

# SITELINES

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## Contents

<a href="#">TRU Waste Celebration</a>	1
<a href="#">NNSA Extends BN Contract</a>	1
<a href="#">ATLAS: Produces Electrifying Data in First NTS Experiment</a>	1
<a href="#">Atlas continued</a>	2
<a href="#">Powell Presents GM &amp; Performance Awards</a>	3
<a href="#">Awards continued</a>	4
<a href="#">Great Attitudes Precede Great Opportunities</a>	5
<a href="#">FLC Provides Broad Forum for Technology Transfer Projects</a>	6
<a href="#">NNSA/NSO Launches New Internet Site</a>	6
<a href="#">Bechtel Nevada Welcomes Three Blackbelt Candidates</a>	7
<a href="#">Lessons Learned on High Hazard Operations</a>	7
<a href="#">The Occupational Medicine Department Focuses on Colon Cancer</a>	7
<a href="#">BN's First Fellow Chosen for Focused Expertise</a>	8
<a href="#">Milestones</a>	9
<a href="#">Retirements</a>	9
<a href="#">Calendar of Events</a>	10

## TRU Waste Celebration

by Katherine Schwartz

There is a TRU reason for celebration at the Nevada Test Site (NTS) Area 5 Waste Examination Facility (WEF). On July 28, 2005, Bechtel Nevada hosted a function to commemorate the dedication and hard work of every employee who assisted in the completion of the legacy transuranic (TRU) waste drum campaign in Area 5. The Department of Energy (DOE) also gave out certificates to all of the employees involved in the campaign.

At the event, Nevada Site Office Acting TRU Project Manager **Joanne Norton** noted that "the Nevada Test Site Glovebox is one of the leading activities for TRU waste in the Department Of Energy Complex. We are proud of meeting the milestone of completion of characterization of all legacy waste drums stored at the NTS for 30 years."

**Wayne Johnson**, assistant general manager for Environmental Management at BN, was equally pleased.

"The completion of this important characterization effort was an outstanding collaboration between the Nevada Site Office, Bechtel Nevada, and the Central Characterization Project," said Johnson. "All parties worked closely and effectively together to meet this important milestone."

Within the WEF, waste specialists perform several separate characterization processes on the TRU waste. Designated waste is processed through the Visual Examination and Repackaging Building (VERB) Glovebox, which is operated by BN. This device allows personnel to open, inspect, sort, and repackage TRU waste without making direct contact with it.

For transport, the Waste Isolation Pilot Plant's (WIPP) Central Characterization Project collaborates with the Nevada Site Office by providing mobile vendor units, which allow the drums to be shipped safely and securely to WIPP, located in Carlsbad, N.M. By the end of September 2005, approximately 40 shipments of TRU waste will be made to WIPP.

"Use of the Central Characterization Project for characterization of the Nevada Test Site legacy drums was instrumental in meeting our milestone," affirms Norton. "This is also due to the committed efforts from all of the dedicated project managers and employees."



Photo courtesy of Joanne Norton

Members of the TRU team at the celebration. From left to right: **Steve Mellington**, NNSA/NSO AMEM; **Cynthia Rivera** BN DGM; **Joanne Norton**, acting TRU project manager; **Frank DiSanza**, Waste Management division director; **Ingrid Siddoway**, former BN TRU project manager; and **Wayne Johnson**, BN AGM.

## NNSA Extends BN Contract for Three Months

The National Nuclear Security Administration (NNSA) notified Bechtel Nevada (BN) on Aug. 15, 2005, that the current BN contract, which expires Sept. 30, 2005, will be extended through Dec. 31, 2005. This three-month extension, with an option to extend an additional three months if required, will allow for continued operations until the solicitation for the new contract is completed. In notifying BN of the extension, the NNSA said the new contract is not expected to be awarded before Sept. 30, 2005.

## ATLAS: Produces Electrifying Data in First NTS Experiments

On July 27, 2005 at the Nevada Test Site (NTS), scientists successfully generated a current approximately four times greater than all the electrical power on Earth.

The Atlas pulse-powered generator discharged nearly 19 million amperes of electrical current through an aluminum cylindrical shell, or liner, about the size and shape of a tuna can. The current caused the liner to implode at extreme speeds, with unrivaled symmetry, precision and reproducibility. This experiment, and two additional experiments conducted in August 2005, at the Atlas Pulse Power Facility produced data to better understand the conditions and reactions of nuclear weapons.

## Atlas facility

continued. from page 1

Atlas works as a giant power amplifier, using energy that accumulates slowly and is stored in the machine's capacitor banks for sudden release into the liner and target. As the electrical current surges through Atlas, it accelerates materials to velocities well in excess of that required to escape Earth's gravity (as high as 22,000 miles per hour), and generates pressures equivalent to millions of times that of Earth's atmosphere. During the few millionths of a second that it is operating at full performance, the tremendous electrical output of Atlas is approximately three to four times that of the world's total electric power production (4 trillion watts).

The goal of this first experiment at the NTS was to demonstrate that Atlas is capable of the implosion quality achieved in experiments conducted three years ago at Los Alamos National Laboratory (LANL), the site where Atlas originated. During those three years, improvements in the design tools used to create the implosion, the fabrication tools used to build the hardware, and the diagnostic tools used to measure the results made this experiment one of the best-predicted and best-understood high-precision implosion experiments ever conducted. This predictability is crucial to characterizing the behavior of materials at extreme conditions in a nuclear weapon. Detailed data produced by Atlas is necessary to validate the sophisticated computer codes used by scientists in certifying U.S. nuclear weapons in the absence of nuclear testing.

Scientists and personnel from LANL, the National Nuclear Security Administration Nevada Site Office, and Bechtel Nevada used the Atlas Pulse Power Facility at the NTS to perform this highly-advanced physics experiment proving that Atlas is ready to support the certification of the nation's nuclear weapons stockpile.

Atlas was designed and built in Los Alamos, New Mexico. The project began in 1993 as part of the Department of Energy's (DOE) Stockpile Stewardship Program to maintain the integrity of the nuclear stockpile in the absence of all nuclear testing. Construction on Atlas started in 1995 and completed in 2000. Pulse power testing experiments began in September 2001. Sixteen total physics experiments were conducted until September 2002. Shortly after the last physics experiment in Los Alamos, Atlas, under direction of Congress, began operations to relocate to the NTS. The machine was disassembled and relocated to a new 14,000-square-foot high-bay in Area 6 of the NTS built especially to house the machine.

The physical environments produced by Atlas enables a wide range of safe, reproducible and controllable experiments in areas of basic science and civilian technologies that have no significant impacts on the environment in an era that precludes nuclear weapons testing. The extreme conditions of high energy density, strongly coupled plasmas, and high magnetic fields have potential applications for understanding planetary physics, condensed-matter physics, fusion-energy research, and astrophysics.



The Atlas machine at the Nevada Test Site is 80 feet in diameter and is comprised of a pulse power system which includes 12 Maintenance Units.

## Face-to-Face

**Name:** Beth Hagaman  
**Company:** Wackenhut Services Inc.  
**Job Title:** Senior Payroll Clerk  
**Hometown:** Detroit, Mich.  
**Hobbies/Interests:** Motorcycling, swimming, building off road vehicles, going to the movies



### Key to Acronyms

The following acronyms appear frequently in *SiteLines*:

BEEF	Big Explosives Experimental Facility
BN	Bechtel Nevada
CTOS	Counter Terrorism Operations Support
DAF	Device Assembly Facility
EM	Emergency Management
EM	Environmental 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
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



# Powell Presents General Manager's and Performance Awards

At his August 2005 all-hands meetings, Bechtel Nevada (BN) President and General Manager **James E. Powell** recognized the superior performance of the following employees by presenting them with the BN General Manager's Awards and/or BN Performance Awards.

The Performance Awards recognize individual employees and teams that demonstrate significant technical and/or operational performance that is above and beyond expected levels. The General Manager's Award recognizes extraordinary performance of individuals who are superior performers, consistently excel at meeting challenging commitments through work efforts, enhance customer service, or apply best practices.

## PERFORMANCE AWARD WINNERS:

### Joseph Sears

When Joe noticed that a fellow employee was pale and seemed weak, he drove the reluctant individual to get medical help. The employee had suffered a double stroke, and later expressed his appreciation for Sears' concern and said "Joe possibly saved my life."

### JASPER gun technicians

**Jeffrey Cates and Donald Western**

During a pre-shot preparation of an accumulator tank, Jeffrey and Donald noticed an abnormality of the bolts used on the tank. They notified management and engineering. The manufacturer had made faulty calculations and because of the astute observation of these employees, a potential failure of the bolts on the pressure system was averted.

### Team Fire Water

**Kenneth Dahn, Kendall Darroch, Janell Darroch, Paul Rice, Mike SeEVERS, and Ted Turney**

Water has been leaking from a number of underground valves at the Test Site. This team came up with a tool to tighten the packing gland nuts from the surface. It is estimated that if 25 percent of these leaks can be fixed, it could save more than \$300,000 per year.

### Warehouse Creation Team

**Sharon Banta, Denise Bernett, Fred Garcia, Gary Hanson, Johnny Jones, John Schoppmann** (received General Manager's award)

This team was charged with creating a warehouse to support all of the NTS Facilities. The result of this effort has provided a very clean, well-stocked facility providing material and equipment staged, stored, and ready to issue.

### Deborah Mellor

Over the past year, Debbie has planned and implemented the complete reorganization of the BN Emergency Services and Operations Support Emergency Plan and the associated Emergency Planning and Response Manual. The new manual eliminated five company directives and will streamline organizational procedures.

### Deployable Satellite Communications System

**Chris Engebretsen, Joseph Hassen, David Lunder, and Bart McGough**

This team was tasked to deliver a proof of concept of a fully operational Deployable Satellite Communication System for DOE Headquarters and the DOE Emergency Response community. Their solution featured leading-edge technologies and design concepts in satellite communication and network design.

### Michelle Murphy

Regulations require BN to perform arc flash and hazard analysis and calculations on all electrical equipment, in order to protect employees from potentially fatal incidents. Michelle developed an innovative method to perform these calculations that eliminates the need for thousands of equipment calculations, field surveys, and drawing updates. A Six Sigma process improvement for this process estimates the cost savings to be \$1.8 million.

### National Ignition Facility First Wall Installation Team

**Bill Bardsley, John Duncan, John Grinold, Steven Huber, York Lee, Sky Marshall and Kris Work**

The First Wall team was able to plan and execute the complex and completely one-of-a-kind installation of a multi-layered, three-dimensional, 12,000-piece puzzle inside of a sphere. This required hundreds of critical path decisions and a material management plan that handled over 20 truck loads of palletized hardware.

### Pinnacle Team

**John Buckley, Brian Maddux, Matt Streeton, and Howard Wong**

The Pinnacle Team, through technical innovation and hard work, has developed and delivered a sophisticated communications system that far exceeded the performance requirements. This system increases the government's capability to collect information that can be used to combat terrorism. This system has become the cornerstone of the customer's program.

## GENERAL MANAGER'S AWARD WINNERS

### Waste Examination Facility Team

**Marcus Brown, Kenneth Bertrand, Louis Gregory, and Terry Ploeger**

The team overcame significant equipment and administrative issues while maintaining a demanding production schedule. They supervised field efforts to repair the Central Characterization Project Head Space Gas Sampling equipment and identified and corrected long-standing safety basis issues.

### Waste Operations Section

**Don Cox, Mike Curtis, Danny Ellis, Samuel Jefferson, Samuel Kilpatrick, Coby Moke, Sharon Nanez, Harry Perry, Greg Schmett, and Karen Williams**

The Waste Operations Section was challenged with an unfunded regulatory mandate to line the A-23 primary sewage lagoon. Their innovative solutions resulted in the liner being placed into use within the required time frame allowed, and they performed a project estimated at \$1 million for \$400,000.

### Brian Barbero

Brian was recognized for his instrumental role in maturing the BN Contractor Assurance Program. His efforts have contributed to BN's success to develop and implement an approach to Contractor Assurance. This includes a method to scope management assessments based on identified risk and associated mitigation.

### Cherri French

Cherri was recognized for her role in developing the Contractor Assurance Quarterly Analysis Report. This new initiative is provided to the NSO to demonstrate BN's performance and improvements in contractor assurance.

### Robert McCook

Robert was recognized for outstanding leadership in developing and maturing the Contractor Assurance, Price Anderson Act, and Quality Assurance programs. He continually goes above and beyond the call of duty in areas including quarterly reporting, lessons learned, and independent assessments.

### Electronic Qualification Card Team

**Kathryn Kimberlain, Patricia Lorenz, Fred Williams, and Lisa S. Yuan**

This team conceived and developed a Web-based application known as the Electronic Qualification Card, to replace paper documents used to document qualifications under BN's Facility Manager/Owner program. The new system streamlines the process and establishes a better method to monitor and audit qualification records for accuracy.

**Gregory Doyle** - Environmental Management, Science and Technology, Geotechnical Sciences

Greg was awarded for contributions to developing in-house geotechnical expertise and supporting various BN initiatives. These included providing the foundation, engineering, and design work for the Radiological/Nuclear Countermeasures Test and Evaluation Complex and classifying soils in accordance with OSHA requirements for construction excavations.

### Remote Sensing Laboratory Team

**Lynne Christel, Edwin Doak, and Dr. Richard Pollina**

These individuals provided critical support to the war on terrorism by providing analytic and technological support to the Department of Defense. They identified and evaluated sensors and sensor collection operations, and updated classified databases of sensors used by the military as important reference tools.



JASPER gun technicians (from left to right) **Don Western** and **Jeff Cates** stand next to **Jim Powell**.



Team Fire Water. From left to right, **Paul Rice, Kenneth K. Dahn, Janell Darroch** and **Kendall Darroch** stand next to **Jim Powell**.

Photos courtesy of Jennifer Morton



## Powell Distributes Awards



continued from page 3

### P800 Classified Project

**Freya Hayes, Michelle Miller, and Chuck Schaefer**

P800 is a unique project with special needs and potential for growth. In just three months this team brought the project back on-line and up-to-date.

### STARS Implementation Team

**Donna Belt-Campbell, Jill Donohue, Stephen Felgar, Jack Huang, Shari Lanzalaco, Brenda Moore, Jim Scherr, Jason Smylie, Naomi Sperling, Jon Takebayashi, Ed Woodward, and Mac Woolard**

The Standard Accounting and Reporting System (STARS) is the cornerstone of DOE headquarters "Improved Financial Performance Initiative." The BN STARS Team was commended by DOE Headquarters for coordinating efforts across 27 DOE sites to develop and test contractor interfaces.

### EDMS Phase I Implementation Team

**John Fisk, Dorothy Flangas, John Halas, Susan Johnson, Jerry Pettis, and Janet Wharton**

The Electronic Document Management System (EDMS) is a major improvement in BN's ability to manage controlled documents throughout their life cycle, which improves our ability to meet federal requirements and quality assurance standards. Now, all BN controlled documents are available electronically in a single location via the company intranet.

### Telephone Switch Lease Team

**Tony Friscia and Sharon Nanez**

BN operates the main telephone switch that provides telephone service to BN, Yucca Mountain, the NNSA/NSO, and all site contractors. Tony and Sharon facilitated vendor discounts and negotiated an upgrade to the main switch through a lease agreement, which resulted in a cost savings of \$4.5 million.

### June Maes

June was recognized for exceeding all 2005 Yellow Belt expectations with four process improvements expected to deliver a financial benefit of more than \$400,000. Her process improvements include several areas of human resources, including retiree claims processing, vacation purchase plan, and the prescription drug plan.

### Sally Perea

Sally was recognized for contributions to our successful use of Six Sigma, with process improvements that have a financial benefit of over \$1 million. As the Six Sigma coordinator for Human Programs and Communications, Sally ensures that Champions and Yellow Belts are positioned to achieve success; she is an exceptional model for all.

### Shari Morrison

Shari was recognized for outstanding contributions to the success of BN's Leadership Supply Program. She has given visibility to the program, implemented a mentoring program, increased the mentor roster by 300 percent, and personally offered 100 percent of future potential leaders a mentoring relationship.

### William Skyles - Special Activities Support Project

William was recognized for making the P300 project an outstanding model of success, and for paving the way to increased confidence on safety and performance from the Department of Defense sponsor and our Nevada Site Office customer.

### LeAnn Tichenor - Homeland Security Technology Program

LeAnn was recognized for successfully executing the classified Scorpion test campaign, a complex effort involving multiple BN organizations and 12 non-BN organizations.

### CTOS Curriculum Delivery Team

**Michael Corr, John Chapman, and Janet Hough-DiLorenz**

As part of the Counter Terrorism Operations Support Program, this team delivered a major accomplishment on behalf of our Department of Homeland Security sponsor.



The Warehouse 129 team accepted an award from **Jim Powell** (far right) for their efforts to set up the new warehouse. Pictured from l. to r: **Johnny Jones, John Schoppmann, Denise Bernett, Sharon Banta, Fred Garcia, & Gary Hanson**

Thanks to their efforts, the entire City of Boston Fire Department will soon complete training in Weapons of Mass Destruction Radiological and Nuclear Awareness.

### Anita Ross

Anita was recognized for significant contributions to the success of Six Sigma, not only in her own organization, Commercial Management and Administration, but also throughout the company. Since Anita's involvement as the Six Sigma coordinator for her organization, Champions and Yellow Belts have delivered over \$4 million in benefits to Bechtel Nevada and the customer.

### Sarah Martin

Sarah was recognized for completing five Six Sigma process improvements in the Emergency Services and Operations Support Department. Based on Sarah's work, the savings identified through the Six Sigma process provided for the creation of three major training props for the NTS Fire and Rescue Training Grounds.

### Microdigitizer Team-Los Alamos Operations

**Craig Hollabaugh and Michael Jones**

This team designed a remote-operational, multi-channel data acquisition system using standard, inexpensive software and Ethernet connections - a method of networking computers within a local area network. The design is useful to acquire data where the user needs only a Web browser to do so.

### Mark Kunish

Mark drove the Device Assembly Facility (DAF) Integrated Schedule to a successful completion. This involved developing and resource loading all activities connected with the baseline DAF programs and getting the commitment to execute the schedule from the key players, including the Nevada Site Office.

### Edward Daykin

During the past two years, Ed has been instrumental in leading the Velocimetry Team to develop a new velocimetric diagnostic system, which measures the velocity of particular objects. He guided the development of a system that is small, easily transported, less costly, and optimized for digital data recording.

### Dale Turley

Dale is being recognized for his significant contributions to BN's Stockpile Stewardship Program, specifically to develop key facilities and diagnostics to support goals in the Dynamic Shock Tasks, Shock Physics tasks and Radiographic Imagery Task.

### Bruce Marshall

Bruce is being recognized for his innovation to redefine the way the Stockpile Stewardship Program performs velocimetry measurements, particularly with the Velocity Interferometer System for Any Reflector (VISAR) diagnostic.

### Martin Fay

Marty is being recognized for his success in leading multiple projects. These include a biological sensor system, a ground penetrating radar system, and a complex electronics system, the latter being a new arena for the Special Technologies Laboratory (STL).



**Gregory Doyle** accepted a General Manager's Award from **Jim Powell** for his contributions to developing in-house geotechnical expertise and supporting many Bechtel Nevada initiatives.



# Great Attitudes Precede Great Opportunities

by Jennifer Morton

The Defense Programs Awards of Excellence Ceremony FY 2004 took place Aug. 3, 2005, at the Nevada Support Facility in the Great Basin Conference Room. **Kathy Carlson**, manager of the National Nuclear Security Administration Nevada Site Office (NNSA/NSO), **Dr. James E. Powell**, president and general manager of Bechtel Nevada (BN), and **Michael Ebert**, general manager of Wackenhut Services Inc.(WSI), were the main presenters at the ceremony.

About 400 federal and contractor employees who perform weapons-related activities received awards (see box below). The awards acknowledged significant achievements in quality, productivity, cost savings, safety, creativity, and support of the nuclear weapons program. Projects, programs, individuals, teams, sections, and groups of employees are also eligible.

"Thank you for your exemplary support of the Stockpile Stewardship Program during fiscal year 2004," said Carlson, addressing the group. "Devoting your time, talents, expertise, and initiative has enabled us to generate substantial cost savings without sacrificing safety and productivity."

Ebert also gave a heartfelt speech to his WSI award winners stating, "It's been a very long year for Wackenhut and I don't think I tell people enough what a great job they are doing. In the last nine months we've about doubled our size while supporting a national security mission that exceeded our staff capability. The entire organization responded by doing an absolutely superb job. Just to give you an example, the Protective Force members since August 2004, have been demonstrating their dedication by working six-day work weeks."

When Powell took his turn at the podium, he reminisced about the time several years ago when he received a Defense Program Award of Excellence. "I look at everyone in this room as a participant in achieving greatness," he noted. "These awards are very special, and I hope you are all as proud of your award as I was with mine."

**Mary Richards**, training coordinator from the NSO, was responsible for organizing the annual award ceremony. She said, "It is gratifying to know that these participants are a resource we can rely on to provide exemplary service and support to the Nuclear Weapons Program."

**NNSA/NSO TEAMS:**

**NNSA/NSO TA-18 Security Relocation, NTS Infrastructure Support for Disposition**

**BN TEAMS:**

**UI9as Post Shot Drilling Project, Nuclear/Radiological Advisory Team (NRAT), BN National Ignition Facility (NIF) First Wall (FW) Installation Team, Joint Actinide Shock Physics Experimental Research (JASPER) TUI Development and Support Team, JASPER Core Team, Lawrence Livermore National Laboratory Data Analysis, Stockpile Stewardship Program Financial Management Team, UIh Shaft Construction Project, Fast VISAR Improvements Initiative, and Bechtel Nevada Livermore Operations**

**BN INDIVIDUAL AWARDS:**

**F. Scott Tibbits**

**WACKENHUT SERVICE'S INC. TEAMS:**

**WSI Classified Removable Electronic Media (DREM) Team, Environment, Safety and Health Section, Electronic Systems Section (ESS), Wackenhut Human Resource, OPSEC/Security Awareness Section, Physical Fitness Unit, Plans and Operations Section, Protective Force Operations Section, Security Access Control Section (SACS), WSI Training Division**



NNSA/NSO Manager **Kathy Carlson** presents **Laura Tomlinson** an award for the NTS Infrastructure Support for Disposition team. The team demonstrated NTS readiness to support a national security emergency.



BN President and GM **Jim Powell** presents **Dennis Finney** with an award for the UIh Shaft Construction Project in recognition of successfully completing the UIh Shaft Project ahead of schedule and realizing a significant cost savings.



Wackenhut Services, Inc. General Manager **Mike Ebert** presents **Dianna Williams** with an award for excellence in visitor control, clearance processing and badging services in support of the Defense Weapons Program in Las Vegas and the NTS.

Photos by Mary Scodwell



# News Briefs



## FLC Provides Broad Forum for Technology Transfer Projects

The Federal Laboratory Consortium (FLC) is truly the only government-wide forum for technology transfer. The organization serves as a liaison between individual federal laboratories and nonfederal entities interested in developing technologies. The FLC was once the Department of Defense Laboratory Consortium, a group dedicated to improving internal communications and aiding in private sector applications. The FLC became a chartered organization through the Federal Technology Transfer Act of 1986.

The FLC provides training advice and assistance for individual technology transfer projects to its commercial and government clients. It facilitates interagency/laboratory communications and assists individual laboratories in developing technology transfer mechanisms. Communication and cooperation with private technology transfer organizations and user groups are facilitated as regional advisory groups are developed.

Governed by an executive committee consisting of officers, regional coordinators, and eight at-large representatives, the FLC is composed of all federal laboratories and R&D centers. The Office of Research and Technology Applications (ORTAs)\*- representing the scientists and engineers at their laboratory- are voting members and act as technology transfer officers at the federal laboratories. These representatives ensure that federal agencies are aware of applications of new technologies developed within their own or other laboratories. They also establish networking channels to increase the use of federally developed technology.

The FLC holds one meeting per year and conducts training for new representatives. Its bimonthly newsletter provides updates, summaries of projects, etc., and its clearinghouse routes all requests to any of the six regional coordinators with potentially appropriate technologies. The ORTA was established in each federal laboratory with 200 or more research and development (R&D) employees and assesses R&D projects for potential commercial applications. Its staff makes information on federal technologies available to state and local governments, and private industry.

"Bechtel Nevada is committed to the Technology Transfer mission of the DOE.," says **B.J. Willeford**, senior operations specialist at BN. "In doing so the Technology Transfer Team here at Bechtel Nevada uses the FLC as a tool to further that mission, firstly as an educational and training resource. The education and training is attained not only through the formal training, but also through the wealth of experience of Technology Transfer Professionals throughout the federal and university community. The FLC also provides an avenue to advertise the licensing opportunities for Bechtel Nevada. In concert with the FLC, we also advertise the same licensing opportunities on Bechtel Nevada's external Web site [www.bechtelnevada.com](http://www.bechtelnevada.com)." Go to <http://www.federallabs.org/> for more information on the FLC.

## NNSA/NSO Launches New Internet Site

By Katherine Schwartz

The National Nuclear Security Administration Nevada Site Office (NNSA/NSO) launched a completely redesigned World Wide Web site in August 2005. The new site, located at <http://www.nv.doe.gov>, includes sections on National Security, Environmental Programs, the Nevada Test Site (NTS), a library containing photos and video, news and information about NSO, and a kid's zone. Everyone who has connection to the internet can access this site.

An extensive photo and film gallery with more than 1,400 photographs and 95 films is included, and hundreds of other documents and publications are newly featured on the site. Some of the advanced features include a streamlined organization and sorting of information, electronic request forms, updated questions and answers, and an in-depth help section.

The Web site was redesigned to give NNSA/NSO a fresh new look. It is now easier for the public to access, navigate, and find specifics with ease. The site has been transformed into a multicultural device, giving an option of language translation into Spanish or German. Previously, the site received approximately 800,000 to 1.3 million hits per month and approximately eight to nine million hits per year. There were more than 500,000 hits during the first week the newly designed NNSA/NSO Web site was available.

The entire redesign effort - from conception to completion - took almost two years. Team Client Network Services Incorporated (CNSI), who is the Information Technology contractor, helped make this project possible. Federal and Bechtel Nevada employees worked on updating documents and programming information to get the site up and running.

The Web site project was led by **Earlena Giddings**, an analyst for Team CNSI. She coordinated the efforts between the contractor and customers, scheduled meetings, and kept the project on schedule.

A wide range of advanced software was used to assemble the site. Adobe Photoshop was used for the design and graphics, and Adobe Acrobat PDF was used

for all documents and reports. Microsoft FrontPage was used to build the HTML page layout, and Microsoft Share Point was used to manage and categorize the photo, film, and document libraries.

**Andrew Zager**, Web developer for the NNSA, was the primary technical designer and builder of the site. He designed the pages; created the graphics; chose the colors; set up the document libraries; implemented standard compliance codes; and imported photos, films, and documents into the Web site.

"Without Zager on the project, we would have been lost. His wide array of Web design knowledge was the backbone to this venture. His hard work and amazing efforts made this Web site what it is today," said **Darwin Morgan**, director of Public Affairs for the NNSA/NSO.

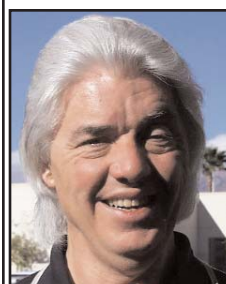
An ongoing exchange of information and ideas with the public is one of the primary goals of the NSO. Some of the ways the public can participate include becoming involved in the Community Advisory Board, taking an NTS tour, calling on the Speakers Bureau, and visiting the Public Reading Facility. Each of these programs is explained in detail on the new Web page.



### In the next issue of SiteLines:

- Congressional visit to ASP testing site/Department of Homeland Security Activity regarding Advanced Spectroscopic Portals program
- FRMAC Supports Dingo King Exercise Aviation Awards
- New York survey by RSL
- BN Mentoring Program
- Community Environmental Monitoring Program

## Face-to-Face



**Name:** Mike Kinney, Certified Safety Professional, Certified Professional Facilitator  
**Company:** Stoller-Navarro Joint Venture  
**Title:** ISMS Manager/ Price-Anderson Amendments Act Coordinator  
**Hometown:** Ottumwa, Iowa  
**Hobbies/Interests:** Motorsports announcing, voiceover acting, street rod design/fabrication, professional facilitation, collecting Native American art, and serving as a Board Member for the Lili Claire Foundation, which assists children with neurogenetic disorders including autism.

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 Process Improvement Projects, the team members associated with Six Sigma, or the anticipated benefits and cost savings associated with implementing the PIPs.

## Bechtel Nevada Welcomes Three New Black Belt Candidates

Bechtel Nevada (BN) is pleased to welcome three Black Belt candidates into the Six Sigma Black Belt program scheduled to start September 2005.

"With more than 20 well-qualified and enthusiastic applicants for these leadership positions, selecting only three was a challenging task for all involved," stated BN Six Sigma Manager **Cathi Tharin**.

Through the interview process, applicants met with a blend of reintegrated Black Belts, active Black Belts, the Yellow Belt coach, the master Black Belt, and members of the Six Sigma Operating Committee (SSOC). This group ultimately recommended three candidates, and the final concurrence for these individuals was received from corporate on Aug. 15, 2005.

**Alex Jackovich** joins Six Sigma with more than eight years of engineering experience at BN.

"I am pleased to be part of the Six Sigma effort and I am looking forward to supporting our champions and Yellow Belts in improving our processes for the future," said Jackovich.

**Michelle Lindsay** joins Six Sigma with more than four years of project controls and procurement service with Bechtel, the past three with BN. Lindsay is a certified and active Yellow Belt.

"It is a great time to be working in Six Sigma at Bechtel Nevada. The resources are in place to implement improvements and reap the benefits for the organization. I'm honored to have been selected for the opportunity to become a Black Belt," said Lindsay.

**Marcus Vitiello** joins Six Sigma with more than five years of construction experience with Bechtel. Vitiello completed Yellow Belt training in 2003.

"I am looking forward to leveraging my construction experience with the Six Sigma process improvement strategies to help Bechtel Nevada exceed customer expectations," stated Vitiello.

Black Belt candidates must successfully complete five weeks of intensive classroom training as well as two PIPs to attain certification as a Black Belt.

"We are pleased with our selection process and confident in the ability of Marcus, Michelle, and Alex to succeed as Black Belts," said BN President and General Manager **Jim Powell**. "We appreciate their commitment to take on this challenging assignment, and I look forward to supporting their development and to the benefits they will bring to BN and our customer."

Six Sigma is a process improvement methodology employed by BN to improve the delivery of BN products and services. Since its inception, more than 400 processes have been improved with a financial benefit that exceeds \$30 million. For more information about BN's Six Sigma program, please call (702) 295-9631 or e-mail [BNSixSigma@nv.doe.gov](mailto:BNSixSigma@nv.doe.gov).



Michelle Lindsay



Marcus Vitiello



Alex Jackovich

## Lessons Learned

### Be Vigilant in New or Infrequent High-Hazard Operations

Several serious events -- caused by a lack of vigilance and attentiveness on the part of those involved in conducting first-time or infrequently performed high-hazard activities -- have recently occurred across several Department of Energy sites. Failure to identify the hazards, develop appropriate actions, and remain alert to the possible dangers involved in such activities could lead to potentially catastrophic outcomes at these sites.

During the replacement of a conveyor belt in a casting line glovebox at the Y-12 Site, Enriched Uranium Operations personnel failed to apply a job-specific hazard analysis. This should have been required based on the criteria for breaching a boundary of a hazardous system. The task had not been performed in several years, and no work planning review protocols for potentially high-hazard work were used.

During a reactor restart at the Idaho National Laboratory's Advanced Test Reactor

following a shutdown, a second shutdown on high coolant pressure occurred. The facility was minimally staffed and faced a very limited recovery time. The procedure used to perform a quick reactor restart did not address possible operational difficulties, and command and control personnel did not identify error precursors before conducting critical, time-sensitive evolutions.

Causal factors for these events reveal similar inadequacies in work performed in the following areas:

#### Procedures

- Omitting steps
- Using an incorrect or unapproved procedure
- Allowing operators' process knowledge to override

continued on page 8



### The Occupational Medicine Department focuses on colon cancer

Colon cancer is the third most common type of cancer, in both males and females, in the United States. There are approximately 150,000 new cases of colorectal cancer diagnosed in the United States each year. Of these 150,000 new cases approximately 56,000 people will die.

Colon cancer can be treated, if caught early enough through testing, but there are many people who are embarrassed by the screening procedures, worried about discomfort, or afraid of the results. Remember, the most important prevention and early detection of colorectal cancer is screening.

The colon is a part of the digestive tract called the large intestine. Colon cancer is malignant tissue that grows in the wall of the colon. The majority of these tumors begin when normal tissue in the colon wall forms a polyp or precancerous growth. Polyps can occur anywhere in the large intestine.

The risk for colon cancer rises substantially at age 50, but every year there are numerous cases reported in people under age 50.

#### Here are the risk factors for colon cancer:

- Family history of colorectal cancer, which you should discuss with your doctor

- Certain family syndromes, such as having polyps in the colon or rectum, which means you will probably need to begin testing at an earlier age
- Ethnic background, especially African Americans and Jewish people of European descent
- Having had colorectal cancer before
- Having a history of polyps
- Having a history of bowel disease - such as ulcerative colitis
- Being 50 years of age or older, which increases the risk of colorectal cancer
- A high-fat diet (especially animal fat)
- Lack of exercise
- Overweight
- Smoking, which increases the likelihood of death due to colorectal cancer by 30 to 40 percent
- Heavy use of alcohol, which has been linked to colorectal cancer

#### Here are preventative measures for colon cancer:

- Eat plenty of fruits and vegetables, which contain vitamins, minerals, fiber, and antioxidants.
- Limit fat, especially saturated fats such as animal fats.
- Get recommended amounts of calcium and folic acid.
- Limit alcohol consumption - no more than one drink a day for women and two drinks a day for men.
- Stop smoking.

continued on page 9



# Bechtel Nevada's First Fellow Chosen for Focused Expertise

by Katherine Schwartz

A recognition dinner was held Aug. 10, 2005, at the Atomic Testing Museum for **Bob Malone**, Bechtel Nevada's (BN) Fellow. Malone, of Los Alamos Operations (LAO), is the first recipient of the Fellows award, honoring his continuing level of technical accomplishments over a 27-year period.

BN President and General Manager, **Dr. James E. Powell** began the evening by outlining the importance of the Fellows program. He explained how important leadership is to a company and that it must be cultivated. "This night represents the beginning of long-deserved recognition for our scientific and engineering community. I am proud we have selected our first Fellow and he is an excellent one," exclaimed Powell.

Malone is a recognized expert in optics, optical lens design, holography, electro-optics, fiber-optics, and fiber-optic instrumentation. He has also been a key player in meeting BN's stockpile stewardship initiatives. His broad technical experience extends to developing high-speed laser-triggered switches, high-speed instrumentation, streak camera recording systems, and radiometric measurements. More recently, Malone's optical designs for the boroscope and pyrometer diagnostics are earning recognition from the Atomic Weapons Establishment in the United Kingdom.

Appointing the first Fellow involved a rigorous selection process, which was administered by the BN Science and Engineering Review Panel in partnership with senior management. Nelson Cochrane, assistant general manager for Diagnostic and Experimentation Operations at BN, explained that a total of five nominees were judged on strict criteria. This included their ability to lead and contribute to technical advancements, their outstanding performance in programs of continuing importance to BN and the National Nuclear Security Administration (NNSA), and being recognized nationally and internationally within their scientific or engineering discipline.

**Dave Esquibel**, a manager at LAO and the person who nominated Bob, also spoke at the dinner. "Everyone told me that if you wanted to learn how core technology work is done at Los Alamos Operations, you better work with Bob," said Esquibel, noting that he nominated Malone for always welcoming a technological challenge and working until he found a solution. "Malone is an expert who sets the bar high and serves as a role model for those pursuing technological careers," said Esquibel.

For example, Malone authored and co-authored more than 40 papers and has been invited to present papers at several conferences, including the 26th International Congress on High-Speed Photography and Photonics Conference; the Society of Photo-Optical Instrumentation Engineers Conference; the Nuclear Explosive Design Physics Conference; and the Institute of Electrical and Electronics Engineers, Inc. International Pulsed Power Conference.

The event ended with an appreciation speech by Malone, who received an award and plaque from Dr. Powell. Malone thanked management for allowing him the freedom and resources for his far-reaching projects. He said his luck, hard work, assistance from his co-workers, and determination all contributed to this success. "I hope to serve the company well as the first Fellow," said Malone.

As a BN Fellow, Malone will be a role model and mentor to other scientists and engineers, serve as a technical advisor to senior management, and lead the Fellows Seminar Program. The BN Fellows and Awards Program was the invention of the BN Leadership Supply Executive Committee and is a key component of BN's leadership supply strategy.



**Jim Powell** presents Fellows plaque to **Bob Malone**.



**Bob Malone** and his management team from left to right, are **Dave Esquibel**, **Bob Malone**, **Nelson Cochrane**, and **Jeff Quintenz**.

## Lessons Learned Provides Valuable Input

continued from page 7

procedural compliance

### Hazards analysis

- Not recognizing the potential for multiple failure modes
- Failing to comply with existing safety requirements
- Ineffective emergency management planning

### Operational oversight

- Less than adequate command and control during an unfamiliar operation and during upset conditions
- Insufficient communication of process activities

Note the following recommendations for conducting infrequent or first-time applications when performing potentially high hazard work:

- Perform a hazards evaluation and operational assessment that are commensurate with the activity's complexity and associated safety risks.
- Conduct a detailed briefing with all parties involved in the project evolution.
- Discuss expected responses and necessary actions if problems occur.
- Always follow all of the procedures.

- Ensure that procedures used are current and incorporate system or equipment modifications and ensure that operators are trained on any changes.
- Conduct a tabletop review or walkthrough of procedures for first-time or infrequent evolutions.
- Ensure safety systems, instrumentation, and alarms are functional
- Practice, from start to finish, all activities involved in the project evolution.
- Ensure that all personnel, including supervisors, have the required levels of experience and that training or certifications are current.
- Ensure that the command and control authority is clearly understood by all parties and is present during the evolution.

For more information, please contact **Rolland Sigler** with DOE at (301) 903-4658 or e-mail him at [Rolland.Sigler@eh.doe.gov](mailto:Rolland.Sigler@eh.doe.gov).

Information extracted from the DOE Environment, Safety and Health Bulletin, Issue 2005-09



**The Occupational Medicine Department focuses on colon cancer continued. from page 6**

- Exercise and control your weight.
- Consider hormone replacement therapy, but discuss with your doctor.

There are several screening test available for the detection of polyps and colorectal cancer:

- **Digital rectal exam** - Your doctor will check your rectum for large polyps.
- **Stool blood test** - This test detects small amounts of blood in the stool. You will receive a test kit with instruction, which is later sent to a lab for testing.
- **Flexible sigmoidoscope** - This slender tube is placed in the lower part of the colon through the rectum to allow your doctor to see about half of the colon.
- **Colonoscopy** - This test is considered to be the gold standard or the best test to detect polyps, colon cancer, and/or rectal cancer. It is relatively painless.
- **Barium enema with air contrast** - This test is a large x-ray of your entire colon. A contrast dye opens up the colon and then air is pumped in to expand the area.
- **New technologies** - A virtual colonoscopy is a highly sensitive x-ray of your

colon. This test is more comfortable and less invasive, but it is not as accurate as a colonoscopy and doesn't allow the doctor to remove polyps or tissue samples. Another new test checks stool samples for DNA from abnormal cells.

With proper screening, colon cancer should be detected before the onset of symptoms. Most cases of colon cancer do not have symptoms until later stages of the disease. The following may be symptoms of colon cancer:

- Diarrhea, constipation, or change in bowel habits
- Blood in stool or stool narrower than usual (pencil thin stools)
- Unexplained anemia
- Abdominal pain or tenderness in the lower abdomen or intestinal obstruction
- Weight loss with no known reason

Treatment for colorectal cancer includes surgery, radiation, and chemotherapy.

Please contact **BN Occupational Health Nurses Robin Ireland**, at (702) 295-4736, or **Karen Sondrol-Maxwell** at (702) 295-1474, with any questions.



**BECHTEL NEVADA**

- 40 years Las Vegas- **Edna Faiss**; Nevada Test Site- **Samuel McClain**
- 30 years Nevada Las Vegas- **Jeffrey Quintenz, Nathan Sadownik**; Test Site- **Lance Rakow**
- 25 years Las Vegas- **Karen Flurer, William Kuhlow, Nita Snyder, Carrie White**; Nevada Test Site- **Joseph Maeder, David Wilson**
- 20 years Las Vegas- **Loretta Bush, Scott Myers**
- 15 years Las Vegas- **JoAnn Beall, Edward Daykin, Lance Prothro**; Nevada Test Site- **Duncan Macrae, Stephen Okosisi**; Special Technologies Lab- **Donna Croom, Timothy Geraghty**
- 10 years Nevada Test Site- **Deborah Osborne, Donald Van Etten**
- 5 years Las Vegas- **David Good, Emily Wilson**; Nevada Test Site- **John Flood, Karl Holtwick, Daniel Soldini**; Los Alamos Operations- **Daniel Frayer**; Remote Sensing Lab-Nellis- **Raymond Keegan**

**DESERT RESEARCH INSTITUTE**

- 35 years **Steven Chai, James Hudson**
- 10 years **Beth Hall**
- 5 years **David Page, Jon Skullestad**

**WACKENHUT SERVICES INCORPORATED -NEVADA**

- 25 years **Donald Peterson, Michael Privitera, Lee Schmardebeck**
- 5 years **Gerry McCutcheon**

--Compiled by Katherine Schwartz

**Retirements**

**Thomas Hayes** - Bechtel Nevada  
**John "Doc" Holiday** - Wackenhut Services, Inc  
**Howard Hoyer** - Wackenhut Services, Inc  
**Dennis Jeffrey** - Bechtel Nevada  
**Juanita Norton** - former contractor employee  
**Hershel Parks** - Wackenhut Services, Inc

**In Memory**

**Ernest Burton**-- former contractor  
**Leroy Heath** -- former contractor  
**Paulita Kennedy** -- former contractor  
**Kenneth W. McGuffey, Jr.** -- Bechtel Nevada  
**Juanita Norton** -- former contractor  
**Iwao Yamamoto** -- former contractor

**Face-to-Face**

**Name:** Sharon Hejazi

**Company:** NNSA/NSO

**Job Title:** Office of Chief Counsel

**Hometown:** Fairfield, Conn.

**Hobbies/Interests:** Songwriting, swimming, sewing, feng shui, poetry

**Face-to-Face**

**Name:** Al Lind

**Company:** Bechtel Nevada

**Title:** Workforce Specialist

**Hometown:** West Chester, Pa.

**Hobbies/Interests:** Golf, competitive shooting, weight lifting, football, and hockey

# CALENDAR OF EVENTS

**September 13**

NTS Public Tour, open to interested members of the public. 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.

**October 10**

NNSA/NSO offices closed in observance of Columbus Day.

**October 26 and November 22**

NTS Public Tour, open to interested members of the public. 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.

**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** at (702) 295-5825.

**Upcoming Conferences, Meetings, and Trade Shows**

**October 4-5**

The Air and Waste Management Association is hosting a conference on Environmental Data Analysis: Assessing Health and Environmental Impacts, Developing Policy and Achieving Regulatory Compliance, Oak Brook, IL. Go to <http://www.awma.org/events/> for more information.

**October 16-19**

1st International Conference on Construction Engineering and Management. Lotte Hotel Jamsil, Seoul, South Korea. For additional information, visit [www.iccem.org/](http://www.iccem.org/).

**October 17-18**

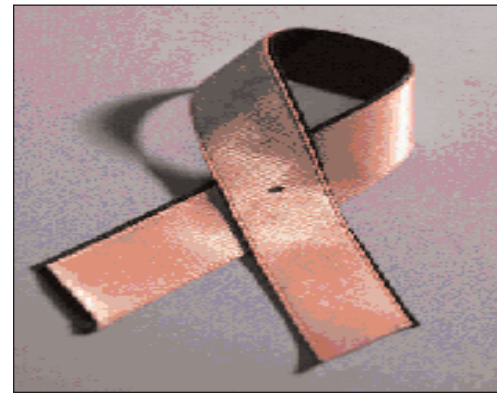
National Contract Management Association hosts the Commercial Contract Management Conference in Atlanta, Ga. Call 800.344.8096 or go to [www.ncmahq.org](http://www.ncmahq.org) for more information.

**October is:**

**National Brain Injury Awareness Month**

**and**

**National Breast Cancer Awareness Month**



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