Accomplishments for 2004

The year 2004 was a busy and productive year for the members of the NNSA/NSO complex. Major accomplishments and milestones were achieved during the year. In support of its mission, contractors and the national laboratories share their major accomplishments for 2004.

Bechtel Nevada

- Exceeded 2.5 million hours without a lost time accident – "company best" since inception of the contract in 1996.
- Realized total Six Sigma financial benefit of $13.6 million ($7.5 million in soft benefits and $6.1 million in hard benefits) – represents a 150 percent increase over fiscal year 2003 and significantly exceeded fiscal year (FY) 2004 established target of $9.8 million.
- Supported stockpile stewardship programs and operations – *Armando* subcritical experiment was executed and all data channels were recorded with excellent data quality.
- Provided technical support to JASPER, which enabled LLNL to achieve 15 successful firings of the gas gun.
- Atlas Relocation Project achieved Critical Decision 4 and turnover to Operations.
- Safely secured more than three million curies of material in Russia with Radiological Dispersal Device potential.
- Prepared nation's military and first responders for the war against terrorism – Trained more than 10,000 emergency responders by integrating training, exercises, testing, evaluation, and technology for combating terrorism.
- Conducted 965 man days of deployed emergency response field operations in support of homeland security.
- Provided security support for numerous national and international events, including the 2004 Summer Olympic Games in Athens, the 2004 State of the Union Address, and the Democratic and Republican national conventions.
- Successfully participated in a simulated broken arrow exercise (Diligent Warrior) in Great Falls, Montana, in September 2004. The Remote Sensing Laboratory Consequence Management Response Team was deployed to participate in the emergency exercise.
- Established a new Radiological Assistance Program (RAP) Region in the National Capital Region.
- Began work on the Radiological/Nuclear Countermeasures Test and Evaluation Complex – the first Department of Homeland Security capital investment in the DOE complex.
- Disposed of a record volume of low-level radioactive waste – 3.7 million cubic feet.
- Shipped 35 transuranic waste TRUPACT-II containers (490 drums) to the Waste Isolation Pilot Plant in 13 shipments – first time in NTS history.
- Completed characterization of over 350 facilities and a collection of over 18,000 samples.
- Reduced the cost of doing business at the NTS by $28.1 million – including the $13.6 million in Six Sigma savings, $6 million in pension contributions, $5.6 million in procurement savings, $2.4 million in savings on wireless devices, and $500,000 in savings in litigation costs and workers compensation.
- Strong support of NNSA initiatives and Service Center transition: BN assumed seven NNSA/NSO functions; is the primary interface to Management and Operations (M&O) contractors supporting DOE's Standard General Ledger implementation; and is one of few M&Os ready to implement DOE's new financial system.
- Established BN Next Generation group to strengthen recruiting and retention of young professionals.
- Met and exceeded small business contract commitment – more than 70 percent of BN subcontracts were awarded to small businesses.
- Team of BN employees won several awards, including Lockheed Martin's NOVA Award and the BN Science and Engineering Award, for their work on the world's largest laser system – the National Ignition Facility's (NIF) Velocity Interferometer System for Any Reflector (VISAR).
- Maintained a strong commitment to the Las Vegas community – successfully raised $406,690 for the United Way; $500,000 gift from Bechtel Foundation to the University of Nevada, Las Vegas' (UNLV) new Science, Engineering and Technology Building; presented $15,000 in scholarship money to UNLV's Minority Engineering Program; Bechtel and Lockheed Martin combined gifts to the Atomic Testing Museum totaled $330,000; and BN named finalist for the Las Vegas Chamber of Commerce Community Achievement Award (category of large business).

Lawrence Livermore National Laboratory

- Successfully completed "drillback" of the U19ad nuclear test event site. The drillback exercised key underground nuclear test field execution skills. LLNL nuclear chemists recovered samples for radiochemical analysis and trained inexperienced personnel in methods and processes unique to underground nuclear testing.
- Met the following Level 2 milestones for nuclear test readiness: Contributed to the Production of the Test Scenarios and Capability Assessment; implemented project planning, execution, and control processes for LLNL activities; completed the Nuclear Explosives Safety Study (NESS) for the DAF. This was the first NESS conducted in Nevada in nearly a decade and the first in Nevada to be 10 CFR 830 compliant; delivered a report to document the reconstitution of low-band width reaction history capabilities; completed the seismic study of the Las Vegas Valley and maintained the seismic monitoring capability
- Operated BEEF in support of work for others projects exploring the physics of shaped charges. Test articles were assembled at Baker Site and transported to BEEF for detonation. BEEF was selected for this work because of the capability to collect high-quality data during the explosion.
- DAF received the first two shipments of nuclear material from TA-18 at LANL. Receipt of material was the first step in relocating Category I and II missions from TA-18 to the Critical Experiments Facility (CEF) at the DAF.
- Provided project management support for the CEF Project to stand up the Central Project Office. As such, LLNL contributed to the completion of various project management plans and procedures (e.g., schedule, budget, quality assurance procedure, design review procedure, etc.).
- Implemented nuclear facility requirements at the DAF as documented in the recently approved safety basis (i.e., Documented Safety Analysis and Technical Safety Requirements). Implementation of these requirements will be verified in 2005 during nuclear startups for the TA-18 Early Move and glovebox projects.
- Achieved full containment of eight plutonium shots at the JASPER facility. Another major first, using a new LLNL impactor technology the team used a bullet to create the first isentropic compression on a plutonium sample. One of these shots targeted aged plutonium in A-B comparison.
- Incorporated a new diagnostic capability at JASPER. The VISAR at JASPER will accommodate experimental requirements in FY05.

Los Alamos National Laboratory

Successfully conducted *Armando* subcritical experiment. Planning began in 1999, and the results exceeded all expectations. All data channels were recorded with excellent data quality.

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The SiteLines Editorial Board wants to know your thoughts on how we can improve the publication. Please visit http://webapp-a.nv.doe.gov/surveys/CorpComm/SiteLines.asp and take the survey.

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Issue 103 February 2005

A publication for all members of the NNSA/NSO family

Accomplishments

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Stoller-Navarro Joint Venture

- Underground Test Area (UGTA) Project: Provided safe, efficient, and successful tracer test and well development and testing field operations including the development and groundwater sampling of a recently-drilled "post-shot" well. Successfully developed major computer flow models for Western Pahute Mesa as well as EarthVision geologic models for Frenchman Flat and Yucca Flat. Submitted key documentation for Rainier Mesa/Shoshone Mountain (RM/SM) Value of Information Analysis, RM/SM Corrective Action Investigation Plan, and Frenchman Flat Hydrologic Data Documentation.
- Offsites Project: Completed surface remediation field work at the Gasbuggy Site in northern New Mexico. Submitted application to New Mexico's Voluntary Remediation Program for the Gnome-Coach site near Carlsbad. Developed the Risk-Based End State Vision documents for all nine Offsite testing locations. Completed and submitted nine Offsite transition plans for the eventual transfer of each Offsites project to the DOE's Office of Legacy Management.
- Industrial Sites Project: Submitted 12 final Federal Facility Agreement and Consent Order (FFACO) deliverables. All deliverables were accepted by the Nevada Department of Environmental Protection (NDEP). Horn Silver Mine Corrective Action Decision Document (CADD)/Closure Report accepted for closure, saving several million dollars in corrective actions and several hundred thousand dollars in monitoring costs. In a joint effort with BN Environmental Restoration, successfully petitioned NDEP to change radiological action levels from background-based to dose-based. This effort resulted in several hundred thousand dollars in current-year savings and several million dollars in saving for the life cycle project costs.
- Defense Threat Reduction Agency (DTRA): Completed characterization at the E-Tunnel sites, pretest soil vapor sampling for DTRA operations in Indiana, and the preliminary cap design for the 15A muckpile. Conducted sampling/monitoring of the E-Tunnel groundwater effluent in compliance with the NDEP-issued water discharge permit. Submitted four CADDs.
- Program Integration: Supported NNSA/NSO EM-32, Office of Engineering and Construction Management and KPMG, LLP audits/review. Developed the NTS Risk-Based End State Vision document. Coordinated the capture of photo/video documentation of the first transuranic waste shipment from the NTS to the Waste Isolation Pilot Plant near Carlsbad, New Mexico. Retooled the FFACO Web page, providing efficiencies to NSO and other contractors.
- ESH&Q: All field work occurred without any recordable or lost time injuries to SNJV personnel or its contractors and without any measurable exposures to radiation or other hazardous materials. SNJV has maintained an outstanding safety and health record for FY04.

Wackenhut Services, Inc.

- Completed the NNSA Service Center transition of personnel security files by dedicating over 2,400 project hours, resulting in the conversion of 3,000 files, destruction of 13,500 files, and preparation of 5,400 files for transfer or archiving. The project, which included classified files, created nearly 500 boxes of documents and was completed under cost and ahead of schedule.
- The DOE Headquarters Central Office of Records presented the WSI COMSEC Custodian with the 2004 COMSEC Award during the Savannah River COMSEC Workshop for having an outstanding rating during the DOE Headquarters COMSEC audit. This award is given once per year to the custodian of the best COMSEC account across the DOE community.
- The NNSA/NSO OPSEC Program achieved national recognition with two awards presented at the National OPSEC Conference: second place in the OPSEC Organizational Award and in the Multimedia Award (Electronic Media) category, for a total of 10 national awards in the last 10 years. SNL, Kansas City Plant, and Savannah River Site requested to benchmark the NNSA/NSO program. The NNSA/NSO OPSEC Program is emulated by government and commercial programs alike.
- NNSA/NSO OPSEC practitioners conducted 13 OPSEC assessments during the year. Four of these assessments were major efforts, three of which involved other NNSA sites. As a result, positive changes to the overall security posture of NNSA sites were effected.
- OPSEC personnel conducted an OPSEC/Foreign Visits and Assignments Seminar at the request of the LLNL OPSEC Manager. Twenty-four employees attended the two-day seminar. Feedback was so positive; the OPSEC Manager requested another seminar be held.
- WSI provided support to the Office of Secure Transportation (OST)/Joint Training Exercise (JTX) which culminated a year of planning and preparation. The JTX encompassed multiple components including an emergency management exercise, live fire range, Las Vegas FBI Special Weapons and Tactics (SWAT) Chemical Biological Warfare building assault, and numerous convoy assaults at varying locations on the NTS. The successful JTX was a direct reflection of outstanding cooperation and teamwork between NNSA/NSO, OST and WSI.
- WSI provided outstanding services and support to the NNSA/NSO community, DOE Office of Repository Development (ORD)/Yucca Mountain Project, and local/federal law enforcement agencies. WSI personnel have sustained their commitment to mission accomplishment by having met all customer expectations of service and support during a period of extremely high staffing requirements. The LANL subcritical experiment, *Armando*; the LLNL Project Drillback; the multiple DTRA Device Kingfisher/Invader tests; and the routinely short notice support to classified Department of Defense projects on the NTS are just a few examples of staff-intensive projects that received outstanding support. Furthermore, with the formal announcement of the transfer of TA-18 to NNSA/NSO, along with project funding, the company embarked on an aggressive hiring campaign that resulted in an unprecedented series of consecutive new-hire training classes.
- The shutdown of classified computer operations by the DOE Undersecretary provided a major challenge as the availability of computing resources is critical to a number of WSI and BN contract performance measures. WSI provided extensive support for inventories; training of all users, custodians and managers; conduct of targeted internal self-assessments; and preparation of validation documents in support of restart activities. All commitments were met or exceeded, and all systems were returned to classified operation as scheduled.
- A Force-on-Force exercise at an NTS ground zero location was conducted to validate Threat Level 1 protection strategies for a simulated nuclear explosive device. The two-day event used participants from the United States Air Force, FBI, Tonopah Test Range, NNSA/NSO, LANL, and WSI uniformed and non-uniformed personnel. The highlight of this exercise was the demonstrated tactical interoperability of the various organizations involved.
- The NTS Security Police Officer Training Competition team participated in the annual competition at the Savannah River Site, finishing in fifth place overall among eleven teams in a tough, challenging event. The competition presented demanding challenges in both physical fitness and weapons skills.
- A Defense Contract Audit Agency (DCAA) WSI FY02 and FY01 claimed costs audit results that indicated zero questioned costs and no findings or exceptions. With these two latest audit reports, WSI has had no questioned costs, findings or exceptions during all DCAA financial audits and reviews since the 1998 contract inception.
- WSI was recertified as a Voluntary Protection Program (VPP) Star Site and during the DOE 20th Annual VPP Conference in Las Vegas. WSI was presented the DOE VPP Star of Excellence award, which is presented annually to VPP Star Sites that achieve and maintain occupational injury and illness rates well below national rates for similar industries. At the same session, the WSI ES&H Manager was presented with the Contractor Champions Award for outstanding performance and leadership in furthering the advancement of the DOE VPP.
- The WSI Support Section coordinated the transfer of nearly $300,000 worth of excess DOE property from the Rocky Flats site to NSO that enhanced protective force operations, ammunition storage capabilities. The Electronic Security Section obtained excess DOE electronic security equipment worth $500,000 from Argonne National Laboratory-West and another $75,000 from SNL.
- WSI strongly supports the local community through active involvement in a variety of programs. As a result of this commitment, WSI provided monetary donations to support JASON XV-Rainforests at the Crossroads, Miracle Flights for Kids, Nye County Amargosa Ambulance Service, and the 13th Annual Nevada Regional Science Bowl. WSI continues to maintain the outstanding relationship forged with Quannah McCall Elementary School. WSI personnel are involved in key community support activities that include Deputy Unit Commander of the Nevada One Disaster Medical Assistance Team; alternate member of Local Emergency Management Committee; a U.S. Department of Public Health Services Board Member; and a member of the Las Vegas Metropolitan Police Department Citizen's Review Board.

Face-to-Face

Name: Michelle Lindsay

Company: Bechtel Nevada

Title: Procurement Specialist

Hometown: Orange County, California

Hobbies/
Interests: Travel, yoga, playing with my two miniature schnauzers, and planning Next Generation events

Key to Acronyms

The following acronyms appear frequently in *SiteLines*:

BEEF	Big Explosives Experimental Facility
BN	Bechtel Nevada
DAF	Device Assembly Facility
EM	Emergency Management
EM	Environmental Management
ES&H	Environment, Safety, and Health
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
NTS	Nevada Test Site
PIP	Process Improvement Project
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
WSI-NV	Wackenhut Services Incorporated - Nevada

New mapping techniques improve national emergency response

Collecting and analyzing geo-spatially correlated environmental data is what RSL scientists do best. Even though commercially available Geographical Information Services (GIS) software is aplenty, their coverage is not uniform. Many times RSL scientists find themselves in remote deployments where all they have is a picture of the landscape. The capability to convert a digital photo into a map is the only technical solution under these circumstances. Scientists at RSL like **John Tipton** and **Sanjoy Mukhopadhyay** have found a way to do just that.

With the help of a commercially available software package called MAPIX, real-time data from the field transmitted via radio or cell phone to a data control center can be plotted in a geographical map. The raster based mapping system is no different than the mapping capability used in modern day auto navigation. MAPIX software was developed by a Swiss company that works closely with the European High Energy Laboratory, CERN, in Geneva. RSL scientists adapted it to use in emergency response. The application software exploits the dynamic data exchange feature provided by the Visual Basic platform to share and update data among various modules in a multitasking environment. Overall accuracy of the map depends on the accuracy of the Global Positioning System (GPS) coordinates of the points surveyed and the quality of the pictures used.

One of the most important features is the option for users to geo-reference a picture, a JPEG or other image file, by identifying four isolated points on the map by their latitude and longitude.

"The greatest advantage of MAPIX is that if we have a section of maps, we can scan them, obtain coordinates for the four corners and the entire map section can be geo-referenced automatically," said Mukhopadhyay.

Newer products, like MAPIX, NAVIGATOR and MAPOPOLIS that are routinely used at RSL, can provide tremendous amounts of information about the mapped object without the need to transport a large database, like the ones needed for GIS products.

Coming soon. . . Atomic Testing Museum

by Michelle Meade

Construction on the long-awaited and much anticipated Atomic Testing Museum is near completion—with a scheduled public grand opening on February 20, 2005. The 8,000 square-foot museum, a project of the NTS Historical Foundation (NTSHF) and an affiliate of the Smithsonian, will provide an extensive visual tour of past and present NTS activities, as well as an overview of the area's geologic and archaeological features.

Audiovisual presentations, environmental re-creations, films, and astonishing graphics displays will all be part of the museum experience. Guests will literally be "moved" inside an interactive movie theatre that simulates an atmospheric nuclear detonation with shaking benches, hot air blasts, and rumbling surround sound. Descriptions of current Environmental Management projects, including groundwater studies, industrial sites cleanup, low-level waste disposal, etc., will also be featured.

The museum was literally constructed around several large NTS artifacts, including a grain silo from the Environmental Protection Agency farm, a one-fifth-scale down-hole canister donated by LANL, and a 15-foot diameter section from a pipe used in a tunnel on the NTS.

It is estimated that as many as 800,000 people will visit the museum annually. For additional information on the Atomic Testing Museum or the NTSHF, log on to http://www.ntshf.org/.

photo courtesy of Michelle Meade

The ticket booth at the entrance of the museum: A replica of an old security station at the NTS.

The NTSHF depends upon its volunteers and encourages any individual or organization interested in preserving the history of the NTS to become involved in this ambitious museum project. Volunteers enjoy free museum membership as well.

U1h shaft project completed

by Jennifer Morton

August 16, 2004 marked the completion of the U1h Shaft Project at the NTS U1a Complex. The shaft and new hoist system will enable an increase in the personnel limit underground and quadruple the capability to lower personnel and experiment construction materials underground to perform subcritical experiments.

The project provides needed improvements including improved ventilation capabilities, improved access and egress paths, and improved personnel and materials handling capabilities," said BN Program Manager **Ray Patterson**. "All these contribute to improved safety and efficiency of operations."

The U1a Complex is an underground facility located 965 feet below the surface of Yucca Flats at the NTS and is accessed by three vertical shafts. The first shaft, U1a, was sunk in the late 1960s for tests planned in that era. The second shaft, U1g, was drilled in 1992 to provide utility services and ventilation to the complex. U1h, the newest shaft at 20 feet in diameter and with a concrete lining, will become the primary means of access and egress for the Complex.

Ground was broken for the U1h Shaft Project in 1999 with total depth being reached in early 2001 and breakthrough of the U1a connecting drift in late 2001. The new hoist system was procured in 2002 and installed in 2003, with shaft outfitting and hoist system commissioning completed in August 2004.

The U1a Complex plays a key role in the Stockpile Stewardship program. LANL retains overall responsibility for the management of the complex on behalf of NNSA/NSO while BN provides such support as maintenance, engineering, construction, operations, project management, and management of subcontractors.

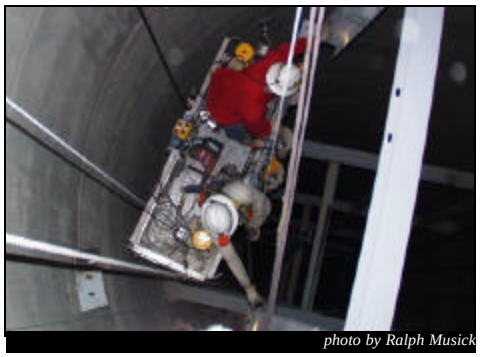


photo by Ralph Musick

Miners install one of the steel sets that support the hoist guide system. Further down the shaft are completed sets and installed guides and utilities.


photo by Ralph Musick

An exterior view of the completed U1h shaft headframe and hoisthouse.

In the Next Issue of *SiteLines* ...

- Atomic Testing Museum Grand Opening
- Science Bowl re-cap
- National Special Security Event – Presidential Inauguration

SDRD: Little known program makes significant impact

by Wil Lewis and Chris Hagen

What is SDRD?

In 2002, Congress passed a bill authorizing the manager of the then Nevada Operations Office to approve the implementation of a research and development (R&D) program aimed at improving the technologies used by BN in support of its national security mission. The intent of this program was to pursue the kind of innovative, high risk R&D that might yield beneficial technology development but might be too risky to pursue programmatically.

In its first three years, the NTS Directed Research, Development and Demonstration (SDRD) program has already produced significant achievements in enhancing the technologies and capabilities at BN. Thirteen inventions disclosures are filed with the BN intellectual property office for creative new ideas like using microelectomechanical devices in infrared viewers, employing fluorescent detection of polymerase chain reaction in air samplers, modeling the temporal performance of mechanically perturbed optical systems, and improving the performance of helium-3 radiation detectors through the addition of xenon. Some SDRD innovations have already found their way into use, including: improved performance, lower cost comb generators for streak camera calibration, software for data fusion, training simulation software, and improved image tube modeling and fabrication capability.

This year, SDRD is supporting R&D activities across the BN complex on 53 different projects ranging from the investigation of nanotube x-ray emitters to developing polymerized colloid arrays for sensing nerve agents. These projects were evaluated on the basis of their technical merit by a team of reviewers representing the various BN sites and selected from 153 submitted proposals by a committee comprised of senior operations and program managers. Researchers working on the selected projects will have one year to carry out their studies and to deliver a prototype or report that demonstrates the feasibility of their idea. Due to the innovative nature of these R&D proposals, it is expected that some of the ideas will prove unfeasible. These projects, too, are considered to be successful. These investigators have helped rule out unfruitful avenues of research while staying abreast of development trends and honing technical skills and capabilities.

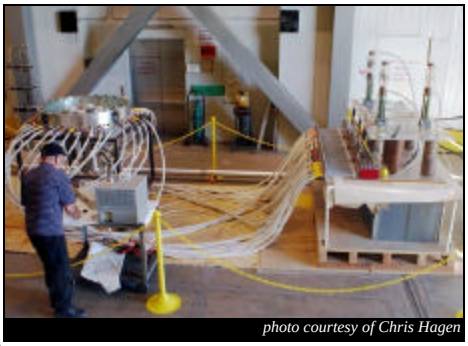


photo courtesy of Chris Hagen

***Ron Swegle** prepares the BN Dense Plasma Focus fusion neutron source for firing. When the energy storage bank, on the right, is filled with electrical energy, the capacitors transfer their stored energy through the white coax to the DPF source tube on the left. The source tube contains the rarified gas which is the fuel for the plasma fusion discharge.*

One example of SDRD success

One project that exemplifies the value of SDRD to BN and to programs is the High Output Tube (HOTube) project. A team of scientists, engineers and technicians in North Las Vegas are investigating various ways to improve the neutron output from a dense plasma focus (DPF) fusion neutron generator. The DPF team has already demonstrated the technology by building and operating a pulsed power based DPF and has successfully established BN as a critical neutron science asset to the weapons community. LANL and SNL have expressed interest in using the facility for programmatic and calibration experiments. With further improvements in technology and the kinds of improvements the team is studying on the HOTube project, DPF will likely be deployed on future subcritical experiments.

A DPF operates like a giant version of the electronic flashes that are in cameras – it slowly stores energy in some capacitors, and then when the button is pushed, much more rapidly discharges that energy into a gas filled tube. The result in the flash tube is a brilliant burst of light. The result in the DPF tube is nuclear fusion, along with a brilliant burst of light. Fusion, the process the sun uses to create the energy that both warms the earth and supplies us with light, releases a lot of energy. Some of it is in the form of fast moving neutrons. These bursts look a lot like miniature versions of the neutron bursts we used to measure accurately at NTS. They can be used for many purposes that support a wide range of customer goals in National Security programs.

The DPF team is working to increase the neutron output of the fusion source, currently 100 billion neutrons per pulse, while at the same time trying to make the 100 nanosecond (ns – or one thousandth of a millionth of a second) neutron pulse narrower in time; these are conflicting goals and daunting to achieve. The HOTube project created several innovations that improve the utility of the DPF. Furthermore, a new and novel neutron and gamma detection scheme has allowed measurement of the fusion burst with greater time resolution than ever before. This detector sits in the DPF as it is discharged, riding up and down a 35 kilovolt wave, immersed in radiation and electromagnetic pulse fields, yet it delivers signals of remarkable fidelity. This tool was designed, fabricated, and brought into use by the BN DPF team. SDRD projects allow the full breadth of BN scientific and engineering expertise to be focused on technological challenges. With this detector in the HOTube, the team has been able to reduce the pulse width to as narrow as 20 ns. During that time, neutrons are being produced at a rate of more than 10^{18} per second!

These fast intense pulses are already being used by LANL and SNL for purposes such as neutron radiography, detector and detection system development and characterization, and DPF source development. The judicious choice of SDRD projects, focusing on essential future needs has developed an important resource within BN. The rapid progress of these BN DPF fusion neutron sources may allow neutrons to be used at the NTS and elsewhere for a wide range of new research. These include neutron radiography, testing for National Ignition Facility and NTS neutron experiments, irradiation for nuclear weapon effects studies, and dynamic materials research. Beyond this, there are also possible Homeland Security applications that could be served by these sources.

NTS Fire and Rescue team sets record

by Sarah Martin

Six NTS Fire & Rescue (F&R) Technical Rescue team members recently set a new Texas A&M University - Texas Engineering Extension Service school speed record for a single clean wall breach and victim recovery. The record was set while they took part in a Structural Collapse Technician course in College Station, Texas. The six participants are now certified to conduct the training at the NTS for other team members.

F&R Captain **John Gerard**, Engineer/Trainers **Chris Swiger** and **Kerry Mackey**, Engineer **Dan Cloes**, Chief's Aide **Bill Nixon**, and Firefighter/Trainer **John Dwyer** set the new speed record with a time of 22 minutes and 42 seconds while breaching and rescuing a victim through 10 inches of reinforced concrete.

"It was really quite an accomplishment for NTS F&R to set a new speed record considering all the other attendees were FEMA or Urban Search and Rescue team members who had already worked major national disasters in Oklahoma and at the World Trade Center," said Gerard.

The course provided participants with the knowledge, skills, and abilities to perform rescues at structural collapse incidents. Team members covered rescuer safety, breaching and breaking operations, lifting and moving operations, and emergency building shoring during the week long course.

"It was the most innovative class I've ever taken," said Dwyer. "The wealth of knowledge among the other attendees and trainers was phenomenal."

The training was conducted at Disaster City, a $7.7 million, 52-acre facility, specially designed with collapsible structures that replicate a wide array of infrastructure found in every community. F&R team members had the opportunity to use a series of full-scale work stations that provided hands-on experience in a strip mall collapse, an office complex collapse, a passenger train derailment, tunneling systems, and large scale rubble piles.

NTS F&R started the technical rescue initiative in 2003 to provide advanced skill sets for firefighters and paramedics. The training translates into improved response capabilities for NTS emergencies. NTS team members are now preparing lesson plans and will conduct certified structural collapse training for the remaining F&R Technical Rescue team members in early 2005 at the NTS F&R training grounds. The NTS F&R Technical Rescue team is comprised of both firefighters and paramedics and all team members must be trained in all six components of Technical Rescue: Confined Space Rescue, Trench Rescue, Swift Water Rescue, Structural Collapse Rescue, Vehicle/Heavy Machinery Rescue, and Rope Rescue. By the end of fiscal year 2005, NTS F&R will have completed all six components of the National Fire Protection Association Technical Rescue Standard.

photo by John Gerard

*NTS Technical Rescue team members **Chris Swiger** (middle jackhammer) and **Kerry Mackey** (far right), along with other course attendees, make a downward penetration into a vault simulating a pancaked structure during the training course.*

"I am extremely proud of the efforts our team is making in this training initiative," said NTS F&R Chief **G. C. Fauerbach**. "Many of the team members have an active role in developing procedures and evaluating response equipment necessary to be successful in this endeavor. We have some of the most highly skilled emergency responders in Southern Nevada."

All about NEPA

by Linda Cohn

The National Environmental Policy Act (NEPA) of 1969 requires Federal agencies and departments to consider potential environmental impacts before making decisions or taking actions; and that these considerations and actions are documented and made available to the public as appropriate. In lay words, any project undertaken by NNSA/NSO and its contractors must be reviewed to ensure the environmental impacts are adequately analyzed and documented and that the best environmental decisions are made while still accomplishing the mission.

At NNSA/NSO this is accomplished through the use of a NEPA checklist that is completed by the project or program manager. Potential environmental impacts are listed on the checklist such as different categories of waste, air emissions, biological and cultural resources, and hazardous materials. When submitted, this checklist is reviewed by the NNSA/NSO NEPA Compliance Office to make a determination as to the level of appropriate analysis and documentation. In most cases, the NEPA checklist shows that the activity has been previously reviewed and is documented in an existing NEPA report, such as the *Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada*, established departmental categorical exclusions, or topically specific Environmental Assessments.

Occasionally, a proposed activity exceeds the analysis conducted for existing NEPA reports and additional analysis must be conducted with an Environmental Assessment or Environmental Impact Statement. In this event, the NEPA process will take several months to complete therefore it is very important for project and program personnel to engage their NEPA staff as early in their project as possible to avoid last minute surprises.

NEPA is a mandatory federal regulation that applies to all NNSA/NSO activities. The NEPA coordinators in every organization are always available to help project and program managers get through the process as quickly and easily as possible.

BN	**Orin Haworth**	295-7374
	Betty Calman	295-5453
SNJV	**Barbara Quinn**	295-2488
WSI-NV	**Richard Shook**	295-6368
DTRA	**Tiffany Lantow**	295-7645

The NNSA/NSO NEPA Compliance Officers are:

Michael Skougard	NEPA Compliance Officer	295-1759
Linda Cohn	Deputy NEPA Compliance Officer	295-0077

News Briefs

STL scientists assist with mudslide recovery

The La Conchita, California, mudslide on Monday, January 10, 2005, provided Special Technologies Laboratory (STL) scientists an opportunity to use their "rescue radar" technology. Working with Ventura County and Los Angeles County Fire and Rescue personnel, **Rory McCarthy**, **Curt Allen**, **Steve Koppenjan, Howard Wong,** and **Matthew Streeton** spent the better part of three days in La Conchita, approximately 25 miles south of STL. The proto-type "rescue radar," which was designed and built by STL engineers, is designed to detect the motion associated with a human breathing who may be buried in rubble.

"When we were informed of the landslide, our initial technical assessment indicated a low probability of success for our radar because of the moisture and soil type at the site – radar has a tough time penetrating moist soils," said **Mike Martinez**, STL manager. "Later we became aware that excavations had exposed protruding building structures, which could offer channels to voids where people could be trapped. This situation improved the chances of success for our radar."

photo courtesy of Mike Martinez

The news media listens in as STL scientists (pictured from left to right) ***Curt Allen***, ***Rory McCarthy*** *and* ***Matthew Streeton*** *brief California Congresswoman* ***Lois Capps*** *on the radar.*

The radar system became an integral part of the search operations and was used in conjunction with cadaver dogs in that the dogs would identify a suspect site where the radar could be used. The system was briefed to several search and rescue organizations and the local congressional representative.

"Although we did not find anyone," said McCarthy, STL Search Team leader, "it was a very fulfilling experience and provided a focus to improve the system for the future."

New Mexico senator visits Nevada

by Amanda Meixel

New Mexico Senator **Pete Domenici** made a brief public appearance in Las Vegas on December 13, 2004, to promote his new book. Bechtel Nevada, Bechtel SAIC Company, Eagle Alliance, the Nuclear Energy Institute, Women in Nuclear, and others sponsored a public book-signing event at the Atomic Testing Museum located on the campus of the Desert Research Institute. The event also included remarks from the senator and a small reception. Special guests included Nevada Congresswoman **Shelley Berkley** and former Nevada Governor **Bob List**

A senator since 1972, Domenici is a leader in nuclear matters and is known as the father of the Waste Isolation Pilot Plant in Carlsbad, N.M.

In his book, "A Brighter Tomorrow: Fulfilling the Promise of Nuclear Energy," the senator takes a proactive look at energy resources. He presents the case that nuclear power must be a major contributor toward reducing the world's dependence on increasingly scarce and perilously political supplies of oil and gas.

Senator Domenici's appearance was part of the Atomic Testing Museum's ongoing world affairs lecture series.

photo courtesy of the Nevada Test Site Historical Foundation

Senator Pete Domenici *signs one of his books during his visit to the Atomic Testing Museum.*

BN management changes

Several management changes have occurred at Bechtel Nevada. Those changes include:

Jeffrey P. Quintenz is the deputy general manager for stockpile stewardship programs and operations, replacing **Jim Powell** who became the president and general manager in September.

Jo Ann Beall is the manager of executive support. She reports to Powell and Principal Deputy General Manager **Brian Sheridan**.

Tim Green is the human resources manager and **Lorraine Marshall** is the employee relations manager. Both report to Assistant General Manager for Human Programs and Communications **Mary P. O'Donnell**

Dale Pendry is the manager of the Technical Facilities department. He reports to **Tom Monk**, NTS Operations deputy manager.

Within the support team for the U1a Complex, **Kevin Breen** is the BN operations manager; **Chuck Garrett** is the operations and maintenance manager; **Rex Livingston** is the operations and maintenance superintendent; and **Paul Lipkowitz**, **Natasha Checkovich**, and **Audrey Hurst** are the lead systems engineers for electrical, mechanical, and mining respectively.

Gary Lucke is the manager of design and engineering.

Janet Wharton is the information manager for the Administrative Resources Department (ARD). **John Kent** is the supply chain manager, and **Jerry Pettis** is the ARD manager.

Leann Tichenor is the project manager for the Test and Evaluation – Chem/Bio project and **Sandra Lamb** is the new chief of staff for the Homeland Security Technology Program. Both report to Homeland Security Technology Program Manager **Richard J. Tighe**.

Test Cell A deactivation and decommissioning

by Nick Duhe

The Industrial Sites Project is gearing up for the first of two Test Cell remediation efforts with the deactivation and decommissioning (D&D) of the Test Cell A facility at the NTS. This fiscal year, crews working at Test Cell A will begin the complex task of removing a variety of contamination from the facility to accomplish clean closure. D&D techniques and technologies used at this facility will streamline the remediation work at the much larger Test Cell C facility, scheduled for D&D in fiscal year 2006.

Test Cell A is a compound constructed in 1959 to test the Nerva, Kiwi, and Phoebus series of rockets developed under the Nuclear Rocket Development Station program. When operations ceased in 1966, Test Cell A remained inactive for more than a decade.

In 1978, work crews launched remediation activities and removed much of the radiological contamination from the facility. Test Cell A was then identified in 1993 as a surplus facility and transferred to the Nevada Site Office D&D source group.

Remediation activities will begin this year and focus on the following contaminants of concern: Asbestos Containing Materials (ACM), used as insulation around exterior and interior pipes; Polychlorinated Biphenyls (PCBs) in light ballasts and equipment lubricants; radionuclides; mercury used in instruments; and lead used in paint and as construction components of the buildings. The following five phase cleanup approach will be used to remediate Test Cell A:

- Mitigate safety hazards by installing portable lighting and cleanup Hantavirus
- Remove hazardous materials which include: ACM, lead, mercury, radiological impacted materials, and PCB's
- Characterize and decontaminate reactor concrete pad and impacted concrete surfaces
- Demolish and properly dispose of building material, including exterior piping and exhaust stack
- Perform final radiological survey to free-release remaining concrete slab

One of the technologies to be employed in the demolition of Test Cell A will be the hydraulic processor, which is mounted on a track hoe and is capable of demolishing both concrete and metal.

Closure activities to remove these contaminants and demolish the facility will begin March 2005 and scheduled completion is September 30, 2005.

Who's guarding the secrets?

by Nancy Tufano

Let's say you are invited to a prestigious conference to address a scientific community about the physics of supercriticality. In your enthusiasm to use realistic examples to illustrate your concepts, you inadvertently provide classified information to an audience not authorized to hear it.

You are not invited to speak at any prestigious scientific conferences? Say you are making an informal presentation during career day at your child's school. You explain to the students (and anyone else in the vicinity), that you work at a secured facility at the NTS, and in an attempt to capture their full-attention, proceed to describe the facility's design information in graphic detail.

In each situation mentioned above, you disclosed information needed to protect the interests of national security, creating vulnerabilities in United States security that can be used to another nation's advantage. In either of these cases, "oops" will not get you out of trouble, nor will it mitigate any possible consequences if the information you leaked got into the wrong hands. "What am I supposed to do," you ask, "memorize every type of information that would render my documents classified?" Luckily for you, that won't be necessary. We have, working among us, a specially-trained group of employees who review all publicly disseminated material to ensure that no classified information, Unclassified Controlled Nuclear Information (UCNI), or official use only (OUO) information is inadvertently released to the public.

Derivative Classifiers

Derivative classifiers (DC) must review all material that may be and will be seen by the public in order to prevent the disclosure of any type of sensitive information. A DC reviews your material looking for any classified or unclassified information within your document and marks your document accordingly. The DC's determinations are made with the aid of classification guides to determine the classification level and category.

What constitutes sensitive information?

Sensitive information may be classified information, UCNI, or OUO information. Derivative classification makes the distinction.

There are three levels of classified information:

- **Top Secret** information is information, that when made public, would cause exceptionally grave damage
- **Secret information** consists of material that would cause serious damage if made public
- **Confidential information**, if released publicly, would cause damage

Unclassified Controlled Nuclear Information (UCNI) allows for the protection of certain design and security information concerning nuclear weapons and nuclear weapons materials. It safeguards sensitive unclassified information.

Official use only (OUO) is unclassified information that has the potential to cause damage to government, commercial, or private interests.

Information requiring review by a Classification Officer or an authorized derivative classifier:

- Nuclear explosives (for either military or peaceful use), including the use, development, testing, disposition, or storage of weapons or weapon components, U.S. or foreign
- Subcritical Experiments
- Non-nuclear testing in support of nuclear weapons programs
- Nuclear material production, processing, or transportation
- Fissile isotope production or separation
- Inertial Confinement Fusion
- Foreign intelligence information
- Treaty proposals or negotiations, including development or discussion of verification technologies or National Technical Means techniques
- Nuclear, biological, or chemical weapon proliferation or development by other countries, including analyses of capabilities, current programs, or studies of proliferation detection techniques, capabilities or detection avoidance schemes
- Weapon/military capabilities of the U.S. or other nations
- Any information derived from a classified program or activity, or having a classified application, whether or not stated
- Safeguards and security information concerning DOE facilities, including physical, computer, and information security
- Radioactive waste
- Nuclear Incident Response
- Information related to Work for Others programs, where the funding source **has not** delegated ultimate information release authority to Bechtel Nevada

The information listed below is not classified but must be reviewed prior to publication:

- Company proprietary information
- Technical information or data which is restricted from foreign distribution under U.S. export control laws and regulations
- Personal/privacy information that is restricted from public release by Federal or State privacy acts or similar regulations
- Vision and mission statements
- Organizational logos/images
- Question and Answer lists related to policies

When in doubt, check it out

If you are uncertain about any information you are about to make public, please contact **Pat Bodin**, NNSA/NSO Classification Officer, at **702-295-0611;** or Don Wright, BN Classification Officer, at **702-295-0412** about arranging a classification review.

Sustainable Development: The big picture

by Nancy Tufano

Simply stated, sustainable development is thinking about the impacts of what we do. - **Catherine McKalip-Thompson**, Bechtel Systems

Sustainable development is a philosophy that works to ensure a sustainable society. At Bechtel, it requires project planners to take into account the big picture, not just the end result. It considers the long term impacts of proposed projects as well as the establishment of economic, environmental and social benefits with lasting value.

Although Bechtel has been practicing the principles of sustainable development for the last several decades, a sustainable development task force was established in 1999. The task force is responsible for molding Bechtel's culture, and ensuring that employees address economic, environmental, and social considerations in the design and implementation of all Bechtel projects. This includes requiring the strictest safety standards and procedures to protect employees; safety has always been a paramount concern to Bechtel, and sustainable development works to ensure that safeguards are in place.

Sustainable development also entails looking outside of the company. It is a process that involves soliciting concerns from local community residents and working in partnership with those residents to reach solutions while incorporating cultural traditions and social needs into all project planning. Planners must also consider environmental effects and employ methods that are environmentally friendly when harnessing natural resources and raising the worldwide standard of living.

Bechtel's long and venerable history prepared it to meet the challenges of sustainable development. With construction and operation experience in all environments and geographical regions, Bechtel is aware of technical possibilities and their costs, as well as cultural and local sensitivities. Because Bechtel operates globally, it maintains a large network of lessons learned that are shared in the practice of sustainable development.

Becoming effective agents for sustainable development will require educating employees and contractors and establishing an ongoing dialog with customers. Bechtel management sees this challenge not as a cost, but an investment— an opportunity to add value, to increase competitiveness, to innovate, and to solidify productive relationships with communities throughout the world. By taking an active approach, Bechtel hopes to serve as a catalyst in its industry. Changing the way global companies think about sustainability will create a more solid foundation for future prosperity.

This feature highlights various components of the Six Sigma process at the NNSA/NSO complex. A monthly article will detail the Six Sigma process, individual PIPs, the team members associated with Six Sigma, or the anticipated benefits and cost savings associated with implementing the PIPs.

When stealing is a good thing

by LeeAnn Inadomi

The BN Corporate Communications department recently stole something from Bechtel SAIC, and they were encouraged to do so.

In the world of Six Sigma, using PIP ideas from other offices is applauded. "Replicating" a PIP is a great way to incorporate good practices from other projects. So, when Corporate Communications was thinking about PIPs for calendar year 2004, the department first wanted to look at PIPs that other communications offices had recently implemented. They enlisted the help of a Black Belt, **Lorraine Marshall**, who had access to search all Corporate PIPs.

Marshall was able to find a PIP that Bechtel SAIC had used to improve the process of collecting and distributing their daily news clips. Originally a time-consuming, labor-intensive process, Bechtel SAIC found a way to automate the process, and thereby save time and money.

BN is in the process of using the same vendor, TracerLock, to automate the news clips process. TracerLock is a company that offers automated news clipping services. They will do a daily search for news clips for BN for a very nominal charge of approximately $20 per month.

For more information on Corporate PIPs or to contact Six Sigma, please e-mail BNSixSigma@nv.doe.gov.

Beyond the call

NTS collects Toys for Tots

by Davey Matthews

Over 1,300 local needy children had a happier Christmas thanks to the generosity of the BN NTS Operations employees. The first Toys for Tots campaign ever conducted by NTS Operations resulted in the collection of 1,323 toys, including 40 bicycles, tricycles and wagons.

The campaign began in October when collection barrels were placed in 40 locations across the site and at the Cheyenne, North Las Vegas and RSL-Nellis facilities. Each of the departments within NTS Operations conducted not only their own fund-raising but also supported a site-wide effort. In addition to collecting new unwrapped toys, activities included raffles, bake sales, and silent auctions used to raise money. The funds were then used to purchase additional toys to add to the mountain of toys donated by employees.

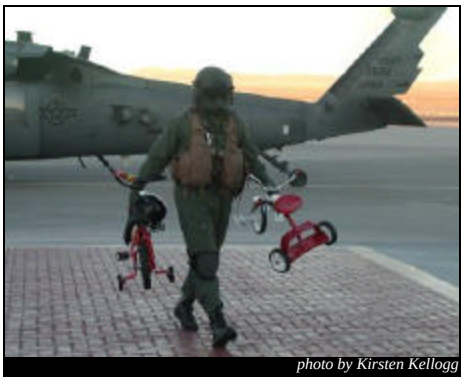


photo by Kirsten Kellogg

A Nellis Air Force Base helicopter pilot unloads a bicycle and a tricycle after picking up toys at the NTS.

According to Staff Sergeant **Fred Krailert**, the U.S. Marine Corps Reserves Toys for Tots Coordinator for the southern Nevada region, NTS Operations was the number one single contributor and important to the success of the campaign this season.

"Contributions were down but the number of requests for toys had increased," said Krailert. "The need was very great, not only in Las Vegas but in surrounding communities."

The NTS campaign ended with a special helicopter pick up and delivery December 15 of the first load of toys to Santa, courtesy of the Sixty-sixth Rescue Squadron of the 563rd Rescue Group, stationed at Nellis Air Force Base. While on a training mission, the crew of a Blackhawk landed at the NTS Desert Rock Airfield to take aboard several barrels filled with toys. Waiting for them at Nellis was **John Howanitz**, NTS Operations manager, flanked by Marines in full-dress uniforms, ready to accept delivery of the toys. Also on hand were three local television news crews, a photographer from the Las Vegas Review-Journal, and, of course, Santa Claus, portrayed by **John "JD" Daniels** of the Emergency Services and Operations Support Department.

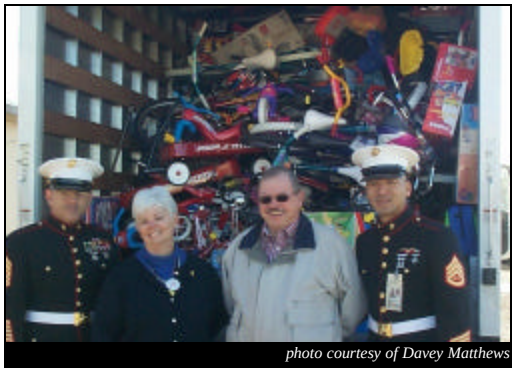


photo courtesy of Davey Matthews

*U.S. Marine Corps Reservists 1st Sgt. **Joseph Kapala** (left) and SSgt. **Fred Krailert** pose with NTS Operations Toys for Tots Coordinator **Davey Matthews** and NTS Operations Deputy Manager **Tom Monk** in front of the truck of toys donated by NTS employees. In addition to recognizing the efforts of each of the coordinators, the Marines presented the "Commander's Award" to Monk, who accepted on behalf of NTS Operations.*

Krailert and First Sergeant **Joseph Kapala** journeyed to the NTS December 16 to pick up the remainder of the toys, packing a 15-foot truck from floor to ceiling. They also presented certificates of appreciation to the 22 coordinators who worked hard to make the campaign a success and a "Commander's Award" to NTS Operations, acknowledging all of the support for the Toys for Tots campaign.

Toys for Tots began in 1947 when a group of Marine Reservists in Los Angeles collected and distributed 5,000 toys to needy children. It became a national campaign in 1948 and has been successfully conducted every year since.

Many thanks to all of the department coordinators for making the NTS Operations Toys for Tots campaign such a huge success:

Construction Department – **Pamela "PJ" Jackson and Darla Livingston**; Emergency Services and Operations Support Department – **Adrienne Grant, Lisa Goodfellow, Cindy Heller, Dawn Leo, Claudina Luthiger, Cheryl Shoemaker,** and **Connie Willson**; Engineering Department – **Lousie Kubeldis** (NTS) and **Jennifer Rolls** (Cheyenne); Execution Services – **John Birkland** and **Greg Ward**; General Facilities – **Steve Mortensen**; Maintenance – **Terri Corlett-MacDonald, Carol Joy Schwartze, Andy Testin, Lou Tharin,** and **Dale Walsh**; Nuclear Operations – **Margaret Felder**; Technical Facilities – **Joe Holden**; Work Management Department – **Paula Vaught**

In addition, with RSL Assistant General Manager **Roger Flanagan's** support, a collection barrel was placed at RSL-Nellis and was filled to overflowing, including three bicycles.

Face-to-Face

Name: Pete Sanders

Company: DOE Nevada Site Office

Job Title: Offsites Task Manager

Hometown: Freeport, Illinois

Hobbies/
Interests: Hiking, camping, and walking my dog

Carl Gertz retires

After many years of dedicated service to DOE, **Carl P. Gertz**, assistant manager for Environmental Management, retired on January 1, 2005. Gertz was responsible for implementation of the $100 million annual environmental restoration and waste management program at the NTS.

Prior to this appointment, Gertz served as acting assistant manager for Environmental Restoration and Waste Management. He also served as director for the Waste Management Division.

In 1987, Gertz was named DOE's project manager of the Yucca Mountain Site Characterization Project. He managed DOE's evaluation of Yucca Mountain as a potential site for the nation's first repository for commercial spent fuel and high-level radioactive waste.

photo courtesy of Environmental Management

Carl Gertz

Prior to 1987, Gertz was manager of the Isotope Separation Project Office at DOE's Idaho National Engineering Environmental Laboratory (INEEL). He headed the effort to design, develop, and operate a facility which uses lasers to separate isotopes of plutonium. He also served as deputy assistant manager for Nuclear Programs, involved with the management of spent nuclear fuel and high-level radioactive waste from Defense Programs at DOE'S INEEL.

For 16 years, before joining DOE, Gertz worked in the inter-mountain states for the Boeing Company in missile site development, installation and construction management.

Gertz will use his retirement wisely – by traveling and spending quality time with his wife, children, and grandchildren. Golfing and skiing will continue to be a part of his regular itinerary as well as officiating both high school football and basketball. He looks forward to retirement and plans to enjoy every minute of it!

Terry Wallace retires

Terry L. Wallace, NNSA/NSO assistant manager for safety and security programs, retired in January 2005 after 14 years with DOE. He was responsible for the management and oversight of safeguards and security; environment, safety and health; and performance assurance.

Wallace began his career with the Department of the Navy as a nuclear shift test engineer, physicist, and reactor systems engineer. In 1984, he transferred to the Naval Sea Systems Command in Washington, D.C., where he worked in the Ship Design Directorate as a program manager and design engineer. Wallace began working in the private sector in senior engineering and management positions with the Tactical Electronics Defense Division of GTE. He provided technical expertise on Air Force and Navy contract work from 1987 to 1991.

photo courtesy of NNSA/NSO

*NNSA/NSO Manager **Kathy Carlson** (left) says goodbye to **Terry Wallace** upon his retirement.*

In 1991, Wallace joined DOE serving as a facility representative at the Los Alamos Tritium and Nuclear Facilities in Los Alamos, New Mexico. He later transferred to the Kirtland Area Office in Albuquerque, New Mexico, in 1992. There he served first as assistant manager for operations and then as the DOE nuclear facilities manager for all reactor and non-reactor nuclear facilities at SNL. During this time, Wallace also served as the on-site program manager for the DOE's Medical Isotope Program responsible for the production of molybdenum 99 and iodine 125.

Wallace was transferred to NNSA/NSO in 2000 as the deputy assistant manager for technical services and was assigned responsibility for Integrated Safety Management as well as the development of several key safety programs including Nuclear Safety and supporting programs. He was named assistant manager for technical services in January 2003 and became responsible for management and oversight of engineering and asset management; environment, safety and health; safeguards and security; nuclear safety; quality assurance; and the Facility Representative Program.

For the next several months, Wallace plans to finish unpacking and says he has a whole new appreciation for cardboard and packing paper! After settling in, he plans to do some contracting work.

"I'm especially looking forward to doing the things I never seem to have time for now," said Wallace. "With regards to NNSA, it's an experiment in progress – I hope it succeeds! I have really enjoyed working with BN over the past several years. They made excellent progress in a number of difficult areas. BN management and staff should be justifiably proud of their accomplishments. I will miss you all."

Partnering for Education

BN focuses on schools

*BN Focus School Coordinator **Jennifer Morton** presents donation checks to Jim Bridger Principal **Milana Winters** and Kit Carson Principal **Linda Gipson**. Each school received $4,000 to use for various educational tools and activities.*

photos courtesy of Jennifer Morton

Student holiday art contest

by Sheril Hamlin

In a continuing effort to promote self-esteem and to explore and encourage student creativity, Quannah McCall Elementary School students were asked to participate in a holiday art contest. **Elia Martinez**, a fifth grade student at the school, won top billing and had the honor of having her creation adorn the WSI-NV holiday card.

This marks the fourth year of this annual competition, and each year participation increases dramatically over previous years. Every student received special recognition for their efforts, which included a certificate along with a keepsake card displaying their handy-work. WSI-NV looks forward to next year's competition knowing even more students will become involved.

*The winning creation by **Elia Martinez***

Warehouse safety awareness

by Lisa Ortowski

Do you need to visit either of the Property Control Department warehouses: A-2 at the North Las Vegas Facility or 23-160 in Mercury? Do you know the location of the visitor entrance? Are you aware of the safety and security requirements for these facilities?

A visitor is anyone who is not a BN employee assigned to the warehouses, including craft or laborers from other facilities and areas, vendors, delivery drivers, and other BN, NNSA/NSO and contractor employees. All visitors must enter the warehouse through the main door or the entrance marked "Visitors," not the bay doors or back entrances. Visitors must sign in at the front desk and wait for an escort to be assigned by the supervisor, facility owner or general foreman. Visitors must be escorted at all times for safety and security purposes. Your escort will keep you safely away from the work flow and path of forklifts. Maintenance workers must sign in with the facility owner before proceeding with their work. If an unescorted person is discovered in the facility, all work must stop immediately, and the person will be escorted to the nearest supervisor.

Many areas at the NTS, including the warehouses, are designated as personal protective equipment areas and are not the place to make a fashion statement. Safety shoes are required in all warehouse and construction areas, and hard hats and safety glasses are required in many areas. Skirts, Capri pants, tank tops, shorts, sandals or heels, and even your best sneakers are a safety hazard in the warehouses. Dirt, rocks, and uneven surfaces can make for difficult walking in street shoes. Safety shoes will protect your feet and save your toes should something fall. Long pants and shirts with sleeves protect you from blowing dirt, intense sun, and the spiders and other critters common to the area.

Visitors are always welcome, but to comply with safety and heightened security requirements, please follow the above instructions. If you have questions, please call BN Property Specialist **Lisa Ortowski** at **(702) 295-5037**.

Brush fires caused by catalytic converter

by Doris Burnett

Lesson: Vegetation lodged between the skid plate and the catalytic converter of a Ford Expedition ignited causing fires underneath the vehicle at the NTS. When driving off-road, or on a road that is over grown, the undercarriage of vehicles must be inspected on a regular basis to ensure that vegetation has not become trapped.

Two fires occurred at the NTS within a two-week period involving the same vehicle. In the first incident, a SNJV field crew had returned to the field office after conducting preliminary site assessments. Upon exiting the vehicle, the crew noticed smoke and embers coming from the undercarriage. When they inspected the undercarriage, there were flames around the catalytic converter. The fire was extinguished with a fire extinguisher and pieces of sagebrush removed from the undercarriage. The following week, the crew was at a remote location driving on an unimproved road in the same vehicle. A passenger smelled smoke coming from the vehicle. The vehicle was stopped immediately and the undercarriage inspected. There were small flames above the skid plate around the catalytic converter due to the presence of accumulated sagebrush.

Historical data on past vehicle fires were reviewed and it was discovered that three previous fires had occurred in 2002. Two involved Chevrolet Trailblazers and one involved a Ford Expedition. The company issued a Lessons Learned in April 2002. Research of the DOE Lessons Learned database found a similar incident involving a Ford Explorer had occurred at Hanford.

All personnel driving at the NTS should:

- Drive on existing or two-track roads.
- Equip vehicles used for off-road job assignments with an appropriate fire extinguisher, a shovel, water, first-aid kit, foul weather gear appropriate for the season of the year and a flashlight.
- Check underneath vehicles before, during and after the trip is completed to remove any debris or brush lodged near the catalytic converter or exhaust system.
- Check the vehicle design to be sure it is high enough to provide adequate clearance to prevent brush fires.
- Contact 911 with a company cell phone or use the Radio Emergency Button on a vehicle-mounted radio if there is an emergency.
- Contact the Operations Coordination Center at **(702) 295-4015** before proceeding into remote locations at the NTS to (a) request information on closed roads, (b) obtain access through barricades, and (c) receive information on weather and road conditions.
- Ensure two people and one radio, at a minimum, are used for operations conducted more than 500 yards from the vehicle at a remote location.
- Complete radio checks with the supervisor upon arrival, once every two hours, before departing the work location, and at the end of the duty shift if the job is not finished.

For more information on this and other Lessons Learned, contact **Doris Burnett** at **(702) 295-5580**.

MILESTONES

Bechtel Nevada

40 years	*Las Vegas* – **Michael Kessler**
30 years	*Las Vegas* – **Martin Burk, Edward Cowle, Kam Yee Ng, Christina Powers**
25 years	*Las Vegas* – **Michael Clark, Robert Corrow, Duane Swenson**; *Nevada Test Site* – **Dennis Chapman, Daniel Solaegui**; *Los Alamos Operations* – **Carl Carlson**
20 years	*Las Vegas* – **Emma Delgado, Janice Langley, Carole Schoengold, Yvonne Townsend**; *Nevada Test Site* – **Jack Meeker, Regina Woolard**; *Europe* – **Richard Waters**
15 years	*Las Vegas* – **Denise Alvarado, Vicki Faglier, Elizabeth Kirkwood, Deron Linkenheil, Patrick Sawyer, Jack White, Rita White, Steven Zellers**; *Nevada Test Site* – **Robert Haney, George Hawn, John Snow, Joseph Tadlock**; *Special Technologies Laboratory* – **James Tinsley**
10 years	*Las Vegas* – **Emma Fox, Cheryl Oar, Sherman Wu**; *Nevada Test Site* – **Joseph Merritt Sr., Kenneth Sampson, Gabriele Tankersley**
5 years	*Las Vegas* – **Yvonne Arreguin, Sonia Bonilla, Maureen Hunt, Beth Knotts, Cynthia Lloyd, Michael Payne, Feltus Lee Scott, Gayla Seymon, Dennis Waldrop**; *Nevada Test Site* – **Troy Belka, Gerald Curtis, Aaron Fisher, Kim Foster, Michael Garland, Thomas Holleran, Ernie Ixtlahuac, Coreen Kramer, Daniel Michaels, Tina Smith, Marcus Vitiello**; *Livermore Operations* – **Terry Richardson**; *Special Technologies Laboratory* – **Mark Bouscaren, James Buford, Michael Buss, John Wesolowski**
New Hires	*Las Vegas* – **Jason Backlund, Maureen Borer, Robert Geisinger, Chana Griffin, Bradford Janota, Mark Krauss, Stacey Mahoney, Kurt Muse, Andrew Rosenman, Robert Weis, Lisa Xee Yuan**; *Nevada Test Site* – **Amelia Arceo, Patricia Bowman, Unhei Cho, Dewey Cooper, David Goble, Belinda Haag, David Kaley, James Keith, Ricker Miles, Gayle Potts, Philip Ralphs, Mark Smith, Mildred Stone, Virginia Virgil, Mark Wheeler, Katherine Wood**; *Los Alamos Operations* – **Brian Cata**; *Special Technologies Laboratory* – **Charles Bamer, Peter Ryan, John Stein**

Desert Research Institute

25 years	**Debora Noack**
15 years	**Douglas Lowenthal**
5 years	**Susan Desilva, Kenneth Garey, Larry Goins, Linda Hafen, Victoria Johnson, Giles Marion, Katarzyna Rempala, Jeffrey Saunders**

Los Alamos National Laboratory

20 years	**Julie Carpenter**

Ruchman and Associates, Inc.

5 years	**Priscilla Cotto**

Wackenhut Services Incorporated - Nevada

40 years	**Ira Matlock, Robert Ready, David Russell, L. Sommers**
30 years	**Vincent Cummings, Robert Fletcher, John Ross**
20 years	**Thomas Brown, Graig Newell, Arthur Richardson**
15 years	**Robert Sisterman**
10 years	**John Aguayo**

— Compiled by Kirsten Kellogg

Retirements

E. Wayne Adams – NNSA/NSO
J. Nolan Bailey – NNSA/NSO
Robert Boudreaux – Bechtel Nevada
Steve Curtis – NNSA/NSO
Carl Gertz – NNSA/NSO
Robert Heiduk – Bechtel Nevada
Kenneth Jensen – Bechtel Nevada
George Kronsbein, Jr. – Bechtel Nevada
Charles Lowery – Bechtel Nevada
Paul Niemann – NNSA/NSO
Barbara Pierce – NOAA ARL/SORD
Keith Roesner – Bechtel Nevada
Gayle Stastny – Bechtel Nevada
Stephen Trupp – Bechtel Nevada
Terry Wallace – NNSA/NSO

In Memory

Cling R. Ashe – former contractor employee
Leroy Bailey – former contractor employee
Virginia Hurlburt – former contractor employee
Joyce Kinsman – former contractor employee
Jerry Knecht – former contractor employee
Robert Miller – former contractor employee
Judy Nichols – former contractor employee
Joseph Phillips – former contractor employee
Lee Reagle – former contractor employee
Howard A. Schmidt – former contractor employee
Nannie Shirley – former contractor employee
Iosefo Suafoa – former contractor employee
Thomas Vance, Jr. – former contractor employee

CALENDAR OF EVENTS

February 11-12
NNSA/NSO's 14th Annual Nevada Regional Science Bowl. University of Nevada, Las Vegas campus. Contact **Kirsten Kellogg, BN (702) 295-1821**.

February 17
NTS Public Tour, open to interested members of the public. CP-1, Sedan Crater, Frenchman Flat, Non-Proliferation Test and Evaluation Complex, Bilby Crater, Area 5 Low-level Radioactive Waste Management Site, Apple II houses. Contact **Brenda Carter, BN (702) 295-0944**.

February 21
NNSA/NSO and contractor offices closed in observance of Presidents Day.

March 22
NTS Public Tour, open to interested members of the public. CP-1, Sedan Crater, Frenchman Flat, Non-Proliferation Test and Evaluation Complex, Bilby Crater, Area 5 Low-level Radioactive Waste Management Site, Apple II houses. Contact **Brenda Carter, BN (702) 295-0944**.

April 27
NTS Public Tour, open to interested members of the public. CP-1, Sedan Crater, Frenchman Flat, Non-Proliferation Test and Evaluation Complex, Bilby Crater, Area 5 Low-level Radioactive Waste Management Site, Apple II houses. Contact **Brenda Carter, BN (702) 295-0944**.

April 28
Take Our Daughters and Sons to Work Day. Contact **BN Workforce Enhancement (702) 295-0930**.

May 14
Family Fair. Contact **BN Workforce Enhancement (702) 295-0930**.

May 26
NTS Public Tour, open to interested members of the public. CP-1, Sedan Crater, Frenchman Flat, Non-Proliferation Test and Evaluation Complex, Bilby Crater, Area 5 Low-level Radioactive Waste Management Site, Apple II houses. Contact **Brenda Carter, BN (702) 295-0944**.

May 30
NNSA/NSO and contractor offices closed in observance of Memorial Day.

Declassified Film Showings
For information on declassified film showings at NTS CP-1, call **(702) 295-4015**.
For information on declassified film showings at NTS Yucca Mountain, contact **Rod Rodriguez (702) 295-5825**.

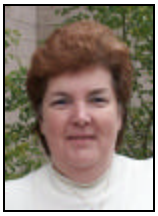
Upcoming Conferences, Meetings, and Trade Shows

February 27-March 3
Waste Management Symposium (WM'05). Tucson, Ariz. For additional information, visit www.wmsym.org/deafult.asp.

April 20-24
2005 Forensic Engineering Symposium. New York Hilton and Towers, New York, N.Y. For additional information, visit www.asce.org/conferences/forensics05/.

April 25-27
National Contract Management Association World Congress 2005. Hyatt Regency/Phoenix Civic Plaza, Phoenix, Ariz. For additional information, visit www.ncmahq.org/.

Face-to-Face



Name: Barbara Smith

Company: Stoller-Navarro Joint Venture

Title: Business Manager

Hometown: Utica, New York

Hobbies/
Interests: Gardening, scrapbooking, travel and camping

March is:

Keep America Beautiful Month

and

National Child Abuse Prevention Month

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