SITELINES

November/December 2008 - Issue 134

A publication for all members of the NNSA/NSO family

Stoller-Navarro Moves Operations to NSF

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In This Issue

Published for all members of the NNSA/Nevada Site Office family
Stephen A. Mellington, Acting Manager, NNSA/Nevada Site Office
Darwin Morgan, Office of Public Affairs
Submit articles or ideas to NSTec Public Affairs at donaldjw@nv.doe.gov.

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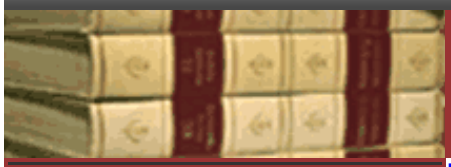

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Milestones

National Security Technologies

25 years

Lee Romeo, Marijo Higginbotham, Mary Belpasso

20 years

Darla Livingston, Donna Belt-Campbell, Kent Thomas, Mary Scodwell, Robin O'Rourke, Ronnie Peters, Toby Anderson

15 years

Christopher Shoenbauer

10 years

Cheri Hautala-Bateman, Rory McCarthy, Susan Kelley

5 years

Anthony Marzola, James Herning, Kerby Nelson, Phillip Wentling, Scott Thayer, Shaughn Burnison, Terry Sirin

Wackenhut Services, Inc. Nevada

10 years

Maria Fuentes, Gary Glazier, Patricia Hartig, Jeffrey Herhold, Marlene Hurt, Dennis Maher, Leo Price, Larry Roeder, Mariano Valle

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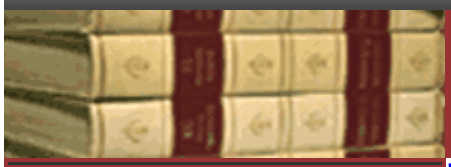

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- NSTec, Los Alamos Honored with Distinguished Performance Award
- NTS Turns Fusion Into Detection Asset
- Livermore Operations Team Offers Major OMEGA Support

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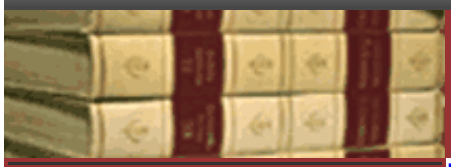

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In Brief

- NSTec Named One of “Best Places to Work”
- Stoller-Navarro Attains Record Safety Accomplishment

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NSTec Supports GreenPower at Local Middle School

When Bridger Middle School decided to teach students how to save money on energy costs by “going green,” they turned to a local company that has taken unprecedented steps toward energy conservation over the past year - National Security Technologies, LLC (NSTec).

The operating contractor for the Nevada Test Site, NSTec has awarded the Desert Research Institute a $10,000 grant to support a GreenPower installation at Bridger Middle School. GreenPower is a Desert Research Institute program that teaches students how to incorporate solar and other types of “green” energy into their daily lives. GreenPower also gives students hands-on training in the use of renewable energy sources. The goal is to change future energy usage behaviors through educational awareness.

Also known as The Academy of Mathematics, Science and Technology Bridger Middle School, the school is one of two NSTec partners with as part of the company’s educational outreach. NSTec also has invested more than $1 million in education grants and focused science and engineering support in the last year. The school coupled the grant with other funding to install several GreenPower features:

- A solar-powered electronic marquee announcing school information
- A weather station including wind speed and direction, temperature, atmospheric pressure, and precipitation
- Approximately two kilowatts of solar panels
- Teaching kits and hands-on items for student exploration.

“We partner with Bridger Middle School through the Clark County School

District Partnership Program," says Steve Younger, NSTec president. "Like us, they're working hard to grow future scientists and engineers. We are excited that in addition to the many learning opportunities the GreenPower program will provide for the students, the solar array will also be used to light the school marquee we funded for them earlier this year."

In addition to its commitment to education, NSTec has quickly become a leader in energy conservation in southern Nevada.

The company teamed with the National Nuclear Security Administration Nevada Site Office in March to dedicate the B3 administrative "green building." One of the first in the U.S. Department of Energy complex, the state-of-the art building features automated temperature and lighting controls that can adjust indoor settings during low occupancy periods. The remodeled structure was designed to Leadership and Energy in Environmental Design (LEED) standards, and is expected to increase energy performance by 17.5 percent. NSTec also currently is underway with similar upgrades to heating and cooling systems at other buildings throughout its Losee Road complex.

The GreenPower educational program installs photovoltaic panels – materials made from silicon that convert energy from the sun into electricity – at the school. Installation of the solar array at Bridger is expected to take two to four weeks. Students will study how the solar panels work through the use of terms like volts, watts and amps. Schools already using the GreenPower program say the renewable energy curriculum fits in nicely with science studies. The DRI GreenPower program was started eight years ago in partnership with Sierra Power and Nevada Power companies. There currently are 17 sites that participate.

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Acronyms

The following acronyms appear frequently in *SiteLines*:

BEEF	Big Explosives Experimental Facility
CTOS	Counter Terrorism Operations Support
DAF	Device Assembly Facility
DOE	Department of Energy
EM	Emergency Management
ES&H	Environment, Safety, and Health
FRMAC	Federal Radiological Monitoring and Assessment Center
JASPER	Joint Actinide Shock Physics Experimental Research (gas gun)
LANL	Los Alamos National Laboratory
LLNL	Lawrence Livermore National Laboratory
NNSA	National Nuclear Security Administration
NSO	Nevada Site Office
NSTec	National Security Technologies, LLC
NTS	Nevada Test Site
PIP	Process Improvement Project
R-MAD	Reactor Maintenance, Assembly, and Disassembly Facility
RSL-A	Remote Sensing Laboratory - Andrews
RSL-N	Remote Sensing Laboratory - Nellis
SC	NNSA Service Center
SCE	Subcritical Experiment
SNJV	Stoller-Navarro Joint Venture
SNL	Sandia National Laboratories
STL	Special Technologies Laboratory

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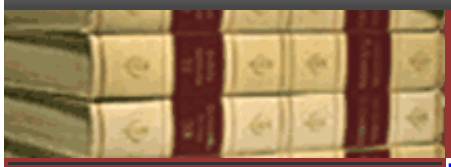

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LaRow said SNJV employees were notified of the move in January, with the move date set as August 29. “We began moving the computer systems on August 27, and everything was online and fully operational more or less by September 2, our first day back after the holiday.”

Angela Colarusso, NSO Safety and Operations assistant manager, says the move was completed two months ahead of the scheduled lease expiration date for the Cheyenne Facility. The lease cost savings will be nearly $1 million a year. The successful and early move also allows SNJV ample time to refurbish the Cheyenne Facility in order to satisfy the lease agreement.

“This move was truly a team effort and the support provided by all team members was the best,” Colarusso says. “Chugach McKinley, NSF operator, met all the schedules for a smooth relocation with minimal interruption to the work of the SNJV staff. Advice provided by Bill Gifford of NSTec was especially appreciated.”

LaRow also credited specific SNJV personnel for their efforts in the move, among them Chris Calabrese, Tammam Cheetany, Marty Bensor, and Danny Bradford.

Added Colarusso: “As a result of this move, all of the NSO activities formerly located at the Cheyenne Facility are now located in one central area at the government-owned North Las Vegas complex. By eliminating time-consuming interoffice travel, efficiencies at the Nevada Site Office are greatly improved.”

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NTS Transition of Facilities Complete

The transition of Nevada Test Site facilities to the management and operational responsibility of National Security Technologies (NSTec) was wrapped up on time and under budget in September.

Patrick Morris, NSTec division manager, Readiness in Technical Base and Facilities, said the transition of the final two facilities, High Explosives and the Joint Actinide Shock Physics Experimental Research (JASPER) Facility was completed on Aug. 4 and 18, respectively.

The final briefing on the transition was completed on September 22. “We finished the transition on schedule and approximately $1 million under budget due to the great efforts, contributions and participation of everyone involved, including those team members from Nevada Site Office and the Joint Nevada Test Site Program Office (JNPO),” Morris says.

Historically, the National Laboratories have managed several NTS facilities using established home laboratory practices, principles, and health and safety requirements. As such, implementation of health and safety, security, and compliance requirements would vary among the NTS facilities.

Citing a shift over the years to “authorization basis-driven activities” and the need for a consistent application of basis requirements and potentially more efficient uses of resources, Martin Schoenbauer, Principal Assistant Deputy Administrator for Operations, National Nuclear Security Administration (NNSA), issued a directive that makes NSTec assume full responsibility and accountability for managing and operating all facilities on the NTS.

A detailed Project Execution Plan was prepared last year by a team consisting of representatives from the Nevada Site Office (NSO), JNPO, and NSTec, and approved on January 4, 2008.

Federal Project Director Lisa Mueller says she has been impressed that the transition was completed on schedule and within projected costs. “I recognize the efforts that the entire team has put forth to accomplish the milestones to date and commend them all,” Mueller says.

The U1A underground complex was the first facility to undergo transition. The transition at U1A included reviewing and transferring some 54 safety and operational procedures. Work was completed in March.

The Device Assembly Facility (DAF) and General Facilities were next. General Facilities, including research sites, warehouses, storage buildings, equipment buildings, and administrative offices were completed on May 9. The DAF transition finished on June 2, Morris says.

The DAF transition involved modification or revision of some 270 management, hazards analysis and regulatory documents. Work in the General Facilities included the modification and development of 270-plus documents, including emergency response plans, security and operations procedures, and Real Estate/Operating Permits (REOPs).

Morris says the biggest challenge the transition teams faced was identifying relationships between primary and secondary REOP holders and ensuring all documentation was in order to successfully transition the operations. He credits everyone who played a role in the effort.

“This project would not have been successful without the acceptance and support of the three organizations, NSTec, NSO and JNPO, and the great efforts put out by a lot of people,” Morris says. “Everyone has been willing to relook at the way we do business and find a way mutually beneficial to everyone, and maintained the integrity of each facility’s authorization basis.”

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Livermore Operations Achieves Prestigious Accreditation

National Security Technologies (NSTec) Livermore Operations has become the first nationally accredited calibration laboratory to perform pulsed laser power and energy measurements in the United States – a major achievement two years in the making.

On August 29, 2008, the National Institute of Standards and Technology (NIST) notified NSTec that it had met the requirements of the National Voluntary Laboratory Accreditation Program (NVLAP) on-site assessment and was granted accreditation in the field of optical radiation.

Kenneth M. Cooke, manager of Livermore Operations, said that in response to National Nuclear Security Administration (NNSA) issued milestone #2903, the High Energy Density Physics (HEDP) section at Livermore Operations has been working with the National Laboratories to implement uniform and verifiable calibration methods on instrumentation needed by the Stockpile Stewardship Program.

In order to meet the requirements associated with standards-based calibrations, the HEDP group began participation in NVLAP. This body, associated with NIST and the U.S. Department of Commerce, verifies a laboratory's competency through assessment against the ISO17025 standard. The Livermore team, during fiscal year 2008, successfully became the first calibration laboratory outside of NIST that is accredited to perform laser pulsed power and energy measurements (Range: 0.8 mJ - 1.2 mJ; Wavelength: 532 nm; Pulse Length: 100 ns).

"NVLAP accreditation means that you have to comply with a certain amount of rigor and qualification. The procedures are very rigid and involved in detail," Cooke says. "Once you've passed it, it means that

you're one of the very few accredited calibration labs in the entire country, especially in the unique regimes we operate in."

Chris Silbernagel, the HEDP section manager, says the major achievement was not in actually making the measurement, but in putting together a quality system that meets the requirements of ISO17025 and the NIST Handbook 150, which the assessors use to evaluate calibration facilities. Now that the system is in place, it can be leveraged to expand the scope of accreditation in additional areas of laser power and energy, X-ray energy and spectral work.

During the course of work, the Livermore team leveraged company programs such as the Management Assessment process, as well as developed other internal systems to successfully reach the goals. "As this program becomes ingrained with the standard operating processes of the HEDP calibration labs, the National Laboratories can be confident in our ability to make precise, repeatable calibrations of their instrumentation," Silbernagel says.

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A TRU Approach to Closure: Final Chapter Drawing to a Close

The final chapter for legacy transuranic (TRU) waste at the Nevada Test Site (NTS) is drawing to a close after nearly 35 years. Since completing 48 shipments (1,860 drums) of legacy TRU waste from the NTS to Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico, in November 2005, the Nevada Site Office (NSO) has focused on preparing the remaining TRU waste in 58 oversized boxes for disposal.

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Workers in protective equipment remove a glovebox section after cutting open an oversized box.

The waste originated from Lawrence Livermore National Laboratory in California and has been managed at the NTS Area 5 Radioactive Waste Management Complex by the U.S. Department of Energy, National Nuclear Security Administration. In order to meet current shipping requirements and the waste acceptance criteria for disposal at WIPP, the contents of the oversized boxes are presently undergoing characterization and repackaging. This challenging task successfully began at the end of August 2008, after more than a year of extensive planning and preparations.

Before these activities could begin, detailed safety documentation, facility modifications, and worker protective measures had to be implemented. According to Gary Pyles, the acting TRU Waste Sub-Project director, “It was critical to ensure the implementation of all the safety measures needed to see this activity into the final stages toward completion.”

Ensuring the safety of workers is paramount, especially considering that opening, characterizing, sorting, and repackaging the contents of the oversized boxes is conducted within a self-contained structure to prevent the free release of radionuclides. Workers must wear protective clothing and breathe supplied air while performing in this closed environment, located inside the Visual Examination and Repackaging Building at the Area 5 Radioactive Waste Management Complex. Not only are these dedicated workers safely completing complex tasks while completely encased in safety gear which is connected to the air supply, they are operating at an accelerated pace of two six-hour shifts per day, six days per week.

Characterization and repackaging of more than half of the boxes are complete, with only a third of the volume characterized as TRU waste. Using a variety of technologies, the other two-thirds of the waste was determined to be low-level and mixed low-level which can be safely disposed on the NTS at a significant cost savings. It is expected that characterizing and repackaging the remaining boxes will be completed by the end of November 2008, and the TRU waste shipped off the NTS by December 31, 2008.

“This monumental achievement reflects the persistence, dedication, and hard work of federal staff, contractors, and stakeholders who have successfully propelled the first NSO Environmental Management project toward closure,” said Stephen Mellington, acting manager for the Nevada Site Office.

What is Transuranic Waste?

Transuranic waste contains man-made radioactive elements heavier than uranium, hence the name “trans” or “beyond” uranium. Most of the transuranic waste managed at the NTS was generated as part of a U.S. nuclear weapons research and development program at Lawrence Livermore National Laboratory near Oakland, California. This legacy waste, which was shipped to the NTS for temporary storage between 1974 and 1990, includes protective clothing and miscellaneous equipment contaminated with transuranic elements.

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NSTec Set for STAR Program Review

National Security Technologies (NSTec) will seek its first-ever U.S. Department of Energy Voluntary Protection Program (DOE VPP) certification when an inspection team visits early next year.

The company would join Wackenhut Services, Inc. Nevada (WSI-NV) as the second Nevada Test Site contractor to receive the prestigious STAR award. WSI-NV received its second recertification this summer.

NSTec's VPP application has been accepted by the Nevada Site Office (NSO), National Nuclear Security Administration (NNSA) headquarters, and the Office of Health, Safety and Security (HSS). An inspection team is expected to visit NSTec sometime in the second quarter Fiscal Year 2009, says Tony Renk, chairperson of the NSTec VPP team.

The DOE created the VPP in January 1994 to recognize and encourage excellence in occupational safety and health protection. The program closely parallels the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) VPP and is comprised of the following elements/tenets:

- Management/leadership
- Employee involvement
- Worksite analysis
- Hazard prevention and control
- Safety and health training.

DOE-VPP also includes coverage of radiation protection/nuclear safety and emergency management because of the type and complexity of DOE

facilities. Much like the OSHA program, DOE-VPP provides several proven benefits to participating sites, including improved labor/management relations, reduced workplace injuries and illnesses, increased employee involvement, improved morale, reduced absenteeism, and public recognition.

The DOE-VPP has three levels of recognition: STAR, MERIT and DEMONSTRATION. Contractors whose programs meet the requirements for outstanding safety and health programs receive STAR recognition. Contractors with highly effective programs who commit themselves to attain STAR status within a five-year period receive MERIT recognition. DOE uses the DEMONSTRATION program to recognize existing achievements in unusual situations about which more information is needed before approval requirements for the STAR program are determined.

The NSTec VPP team has developed criteria for the inspection and plans to conduct an internal mock review in the upcoming months to help employees prepare for inspection activities.

Next year, a DOE headquarters team will evaluate NSTec by conducting safety and health program reviews, employee interviews, and walk-throughs of several NSTec work locations.

“There are on-going communications about VPP; people should stay tuned to get updated information about how it works,” Renk says. “We’ve been actively pursuing DOE VPP Star certification for the last 18 months and already have helped our employees prepare with our monthly VPP safety topics.”

According to Xavier Aponte, NSO VPP representative, contractors that choose to apply to the VPP must develop robust safety and health management systems and demonstrate effective implementation of safety and health procedures. “These contractors are subject to frequent DOE reviews,” Aponte says. “Certification in the VPP represents that a company has maintained injury and incident rates below national industry averages, developed outstanding worker safety and health programs and has a

strong commitment to safety in accordance with the five tenets."

Currently, there are only two NNSA contractors that have received DOE VPP Star certification, WSI-NV and Honeywell Federal Manufacturing and Technologies, LLC, which manages and operates the Kansas City Plant. Renk says joining this elite group will further enhance the safety-conscious work environment at NSTec for years to come.

"VPP gives everyone a strong voice and provides an excellent partnership between management and personnel performing the work," Renk says. "There are only 28 total DOE VPP contractors throughout the country. In addition to increased worker involvement, ownership, and morale, achieving DOE VPP STAR certification will give us national recognition that we have met the challenge of being able to demonstrate excellence in our approach to safety."

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NSTec, Los Alamos Honored with Distinguished Performance Award

A science team of physicists and engineers from National Security Technologies Los Alamos Operations (NSTec-LAO) and Lawrence Livermore National Laboratory (LLNL) has received a distinguish performance award.

Robert Hilko and Douglas Johnson of NSTec–LAO, along with Anemarie DeYoung, Thomas Gorman, Chad Olinger, and Roddy Walton of LANL, were recently honored with a Small Team Distinguished Performance Award for their reanalysis work of the COALORA pinhole neutron experiment (PINEX). This interest went beyond Los Alamos to include members from Lawrence Livermore National Laboratory, such as the former LANL physicist Paul Weiss, who originally fielded the COALORA PINEX.

The Underground Nuclear Testing program at the Nevada Test Site (NTS) historically generated a suite of data sets that now serves as a national resource since the advent of the cessation of testing. These data are required for validation of weapons design codes necessary for Stockpile Stewardship.

Perhaps the single most important data set involves a movie of the primary in action, known as a PINEX experiment. PINEX—producing an image of the neutrons in a device—was not fully appreciated in its time. However, a few experimentalists were quick to see the exceptional value and power of PINEX in diagnosing device processes, says Tom Tunnell, manager of the LAO Physics and Analysis section.

“The Nevada Test Site Underground Nuclear Testing program originally

produced only two successful time-resolved PINEX. The Nuclear Device Data and Science team, comprised of scientists from NSTec and LANL's P-23 and X-2 groups, exhibited exceptional creativity and dedication in their reanalysis of one of these: COALORA," Tunnell says.

The COALORA PINEX has now been successfully reanalyzed and a "movie" created showing the device in action. Those who assisted with the project include:

- Douglas Johnson is an electrical engineer at NSTec who worked on PINEX diagnostics for EG&G during the days of testing. His work now specializes in PINEX image processing and archiving. Douglas produced the original COALORA TRP movie, created from the nine time-sequenced images resulting from the COALORA time-resolved PINEX, which has been used for 20 years. This year, he interpolated between the team's reanalyzed images to create the continuous reanalyzed movie.
- Robert Hilko is a physicist at NSTec who worked on neutron diagnostics for EG&G during the days of testing. Robert has been the resident expert on neutron experiment (NUEX) data from the NTS testing days but now his work focuses on PINEX image processing. Robert's unparalleled dedication to this effort, along with that of Roddy Walton, is being touted as the main reason for the success of this team.
- Anemarie DeYoung is a Deputy Group Leader in the Neutron Science and Technology (P-23) Group at LANL, physicist, and P-23 Principal Investigator on Boost. She led this team's effort to reanalyze the COALORA time-resolved PINEX.
- Thomas Gorman is a physicist and primary designer in the Applied Physics (X-2) Group at LANL. He provided movie calculations of COALORA using different weapons physics models for comparison with data.
- Chad Olinger is a physicist and the team leader for the Nuclear Device Data and Analysis Team. He enabled the COALORA reanalysis and assisted on PINEX analysis work.
- Roddy Walton is a physicist and LANL's expert on PINEX, having fielded many such diagnostics during the days of testing. He is a retiree that contracts with LANL and mentors NDDS Team Members.

LANL's Distinguished Performance Award recognizes employees or groups of employees "who have distinguished themselves by their outstanding contributions and performance in support of [LANL's] programmatic efforts." This movie was shown recently by the Applied Physics (X) Division to the United States Strategic Command's (USSTRATCOM) Strategic Advisory Group Stockpile Assessment Team (SAGSAT)

committee. The real-time data imaging of a dynamical pit is critical for validating Advanced Simulation and Computing models in support of Stockpile Stewardship.

“It took unusual creativity by the dedicated team to search and find papers in the archive on every aspect of the time-resolved PINEX camera calibration and timing electronics,” Tunnell says. “Although more than 30 percent of the background documentation was not found, the team innovatively used other diagnostics, such as NUEX, to calibrate and cross-check the PINEX results.”

NUEX measured the neutron flux up the line-of-sight as a function of time. A chi-squared minimization between PINEX and NUEX data was used to optimize frame-by-frame PINEX image times and intensities. “The result was timing good to within one nanosecond, and relative intensities of the images good to within the uncertainty of the NUEX data of a few percent. Despite an incomplete calibration data set, and despite the complexity of the task, the small team worked diligently to produce this movie,” Tunnell says.

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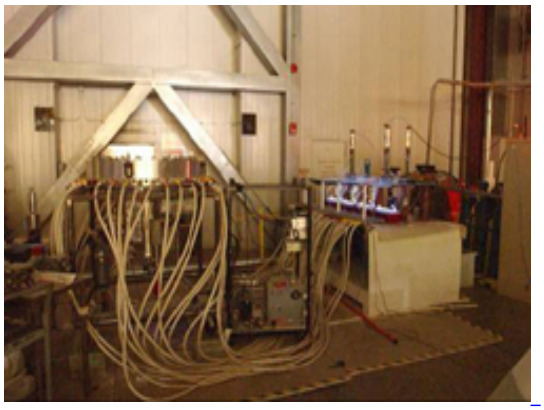
NTS Turns Fusion Into Detection Asset



Click to Enlarge

A Dense Plasma Focus machine.

The relocation of a new nuclear fusion machine from North Las Vegas to the Nevada Test Site (NTS) is helping to enhance the country's detection capabilities in a way rarely found elsewhere.

One of National Security Technologies' (NSTec) Dense Plasma Focus (DPF) sources was recently relocated to the NTS to conduct research and development activities using a deuterium-tritium gas load. Previously, DPF used only deuterium fusion. Deuterium-tritium fusion creates controlled, higher-powered reactions that can be used to calibrate neutron yield detectors.

The first DPF experiment at NTS was conducted on November 1, 2007, just six months after the technology was moved from the Losee Road facility. It was so successful that the source is now frequently used by all three National Laboratories.

"The DPF is an efficient, multipurpose tool," says Andrew Obst, Los Alamos National Laboratory (LANL) staff physicist. "We use the outputs of the fusion reaction for many important purposes. At NTS, the DPF is used for physics experiments, to qualify detection systems, and to characterize and calibrate specialized detectors that are used in experiments by Los Alamos, Lawrence Livermore and Sandia National laboratories."

Plasma is an ionized gas with sufficient energy to free electrons from atoms or molecules and allow both ions and electrons to coexist. The Dense Plasma Focus machine produces, by electromagnetic compression, short-lived plasma that is so high in temperature that nuclear fusion occurs. Fusion is the process the sun uses to generate energy.

Much like the processes of the sun, dense plasma focus creates intense bursts of X-rays, charged particles, and nuclear fusion neutrons that can be used to simulate radiation bursts from nuclear explosions (for testing of the electronic equipment). It also is a short and intense neutron source useful for non-contact discovery or inspection of nuclear materials (uranium, plutonium).

Through Dense Plasma Focus technology, scientists can now harness nuclear fusion to create short intense bursts of neutrons. Each fusion event generates about the same number of neutrons as there are stars in the Milky Way (about a trillion, and could also be about the same size as the number of bits on a hard drive).

DPF is still considered a delicate science, and the technology at NTS surpasses most DPF found at universities that study nuclear fusion. A standard university capacitor typically stores one to two kilojoules of energy. The DPF machine at NTS can store up to 133 kilojoules, or about 100 times as much.

DPF machine technology also is expected to be improved with more powerful versions of the plasma tests in use in the future. In addition to improving the field of plasma physics, DPF scientists also use the deuterium-tritium “shots” to prepare detection devices for readiness exercises. The deuterium-tritium fusion reaction produces neutron energies similar to energies found in nuclear devices.

Chris Hagen, NSTec principal scientist, says the first experiments at the facility last November exceeded the design goals. As a result, the DPF machine at NTS was transitioned to a full-use facility. The National Laboratories and NSTec have worked together to design and operate a number of experiments leveraging DPF technology.

“We’re trying to improve and upgrade DPF in parallel to ongoing projects,” Hagen says. “We are continuously improving with lessons learned during our current experiments.”

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Livermore Operations Team Offers Major OMEGA Support

The word “team” usually conjures up the image of a large group of people working together to meet major milestones, but a National Security Technologies (NSTec) Livermore Operations (LO) team of four is proving that big things can come in small packages.

Over the past year, an LO team has been an integral part of cooperative efforts with the experimental and analysis team working on National Science Campaign (NSC) 4 and 10 Lawrence Livermore National Laboratory (LLNL) experiments on OMEGA – one of the major United States high-power laser facilities.

The primary team member, James Tellinghuisen, Electro-Mechanical Technician, is the only team member deployed to the Laboratory for Laser Energetics (LLE), at the University of Rochester, in Rochester, New York. The three additional team members are Zaheer Ali, Scientist/Physicist, LO, Kevin Loughman, Supervisor, OMEGA Diagnostics, Development, and Support, deployed to Lawrence Livermore National Lab (LLNL), and Kathleen Garcia, Administrative Assistant, who is responsible for supporting work at both LO and LLNL.

According to Ali, “Our scientists, engineers, and technicians support experiments to verify magneto hydrodynamic code, develop Inertial Confinement Fusion (ICF) targets, investigate material properties at extreme energy densities, as well as helping to develop, implement, and operate diagnostics for high energy density science.” Recently, NSTec even supported the commissioning of the new OMEGA Extended Performance (EP) laser system, a joint laser system designed to integrate emerging high energy short pulse laser technology with existing long pulse technology.

NSTec scientists and technicians have also been involved with the new neutron, hard x-ray, and Electro-Magnetic Pulse (EMP) diagnostics fielded on OMEGA EP. Additionally, NSTec engineers calibrate and support mission critical diagnostics on OMEGA such as the x-ray spectrometers, DANTE, HENWAY, as well as x-ray framing cameras, and streak camera systems.

When asked about recent accomplishments supporting LLNL at LLE, Loughman commented that, “LO provided critical, one-month priority turnaround to complete the OMEGA High-Resolution Velocimeter (OHRV) diagnostic, which had been shipped incomplete. James (Tellinghuisen) and a prior team member, Michael Brodowski, worked diligently to ensure the diagnostic was operational so LLE could proceed with an experiment. If our folks had not stepped up to the plate, LLE would have had to postpone the experiment.”

The LO team continues to serve LLNL/LLE above and beyond the call of duty, including Tellinghuisen providing crucial day-to-day interface and support, Ali frequently “commuting” to LLE, Loughman providing coordination and oversight, plus Garcia contributing to overall operational/ administration continuity, all to ensure that experiments go off without a hitch and each milestone is achieved.

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NSTec Named One of "Best Places to Work"

The Southern Nevada Human Resources Association in October named National Security Technologies (NSTec) one of the top three best places to work in Southern Nevada.

NSTec was evaluated from a list of 19 companies nominated. The company was presented the award during the Best Places to Work Awards luncheon on October 10.

"There is no doubt in my mind that NSTec's commitment to employee quality of life, along with our focus on the importance of our mission, led to this distinction," says Steve Younger, NSTec president. "Our educational programs are second to none, and our engagement in the community is unprecedented."

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Stoller-Navarro Attains Record Safety Accomplishment

The associates of Stoller-Navarro Joint Venture (SNJV) have worked over three years since the last Occupational Safety and Health Administration (OSHA) lost work day and OSHA recordable case, attaining one million safe hours.

This safety accomplishment includes work completed by SNJV associates both in the office and in field work at the Nevada Test Site, including subcontractors performing drilling, janitorial, maintenance, and other tasks.

SNJV was awarded a contract for environmental engineering services in 2003 to support the U.S. Department of Energy National Nuclear Security Administration Nevada Site Office. SNJV provides a wide range of professional services including preliminary assessment, drilling, characterization, sampling, GIS, modeling, statistical analysis, and many other environmental services and support functions.

According to Dave Taylor, program manager for SNJV, this accomplishment speaks highly of the SNJV team. “One million safe hours over a nearly 3-year period is a testament to the day-to-day commitment to safety, and minute-by-minute dedication to teamwork of all our associates. From complicated field activities to office ergonomics, everyone had to believe that zero injuries is achievable. Our goal now is to ensure an injury-free workplace for the rest of our careers.”

Stacey Alderson, Environmental Safety, Health, and Quality manager, says that safety is the core component of every task performed by SNJV associates. Stacey is excited to see this validation of the effectiveness of SNJV’s safety culture by setting this outstanding safety record. “We have set the bar high and met the challenge – it’s now time to see how high we

can truly go," she says.

Health and Safety Manager Gregg Mickelson adds, "This is a huge achievement for SNJV and for every associate who helped make it happen. It's a great example of continuous improvement, associate involvement and management's commitment to maintain a safe and productive workplace."

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