

## Bodman tours DOE facilities in Nevada

**S**ecretary of Energy Samuel Bodman visited Las Vegas for the first time in mid-April, at which time he toured various DOE and NNSA facilities, including Yucca Mountain, the Remote Sensing Laboratory-Nellis, as well as the Nevada Test Site (NTS).

At the NTS, Secretary Bodman flew over the Phoenix Facility, where first responder training is taking place for the Department of Homeland Security, as well as the JASPER facility, an acronym for Joint Actinide Shock Physics Experimental Research. The JASPER gas gun plays an integral role in material property studies for the Stockpile Stewardship Program.

Secretary Bodman also toured and was briefed on other NTS landmarks, including Frenchman Flat, where the first atmospheric test was conducted, as well as the following major areas:

- Nonproliferation Test and Evaluation Complex - the only facility of its kind for either large- or small-scale hazardous and toxic materials testing.
- U1a Complex, where sub-critical experiments are conducted.
- The Radiological/Nuclear Countermeasures Test and Evaluation Complex, a multi-use test and evaluation platform that will serve the U.S. homeland security mission.
- Radioactive Waste Management Complex - Low-level radioactive waste is stored in this location.
- Device Assembly Facility (DAF) - Now that the U.S. is under a continuing nuclear testing moratorium, the DAF serves as the Criticality Experiments Facility.
- Yucca Dry Lake
- Atlas Facility - this pulse power facility investigates the properties of materials (nonnuclear)

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**Left:** Employees received a pep talk from Secretary Bodman, who spoke in person at the Mercury Cafeteria and also took questions from employees.

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**Above:** Secretary Bodman toured a variety of key landmarks at the NTS, including the U1a facility.

**Bodman Visit**  
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under extreme conditions and provides data to assist in the validation of nuclear weapons codes.

- The U16b tunnel, where the Divine Strake experiment is expected to occur in June.

During his visit, Secretary Bodman also made remarks to employees and took questions at the Mercury Cafeteria. This session was broadcast to other areas of the Nevada Site Office.

Noting that the work that employees do is "not only challenging but important," Secretary Bodman emphasized the following key messages:

- He expressed his personal gratitude, on behalf of President Bush, for the work of all employees affiliated with the Nevada Site Office.
- He insisted that employees make personal safety a priority in everything they do.

**“The work you’re doing is not only challenging but very important.”**



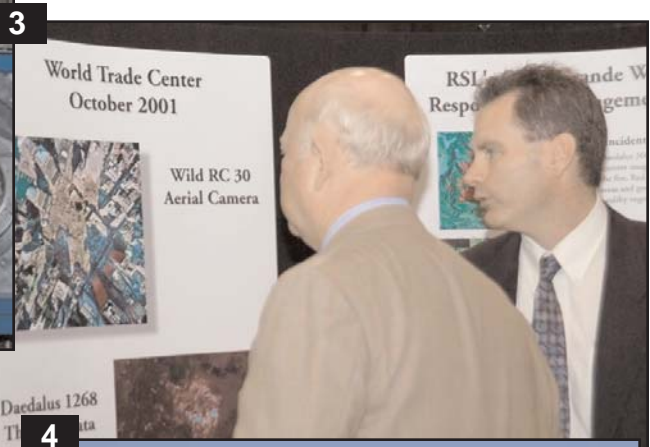
**Above:** Bert Cochran of the Remote Sensing Laboratory demonstrates to Secretary Bodman the operation of Second Line of Defense (SLD) equipment. Cochran is the lead BN Technician for the SLD project.

**One:** Kathy Carlson and Secretary Bodman pose in front of the Cygnus Inductive Voltage Adder at U1a (05 Drift) Armando - prior to full assembly.

**Two:** Ronald Gross, BN manager at the Remote Sensing Laboratory-Nellis, explains to Secretary Bodman the RSL sensor characterization process using an automated robot.

**Three:** Aerial Measuring System Manager Courtney Brown explains to the Secretary RSL’s emergency response activities to the attacks of Sept. 11, 2001.

**Four:** Secretary Bodman viewed portions of the NTS from this Sundance helicopter.





# NTS receives first out-of-state mixed low-level waste

On April 11, 2006, the Nevada Test Site (NTS) received its first shipment of out-of-state Mixed Low Level Waste (MLLW). The shipment, which came from the Idaho National Laboratory, was deposited at the Area 5 Radioactive Waste Management Site and was the first received outside Nevada since 1990.



*A delivery truck waits in the parking lot at Area 5 Radioactive Waste Acceptance Program.*

With its ideal combination of depth to groundwater, arid climate, and natural earth configuration, the NTS is the optimal place for disposal of MLLW. The NTS is also the only U.S. disposal site that can accept Alpha Contaminated waste that doesn't meet requirements for disposal at the Waste Isolation Pilot Plant or commercial facilities.

"The ability to dispose of MLLW fulfills the complex-wide clean-up and closure commitment. The Area 5 Radioactive Waste Management Site is the only nationally approved MLLW disposal site," said **Jhon Carilli**, NNSA/NSO Low-Level Waste Federal Sub-Project director. "Without this safe and successful team effort the National Nuclear

Security Administration (NNSA) and stakeholder goals for complex remediation efforts could not be met."

The NTS has been receiving shipments of Low Level Waste (LLW) since 1978. LLW is defined as radioactive waste that cannot be classified as high-level waste, transuranic waste, spent nuclear fuel, or by-product material such as uranium mill tailings.

MLLW is a combination of LLW and regulated hazardous wastes. Some examples of MLLW include debris components, valve actuators, and steel plating. MLLW is accepted from other DOE locations and is treated before arriving at the NTS, therefore the NTS is for burial only.

The burial process works as follows: MLLW arrives at Area 5 from other DOE sites nationwide; the team of experts assures the documentation is in order and the containers are compliant for disposal; the containers are moved into Pit 3; and the containers are removed from the vehicle and placed into a 30-ft. deep pit. The containers, which can be in the form of boxes, drums, or Sealands, are then covered with soil as required to meet regulatory, safety basis, and operational controls.

"Bechtel Nevada has been working diligently with the Nevada Site Office and the Nevada Division of Environmental Protection to establish acceptance criteria and implement a process to accept off-site MLLW. Accepting this waste not only benefits the NTS, but also the DOE complex," stated BN Environmental Management Assistant General Manager **Wayne Johnson**.

The NTS will continue to receive MLLW over the next four and a half years, or until a total of 20,000 cubic meters of MLLW is reached, whichever comes first.

## The following acronyms appear frequently in *SiteLines*:

<b>BEEF</b>	Big Explosives Experimental Facility
<b>CTOS</b>	Counter Terrorism Operations Support
<b>DAF</b>	Device Assembly Facility
<b>EM</b>	Emergency or Environmental Management
<b>ES&amp;H</b>	Environment, Safety, and Health
<b>FRMAC</b>	Federal Radiological Monitoring and Assessment Center
<b>JASPER</b>	Joint Actinide Shock Physics Experimental Research (gas gun)
<b>LANL</b>	Los Alamos National Laboratory
<b>LLNL</b>	Lawrence Livermore National Laboratory
<b>NNSA</b>	National Nuclear Security Administration
<b>NSO</b>	Nevada Site Office
<b>NTS</b>	Nevada Test Site
<b>RSL-A</b>	Remote Sensing Laboratory - Andrews
<b>RSL-N</b>	Remote Sensing Laboratory - Nellis
<b>SCE</b>	Subcritical Experiment
<b>SNJV</b>	Stoller-Navarro Joint Venture
<b>SNL</b>	Sandia National Laboratories
<b>STL</b>	Special Technologies Laboratory
<b>WSI-NV</b>	Wackenhut Services Incorporated - Nevada

## In the next issue of *SiteLines*

- Divine Strake experiment
- Take Your Children to Work Day
- Environmental work conducted at the Marshall Islands
- History of Cane Spring
- Update on Kathy Carlson retiring
- P2 Environmental Awards

# Beyond

# the Call

The oft-quoted African proverb has become so commonplace that the first four words of the phrase have become part of America's cultural lexicon.

Many may be familiar with the maxim, but there are few with whom it resonates more than Bechtel Nevada Facility Manager **Stephen Okosisi**. He was raised in a rural Nigerian community that treated the aforementioned adage as a covenant. The sacrifices of his immediate and extended family allowed him to become one of only three youths from his elementary school class to graduate from high school, and consequently graduate from Howard University with bachelor and master's degrees in chemistry and environmental engineering, respectively.

But Okosisi has turned the adage on its ear. Although Okosisi resides in Las Vegas, he has taken on the responsibility of assisting his childhood homeland, providing his family with financial assistance and know-how to become financially independent, and assisting the larger community with the installation of electricity and pipe-borne water, among other things. Could it be that the child is raising the village?

Okosisi's humility won't allow him to make such a claim, but when one considers the 1,000-bird poultry farm he began funding in July 2005, along with the mushroom cultivation he plans to implement next year, the proverbial reversal is almost self-evident.

"The poultry farm is doing very well, and serves not just one village but an entire community," explained Okosisi, who said maintaining the farm and hiring a licensed veterinarian have cost him approximately \$10,000 thus far.

"But it has been worth it," Okosisi added. "The chickens, the eggs they produce, and their ability to sell products of the poultry farm have helped my people economically and practically."

*"It takes a village to raise a child..."*



*Children in the Village of Mgbokonta present the gift of a ram.*

Economic independence and stability are rarities for subsistence communities in Nigeria, according to Okosisi, who said despite his native country's oil wealth, far too little money finds its way into the hands of the rural communities who need it the most. It is that disparity that prompted Okosisi's newest venture.

"You might say that I've been captivated by mushroom cultivation," said Okosisi, who recently attended a seminar in Olympia, Wash., that taught 30 attendees from as far away as the United Kingdom the process of mushroom cultivation.

Okosisi admits that mushrooms are probably not the likely pick by many to rejuvenate a community, but he's quick to laud the merits of mushroom cultivation, not the least of which is the fungi's financial usefulness.

"Mushrooms offer all the benefits my community needs to achieve the autonomy they need to not only survive, but prosper," Okosisi said. "Not only can they consume it in a variety of ways all year long, but they can grow it virtually anywhere at anytime with the proper training and equipment." He added that protein-laden, cholesterol-free mushrooms also provide a healthy and viable alternative to animal protein -- a cost-prohibitive item for many residents in rural communities of Nigeria.

Okosisi plans to use what he has learned about mushrooms to perfect cultivation techniques before he introduces the process to his native community next year. Until then, he and his younger brother Jerome plan to maximize the use of their poultry farm and find new ways to "raise" their village.

"Helping my community has been my honor...and obligation," Okosisi said. "If we have knowledge and keep it, then we're not serving humanity well. A lot of time and energy was invested in me...this is just a way for me to say 'thank you.'"

## Threat, detection course features guest speakers

Catchwords like "homeland security" or "nuclear threat" elicit at least a passing interest



**Warnick Kernan**

from even the most apathetically inclined in the wake of the horrific terrorist attacks of Sept. 11, 2001. Mention them in tandem, and mild interest often turns into piqued curiosity. At least that's the hope of **Dr. Warnick Kernan**, Bechtel Nevada scientist and University of Nevada, Las Vegas (UNLV) adjunct faculty member, who teaches a special topics course titled, "Nuclear Threat and Detection for Homeland Security" Tuesday and Thursday nights from 7 p.m. to 8:15 p.m. at the UNLV campus.

"The course does catch the attention of students from a variety of backgrounds with a variety of interests," explained Dr. Kernan, who works at

the Remote Sensing Laboratory. A highlight of the course, according to Dr. Kernan, has been the professionals from throughout the country who have routinely donated their time and expertise as guest lecturers with the hope of educating another generation of scientists and professionals.

Dr. Kernan said he expects the need for physicists, chemists, health physicists and other scientific disciplines in the field to grow with time, adding that courses such as this are "intended to motivate research and to provide an accessible, but highly authoritative and culturally enriching introduction to the subject." Kernan said the course also has the added benefit of engendering goodwill between the academic community and working scientists.

"We hope to encourage a few students to join this scientific field as well," said Dr. Kernan.

The "accessibility" and "authoritative introduction" to the field comes in the form of guest lecturers who have met and addressed students and the public

each Thursday since late January, and will continue to do so until May 4.

"Subject matter experts drawn from academia, government or industry provide lectures on nuclear threats, public policy, radiation detector technology, and other radiation detection applications," Dr. Kernan said. "I am particularly proud of the guest lecture section of the course because unlike the classroom lectures, which are meant only for the students, the guest lectures are open to the public."

Graduate students and health physicists Jason Davis and Ron Etnire, who work at the Desert Research Institute, describe the lecture series as an "invaluable" part of the course.

"There's no comparison between the classroom and the 'real world,'" said Etnire, who like Davis hopes to enter the field of radiation oncology. "To hear a professional discuss the challenges, opportunities, and possibilities within the field really brings home everything we've studied...and makes it more achievable."

## WSI graduates eager members of Security Protective Forces

On March 31, 2006, 37 Wackenhut Services, Inc. (WSI) Security Police Officers graduated from the Department of Energy (DOE), National Nuclear Security Administration's (NNSA) Basic Security Police Officer Training Course at the Atomic Testing Museum in Las Vegas, Nev.

The graduates are part of a significant increase to the security posture at the Nevada Test Site (NTS) and Nevada Site Office (NSO) that has resulted from a full-time nuclear mission.

Guest speakers at the graduation ceremony included **Dr. Jay Norman**, designated acting manager NNSA/NSO; **Ray Phifer**, NNSA/NSO assistant manager for Safeguards & Security; **Troy Wade**, chairman of the Nevada Alliance for Defense, Energy & Business; and the NTS Historical Foundation.

Both Dr. Norman and Wade praised the students for their decision to become an integral part of the DOE's security protective forces, which are entrusted with the responsibility of protecting the nation's most vital assets, such as spe-



**Scott Damron**, WSI training manager, observes as **Ray Phifer**, NNSA assistant manager, Safeguards and Security, presents the Top Gun Award to the newly graduated Security Police Officer

cial nuclear material, critical infrastructure, and personnel.

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## WSI graduates continued from page 5

Wade presented a history of nuclear testing and the NTS.

"You are not only protecting the NTS, but you are also protecting 60 years of history," stated Wade.

Phifer challenged the students to continue to learn and put forth the extra effort required to maintain the NNSA's goal of an Elite Protective Force, which has the capability to safely and swiftly repel any adversary, including the terrorists of today.

WSI General Manager **Michael Ebert**, and members of the WSI Training Academy, presented the students with graduation certificates.

A special award, called the Top Gun Award, was presented to **Matthew Floyd**, who shot the highest score on the National Nuclear Security Administration (NNSA) qualification course for pistol and rifle. Floyd, who moved here from Fort Drum, New York, is looking forward to his career with WSI.

"I'm particularly looking forward to being on the special response team," he stated.

The SRT is a specially selected and trained unit that will be embedded within the existing NTS Protective Force; it will employ special weapons, vehicles, and tactics similar to our nation's elite military forces. The SRT borrows heavily from the lessons learned in overseas campaigns in order to complete its mission.

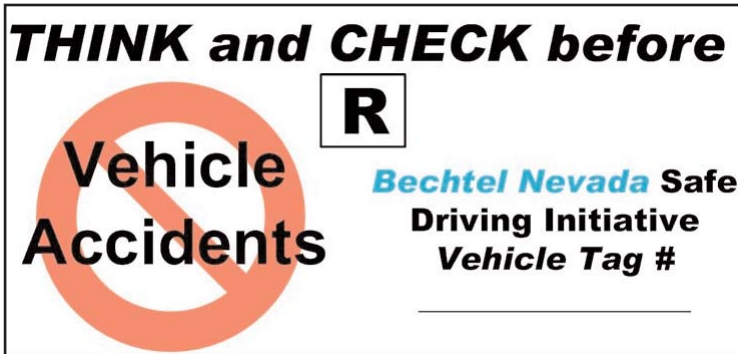
After the ceremony, officers (and their families) toured the museum, which painted a vivid and colorful picture to everyone about how security forces fit into the nation's atomic energy program and how their performance will impact the future.

**"You are not only protecting the Nevada Test Site, but you are also protecting 60 years of history."**

## Magnet campaign spurs safer drivers at the NTS

In November 2005, Bechtel Nevada (BN) senior management requested that the Contractor Assurance and Compliance Department conduct a Root Cause Analysis to determine the reason vehicle accidents at the Nevada Test Site (NTS) continued to be an issue.

One-on-one interviews were conducted with 36 drivers involved in accidents resulting in damage to either government vehicles or equipment, or government paid-for-rental vehicles. Each interviewee was asked a fixed set of questions with the goal of discovering common data regarding the accidents. Since 60 percent of the accidents were backing accidents, management attention was directed to this area first.



**John Howanitz**, NTS Operations Manager for BN, was asked to create an aggressive campaign to reduce the number of vehicle backing accidents.

Information received from the interviews indicated that drivers were not always performing a walk around of the vehicle before they drove it. Drivers who did perform a walk around looked mainly for vehicle damage, not for objects in their path.

The challenge was to get the employees to perform these two functions of looking for existing damage to the vehicle and, more importantly, to look behind the vehicle for items that could cause damage. Howanitz researched possible solutions at other sites and rejected two.

One was to place an orange safety cone in front and back of vehicles to attract attention. Employees later informed John that this resulted in damaged cones caused by drivers

who simply "ran over" the cones. The other idea was to place chocks in front of vehicles. Again, this resulted in more of an annoyance to drivers rather than a change in their behavior.

The program ultimately chosen for the test site involved placing magnets on vehicles; this reminded employees of the safety requirement to locate obstacles around the vehicle that may not be visible from the driver's seat. The magnetic signs were distributed for use on all NTS Operations General Services Administration vehicles.

Each driver was required to place the sign at the rear of the vehicle each and every time the vehicle was parked. When the driver returned to

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the parked vehicle, a walk-around inspection was completed to alert the person to any potential obstacle in the vehicle path. The driver then placed the sign inside the vehicle before backing up. Magnet signs were not required when a driver backed into a parking place or parked where he/she could drive through the space without reversing.

Implementation and adherence to this pilot program was observed over a 90-day period. The end result was a resounding success!

Throughout the 90-day period, not a single backing accident (from a stop) occurred within NTS Operations. Howanitz stated that 50 percent of vehicles now back into their parking space or drive through the space without reversing. Statistics from the Root Cause Analysis indicated that only 3 percent of employees backed into their parking spaces and only 9 percent pulled through the space so their exit did not require backing.

As a result of the demonstrated behavior change, the requirement to use the magnets was suspended on April 18, 2006. However, if the new "safety behavior" appears to be eroding, the program may be reinstated.

In the meantime, the success of the program has caught a few

eyes. Case in point is **Ken Hoar**, acting assistant manager for Safety Programs for the NNSA.

"The 'Check-Before-You-Reverse' campaign has proven to be a great success story," says Hoar. "The process required by the campaign increased the level of attention while operating a motor vehicle. The results are staggering in that during a 90-day trial period, no backing incidents occurred. Once again, Bechtel Nevada challenged employees to resolve a behavior-based safety issue in the workplace."

**"The results are staggering in that during a 90-day trial period, no backing incidents occurred. Once again, Bechtel Nevada challenged employees to resolve a behavior-based safety issue in the workplace."**

## Face-to-Face

**Name:** Lori Miller  
**Title:** Future Leaders Program participant/  
 Facility Representative in Training  
**Company:** NNSA  
**Hometown:** Albany, Missouri  
**Hobbies:** Nature, Harry Potter, science fiction (TV and books)



Lori believes her most significant contribution to the NNSA so far is improving the FLP Program and New Employee Training in general, and providing an outsider's perspective to the methods involved with oversight by being "gutsy" enough to ask the stupid questions. Since working at NNSA, she has learned that the ability to read people and play interpreter between "techie" and average "Joe six-packs" has made her better at what she does. Her ideal job would be as an occupational therapist specializing in hippo therapy. She has a family background involving animals and various disabilities and has found such activities are a great way to give back to humanity. Most people don't know that Lori was run over by a car when she was about four.

Have you visited the  
**Atomic Testing Museum?**  
 Go to  
<http://www.atomictestingmuseum.org/hours.htm>  
 for more information.



## Independent study finds Amchitka marine environment safe

An independent team of scientists recently studied Amchitka Island's marine life and found no evidence that radionuclides from past nuclear tests have compromised the area's fish and wildlife. The Consortium for Risk Evaluation with Stakeholder Participation, or CRESP, performed the comprehensive study over the course of three separate expeditions in the summer of 2004. Their findings were released in August 2005.

The governor of the state of Alaska made a request for the independent assessment in a letter to the Secretary of Energy after Aleutian communities expressed concern over the safety of their food sources. Radionuclides were released into the Amchitka subsurface environment during a series of underground nuclear tests from 1965 to 1971. Since then, questions have been raised over whether these radionuclides could migrate into the sea and affect wildlife.

This most recent research effort set out to look at this question and to provide valuable insight into future monitoring and stewardship options. CRESP's approach involved collecting a large number of samples and then measuring the samples' radionuclide content. Researchers sampled biota (regional flora and fauna) from seabirds, marine algae, invertebrates and fish throughout the island. Results concluded that radionuclide levels were within the range of biota found in other marine environments in the Northern Hemisphere. In fact, all levels of radionuclides measured "far below" any human health food safety standard.

In interviews, CRESP participants have said the findings should provide assurance to those in the region who depend upon the fish and other wildlife for subsistence food. But they also stress the importance of using their findings as a baseline for future

data gathering and monitoring. To learn more about CRESP, or to view the Amchitka report in its entirety, visit: <http://www.cresp.org>.

The remote island of Amchitka is located in the Aleutian Island chain between the Bering Sea and the North Pacific. The island is one of 129 DOE sites requiring long-term stewardship.

CRESP is an interdisciplinary, multi-university research body that performs independent risk evaluations for U.S. Department of Energy (DOE) sites facing cleanup or long-term stewardship. Though independent, CRESP works in concert with other entities. For the Amchitka study, CRESP's approach was reviewed by the State of Alaska, DOE, the Aleutian/Pribilof Island Association, and the U.S. Fish and Wildlife Service. Stakeholders, such as residents of Unalaska, Nikolski, Atka, and Adak, also played a vital role in the design and refinement of CRESP's research plan.



The flora and fauna of Amchitka Island reveal that the level of radionuclides are within the range found in other marine environments in the Northern Hemisphere.



# NNSA works cooperatively to tackle security threats facing America

Over the past decade, security threats facing our nation have changed tremendously.

Radioactive materials used in agricultural, medical, and industrial sectors can be diverted and misused for Radiological Dispersal Devices (RDDs) or "dirty bombs."

To mitigate the threat of terrorists acquiring high-risk radioactive materials, the National Nuclear Security Administration's (NNSA) International Radiological Threat Reduction (IRTR) program works in cooperation with foreign counterparts and international organizations to locate, recover, consolidate, and enhance the security of such materials.

One aspect of the IRTR Program provides U.S. funding for Russian companies to secure and/or retrieve abandoned radiation sources, such as radioisotope thermoelectric generators (RTGs). RTGs powered by strontium-90 are used in the Arctic Sea region to provide power to navigation beacons. Since Strontium-90 has a half-life decay period of 30 years, the beacons can provide uninterrupted power in remote locations for many years.

During September 2005, an NNSA team traveled to Russia for a verification visit to ensure that the RTGs were being collected and disposed of as previously agreed. The team included **Carson Riland**, Remote Sensing Laboratory, Bechtel Nevada; **Brian Waud**, Office of Radiological Threat Reduction, NNSA-Headquarters; **Lonnie Moore**, Lawrence Livermore National Laboratory; and two interpreters (one out-of-country and one in-country). Carson said this was a unique adventure and that the Russians were very hospitable hosts. However, he added, Russian Customs can be quite a different kind of adventure.

The team arrived in Moscow and traveled by Russian airline to Naryan Mar, and then flew to the Kara Sea coast by helicopter. A landing craft transported the team to the HS Smirnitskii and a sister ship used for the RTG recoveries. The ships had been refurbished by the U.S. program for the recovery effort. The team observed RTG recovery operations by the Russian crew both on land and on the ship.

While onboard, the team observed two RTG recoveries by the Russian crew from navigational beacons. Carson stated that

polar bears. Many of the beacons had been damaged by the bears. At least one crew member with a rifle accompanied the team while they were on land.



**Above:** Carson Riland onboard the Russian ship HS Smirnitskii during recovery efforts for radioisotope thermoelectric generators (RTG's) used in the Arctic Sea region to provide power to navigation beacons.

**Left:** One of the recovered RTG units is loaded on the Russian Ship for transport to Murmansk.



Onboard, an Iridium phone allowed the team to keep in touch with Russia and the United States.

Carson said that "the food onboard was authentic Russian fare and was pretty good. Because these vessel are at sea for weeks to months at a time, they told me they only purchased top quality food for the crews."

"the tundra was thawed and you would sink up to four inches with every step."

The RTG units recovered were approximately 30 inches high and 20 inches in diameter, though actual strontium-90 sources inside are ceramic and about the size of a coffee can. Riland, a certified health physicist, monitored radiation levels during the recovery. One of the potential hazards the team faced during the recovery operations was encountering

Once the RTGs were recovered, the ships proceeded to Murmansk. It was a voyage that would take three days over sometimes very rough waters. Once at Murmansk, the RTGs were unloaded using a large crane, loaded into special rail containers, and shipped to Moscow for repackaging and then on to Myack for disposal.

**S**outhern Nevada is one of the sunniest places in the continental U.S. and, not surprisingly, skin cancer concerns are a common reason for a visit to the doctor.

Over one million cases of skin cancer are diagnosed each year with the incidence increasing annually. These skin cancer cases include Basal Cell Cancer (BCC) and Squamous Cell Cancer (SCC) as well as the potentially deadly melanoma.

Skin cancer is most commonly found on the sun-exposed areas of the body, such as the face, scalp, ears, neck, chest, hands, back, and legs. However, melanoma can show up anywhere - including the soles of the feet, palms, inside the mouth, genitalia, and underneath the nails. Most commonly it is found on the back, buttocks, legs, scalp, neck, and behind the ears.

### Skin cancer effects

BCC grows slowly and usually spreads contiguously with little spreading to other parts of the body. Therefore, BCC is the least lethal of the three skin cancers discussed. However, BCC can cause significant damage to the affected tissue resulting in severe disfigurement and requiring extensive surgery.

Squamous Cell skin cancer (SCC) grows more rapidly and does have the potential



to metastasize or spread. SCC is also capable of considerable local tissue damage and, with the capability of spreading to other organs, is a more lethal skin cancer than BCC.

Finally, melanoma is the most deadly of the three skin cancers discussed.

Melanoma often develops in a pre-existing mole that begins to change or it can appear as a new mole. It has the ability to metastasize that makes melanoma a very dangerous form of cancer.

### Early recognition is important

BCC can appear as a red patch, or irritated area, a small pink, pearly lump, a waxy, white or yellow scar-like area, a smooth growth with a dent in the center, or an open sore that bleeds or oozes.

The most common sites for SCC are the ears, face, and the mouth. It usually arises from a precancerous lesion that appears as a rough, flat pink spot that is raised above the skin level and is firm to the touch, a sore that doesn't heal, a wart-like growth, or an ulcerated bump or thickened skin on the lower lip.

According to the American Academy of Dermatology, one person dies from malignant melanoma every hour. The ABCDs of Melanoma Detection are:

- Asymmetry.** If you fold the lesion in two, the halves do not match.
- Border.** Melanomas may have uneven or blurred borders.
- Color.** Not usually one solid color. May contain tans, reds, black, browns, blues, and whites.
- Diameter.** Usually about the size of a pencil eraser or smaller.

### Prevention is the key

- Stay out of the sun between 10 a.m. and 3 p.m., even on cloudy days.
- Sunscreen with at least 15 SPF is recommended.
- Apply sunscreen heavily 30 minutes prior to exposure.
- Reapply sunscreen every two hours or after swimming or perspiring.
- Wear clothing that covers your body. A wide brimmed hat is recommended.
- Avoid exposure to all forms of ultraviolet (UV) radiation from artificial sources.
- Wear sunglasses with UVA and UV B protection.
- Throw away last year's sunscreen.
- Look for the Skin Cancer Foundation's "Seal of Recommendation" on some sunscreens, sunglasses, clothing, etc.

For more information go to:

<http://www.skincancer.org/artificial/index.php>

<http://melanomafoundation.org/>

<http://www.skincancer.org/children/index.php>

<http://www.skincarephysicians.com/skin-cancernet>

## Face-to-Face

**Name:** George Edward Hand IV  
**Company:** Bechtel Nevada  
**Title:** Manager, Special Activities Support, Counter Terrorism Operations Support  
**Hometown:** Braithwaite, Ariz.  
**Hobbies:** Computer Science



**G**eorge believes that his most significant contribution to BN is fostering enhanced credibility to the Department of Defense Special Operations Community. He has learned that keeping your friends close and your enemies closer is making him better at what he does today. If he could have any job, he would be the host of the game show Deal or No Deal; he only has two operational criteria to worry about. Most people wouldn't know that he turned down the Clive Owen role opposite Denzel Washington in the movie *The Inside Man* so that he could sit in on a root cause analysis board.



**May is:**

**National Skin Cancer Awareness Month**

**and**

**High Blood Pressure Education Month**

# Milestones

## Air Resources Laboratory/Special Operations & Research Division

5 years **Gerry Fleming**

## Bechtel Nevada

35 years *Las Vegas* - **Dorothy Green, Charles Jones, Robert Pritchett.**

30 years *Las Vegas* - **Rande Finkley**

25 years *Las Vegas* - **Roy Lewis, Rudolf Rehfeld, William Skarda;** *Nevada Test Site* - **Bruce Charlton, Chloe Day, Samuel Kilpatrick, Michael Seevers**

20 years *Nevada Test Site* - **Ralph Musick Jr., Wilbert Wharton**

15 years *Nevada Test Site* - **Nicholas Simpson, Terrence Sonnenburg**

10 years *Nevada Test Site* - **Jeffery Cates, Billy Hopkins**

5 years

*Las Vegas* - **George Hand, Scott High, Kathryn Skelley-Bird;** *Nevada Test Site* - **Steven Bobo, Martin Cavanaugh, Aaron Fisher, Larry Lambert, Jeff Moon, Kelly Murphy, Roberta Nelson, James Peters ;** *Remote Sensing Lab - Nellis* - **Tricia Nix,** *Special Technologies Laboratory* - **Terence Davies, Ronald Justin**

## Los Alamos National Laboratory

20 years **Richard Kovach**

New Hires *Las Vegas:* **Eugene Zolnay;** *Livermore Operations:* **John Helton;** *Los Alamos Operations:* **Douglas Lewis;** *Nevada Test Site:* **Andrew Bendtsen, Randall Erickson, Robert Flynn, John Griffin, Rochene Johnson-Trueitt, Lillie McKinney, Dean Nelson, Marilyn Overman, Barton Roberts, John Wright; *Remote Sensing Laboratory - Andrews:* **Troy Waterman;** *Special Technologies Laboratory:* **Melissa Hernandez, James Peterson****

## Face-to-Face

**Name:** Bruce Baker  
**Title:** Computational Hydrologist  
**Company:** Stoller-Navarro  
**Hometown:** Meadville, PA  
**Hobbies:** Caving and Land Rovers



**B**ruce believes his most significant accomplishment for his company is that he implemented a Total Systems Model for Pahute Mesa in just three months! Since working at Stoller Navarro, Bruce has found a magic key for working his way through Data and Modeling reports to find important modeling parameters! If he could have any job, he would take an offer that he received years ago to be a writer compiler, a skill he had just acquired by completing a class in the subject. He would like the job offer back, as it came from a young man in a garage shop in Albuquerque who had just dropped out of Harvard and wanted to write a new compiler but had no experience. That young man's name was Bill Gates! Most people might not know that Bruce is completing his master's degree in Explosives Engineering at New Mexico Tech in Socorro.

## Retirements

**John Anderson** - Wackenhut Services, Inc.  
**Dona Hardy** - Bechtel Nevada  
**Mark Helwig** - Bechtel Nevada  
**Barton Roberts** - Wackenhut Services, Inc.  
**Rafael Romo** - Wackenhut Services, Inc.

## In Memory

**Thomas Bull**, former contractor  
**Wilfred Durkee**, former contractor  
**Charles MacInnis**, former contractor  
**Louis Tirella**, former contractor



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Calendar of Events

**June 20**

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

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

**May 9-11**

The Air and Waste Management Association presents the 2006 "Symposium on Air Quality Measurement Methods and Technology" at the Sheraton Imperial Hotel and Convention Center in Research Triangle Park, N. C. Past participants have included the full range of investigators-academe, industry, consultants, and government agencies for exchanging information on current advances in air monitoring, and measurement methods and technology. For more information, go to <http://www.awma.org/events/conf/Measurements/2006/default.asp>.

**May 13-16**

The American Industrial Hygiene Association presents the 2006 conference, Practical Application of Ventilation for Emission and Exposure Control featuring prominent researchers, designers, equipment suppliers, engineers, practitioners, and government officials to explore the latest developments in ventilation-related emission and exposure controls. VENT 2006 will be held concurrently with AIHce 2006 at McCormick Place in Chicago, Ill. For more information, go to <http://www.aiha.org/Content/CE/aihce/aihce.htm>.

**May 17**

The Nevada Counterintelligence Office will be hosting a guest speaker at the Nevada Support Facility, May 17,

2006, from 1:30 p.m. to 3 p.m. in the Great Basin room. Don't miss this opportunity to hear from a former high level Iranian government official who served in Iran during the Iran-Iraq war. The guest speaker holds a Ph.D. in International Law, and a master's degree in International Relations and International Studies. He will be discussing Iranian politics, Caspian Sea issues, and intelligence collection techniques of his former country.

**May 18-20**

The American Society of Civil Engineers presents the 2006 Structures Congress on structural engineering and public safety at the Adam's Mark St. Louis in St. Louis, Mo. Early bird registration ends April 15. The conference will highlight recent research concerning theory, practice, and application of all forms of computation related to the analysis and design of engineering structures. For more information, go to <http://content.asce.org/conferences/structures2006/>.

**June 2-4**

The International Association of Emergency Managers is hosting its 2006 Mid-Year Meeting is for IAEM members, emergency management professionals, Congressional staffers and federal officials with a role in homeland security and emergency management. Sessions will include briefings from top DHS officials. The event takes place at the National Emergency Training Center in Emmitsburg, MD. For more information, go to <http://www.iaem.com/events/MIDYEAR/INTRO.htm>.

**June 4-8**

The American Nuclear Society presents its Annual Meeting, A Brilliant Future: Nexus of Public Support in Nuclear Technology" in Reno, Nev., at the Reno Hilton Hotel. Topical sessions include the 2006 International Congress on Advances in Nuclear Power Plants. For more information, go to <http://www.ans.org/>.