SiteLines

Issue 107 June/July 2005 A publication for all members of the NNSA/NSO family

Contents

Fires burn Nevada Test Site in June

by Nancy Tufano

Summer in the desert means hot, dry air with occasional high winds. These conditions, combined with a rainy winter that produced an increase in the growth of flammable brush in lower elevations, form the perfect setting for wild fires. All it takes is one lightning strike to ignite a fire that can soon burn out of control, as demonstrated at the NTS when lightning started two significant fires during the first week of June.

The first fire started in Area 25 just east of BREN Tower on June 3. NTS Fire & Rescue responded with the assistance of the U.S. Air Force, who provided water drops over the blaze. The fire was extinguished on June 4 at 6 p.m. after having burned a total of 150 acres on the NTS.

A second fire was ignited northwest of the BREN Tower fire on the Nellis Air Force Range, approximately 25 miles east of Beatty, Nev., during the same lightning storm. The U.S. Bureau of Land Management (BLM) was the primary response organization called in to fight the fire on the range, but the fire continued to grow despite attempts to extinguish it.

photo courtesy of NNSA/NSO

An NTS Fire & Rescue fire fighter battles the blaze at BREN Tower. The fire burned 150 acres in Area 25 of the NTS.

By June 7, BLM was joined by NTS Fire & Rescue when the fire crossed the border of the NTS into Areas 29 and 30, near Dome Mountain, causing activation of both the NNSA/NSO Emergency Management and Emergency Operations Centers.

Tension mounted as the fire grew to encompass 20,000 acres and response efforts were heightened. Nine heavy tankers and seven helicopters were enlisted to make water and retardant drops over the affected areas while 17 hand crews battled the blaze on the ground. RSL-Nellis provided aircraft with thermal infrared imaging technology to fly over the fire and provide BLM with images of 'hot spots' to assist in the efforts to completely extinguish the fire. The U.S. Air Force also provided images from Predator over-flights to aid in the fire fighting effort. At its height, a total of 491 personnel were actively engaged in fighting the Air Force fire.

Through extraordinary efforts, the Air Force fire was 75 percent contained by the morning of June 8, and 100 percent contained by 6 p.m. that day. NTS Fire & Rescue Chief **Charles Fauerbach** said "I am really proud of our personnel in their efforts, knowledge and skill in attacking wildland fires on the NTS."

Kathy Carlson, NNSA/NSO manager, commended fire fighting efforts. "Thanks to the remarkable efforts of both BLM and NTS Fire & Rescue fire fighters, the Air Force fire was quickly contained before it could cause damage to any NTS facilities or infrastructure. Our people at the Incident Command and NTS Fire & Rescue, the Emergency Management Center, the Emergency Operations Center, and RSL worked safely and successfully to ensure that both the BREN Tower fire and the Air Force fire were rapidly extinguished – I thank everyone involved in these efforts."

Upon containment, the fire had burned more than 21,000 acres; approximately 6,000 of which was on the NTS. No NTS facilities or infrastructure were damaged by either the BREN Tower or the Air Force fire.

NTS recovery operations began in June. Anyone requiring access to Areas 29 and 30, or the eastern portions of the NTS, should first obtain prior access authorization through the **Operations Coordination Center** at **(702) 295-4015** or BirdDog on the SOC radio net.

NNSA/NSO and Department of Homeland Security break ground at the Nevada Test Site

by Nancy Tufano

Ground was officially and ceremoniously broken for the Radiological/Nuclear Countermeasures Test and Evaluation Complex (Rad/NucCTEC) site on June 1, 2005, in Area 6 of the Nevada Test Site. The ground breaking ceremony for the Rad/NucCTEC project – a joint effort of the NNSA/NSO and the U.S. Department of Homeland Security (DHS) Domestic Nuclear Detection Office (DNDO) – was attended by high-ranking officials from NNSA, DHS and representatives from the Nevada congressional delegation.

Rad/NucCTEC is a multi-use test and evaluation platform that will serve the U.S. homeland security mission to develop, acquire and support the deployment of a domestic nuclear detection system. This system will be capable of detecting and reporting any attempts to import or transport a nuclear explosive device, fissile material or radiological material intended for illicit use.

Rad/NucCTEC capabilities include:

• A vehicle choke point where detection systems for land-border crossings, toll plazas and entrances to tunnels and bridges can be evaluated

• An "active interrogation" facility enabling the evaluation of the latest detection technologies to intrusively interrogate trucks and/or transports, enhancing the sensitivity of nuclear materials detection and overcoming the effects of materials that can shield the presence of nuclear materials

• An automated test track that provides highly repeatable measurements of sensor system responses; permitting the evaluation of systems against American National Standards Institute standards

• A large instrumented outdoor testing area to support testing of systems designed to screen transports and mobile detection systems

• A test support facility with control rooms and secured data processing areas

photo by Mary Scodwell

*From left to right, BN President and General Manager **Dr. James E. Powell**; NNSA/NSO Manager **Kathy Carlson**; NNSA Principal Deputy Administrator **Jerry Paul**; and DNDO Acting Deputy Director **Michael Carter** break ground for the Radiological/Nuclear Countermeasures Test and Evaluation Complex.*

Kathy Carlson, NNSA/NSO manager, enthusiastically opened the ceremony by stating "It is through the dedication of the national laboratory, contractor and federal staff that we are able to be here today accepting this work effort from the Department of Homeland Security. There is no doubt in my mind that some of the brightest, most talented technically capable people who know how to find the answers to the most challenging of problems can

cont. on page 2

NNSA/NSO and Department of Homeland Security break ground at Nevada Test Site

cont. from page 1

be found right here at the Nevada Test Site - that is what brought the Department of Homeland Security to our door-step."

"We are delighted that the Department of Homeland Security has decided to build this complex at the Nevada Test Site and look forward to working with them in the future in support of their important mission," **Jerry Paul**, NNSA principal deputy administrator, added.

Michael Carter, DNDO Acting Deputy Director, stated "Test and evaluation facilities capable of high-fidelity testing against relevant test threats in realistic measurement scenarios do not presently exist. While considerable information can be obtained from testing against surrogate materials, testing with special nuclear materials in significant quantities and realistic configurations provides the definitive ground truth on which all simulations and extrapolations must be based.

"This facility will be truly unique across the U.S. government and will bridge an essential test and evaluation gap currently existing between 'bench-top testing' performed by developers and operational field-testing conducted during pilot deployments. We are greatly pleased to be sponsoring, in partnership with NNSA, the building of the Rad/NucCTEC and we believe that test and evaluation results generated here will be no less than essential to the future security of the United States."

Rad/NucCTEC is intended for use by DHS as well as DOE's national laboratories and universities and private companies that support the DHS mission. The facility is expected to be operational in October 2006. For more information about Rad/NucCTEC, contact Federal Project Director **Dirk Schmidhofer** at **(702) 295-0159**.

U1h ribbon cutting marks the remarkable

by Norma Restivo

When ground was broken for the U1h Shaft Project in 1998, the goal was to finish the project without a single lost time safety incident. Now, several years and tens of thousands of labor hours later, that goal is a reality.

"This is a remarkable achievement, considering the hazardous nature of the work," said BN President and General Manager **Dr. James E. Powell**, addressing a crowd assembled at the NTS May 25, 2005, for the U1h ribbon cutting. "I want to thank all of the employees who were committed to safety during the duration of this project."

Powell noted further that the completion of the project is a significant milestone for the U1a complex. This underground experimental facility consists of horizontal tunnels that support subcritical experiment activities for the Stockpile Stewardship Program, including the Armando and Oboe experiments.

"The completion of this project greatly improves the U1a complex and quadruples our capability to lower personnel and construction materials underground," said Powell. "This makes U1a a major contributor to the stockpile program and greatly enhances the strategic future of the NTS. Over the next 20 years, U1a will have an increasingly important role in high-hazard experiments."

Kathy Carlson, NNSA/NSO manager, also commended the U1h team — which includes NNSA/NSO, BN, LANL and other subcontractors — for their "can do" attitude toward the Shaft Project. LANL manages the complex on behalf of the NNSA/NSO, while BN provides maintenance, engineering, construction, operations and other support.

"As I look at the future of the complex, it's clear that we could become an even more active site for research and experimentation," said Carlson. "When it comes to delivering, the Nevada Test Site work force has proven time and time again that this is the place to come to."

The ribbon cutting festivities included the distribution of Professional Miner's Awards to recognize several individuals with no lost time or recordable incidents over five years (platinum) and three years (gold). Platinum awards went to **Gerald Chavez**; **Coates Cobb-Adams III**; **Edward Duran**; **Charles Eaton**; **George Hamrick**; **Dominic Isi**; **Ryan King**; **James Lujan; Larry McDaniel**; **Ricardo Sandoval**; **William Swena**; **Marion Trone**; and **Ricardo Villanueva**. Gold awards went to **Boyd Anderson**; **Gordon Canning**; **Terry Cowley**; and **Anthony Garcia.**

"This project could not have been completed without the leadership and hard work of **Patrick Morris**, U1a project manager, and **Ray Patterson**, RTBF program manager," said BN Assistant General Manager **Bob Braddy**. In addition, NTS management gave special recognition to others at the helm of the U1h team, including project managers **Ralph Musick** and **Sam Williams**, as well as superintendent **Bob Hand** and project engineer **Dave Rees**, miners **Terry Cowley** and **Ryan King**, operators **Larry Lambert** and **Carl Holtwick**, and procurement professional **Emma Fox**.

The concrete-lined U1h shaft is 20 feet in diameter and is now the primary means of access and egress for the U1a Complex, located nearly 1,000 feet below the surface of Yucca Flats and accessible by three vertical shafts. U1h is equipped with a mechanical hoist for personnel and equipment access while the U1a shaft, about 1,500 feet away, provides cross ventilation, instrumentation and utility access, and emergency exits.

The subcritical experiments performed within the U1a complex, located in Area 1 of the NTS, are designed to certify the nation's nuclear weapons stockpile. Test data help maintain the reliability of the nuclear weapons stockpile by allowing scientists to gain more knowledge of the dynamic properties of aging nuclear materials. Of particular interest and importance is data on the behavior of plutonium. This information can be used in computer calculations of nuclear weapon performance and safety in the absence of actual underground nuclear testing.

photo by Raffi Papazian

*From left to right, LANL Dynamic Experiments Acting Deputy Division Leader for Technical Support **John McAfee**, NNSA/NSO Manager **Kathy Carlson** and BN President and General Manager **Dr. James E. Powell** cut the ribbon at U1h.*

photo by Raffi Papazian

*NNSA/NSO Manager **Kathy Carlson** congratulates the U1h team during a ribbon cutting ceremony at the facility May 25, 2005. From left to right, U1h Project Manager **Patrick Morris**, LANL Dynamic Experiments Acting Deputy Division Leader for Technical Support **John McAfee**, and BN President and General Manager **Dr. James E. Powell** also participate in the ceremony.*

In the Next Issue of *SiteLines* ...

- NTS awards new contract
- NNSA/NSO conducts radiation training for medical personnel
- To your health

New training grounds dedicated at NTS

by Sarah Martin

The NTS Fire & Rescue (F&R) Training Grounds was dedicated in memory of the first NTS F&R Chief, **Leo Martin**, on Thursday, June 9, 2005. The dedication ceremony was attended by more than 40 members of the Martin family.

Chief Martin served as the NTS Fire Chief from 1952 to 1980. He began his career at the NTS in 1951 as a laborer. He volunteered for the fire brigade that year and was appointed as the first Fire Chief one year later.

Chief Martin's goal was to establish a fire department that met the needs of the NTS. In the beginning, he had nine employees, one station, and three used fire trucks. Under Chief Martin's guidance, the Fire Department expanded at its peak in 1966, to 102 employees, six fire stations, and 11 custom-built fire trucks.

A true pioneer for the NTS Fire Department, many of Chief Martin's innovations are still in practice today. Innovations like self-contained breathing apparatus for F&R personnel, fire hydrants in Mercury, more than 6,700 fire extinguishers on the NTS and a continuous F&R personnel training program are attributed to Martin.

Five current F&R personnel worked for Chief Martin, and they all agree his philosophy was simple. He often said "There is a practical, economical solution to all problems."

With that philosophy in mind, NTS F&R created a unique and cost-efficient onsite training facility to conduct essential training and provide more opportunities for hands-on training in a safe environment. NTS F&R has eliminated the need for costly overtime training hours and the 130-mile round trip to the nearest offsite training facility.

Each year, overtime was budgeted to provide the necessary funds to send NTS F&R staff offsite to receive required training. It was determined that an onsite capability to conduct essential training would not only prove more cost-effective but would also provide opportunities for hands-on training on a daily basis. In July 2003, the old bulk fuel storage yard in Mercury became available, providing an ideal location for an onsite training area.

Six Sigma processes were used to identify cost savings in areas such as overtime set aside for training and equipment wear and tear for the 130-mile round trip to the nearest offsite training location. These savings were then used to construct many of the props at the NTS F&R Training Grounds.

Over the past 20 months, as various objects became available, NTS F&R has acquired and moved them to the training grounds – all part of a master plan. For example, when transport containers became available, the High Angle Rope Rescue prop was created. A variety of BN departments contributed props and expertise, laying the foundation for a unique and cost-efficient training environment.

The NTS F&R Training Grounds serves as a tribute not only to the resourcefulness and ingenuity ingrained in the character of firefighters and paramedics but also to their dedication to do their best to protect the lives and assets of the Nevada Test Site.

photo courtesy of Sarah Martin

Members of the NTS F&R team demonstrate the High Angle Rope Rescue prop during the dedication of their new training grounds.

photo courtesy of Sarah Martin

*The family of the first NTS F&R Chief, **Leo Martin**, enjoys the festivities during the dedication.*

Changes enhance the EAP

On June 1, 2005, the BN Employee Assistance Program (EAP), in cooperation with Behavioral Healthcare Options (BHO), embarked on a unique concept in employee assistance programming; combining the existing counseling and consultative services of the BN EAP with the 24 hour/7 day per week availability of the BHO Call Center. This unique collaboration will provide an enhanced, more diversified and responsive service for our employees and their families.

The enhanced EAP will remain a confidential, work-based service designed to assist the employee with problem identification, defining strategies, developing corrective action plans and problem resolution. The positive outcome that the EAP has for the employee and the company is increased productivity and safety.

The EAP will continue to provide solution-focused counseling that covers a broad range of problem areas that impacts individual performance. The new counseling focus will be on short-term intervention and consultation. The EAP will provide three counseling interactions per identified problem area per year. Problem assessment, education and strategy identification will be emphasized in counseling.

The targeted problem areas that the EAP will focus on include:
- Work related stress and productivity
- Emotional/mental/physical health
- Family/marital/parent-child
- Substance abuse
- Financial/legal

cont. on page 4

Face-to-Face

Name: Bill Wilborn

Company: DOE Nevada Site Office

Title: Acting Project Manager, Underground Testing Area Project

Hometown: St. Louis, Mo.

Hobbies/
Interests: Playing golf, vintage cars, boating, hiking and four-wheeling

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

Unicorn subcritical experiment completes key milestone

On June 21, 2005, the LANL and BN Unicorn Subcritical Experiment Project Team met a major milestone when the Unicorn experimental rack was placed in the Unicorn tower in Area 6 of the NTS. Unicorn is unique in that it is a large-scale subcritical experiment conducted in the vertical configuration at 620 feet below the desert floor and is the first vertical experiment since 1995. Subcritical experiments are designed such that the experiment remains subcritical (i.e. no nuclear yield) but still provides important data for the maintenance of the enduring nuclear weapons stockpile.

Because Unicorn is a complex subcritical experiment executed in the vertical configuration, it is a perfect exercise to demonstrate key capabilities required to conduct an Underground Nuclear Experiment (UGT). These include rack emplacement, stemming, timing and firing and diagnostic data recovery from a surface trailer park.

photo by Raffi Papazian

Unicorn subcritical experiment towers and cables.

The Unicorn assembly will arrive at the test site next spring. Once it is loaded into the rack, the rack will then be lowered into the bottom of the existing hole. The data cables will connect to the assembly and experiment diagnostics to transmit firing signals to the assembly and transmit data during the event. Veterans of UGT testing at NTS will recognize several features of the experiment, some of which have not been seen at NTS for more than 13 years.

Key players in the realization of the Unicorn experiment include LANL Test Director **Gene Christensen**; LANL Field Coordinator **Bill Carpenter**; LANL Event Engineer **Bob Miller**; BN Project Manager **Jim Gatling**; BN Assistant Project Manager **Jennifer Politano**; Construction Superintendent **Clea Threats**; and BN Project Controls Engineer **Dennis Wai**.

photo by Raffi Papazian

The Unicorn rack that will contain the experiment is placed in the Unicorn tower by the nuclear certified crane, "Big Blue." The tower for the Unicorn confirmatory, Centaur Experiment, is seen in the background.

Changes enhance the EAP

cont. from page 3

The expanded program options that BHO brings to the BN EAP will prove beneficial to all those looking to access employee assistance services. These include:

- 24 hour/7 day per week access to a behavioral health professional through the BN/BHO Call Center. The Call Center is a toll-free telephonic consultation service that is available to the employee from anywhere in the United States. The Call Center will provide around the clock crisis intervention by a behavior healthcare professional for employees and their family members who have a need for consultation when the BN Employee Assistance Professionals are not available.
- The availability of "out of area" EAP services. If an employee or family member is away from the area in which they live and work and a need arises where EAP help is needed, you can contact the Call Center for assistance.
- On-line access to the BHO Web site where a broad range of topics relating to behavioral, emotional, psychological and work-life issues can be researched.
- Information and referral.

The enhanced EAP is available to all current employees and their dependents, who work for the federal agencies and their contractors supporting the Nevada Test Site. These would include, but are not limited to: BN, NNSA/NSO, DOE/Office of Repository Development, Bechtel SAIC, WSI, the national laboratories, and other contractors. If you have access to medical services through the BN Occupational Medicine department, you are eligible for EAP services.

We are excited about this expanded company sponsored benefit. It demonstrates the continuing commitment that BN has for the emotional health of the workforce and their dependents. We encourage you to contact the BN Employee Assistance Specialists **Patsy Molina** at **(702) 295-0917** and **Kevin Broadbent** at **(702) 821-7398** with questions or to schedule a consultation.

The BHO Call Center numbers are as follows:
Las Vegas based employees – **(702) 797-2195** or toll-free **(877) 209-8516**
Employees outside Las Vegas – toll-free **(877) 209-8516**

New communication system takes flight

It is a hot, windy day in the desert. An emergency response team is dispatched to the site of a nuclear explosion. The team surveys the area and begins to quantify the extent of the contamination. They turn to a new communications tool called the "Fly-Away Communication System" to communicate their findings simultaneously to a number of emergency operating centers around the nation. This time it is just a demonstration, but the real event could happen anywhere.

On April 14, 2005, the RSL team conducted a proof of concept demonstration of the "Fly-Away Communication System" for DOE and associated laboratories and emergency response teams. The RSL engineering team demonstrated the available services in a "real world" environment. The team deployed its portable satellite system to a remote location and connected back to the satellite hub location at RSL. The system was then connected to the existing Emergency Communications Network for distribution to DOE Headquarters, Home Team locations at DOE Laboratory sites, and DOE operations sites. **Admiral Joseph Krol**, NNSA Associate Administrator for Emergency Operations, attended the demonstration.

photo by Mary Scodwell

*BN's **Joe Hassen** (right) and **Chris Engebretsen** (seated) demonstrate for **Admiral Krol** (center) and **Jeff Stickney** (left), NNSA Albuquerque, one of the portable communication systems being considered for use by NNSA emergency response teams.*

Engineers at RSL have developed this state-of-the-art communication package for DOE using existing communications infrastructure to develop a cost effective solution. The systems utilize commercial Ku band satellite systems, state-of-the-art deployable satellite hardware and Internet Protocol (IP) data communications to provide data, video and voice communications to emergency response teams anywhere in the world. The system is designed to connect deployed emergency response teams to DOE, their associated Laboratories and Home Team support groups.

The lightweight portable satellite system provides data bandwidths previously not available at remote emergency response locations. Features include high-speed data transfer at 1.5 to 10 megabits per second, video and videoconferencing using Tactical Tandberg videoconferencing units and IP telephone service.

A final test and demonstration of the "Fly-Away Communication System" will be to support the Accident Response Group and the Federal Radiological Monitoring and Assessment Center during an exercise this fall. Final engineering and deployment of multiple systems to support the DOE emergency response elements is planned for early in fiscal year 2006.

News Briefs

SiteLines goes online

SiteLines is going electronic! In an effort to cut costs and save time, NNSA/NSO has decided to reduce the number of printed copies of *SiteLines* and urge readers to access the electronic version via their Web site. The newsletter is located at http://www.nv.doe.gov/news&pubs/publications/envm/default.htm.

If you are a current NNSA/NSO or contractor employee and do not have access to a computer, you will continue to receive a hard copy via internal mail. Those readers who are not current employees will have the option to continue receiving a hard copy or elect to access the newsletter electronically.

If you have questions about this change or would like to opt out early, please contact **Norma Restivo** at **(702) 295-7045** or via e-mail at restivnm@nv.doe.gov.

Funnel clouds at the Nevada Test Site

photo by Kurt Guthrie

Funnel clouds, like the one shown here, occur at the Nevada Test Site on an infrequent basis. The last reported sighting of a funnel cloud, the precursor to a tornado, occurred about 10-12 years ago. This cloud was sighted in Area 25 on the afternoon of April 28. Another funnel cloud was sighted a short while later in Area 5. The severe afternoon weather led to nearly all test site personnel being sheltered in place for an hour. Weather service personnel who tracked the storm on the scene reported sleet, nickel-sized hail and severe lightning.

DNFSB visits U1a

photo by Raffi Papazian

*Defense Nuclear Facilities Safety Board (DNFSB) Member **Joseph Bader**, LANL Test Director **Chuck Costa**, and DNFSB Staff Member **Richard Tontodonato** examine the Cygnus Radiographic Sources at the U1a Complex. The Board's mandate under the Atomic Energy Act is to provide safety oversight of the nuclear weapons complex operated by DOE.*

Face-to-Face

Name: Norma Restivo

Company: Bechtel Nevada

Title: Senior Public Relations Specialist

Hometown: Denver, Co.

Hobbies/
Interests: I like to get outside to exercise, and I'm an avid reader (self-help and psychology). I do some freelance writing and editing. Right now, I'm editing a love story set in Las Vegas about the homeless.

Beyond the call

Community Environmental Monitor receives EPA award

Don Curry, a science teacher at Silverado High School and Community Environmental Monitor for NNSA/NSO's Community Environmental Monitoring Program, recently received an award from the Environmental Protection Agency (EPA).

Curry was honored at the EPA's Seventh Annual Environmental Awards ceremony in San Francisco for his work with the high school's global environmental studies program. Students that are part of the program have designed and implemented innovative projects that contribute to a greater understanding of environmental issues. Partnering with the Clark County Air Quality and Environmental Management Department, the students created a video and CD program with entertaining skits and songs. They visited elementary schools to provide younger students with interactive presentations on particulates and air quality in the Las Vegas Valley. The students have also established networks with schools in six other states for investigations of water and air quality, presented their research at regional conferences and also write and publish a newsletter distributed to approximately 300 other schools, agencies and network sites.

A total of 37 individuals and organizations from Arizona, California, Nevada and the Pacific Islands were presented with the EPA award for their efforts to protect and preserve the environment during 2004. The winners were selected from a pool of more than 175 nominees.

Take Our Daughters and Sons to Work Day

by Debi Foster

NNSA/NSO celebrated Take Our Daughters and Sons to Work Day on April 28, 2005. More than 220 children attended the presentations and tours at the Nevada Test Site, the North Las Vegas Facility, STL and RSL-Andrews. Children of NNSA/NSO, Bechtel Nevada, WSI, Team CNSI and Defense Threat Reduction Agency employees participated in the day's events.

The day started at the North Las Vegas Facility (NLVF) with a welcome by senior management, including NNSA/NSO Deputy Manager **Maureen Hunemuller**, BN Deputy General Manager **Cynthia Rivera**, WSI-NV General Manager **Mike Ebert** and Team CNSI Project Manager **Tony Jensen**. Participants at RSL-Andrews and STL attended the welcome via video teleconference.

Children attending the NLVF program split into groups for several presentations. Among some of the things they saw were Geographic Information Systems; Micro-Electronics; Photo/Video; NTS Wildlife; CPR and Automated External Defibrillator information; Information Services; Identity Theft; a Magnet Demonstration; and a tour of the Dense Plasma Focus. Each participant was presented a certificate before going to lunch with their parents. After lunch, the children shadowed their parents in the work place.

At the NTS, the children were welcomed by **John Howanitz**, BN assistant general manager. During their tour, they saw presentations at the WSI Training Academy and the NTS Fire and Rescue Training Ground as well as sites such as Frenchman Flat; the Area 5 Radioactive Waste Management Complex; and the T-1 Exercise Site. In addition, the children touring the NTS also took part in an extra activity that day – they had to shelter-in-place at the WSI Training Academy for an hour due to high winds and lightning at the site.

The children at STL saw presentations on the Laser Laboratory; Night Vision Goggles; the Phone Room; and the Anechoic Chamber while those attending the RSL-Andrews program saw presentations on Safety; a Radioactivity demonstration; a Canine Unit presentation; and an Aviation and Medical Evacuation Helicopter demonstration.

Thanks to all the session presenters and those employees that volunteered their time to make this annual event a success!

photo courtesy of RSL-Nellis

***Brielle Wilke**, granddaughter of BN employee **Ronna Hoesch**, inspects the cockpit of a helicopter at RSL-Nellis during Take Our Daughters and Sons to Work Day.*

Partnering for *Education*

BN donates money to Focus School

photo courtesy of Jennifer Morton

*BN Focus School Coordinator **Jennifer Morton** presents Kit Carson Elementary School Principal **Linda Gipson** (left) and teacher **Judy Ingham** (middle) a check on behalf of Bechtel Nevada. The money is intended to further enrich the school's curriculum.*

Let's bowl!

by Sheril Hamlin

We made it! Over the past year, the WSI-NV Community Outreach Committee sponsored raffle drawings and a craft fair to raise money to purchase physical education equipment for Quannah McCall Elementary School. We were happy to finally present the team bowling sets and stability balls requested by the physical education teacher. It was more than obvious that everyone was extremely pleased to receive the new equipment – just look at those smiles! The students could not wait to try their luck at bowling and were lining up to throw their first ball at the pins. Thanks to everyone who supported our efforts.

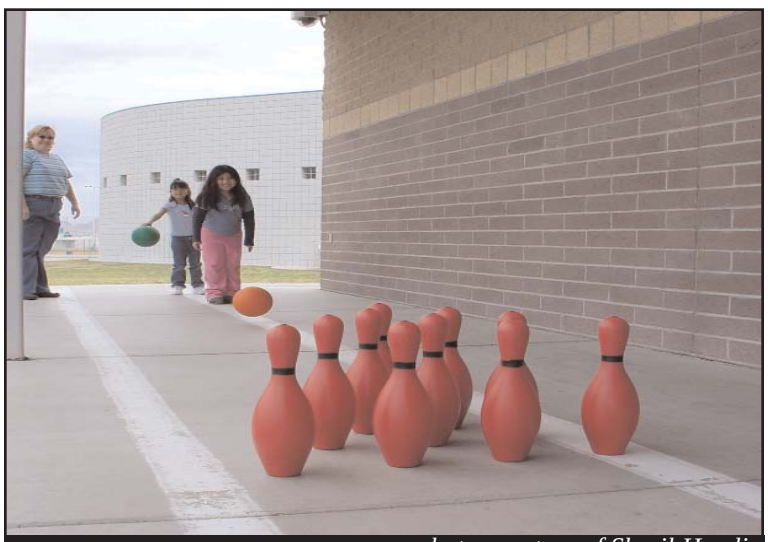


photo courtesy of Sheril Hamlin

***Patrice Ross**, WSI-NV, looks on as Quannah McCall Elementary students try out their new bowling equipment.*

Learn the lesson – Tell the story

A Lessons Learned is a good work practice or innovative approach that is used to promote repeat application or an adverse work practice or experience that is captured and shared to avoid recurrence.

When an accident or incident occurs, corrective action efforts are often accomplished quickly in response to the event, sometimes including a procedural change. A period of delay follows during which tribal knowledge is lost as workers retire or transfer and are replaced with new workers. A new worker or manager may not know the history of task requirements or may have been exposed to different techniques for accomplishing the task. Therefore, over time, requirements may soften. The effect is that safety issues put in place to mitigate recurrence become optional.

Using Lessons Learned in the planning processes, such as work plans, checklists and pre-job briefings, or as part of an indoctrination process helps organizations preserve historical information, ensuring it is continually used to improve operations. Lessons Learned are a significant form of the feedback and continuous improvement function of the Integrated Safety Management system. Lessons Learned help organizations:

- Identify and share innovative ways to solve problems
- Encourage using information about successes experienced by others when planning and implementing new projects
- Demonstrate and promote continuous safety, operational improvement, and cost savings
- Learn from past experiences

At the Nevada Test Site, there are Lessons Learned points of contact for the major contractors, the Defense Threat Reduction Agency, and the national laboratories. They are: **Becky Jeffries**, LLNL/NTS Operation; **Alice Shillock**, LANL/NTS Operation; **Linda Land**, SNL/NTS Operation; **Tiffany Lantow**, Defense Threat Reduction Agency; **Hershel Parks**, WSI; **Jeanne Wightman**, SNJV; **Doris Burnett**, BN; and **Ken Hoar**, NNSA/NSO.

After an incident and, especially after identifying a good work practice, contact your representative. Capture the Lessons Learned and post the document either on a local server/database or on the DOE Lessons Learned Server with distribution to all DOE and NNSA sites. We can all "learn our lessons" by sharing our experiences through the Lessons Learned program.

The unpredictable streets of Las Vegas – One man's story

A few weeks ago while driving down my street, I saw a child about seven years old bouncing a ball on the sidewalk some 200 feet from my position. For whatever reason, despite the seemingly non-hazardous situation, I instinctively reduced my speed from the posted speed limit of 25 mph to 15 mph. Then it happened. The child inadvertently bounced the ball off his foot. He darted out into the road chasing the ball and into my path of travel.

Before I reveal the outcome, I would like to point out some issues related to the dangers faced by children as pedestrians. Children are at an increased risk of pedestrian injury for many reasons:

- Judging speed and distance is difficult for them so they may let a slow vehicle pass and cross in front of a fast-moving vehicle.
- They may have a reduced ability to take note of vehicles in their peripheral vision.
- They may only concentrate for a short time and notice only one thing at a time.
- They are small and often cannot see over vehicles, and drivers cannot see them easily.
- They are constantly moving and may have trouble stopping at the curb.
- They imitate inappropriate behavior.
- Drivers and children may each assume incorrectly that the other will yield the right-of-way.

Unfortunately, it is difficult to gauge the effectiveness of parents'/guardians' approaches in the area of child pedestrian safety. You as a vehicle operator cannot presume that parents/guardians:

- Explain to their children words like "fast," "slow," "near," and "far."
- Talk to them about how to look and listen for traffic.
- Provide the proper example for them to follow.
- Never allow them to run into the street.
- Teach them to look left, right, and then left again when crossing a street and to continue looking around while crossing.
- Explain to them that seeing the driver in a vehicle does not mean the driver can see them.

Now, back to my story. Fortunately for me, I was able to stop in time about ten feet in front of the child retrieving his ball. In that small amount of reactionary time, I considered the laws of physics to be more important than the speed limit laws. By instinctively reducing my speed, I gave myself less travel distance after applying my brakes. I also increased my chances of stopping in time due to the reduced speed. The result was the avoidance of a tragedy. So I arrived at my destination about 15 seconds later than I should have. Was it worth it? You be the judge.

— Bob Skier

Retirements

Robert Arnold - Bechtel Nevada
Sharon Herdell - Bechtel Nevada
Wilbur Tipton - Bechtel Nevada
Lawrence Trautner - Bechtel Nevada
Donald Wright - Bechtel Nevada
David Zohner - Bechtel Nevada

In Memory

Jose Apodaca - former contractor employee
Felix Baguso - former contractor employee
John Bazar - former contractor employee
Henrietta Beals - former contractor employee
William J. Camp - former contractor employee
Frances Goodwin - former contractor employee
Jerry F. Hansen - former contractor employee
Robert H. Jackson - former contractor employee
Quincy Johnson - former contractor employee
Robert D. "Bob" Johnson - former contractor employee
Lex E. Lawson - former contractor employee
Calvin Lee - former contractor employee
Frank L. Lewis - Bechtel Nevada employee
Leornese "Shirley" Richardson - Bechtel Nevada employee
Gary Seale - former contractor employee
John Soderstrum - Bechtel Nevada employee
Richard Sowards - former contractor employee
Alma Vela-Belmonte - Bechtel Nevada employee

Face-to-Face

Name: Patrice Ross

Company: WSI-Nevada

Job Title: Human Resources Supervisor/EEO Specialist

Hometown: Omaha, Neb.

Hobbies/
Interests: Travel, Nebraska football (Go Huskers!!) and spending time with friends and family

...To your health...

The ABC's of hepatitis

by Karen Sondrol-Maxwell

What is hepatitis?

Hepatitis is a liver disease caused by infections from various organisms, including bacteria, viruses (hepatitis A, B, C, etc.) or parasites. Chemical toxins such as alcohol, drugs or poisonous mushrooms can also damage the liver and cause it to become inflamed. A rare but extremely dangerous cause of hepatitis results from an overdose of acetaminophen (Tylenol), which can be deadly. In addition, immune cells in the body may attack the liver and cause autoimmune hepatitis. Hepatitis may resolve quickly (acute hepatitis) or cause long-term disease (chronic hepatitis). In some instances, progressive liver damage or liver failure may result.

Types of hepatitis:

Hepatitis A is caused by the hepatitis A virus (HAV). It is transmitted by contaminated food, water or contact with a person ill with hepatitis A. This usually occurs through a person's stools, blood and secretions. The HAV is shed in the stools during the incubation period of 15 to 45 days before symptoms occur and the first week of illness. Poor hygiene can contribute to contamination of objects, food, etc. This virus does not stay in the body after the infection is resolved. A person can spread hepatitis A to others without ever becoming ill. There are blood tests to diagnose hepatitis A and physical examinations may show an enlarged liver.

There is no specific treatment for hepatitis A. During the acute stage, rest, adequate nutrition, and avoiding alcohol and Tylenol or other acetaminophen containing products is recommended.

Reduce the chances of getting hepatitis A by avoiding contaminated food and water; hand washing after using the restroom; and cleansing after contact with an infected person's blood, feces or secretions.

The hepatitis A vaccine is the best protection against the virus. An injection of immune globulin is given for short term protection.

Hepatitis B is caused by the hepatitis B virus (HBV). It can be transmitted from unsafe sex or from infected blood or body fluids (contact with open wounds or mucous membranes). Hepatitis B is highly contagious and some people may become carriers or have chronic liver disease. This disease may cause permanent liver damage and is nearly 100 times more infectious than human immunodeficiency virus, otherwise known as HIV. The highest rate of this disease occurs in adults 20 to 49 years old. Routine vaccination from the disease in recent years has significantly decreased the virus in children and adolescents.

Treatment of chronic hepatitis B includes drug therapy and avoidance of alcohol and medications that may lead to liver damage including Tylenol or acetaminophen containing products. Many people have no symptoms. They do not know they have the virus unless they get a blood test. If you know that you have been exposed to HBV, call your doctor immediately. Receiving an injection of hepatitis B immune globulin within 24 hours of contact may protect you from developing hepatitis B.

Hepatitis C is a liver disease caused by the hepatitis C virus (HCV). The virus is found in the blood and can lead to chronic liver disease, liver cancer or liver failure. It ranks second only to alcoholism as a cause of liver disease and is a leading reason for liver transplants in the United States. The virus is known to spread through body piercing and tattoos due to improper or unsanitary technique. About 80 percent of people can live for years without any symptoms at all. For some, the most common symptom is extreme fatigue.

Avoid spreading these diseases to others by practicing good personal hygiene. Proper hand washing is extremely important. Don't share toothbrushes, needles, razors, or other personal items that may have blood on them, and cover open wounds. Practice safe sex by using condoms. If you think you may have been exposed, contact your personal physician.

If you have any questions regarding hepatitis, please contact **Karen Sondrol-Maxwell**, BN Occupational Health Nurse, at **(702) 295-1474** or **Robin Ireland**, BN Occupational Health Nurse, at **(702) 295-4736**.

For further information about hepatitis, visit the following Web sites:

http://www.cdc.gov/ncidod/diseases/hepatitis/
http://www.cdc.gov/ncidod/diseases/hepatitis/a/fact.htm
http://www.cdc.gov/ncidod/diseases/hepatitis/b/fact.htm
http://www.cdc.gov/ncidod/diseases/hepatitis/c/fact.htm

If you think you may have been exposed or are currently experiencing symptoms, contact your personal physician. The following are risk factors of hepatitis A, B, and C.

Risk for hepatitis A:
- travelers to countries where hepatitis A is common (eating raw shellfish from contaminated water, drinking contaminated water or ice, eating raw fruits and vegetables)
- a person who lives in the same household or has sex with someone with hepatitis A
- men who have sex with men
- a person who uses street drugs
- children and employees in child care centers
- workers who handle HAV infected animals or who work in HAV research laboratories
- a person with a clotting disorder who receives factor concentrates
- a person with chronic liver disease

Risk for hepatitis B:
- have unsafe sex
- men who have sex with men
- have more than one sex partner
- have another sexually transmitted disease
- share needles
- work in health care
- live with someone with hepatitis B
- is a kidney dialysis patient
- body piercing and tattoos (improper or unsanitary technique)

Risk of hepatitis C:
- received an organ transplant or blood transfusion before July 1992
- treated with a blood product for clotting products made before 1987
- have ever been on long-term dialysis
- have ever injected street drugs at any time
- known blood exposure

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.

Waste cell construction process improved

by Ray Thom

Space management is always a primary concern for BN's Environmental Management department. Placing more of the customer's waste in the available space not only reduces the cost to company, but it can also reduce the overall costs to the customer. In an effort to gain insight on how a waste cell is designed and constructed at the NTS, BN Environmental Management Assistant General Manager **Wayne Johnson** sponsored a Six Sigma project to analyze the complete process.

Black Belt **Ray Thom**, Yellow Belt **Gina Fitzmaurice**, and subject matter experts **Mike Noland**, **Max Dolenc**, **Saligrama Rao**, **Carlos Ramirez**, **Steve Nacht**, **Kenny McGuffey**, **Carol Lisor** and **Bruce Becker** teamed up to break down the as-is process to determine its critical components.

When the process map was completed and all of the elements identified, it was discovered that there was a hidden factory in the process which provided a critical link between the customer's requirements and the engineering design. If that process was removed, the entire process would break down with very costly consequences. Armed with this new knowledge, the team tackled the issue by capturing all the elements of the hidden factory.

Data was gathered and activity codes were created to determine the extent of process influence. In the end, the team formulated a control plan that changed the existing process to formally capture the elements of the hidden factory. It would no longer be a high risk element that the team did not know existed.

With the new process up and running, BN has realized a current benefit of $866,000 this year. But the biggest payout goes to the customers. They have realized a benefit of more than $4 million this year in repackaging and transportation cost reductions and will continue to benefit from the improved process.

MILESTONES

Bechtel Nevada

40 years — *Las Vegas* – **Dale Holmberg, C.Y. Tom, Jr.**

35 years — *Las Vegas* – **Edward Hughes**; *Los Alamos Operations* – **Albert DeLanoy**

30 years — *Nevada Test Site* – **Guy Gunthorpe**

25 years — *Las Vegas* – **Kathleen Breeding, Randy Flurer, Salvador Macias, Sandra Maines, William Nickels, Lois Prihepa**; *Nevada Test Site* – **Douglas Hornbeck, Michael Mikulis, Paul Robinson**; *Livermore Operations* – **Kenneth Jacoby**; *Los Alamos Operations* – **David Esquibel, Richard Thompson, Jr.**; *Remote Sensing Laboratory-Andrews* – **James Butler**

20 years — *Las Vegas* – **Sharon Herdell, Yvette Mason, Robert White**; *Nevada Test Site* – **Philip Gorka, Carolyn Henderson, Andrew Lysandrou, Thomas Morrissey, Gabriel Rudd, Craig Smith, Glenn Thompson**; *Los Alamos Operations* – **Stuart Baker, Adam Whiteson**

15 years — *Las Vegas* – **Robert Augdahl, Mary Campbell, James Catlin, Joseph Delph, Arlinda Gutierrez, Robert Luciani, Charles Meyer, Cheryl Miller, Julie Nusbaum, Laura Ogle, Stephanie Prothro, Paul Raglin, Larry Snowden**; *Nevada Test Site* – **F.L. Christophiades, Edwin Cox, Jr., Stephen Cruz, Dewayne Jenkins, Patricia May, Curtis Obi**; *Europe* – **Christopher Joines**; *Los Alamos Operations* – **Paul Flores**; *Remote Sensing Laboratory-Andrews* – **Robert Swindell**; *Special Technologies Laboratory* – **Maryann Robbins**

10 years — *Las Vegas* – **Wayne Johnson, Robert Wilson**; *Nevada Test Site* – **Karl Holtwick, Kathie Sodeman**; *Livermore Operations* – **Victor Johnson**; *Special Technologies Laboratory* – **Larry Franks, Robert Miesbauer**

5 years — *Las Vegas* – **Teri Allison, Jaime Badua, Kent Bailar II, Benjamin Davison, Anthony Friscia, Joseph Hassen, Cynthia Truffa, Sarah Yenglin**; *Nevada Test Site* – **Don Dishion, Jr., Barbara Eisinger, Carl James, James Koch, Timothy Manchego, Herbert Moore, Melvin Pepper, Andrew Riggs, Lillie Simon, Patricia Thompson, Paula Treider, Sharon Wehrly**; *Livermore Operations* – **Fletcher Goldin, Eric Huffman, Christopher Silbernagel**; *Los Alamos Operations* – **Maria Salazar**; *Remote Sensing Laboratory-Andrews* – **Kevin Borders, Gerard Garino, Steven Powell, Sr., Timothy Rourke, Salee Wilson**

New Hires

Las Vegas – **Daniel Alvarenga, Tondra De, Misti Duplex, Sydney Gordon, Kristen Helman, Ryan Labrador, Robert Lind, Jr., Lynda Mentgen, Susie Pak, Lance Prothro, Gloria Roan, Delmer Sneed, Gregory Spencer, Denver Stevens, Richard Tarbox IV, Antonio Vargas, Lai Yip**; *Nevada Test Site* – **Jerry Bogert, James Cappelletti, Michael Davidson, Nicki Freeman, Stephan Garrett, Sandra Ladd, Yvonne Mescall, Michael Milward, Steven Munns, Cathy Neal, Peter Ossowski, Edwin Ross**; *Hawaii* – **Lance Sugimura**; *Los Alamos Operations* – **Richard Yeh**; *Remote Sensing Laboratory-Andrews* – **William Beal, Charles Haines**

Desert Research Institute

15 years — **Peter Ross**

10 years — **Stephen Wells**

5 years — **Yvonne Rumbaugh**

Ruchman and Associates, Inc.

15 years — **Nicole Carson**

Wackenhut Services Incorporated - Nevada

20 years — **Harold Carpenter**

15 years — **Jody Coles**

5 years — **Earlie Rose, Jr.**

— Compiled by Kirsten Kellogg

Test Cell A cleanup progresses on schedule

The Industrial Sites Project is in full swing working on the deactivation and decommissioning of the Test Cell A facility at the Nevada Test Site. Project workers are currently involved in the removal of hazardous materials, such as asbestos containing materials (ACM), lead, mercury, radiological impacted materials, and polychlorinated biphenyls (PCBs). Having removed all ACM from the facility, work crews are focusing their efforts on lead and mercury.

Lead is found in various locations throughout Test Cell A in the form of lead bricks and doors, handrail anchors, piping collars and lead in the Neutronics room. The removal of lead bricks, which were used for shielding purposes at the facility, is no easy task. Even with the use of heavy-duty tools such as prybars and electric chisels, dismantling these bricks will prove difficult due to the shear number of bricks and their weight. One wall in particular contains lead bricks that are five layers deep, nine bricks high and 19 bricks across. That's 850 individual bricks – each weighing 28 pounds.

Also underway is the removal of items that contain mercury. Items include wall-mounted capacitors and thermostats. Project crews are also working on the removal of certain heavy equipment, such as the Perkins Rectifier Unit that was used to generate and maintain energy levels at Test Cell A while tests were conducted.

The next phase in Test Cell A's deactivation and decommissioning is the characterization and decontamination of the reactor concrete pad and impacted concrete surfaces. All phases are part of an intensive five-phase cleanup approach, which includes the following:

1) Mitigating specific safety hazards, such as poor lighting and the Hantavirus (*work completed)*;

2) Removing identified hazardous materials (*work in progress*);

3) Characterizing and decontaminating reactor concrete pad and impacted concrete surfaces *(work remains*);

4) Demolishing and properly disposing of buildings 3113, 3113A, 3113B, and 3130 including exterior piping and exhaust stack (*work remains*); and

5) Performing final radiological survey on remaining concrete slab (*work remains*).

Closure activities at Test Cell A, which began in March 2005 are scheduled for completion by September 30, 2005, and will cost as estimated 2.5 million dollars.

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

photo courtesy of Environmental Management

Hydraulic shears dismantle the restroom building and exhaust stack at Test Cell A in Area 25 of the NTS.

Calendar of Events

July 13
Community Advisory Board for Nevada Test Site Programs Public Meeting. Meeting begins at 7:00 p.m. Amargosa Valley Community Center, 821 East Amargosa Farm Road, Amargosa Valley, Nev. Contact **Kay Planamento**, **(702) 657-9088** or e-mail **NTSCAB@aol.com**.

July 16
Benjamin Cody Benjamin presents "Trinity: Then and Now," photographs of the first atomic blast. Atomic Testing Museum, 755 East Flamingo Road, Las Vegas, Nev. Contact museum at **(702) 794-5151**.

July 30
Opening of the exhibit "Face to Face with the Bomb: The Nuclear Weapons Photographs of Paul Shambroom." Atomic Testing Museum, 755 East Flamingo Road, Las Vegas, Nev. Contact museum at **(702) 794-5151**.

August 6
Dr. James N. Yamazaki presents "Children of the Atomic Bomb and Their Future." Atomic Testing Museum, 755 East Flamingo Road, Las Vegas, Nev. Contact museum at **(702) 794-5151**.

September 5
NNSA/NSO and contractor offices closed in observance of Labor Day.

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
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 (702) 295-5825**.

Upcoming Conferences, Meetings, and Trade Shows

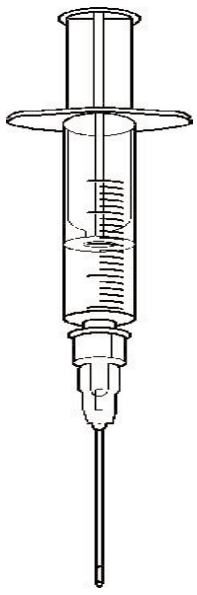
July 10-13
International Association of Emergency Managers 15th World Conference on Disaster Management. Metro Toronto Convention Centre South Building, Toronto, Ontario, Canada. For additional information, visit www.wcdm.org.

July 10-14
Health Physics Society's 50th Annual Meeting. Spokane Convention Center, Spokane, Wash. For additional information, visit www.hps.org/newsandevents/meetings/meeting4.html.

September 4-8
10th International Conference on Environmental Remediation and Radioactive Waste Management. Glasgow, Scotland. For additional information, visit www.icemconf.com/.

October 16-19
1st International Conference on Construction Engineering and Management. Lotte Hotel Jamsil, Seoul, South Korea. For additional information, visit www.iccem.org/.

August is:

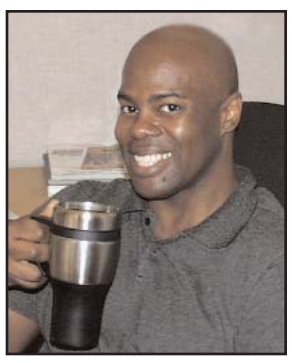


Eye Injury Prevention Month

and

National Immunization Awareness Month

Face-to-Face



Name: Bryan White

Company: Stoller-Navarro Joint Venture

Title: Environmental Compliance/Waste Management Technician

Hometown: Las Vegas, Nev.

Hobbies/
Interests: Computers and computer technology, fitness, literature and movies (sci-fi and horror for the most part)

SiteLines
Bechtel Nevada
P.O. Box 98521, M/S NLV 106
Las Vegas, NV 89193-8521

PRSRT STD
U.S. Postage
PAID
Las Vegas, NV
Permit No. 155

SiteLines

Published for all members of the NNSA/Nevada Site Office family
Kathleen A. Carlson, Manager, NNSA/Nevada Site Office
Darwin J. Morgan, Director, Office of Public Affairs
Submit articles or ideas to the editor at M/S NLV106,
restivnm@nv.doe.gov, or 702-295-7045

Editor:
Kirsten Kellogg
Bechtel Nevada

Layout and graphics:
Kirsten Kellogg
Bechtel Nevada

Contributors:
Bob Braddy
Kevin Broadbent
Doris Burnett
Debi Foster
Sheril Hamlin
Ted Hartwell
Kirsten Kellogg
Sarah Martin
Davey Matthews
Michelle Meade
Patsy Molina
Darwin Morgan
Jennifer Morton
Cheryl Oar
Raffi Papazian
Norma Restivo
Bob Skier
Karen Sondrol-Maxwell
Ray Thom
Nancy Tufano

National Nuclear Security Administration

Printed on recycled paper