012, National Security Technologies (NSTec) President Raymond J. Juzaitis presented the NSTec Project Excellence Award for FY2012 Project of the Year to the Defense Experimentation and Stockpile Stewardship (DE&SS) Detectors and Instrumentation Project. The Project also received the Project Excellence Award for the fourth quarter of FY2012 for providing diagnostic engineering and development for state-of-the-art high speed camera systems, detectors, instrumentation, process control, timing and firing, data acquisition, and software systems for weapon science experiments at NNSC and National Lab facilities. In FY2012 innovative technology research and development materialized in key deliverables for instrument systems that included spectrometer systems, photon Doppler velocimeter components, radiometry calibration systems, and small X-ray detectors for deployment in hostile

experimental environments. The project received highly satisfied responses from its stakeholders/customers.



NSTec President Raymond J. Juzaitis (right) and DE&SS Senior Manager Patrick Morris (left) present the Project of the Year Award to Thomas Waltman.

The Project Excellence Award was established to provide formal recognition of superior project performance. The selected project must have achieved notable performance in one or more of five criterion areas: Customer Satisfaction, Cost and Schedule Performance, Technical Performance, Safety/Security, or Quality. All NSTec Projects are eligible for award consideration including: Construction, Environmental Management, Research and Development, and others including indirect funded projects.

Detailed information concerning eligibility, nomination, and selection process is provided in the NSTec Project Excellence Award Protocol, which is available on the PMD Home Page.

For additional information on the Project Excellence Award, contact Tom Andrews at **702-295-5846** or [andrewtd@nv.doe.gov](mailto:andrewtd@nv.doe.gov).

# Tomorrow's Leaders Get a Head Start Today

By Marc Klein, Navarro-Intera

They say that today's students are tomorrow's leaders. If the 14th annual Southern Nevada Future City Competition is a sign of things to come, our future will be in good hands.

That was the takeaway for Navarro-Intera's Dave Taylor, Sam Marutzky and Nate Bryant, volunteer judges at the Jan. 19 competition, held at Northwest Career & Technical Academy in Las Vegas. Part of National Engineers Week (Jan. 17-23), the Future City Competition tasks student teams of three to create a city that addresses real world issues through engineering advances, such as sustainable clean energy or improved water distribution.

Teams used math, science, problem solving, writing and public speaking skills to design and test their city using computer software, build a scale model of a section of their city with recycled materials, write a 500-word essay on an assigned engineering topic, and present their city in front of various judges. They also created names for their imaginary cities, such as "Seporra," "Citta di Maschere" and "Roanoke." The students were under the guidance of a teacher and a practicing engineer.

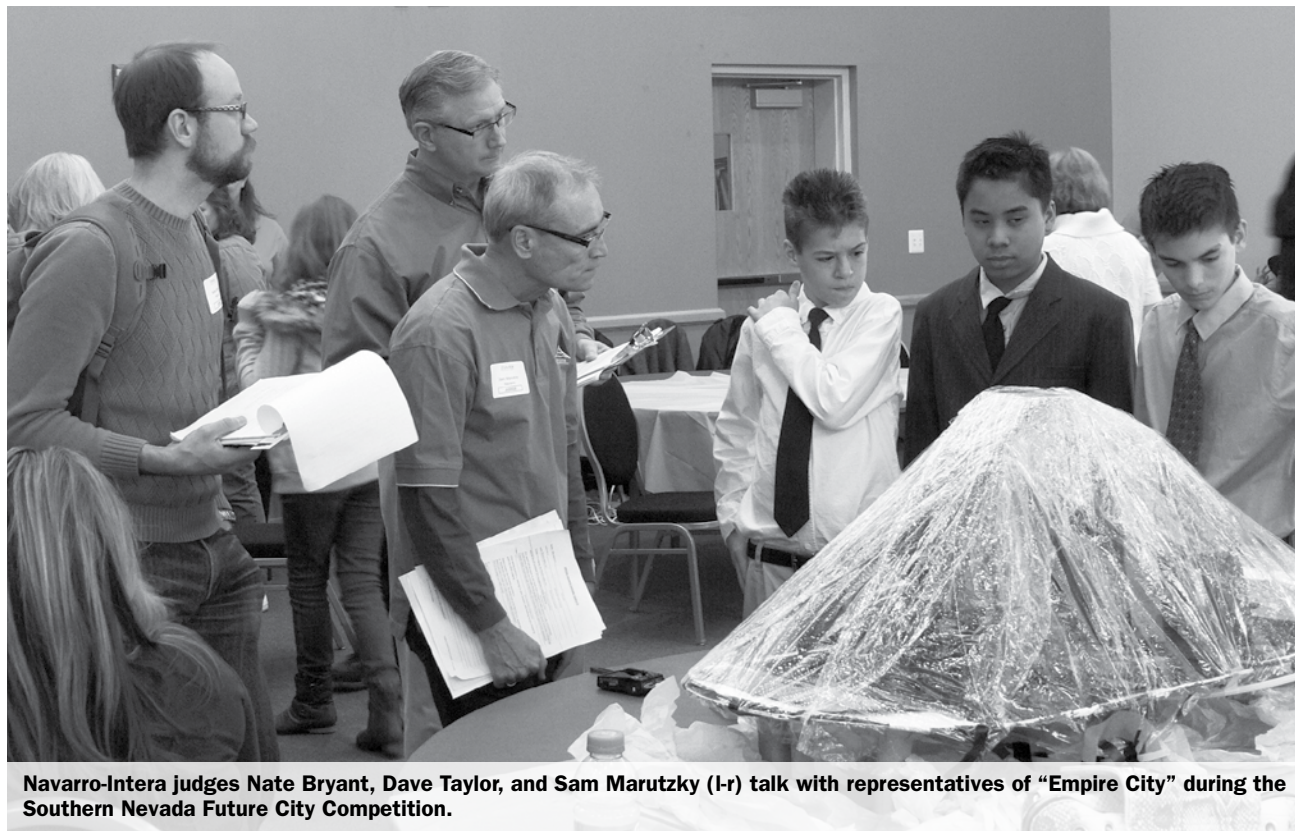
"I think the work presented at this competition is a sign that we have a bright future ahead of us with creative and talented young people," said Marutzky. "I was very impressed." Judging for the second year in a row, Navarro-Intera representatives also presented the

"Best Management of Water Resources" award and donated \$1,000 to the competition. "As representatives of Navarro-Intera, we are very proud to be sponsors and judges of this competition. As an organization, it's important to demonstrate our commitment to the success of education in Southern Nevada," Marutzky added. National Security Technologies (NSTec) also donated \$1,000 to the competition and presented the award for Disaster Preparedness to "Legacy" from Cashman Middle School.

Overall, more than 120 seventh and eighth grade students, from 10 different Clark County School District and private schools took part in the competition. "Seporra" from Alexander Dawson School took the first place prize and will represent Nevada at the National Future City Finals in Washington, D.C., Feb. 15-20, 2013. There they will compete for the grand prize: a trip to the U.S. Space Camp in Huntsville, Ala.

Twenty-five other awards also were presented, including the "Best Management of Water Resources" award, won by "Eridan City" from Las Vegas Day School. Three awards were presented to teachers, mentors and student alumni.

For more information about the Southern Nevada Future City Competition, visit [www.snvfuturecity.org](http://www.snvfuturecity.org). For more information on the National Future City Competition, visit [www.futurecity.org](http://www.futurecity.org).



Navarro-Intera judges Nate Bryant, Dave Taylor, and Sam Marutzky (l-r) talk with representatives of "Empire City" during the Southern Nevada Future City Competition.

## Overall, 26 awards were presented at the Southern Nevada Future City Competition:

**1st Place: Seporra** – Alexander Dawson School

**2nd Place: Milae Dosi** – Las Vegas Day School

**3rd Place: Ma Kai City** – Mannion Middle School

**4th Place: Arashi** – Hyde Park Middle School

**5th Place: Matalasi Suavai** – Mack Lyon Middle School

**Best Computer Model: Seporra** – Alexander Dawson School

**Best Essay: Citta di Maschere** – Alexander Dawson School

**Best Presentation: Seporra** – Alexander Dawson School

**Student Choice Award: Ma Kai City** – Mannion Middle School

**Most Innovative Part: Coral Ohana** – Mannion Middle School

**Best Educational Community: Green Apple** – Johnson Junior High School

**Optimum Use of Resources for Energy in a Future City: Prospect Chicago** – Alexander Dawson School

**Most Sustainable Future City: Roxmore** – Hyde Park Middle School

**Best Use of Recycled Materials: Meuxng Na** – Mack Lyon Middle School

**Most Diverse Engineering Concept: Citta di Maschere** – Alexander Dawson School

**Disaster Preparedness: Legacy** – Cashman Middle School

**Best Management of Water Resources: Eridan City** – Las Vegas Day School

**Most Innovative Energy System: Venoshstan** – Cashman Middle School

**Most Innovative Solution to an Environmental Problem: Pandora** – St. Viator Catholic School

**Best Use of Solar Energy: Empire City** – St. Viator Catholic School

**Best Land Survey Practices: Roanoke** – Walter Johnson Junior High School

### Top Five Models:

**Seporra** – Alexander Dawson School

**Milae Dosi** – Las Vegas Day School

**Ma Kai City** – Mannion Middle School

**Prospect Chicago** – Alexander Dawson School

**Matalasi Suavai** – Mack Lyon Middle School

## NvE Calendar of Events

**Feb. 20:**  
Mercury Blood Drive, 10 a.m. – 2:30 p.m., Mercury Cafeteria



# NVE VOICES

## Lt. Col. Kevin Fallico



### Current Position

As the U.S. Air Force liaison to the National Nuclear Security Administration (NNSA), Lt. Col. Fallico's primary responsibility is to ensure smooth and efficient partnership between the Air Force and NNSA and their respective operations on the Nevada Test & Training Range and the Nevada National Security Site (NNSS).

### Career Path (past 10 years)

- Asst. Director of Operations, 30th Reconnaissance Squad, Creech AFB, Nev. (2009 – 2011)
- Director, Programs, Dept. of Air Force, Las Vegas, Nev. (2005 – 2009)
- Chief of Scheduling/Academics, 8<sup>th</sup> Weapons Squadron, USAF Weapons School, Nellis AFB, Nev. (2002 – 2005)

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

- Outstanding Graduate – USAF Weapons School
- 1999 – Company Grade Officer of the Year
- *Weapons Review* magazine – published work
- Meritorious Service Medal, Air Medal, Aerial Achievement Medal

### Education

- Bachelor of Business Administration, Aviations Management, National University, San Diego, Calif.
- Master of Arts, Human Resources Management, National University
- Air Command & Staff College, Maxwell AFB, Ala.

### Why did you join the Air Force?

“My granddad retired after 26 years of Air Force service the year before I was born. I grew up understanding that my grandfather was not only part of the ‘greatest generation,’ but was also one of the greatest men I could imagine. Honoring his legacy is all I ever wanted to do.”

### What one thing in your job makes you proud?

“Knowing that my efforts over the past 18 years, will, in a small way, leave this country safer and stronger for my children.”

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

“My family and I are boaters. We love spending summer days on Lakes Mead and Mojave – away from TVs, cell phones and video games!”

### What or who inspires you, and why?

“Both of my grandfathers. The first was described above. The second taught me about hard work and doing things right in the right way.”

## Debbie Mavros



### Current Position

As senior Systems Analyst and Change Manager of NSTec's Information Services Department, Debbie is responsible for managing the Change Management system, coordinating, reviewing and processing departmental controlled documents and the Subcontractor Technical Representative (STR) for the R12 Oracle project.

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

- Toastmasters CTM (Competent Toastmaster)
- ITIL (Information Technology Infrastructure Library) Foundation Certification

### Education

- Bachelor of Science, Management Information Systems, University of Nevada, Las Vegas, Nev.
- Associate of Science, Data Processing, Cuyahoga Community College, Cleveland, Ohio

### Debbie, you've been serving the Site mission for, remarkably, 35 years. Why have you stayed so long?

“I'm very proud of the company I work for – their mission and the support for our country. I've been very fortunate to have had excellent supervisors and managers that made working for this company a challenging yet rewarding experience. I've met wonderful people here.”

### What has been your most significant contribution to your job?

“I've had the opportunity to provide IT support for many different departments including Property, Procurement, Housing & Feeding, and Finance departments. My accomplishment as the project manager for our Y2K project was the most rewarding because we were able to complete the project on time and below budget, and the results of going into the year 2000 went seamless. However, it was the diligent work of the team that made this project so successful.”

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

“I love to entertain family and friends by cooking and making them laugh. As quoted in the movie, ‘My Big Fat Greek Wedding,’ a Greek woman's role in life is to 1. marry a Greek man, 2. make Greek babies, and 3. feed everyone. Because I'm Greek, I've done all three.”

### What or who inspires you, and why?

“My parents and grandparents showed me, by example, that honesty and a good solid work ethic are the key to success in business and in every aspect of life.”



## There's Oil at the NNSS – but It's Not What You Expect

By Lory Jones, *OneVoice* Editor

A variety of motor oils – from government-owned vehicles to transformers and capacitors – will be recycled and used to heat selected buildings at the Nevada National Security Site (NNSS). Recycling and reusing these oils not only reduces energy usage at these facilities, it also protects the fragile desert environment while providing free heat to our facilities and saving disposal costs to National Security Technologies (NSTec), which manages the Site.

Used motor oil is stockpiled in various-sized tanks in Area 6 at what is known as the “tank farm.” The oil is generated through a preventative maintenance program, such as routine oil changes, repairs, etc. of vehicles and equipment, through NSTec's Fleet, Fuel and Equipment (FFE) department. The Atlas Facility, which holds approximately 148,000 gallons of dielectric oil inside capacitors and a holding tank, is considered the same as transformer oil. All of this oil will be disposed of at some time.

For many years, NSTec has stockpiled its used oil for offsite recycling at Evergreen Environmental

Services, a recycling company. The NNSS averaged three offsite shipments per year; averaging 2,500 to 3,000 gallons of oil per shipment. Evergreen provided the vacuum, tank truck and personnel to do the labor. They deliver the used oil to their re-refining facility in Newark, Calif., then packaged it under the Evergreen trademark. (Transformer oil is not shipped on a regular basis because of high costs.) The oil is purified then resold to the public.

The NNSS will burn and recycle the used oil generated onsite in Clean Burn waste oil furnaces right at the Site. In fiscal year 2012, Facilities and Infrastructure Planning purchased four Clean Burn furnaces for Bldg. 23-160, the NNSS central receiving warehouse. The furnaces will burn transformer oil, used motor oils, petroleum-based fluids and even the used frying oil from our cafeterias in Mercury and the forward areas.

“The Clean Burn furnace turns waste products into a valuable fuel source, providing free heat for the facility and at the same time protecting and preserving the environment. Our goal is to reduce energy usage in this facility and implement this technology into other large facilities that have high-energy costs,” says NSTec Senior Facilities Specialist Denise Skougard. She estimates that Building 23-160 will burn 8,000 gallons of used oil during the winter months. FFE generates anywhere from 8,000 to 10,000 gallons of used oil a year. “As you can see, we generate enough oil to provide free heating to this facility year after year,” says Skougard.

The Clean Burn furnaces are approved by the Environmental Protection Agency. Clean Burn received the “2009 Save Energy Now Energy Saver” award from the U.S. Department of Energy (DOE) Industrial Technol-

ogies Program. The Energy Saver award is presented to those companies that participate in a Save Energy Now energy assessment and successfully achieve more than 75,000 MMBtu total energy savings, or more than 7.5 percent total energy savings.

According to Skougard, using the Clean Burn furnaces greatly reduces the handling and disposal risks associated with used motor oil. “The federal government holds companies directly responsible for pollution management and clean-up and disposal control of used oil they generate. This responsibility constitutes a ‘cradle-to-grave’ liability, which remains with the generator of the waste oil, even if the oil has been collected and transported off-site. Using the Clean Burn furnaces decreases this liability. It is to our advantage to use the waste we generate onsite to produce renewable energy.”

Skougard says that several groups, including the Idaho National Laboratory, have toured the Site, where they visited the Mercury warehouse. When she briefed them on the recycling project for the warehouse, they expressed interest in possibly using these units at their lab.

The recycling plan will also save NSTec money. Energy cost savings to heat Building 23-160 will approximately be \$58,000 a year. There will be less commercial energy consumption, saving the company year after year. The oil located inside the Atlas Facility will provide enough oil to heat the Mercury warehouse for the next 18 years; the energy cost savings will be more than \$1 million for the warehouse alone. There are additional costs savings due to literally zero costs for offsite disposal, and maintenance on the existing heating systems will drop significantly.

The used-oil recycling project began in January. “As long as we generate used oils onsite, this will cost savings continue for many years,” says Skougard. “I am truly excited about this project. As a facility manager, we are asked to find solutions to cut costs in the facilities we manage. I am a strong advocate for renewable energy, and when I found this product, I knew we had the means to execute this at the NNSS. It has been a long process; however, I have had strong support and assistance from many organizations and am very grateful for all those who were willing to listen and recognize the positive impact this will have for the NNSS and NSTec.”

For more information on the clean burn process, visit the Clean Burn website at: <http://www.cleanburn.com/brochure/4x9/#/6/>.



PRSR STD  
U.S. Postage  
PAID  
LAS VEGAS, NV  
Permit No. 155

**OneVoice**  
P.O. Box 98521, M/S NSF119  
Las Vegas, NV 89193-8521