

Secretary Chertoff dedicates new NISAC facility

First DHS-funded building at Sandia marks evolving relationship

By Stephanie Holinka

Department of Homeland Security Secretary Michael Chertoff dedicated the National Infrastructure Simulation and Analysis Center (NISAC) at Sandia on Sept. 18. NISAC is a program that integrates the laboratories' expertise in modeling and simulation of complex systems to examine both natural and manmade infrastructure national security issues.

The center is a partnership between Sandia and Los Alamos national labs and is managed by the Department of Homeland Security's Preparedness Directorate.

Secretary Chertoff affirmed the need for NISAC, insisting that "people who have to make decisions need accessible and reliable information." He praised the "willingness of the Labs to adapt to 21st-century challenges and step forward" to address the types of problems that may someday face our nation.

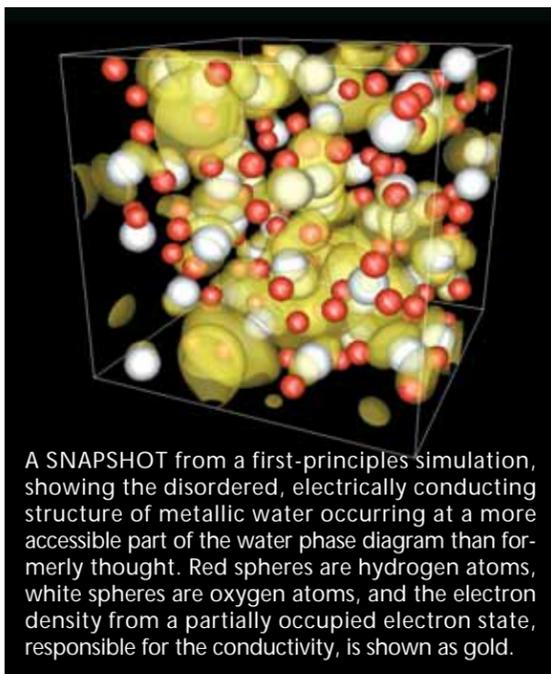
Chertoff was joined by Sen. Pete Domenici, R-N.M., Rep. Heather Wilson, R-N.M., and Rep. Steve Pearce, R-N.M., as they dedicated the first DHS-funded facility at Sandia. They received an

(Continued on page 5)



A GRAND OPENING — Rep. Steve Pearce, R-N.M.; Rep. Heather Wilson, R-N.M.; Sen. Pete Domenici, R-N.M.; Department of Homeland Security Secretary Michael Chertoff; and Sandia Sr. VP Al Romig preside over the ribbon-cutting for the new National Infrastructure Simulation and Analysis Center (NISAC) building at Sandia/New Mexico. The building is the first at Sandia funded by DHS and one of few at the Labs not funded by DOE/NNSA. (Photo by Randy Montoya)

Phase diagram of water revised by Sandia researchers



A SNAPSHOT from a first-principles simulation, showing the disordered, electrically conducting structure of metallic water occurring at a more accessible part of the water phase diagram than formerly thought. Red spheres are hydrogen atoms, white spheres are oxygen atoms, and the electron density from a partially occupied electron state, responsible for the conductivity, is shown as gold.

By Neal Singer

Two Sandia researchers have significantly altered the theoretical diagram universally used by scientists to chart the phases of water. The new model also expands the known range of water's electrical conductivity under extreme temperatures and pressures.

"We were trying to understand conditions at [Sandia's] Z [accelerator] when its flash goes through water," says Thomas Mattsson (1674), a theoretical physicist, "but the problems are so advanced that they hopped to another branch of science and apply to the outside world to a high degree."

The intent of Thomas and Mike Desjarlais (also 1674) was to produce more accurate information on the changing state of water in Sandia's Z machine as its extreme amperage passes through a water bath insulating Z's transmission

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Sandia LDRI sensor continues to monitor space shuttle missions

Team helped bring Atlantis home safely after space debris mystery

By Michael Padilla

During each of the three space shuttle flights since the *Columbia* disaster, the Sandia Laser Dynamic Range Imager (LDRI) sensor has been used to help ensure that the shuttle's thermal protection system is intact before the spacecraft returns to earth.

During the latest *Atlantis* mission nearly two dozen Sandians served as the ground station team at NASA's Johnson Space Center near Houston, Texas.

During the flight while preparing for reentry, astronauts saw several unidentified objects floating in space nearby. Mission control decided to do a quick inspection of the shuttle's skin using NASA's in-house video camera.

"In the spirit of doing everything possible to aid the NASA screeners, the Sandia ground station team processed the NASA data and provided them with improved, high-quality imagery that helped

NASA make the decision to return the shuttle to earth," says team member Mark Heying (2624).

On flight day two after liftoff, the LDRI sensor is used in a series of multiple pass scans of the leading edges of both wings of the shuttle and of the nose cap. Approximately three hours of video is acquired. The operation is repeated just before the shuttle returns to earth, in case the shuttle was impacted by micrometeorites or space debris while on orbit. The sensor generates images of 720 by 480 pixels, at 30 Hz, which are transmitted to the Space Center.

The Sandia team staffed four workstations, which captured the down-linked data and provided various types of products for the NASA screening teams. The first product, called level 1, is the imagery corrected for transmission line artifacts

incurred, and for fixed pattern noise, which is

(Continued on page 5)



ATLANTIS roars into orbit.

(NASA photo)



Benefits Choices 2007

(Almost) everything you need to know* to make benefits changes during the upcoming open enrollment period, Oct. 20-Nov. 9. Stories and charts begin on page 6. * There's information on the web, too.



ECP campaign

Sandia's annual ECP campaign begins Oct. 9. Read about how your generosity can make a difference in our community and in peoples' lives. Stories on pages 8-9.



Org chart

There have been a number of management changes since the *Lab News* last published an org chart back in August 2005. See the latest chart on page 13.

What's what

Fall arrived officially last Friday night, but you probably already knew it was on the way.

Tip-offs vary. There are fairs, apple festivals, the smell of roasting chile (if you're in New Mexico), the gurgle of wine-festival pourings (if you're in California or New Mexico), the first whiff of wood smoke on a chilly morning, football games preempting news programming, animated talk about returning TV shows, idiotic political commercials.

Sandia tip-offs include reminders about the approaching end of the fiscal year and its impact on timecards, invoices, project/task numbers, and vacation balances. And, of course, Open Enrollment. . .

* * *

. . . that time of year to think about the insurance coverage you have and maybe what you don't have but wish you did, and do something about it. You'll find all the options spread over several pages in this issue of the *Lab News*. It seems cost increases are less than we might have expected. Various coverages will cost more, but maybe not so much more that we cringe and gasp. Maybe just a quick, short catch of breath, then a sigh of resignation.

An important bit of information, for example, is that the Open Enrollment phone system available in past years has been eliminated; you'll make changes this year on the web-based system. Be sure to read about that and much more, beginning on page 6.

* * *

While the trappings of power are usually obvious – big office, deference, assistants, schedulers, public recognition, and much more – the definition of power is elusive. You could have some or all of those accoutrements and be just a front for someone else.

Or you could have no visible indications of power, yet exercise uncanny control over an amazing range of undertakings. Like me.

I don't understand how I acquired this power, but by the simple act of discovering that I like a particular thing and picking it off a grocery store shelf two or three times, I can halt the stocking of that commodity, thus altering the buying pattern of a huge chain of stores. The ripple effect is, of course, awesome. Component suppliers all the way to the field feel it.

Don't believe me? Well, I can say without reservation that I affected the equity markets last week. After pulling back a few months ago in an uncharacteristic exhibition of restraint and putting my 401(k) assets in a conservative fund, I decided two or three weeks of a pretty good run-up in the markets signaled that it was time to move back into areas of potentially higher yield. I figured that with approaching retirement, I could use the gains to buy a new dinghy and some whiz-bang electronics for my sailboat.

The day after I made the switch, as Ed Norton used to say: "Va-va-va-VOOM!" To borrow a phrase from the business writers: My losers outnumbered my gainers. A weak rally the next day was followed by two more days of losers outnumbering gainers.

Maybe the logic is specious, but I figure all I have to do to make the market go up like a rocket is to pull out entirely. The problem is that I can't figure out how that would help me.

– Howard Kercheval (844-7842, MS 0165, hckerch@sandia.gov)

Sandia LabNews

Sandia National Laboratories

<http://www.sandia.gov/LabNews>

Albuquerque, New Mexico 87185-0165
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Bill Murphy, Editor 505/845-0845
Chris Burroughs, Writer 505/844-0948
Randy Montoya, Photographer 505/844-5605
Nancy Garcia, California site contact 925/294-2932
Michael Lanigan, Production 505/844-2297

Contributors: Janet Carpenter (844-7841), John German (844-5199), Neal Singer (845-7078), Stephanie Holinka (284-9227), Howard Kercheval (columnist, 844-7842), Will Keener (844-1690), Iris Aboytes (844-2282), Michael Padilla (284-5325), Julie Hall (284-7761), Rod Geer (844-6601), and Michelle Fleming (Ads, Milepost photos, 844-4902), Darrick Hurst (intern, 844-8009), Erin Gardner (intern, 284-8432). Dept. 3651 Manager: Chris Miller (844-0587).

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LOCKHEED MARTIN

Employee Death

Dan Roman of Engineering Services Dept. 8236 died Sept. 10. He was 39 years old.

Dan had been at Sandia for four years. He is survived by his wife Sherry, son Blaine, father Donald, mother Angela, and brother Don.

Sympathy

To Karen Gillings (3550) on the loss of her mother, Myriam Grube, in Dallas, Texas, Sept. 5.



Retiree deaths

Nell B. Norton (age 77) July 17
Richard E. Wilhite (80) July 28
William E. Boyes (87) Aug. 2
Robert N. Roberts (87) Aug. 4
Willie B. Baca (85) Aug. 7
Ruby A. Bell (85) Aug. 11
Kenneth J. Urquhart (90) Aug. 15
Ted Burton Sherwin (88) Aug. 19
James J. Weber (90) Aug. 23
Clara E. Taylor (82) Aug. 27
Robert G. Scharrer (81) Aug. 28
Larry S. Lopez (74) Sept. 2

Upcoming conferences focus on terrorism, homeland security

Terrorism conference set for Oct. 4-6 at Sandia

A conference on "Terrorism: Threats, Training, Tactics, and Technology" will be held Oct. 4-6 at the Steve Schiff Auditorium.

During the three days, participants will have the opportunity to explore some of the challenges and gain a comprehensive understanding of issues related to terrorism.

On Oct. 4, attendees will be given a demonstration of security protective forces armaments and technology at the live fire range, including new tactical vehicles and equipment, simulation technology, and weapons demonstrations.

Scheduled speakers include: Rohan Gunaratna, author of *Inside Al Qaeda*; Mike Scheuer, author and former head of the CIA bin Laden desk; Scott Shumate, former chief operational psychologist for the Counter-Terrorism Center; Brian Michael Jenkins of the RAND Corporation; Sandia Principal Scientist and VP Gerry Yonas; and other Terrorism Research Center experts.

The conference is for military, law enforcement, security professionals, first responders, emergency managers, government leaders, and academic personnel.

The conference is cohosted by Sandia's Security Systems & Technology Center and the Terrorism Research Center. For information, contact Betty O'Hearn-Hines at (727) 360-4302 or at betty@terrorism.com. Information can also be found at <http://www.terrorism.com>.

Fifth Annual Homeland Security Conference is Oct. 24-26

The Fifth Annual Homeland Security Conference will take place Oct. 24-26, at the Marriott Pyramid North, 5151 San Francisco Rd. NE in Albuquerque. Since 2002, more than 2,000 public safety personnel from 200 different agencies have taken advantage of this training.

This year's conference will feature nationally and internationally recognized experts who will guide participants in optimizing limited homeland security resources, identify and discuss emerging threats, highlight cutting-edge technological resources, share expertise in conducting risk assessments, assist in the formulation of appropriate response strategies, and facilitate the development of interdisciplinary partnerships to ensure the safety and security of local communities.

The conference costs \$295 through Oct. 6, (late registration is \$395) and CEU credits are available through New Mexico Tech.

For more information, visit the conference website at www.nmhsconference.org.

Conference coordinator is Steve Rivera, sgriver@sandia.gov, (505) 845-0682.

Teaching the teachers

NORB TENCZA (3652) teaches a nanotechnology class for New Mexico teachers during the



NORB TENCZA

recent SEMI High Tech U Teacher Edition program. The two-day, hands-on program is designed to help strengthen the math and science curriculum by providing teachers with classroom-ready activities and resources. Teachers receive practical

information on the semiconductor and nanotechnology industries and participate in activities focused on math, science, and technology. Mindi Koudelka (5433) presented a class on electronics. Teachers rated the event as "highly successful" and said they appreciated the partnership with technical experts.

Sandia's Rapidly Deployable Chemical Detection System offers fast, potentially lifesaving capability to event managers

Unobtrusive system of sensors designed as detect-to-warn measure

By Mike Janes

Baseball fans cheering on their beloved Oakland A's at a home stand earlier this summer may have been happy about the team's play, but the best news for those at McAfee Stadium in Oakland, Calif., didn't take place on the field.

Through late June and early July, a team of researchers from Sandia/California — roughly 30 minutes east of the A's home at McAfee Stadium — tested the Rapidly Deployable Chemical

Detection System (RDCDS) during a series of games. The system can be packaged and deployed locally within 24 hours and is designed to provide swift yet effective protection at high-profile events. It is funded by the Department of Homeland Security.

RDCDS is designed to provide broad, high-confidence coverage of more than 40 different chemicals using multiple overlapping detection technologies and live video. "The beauty of this system is that it can be packaged and set up at a venue within a day's notice, without having to sacrifice any of the robustness or features required by such a sophisticated system," says Ben Wu (8124), a chemical engineer and project manager for RDCDS. "The bottom line is that it can help emergency responders save more lives in the event of a terrorist attack."

RDCDS can detect a variety of chemical warfare agents as well as the more common toxic industrial chemicals. The RDCDS platform also readily accepts other types of detectors, such as those that sense radiological material.

As a "detect-to-warn" system, says Ben, the aim of RDCDS is to alert emergency responders to a chemical release early on and enable evacuations



RDCDS is designed to provide quick yet effective protection at high-profile events. It was tested recently during a 10-game home stand at Oakland's McAfee Stadium.

(Photo by Randy Wong)

or other timely response measures to minimize casualties.

Mix of detection, surveillance measures

A 2004 version of RDCDS (then known simply as Sensor Management Architecture) used just one node — a box laden with electronic components, detectors, and communications equipment — and just two detectors. The RDCDS system has matured to the point that eight nodes, totaling 64 detectors, were networked in and around McAfee Stadium during the Oakland deployment.

The detectors, says Ben, use a variety of technologies and capabilities to counter any attempts to tamper with the system by terrorists or other outside forces, and simply to avoid having to rely too heavily on any one detector. Detectors are placed strategically and, depending on wind trajectory and other environmental variables, might even be placed outside a venue's physical boundaries.

The system incorporates video surveillance cameras, which serve both to confirm the findings of the detection equipment and to keep a lookout for illicit attempts to damage or alter any system components.

Primary challenge is background noise

In designing and testing the RDCDS system, says Ben, the main obstacle has been dealing with the plethora of background noise common in or near large venues — one reason why Sandia's team appreciated McAfee Stadium's management allowing a multi-game test deployment at its venue.

"You simply can't reproduce in a laboratory the kind of real-world environment where

RDCDS is meant to be deployed," Ben says.

In a typical sports venue such as McAfee, he says, detectors must try to differentiate between authentic chemical releases and cigarette smoke, automobile emissions, perfumes, and odors from popcorn machines, hamburger stands, and hot dog vendors.

In addition to the deployment at McAfee Stadium, Sandia evaluated RDCDS's effectiveness during a 10-week stint at the Livermore, Calif., site and at a brief deployment in early 2005 at San Francisco International Airport.

The final and most important test, however, came in late August, when a test and evaluation — using an authentic chemical discharge — took place at the remote Nevada Test Site.

Ben says the system performed extremely well, meaning the RDCDS is ready for service for the Department of Homeland Security. DHS, says Ben, is weighing its options as to how the RDCDS capability will be folded in to the department's national security responsibilities.



THE DETECTORS used in the Rapidly Deployable Chemical Detection System can detect a wide variety of chemical warfare agents as well as common toxic chemicals.

(Photo by Randy Wong)

Sandia California News

Jim Miller receives Combustion Institute gold medal award at symposium in Germany

Jim Miller, a Distinguished Member of Technical Staff in the Combustion Research Facility's Combustion Chemistry Dept. 8353, last month was awarded the Bernard Lewis Gold Medal by The Combustion Institute at the Thirty-First International Combustion Symposium held in Heidelberg, Germany. The inscription on the medal reads "for brilliant research in the field of combustion, particularly on the theory and modeling of combustion chemistry." An important motivation underlying Jim's research has been to understand how pollutants are formed in combustion and to devise chemical kinetic models that allow their emissions to be controlled.



JIM MILLER

Jim received his bachelor's degree from the University of Cincinnati and his PhD from Cornell University in 1974, where he did research with S. H. Bauer, P. C. T. de Boer, and E. L. Resler, Jr. He has been employed at Sandia/California since his degree. Miller was part of the founding staff of the Combustion Research Facility in 1980 and has had the DMTS title since 1989. He has research interests in both combustion chemistry and theoretical chemical kinetics, and conse-

quently he has published extensively in both the physical chemistry and combustion literature.

Early in his career, Jim teamed with Bob Kee, now at the Colorado School of Mines, to create and develop CHEMKIN, which with its derivative software, has become the standard in the field for chemical kinetic modeling in combustion. Chemical kinetic models are now exchanged simply by exchanging CHEMKIN files.

Jim's current research stems from his previous experience with nitrogen and soot chemistry and is a collaboration with Stephen Klippenstein at Argonne National Laboratory. It involves the theoretical description, using master equations, of reactions that take place over multiple, interconnected potential wells and of the thermal dissociation of weakly bound free radicals. Such reactions dominate our understanding of all of combustion chemistry, as well as that of atmospheric chemistry and chemical vapor deposition. A feature article on this topic, by Jim and Klippenstein, appeared Sept. 14 in *The Journal of Physical Chemistry A*.

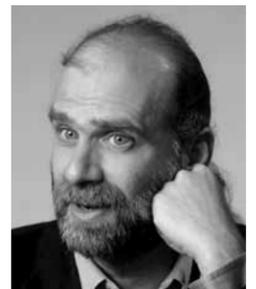
Jim is a Fellow of the American Physical Society and a member of the American Chemical Society, the American Association for the Advancement of Science, and The Combustion Institute. A special issue of *The Journal of Physical Chemistry A*, to appear in early 2007, will be devoted to a "James A. Miller Festschrift" in honor of his 60th birthday.

Distinguished Lecture Series will discuss information security trends



Security is fundamentally all about economics.

— Bruce Schneier



BRUCE SCHNEIER

The Distinguished Lecture series returns in October with a talk by speaker Bruce Schneier, an internationally renowned security technologist and author. His talk on "The Economics of Information Security — Ten Trends" takes place Oct. 5 from 3-4:30 p.m. in the Building 904 Auditorium. Described by *The Economist* as a "security guru," Schneier is known as a refreshingly candid and lucid security critic and commentator. When people want to know how security really works, they turn to Schneier, says *The Economist*.

Metallic water

(Continued from page 1)

lines, as well as through water switches placed along those lines to first restrain and then transmit Z's electrical pulse.

The researchers first found the standard water-phase diagram out of whack when, on Sandia's Thunderbird supercomputer, they ran an advanced quantum molecular simulation program able to include "warm" electrons instead of unrealistic cold ones, says Mike.

The work showed that phase boundaries for "metallic water" — water with its electrons able to migrate like a metal's — should be lowered from 7,000 kelvin and 250 gigapascals to 4,000 K and 100 GPa.

This new range — far beyond that which Z routinely enters — is nevertheless useful because it is sure to revise astronomers' calculations of the strength of the magnetic cores of gas-giant planets like Neptune. Because the characteristics of Neptune's interior water partly lie in this electrically conducting sector, the water probably contributes to a magnetic field formerly thought to be generated only by the planet's core.

Diagram confirmed experimentally

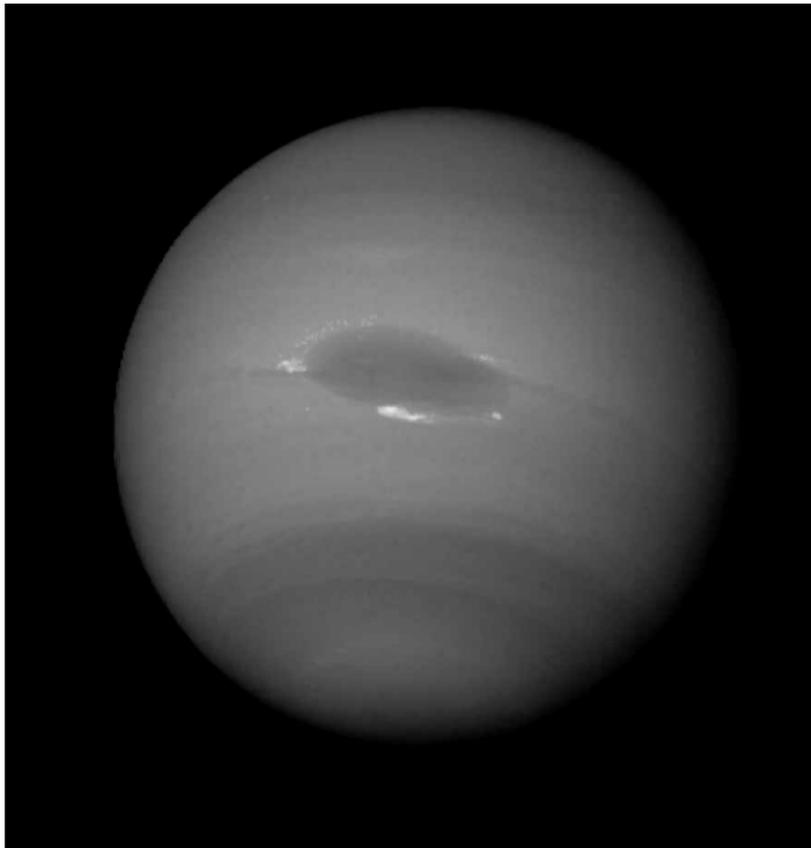
The new calculations agree with experimental measurements in research led by physicist Peter Celliers of Lawrence Livermore National Laboratory.

The computational work, paid for by Sandia's internal Laboratory Directed Research and Development program, is part of a broad front of research to understand conditions that will prevail when the current upgrade of Z to ZR is completed in July '07. With new giant capacitors around Z's circular rim replacing ones 20 years old, the expected amperage sent through the machine's 36 "spokes" to a target placed at its hub is expected

to rise from 20 million to 26 million amps.

A key question for Sandia designers is to determine what characteristics of water can be expected as greater amounts of electricity pour through the machine's switches. These switches not only rely on water's insulating properties to momentarily restrain the current but, in water's ionized state, to pass the pulse forward at a time interval reduced from micro- to nanoseconds.

So much electricity passing through water



THE NEW DATA about the phase boundaries of water are sure to revise astronomers' calculations of the strength of the magnetic cores of gas-giant planets like Neptune, seen here in a photo from NASA's *Voyager* spacecraft. Because the characteristics of Neptune's interior water partly lie in this electrically conducting sector, the water probably contributes to a magnetic field formerly thought to be generated only by the planet's core. (NASA photo)

vaporizes it, causing pressures to rise in surrounding regions as the shock wave travels outward.

But how much is the increase? How big a transmitting cavity does the ionized region form to transmit what amounts to a giant spark? And what are the best sizes for these channels, and for the switches themselves, to optimize the transmission of electrical pulses in future upgrades?

"The concern was that ZR or its successors might go beyond the ability of a water switch to function and carry the current we want it to carry," says Keith Matzen, director of Sandia's Pulsed Power Sciences Center (1600). "The

concern is that more efficient, larger machines may run into a limit and their switches not meet design requirements. So the question is, how does a water switch really work from first principles?"

Understanding water's phases

One aspect of this knowledge is to model water to get a finer understanding of its phases, he says.

The molecular modeling code, VASP (Vienna Ab-initio Simulation Package), based on density functional theory (DFT), was written in Austria and initially used at Sandia by Peter Feibelman (1114). Mike extended it to model electrical conductivity and Thomas developed a model for ionic conductivity based on calculations of hydrogen diffusion. An accurate description of water requires this combined treatment of electronic and ionic conductivity.

The adaptation of VASP to high-energy-density physics (HEDP) work at Sandia was motivated by earlier experimental measurements of the conductivity of exploding wires by Alan DeSilva at the University of Maryland. DeSilva found a considerable disparity between his data and theoretical models of materials in the region of phase space called warm dense matter. Mike's early VASP conductivity calculations immediately resolved the discrepancy. In recent years, a team of Sandia researchers has been extending one of Sandia's own DFT codes (Socorro) to go beyond the capabilities of VASP for HEDP applications.

"Mike was the first to pioneer this capability for warm dense matter," says Tom Mehlhorn, manager of 1674, "and Thomas has come on to be a near-perfect complement as the work enters more complex areas."

Information vital for ZR

Sandia's ability to calculate electrical properties and phase diagrams "has rapidly progressed from simple metals like aluminum for Z's flyer plates — a critical breakthrough by Mike, the need for which was driven by experimental-theoretical discrepancies," says Tom, "to alloys like stainless steel for Z's wire arrays and ZR's structural conductors (with Thomas' help), and now to water, with Thomas leading the way. This six-year history gives us a unique ability to model the extreme conditions of high-energy-density environments."

As it turns out, the newly discovered regime will not adversely affect Sandia's water switches on ZR. But water switches not yet designed for future upgrades may require the more accurate understanding of the phases of water discovered by the Sandia researchers, says Larry Warne (1152).

Because of Z's success in provoking fusion neutrons from deuterium pellets, it is thought of as a possible (if dark-horse) contender in the race for high-yield controlled nuclear fusion, which would provide essentially unlimited power to humanity.

Compression of Z's amperage in time is the cause of its huge power, equivalent to 50 times the electrical production of all the generating plants on Earth for a few nanoseconds.

The work on water phases was initially published July 7 in *Physical Review Letters* and most recently reported at the 12th International Workshop on the Physics of Non-Ideal Plasmas, held in Darmstadt, Germany, Sept. 4-8.

Sandia releases the Acro 1.0 optimization software for free public download

By Chris Burroughs

Acro 1.0 optimization software, developed by a Sandia team led by Bill Hart (1415), has recently been released to the public and is available for free.

Optimization software can be used to answer questions like: "How will a drug molecule bind to a target protein?" or "How should the military distribute spare parts to maximize the reliability of its combat equipment?" Such questions require selecting a best alternative from an enormous set of possibilities.

"Acro puts together different optimization software applications into one large package, making it easier to solve large-scale engineering and scientific problems," Bill says.

Acro integrates many optimization software applications, with most written in the C++ programming language. A user can combine various optimization components to develop an optimization capability that meets a particular need. This flexibility makes Acro a valuable tool for problem solving, particularly for applications that need to integrate an optimization capability into their existing application software.

Primary Acro users are academics and com-

"Acro . . . makes it easier to solve large-scale engineering and scientific problems."

mercial companies seeking to solve specific science and engineering problems such as engineering design, inventory management, and molecular prediction. Acro is currently part of DOE's Advanced Simulation and Computing (ASC) efforts and supports interactions with the Department of Homeland Security, computing activities in a water initiative with the Environmental Protection Agency, and military logistics operations with Lockheed Martin.

Bill says he and his team have been developing Acro for the past year-and-a-half. Both Sandia-developed and off-the-shelf software are included in Acro. In particular, Acro integrates Sandia's APPSPACK, Coliny, OPT++, and PICO optimization software. Acro includes optimization techniques like linear programming, mixed-integer linear programming, derivative-free local search, and genetic algorithms.

Sandia is giving Acro away free to encourage external collaborators to use it and make suggestions for improvements. Acro Version 1.0 is available for download under the terms of the Lesser GNU license from the following web site: <http://software.sandia.gov/Acro>. For more information contact acro-help@sandia.gov.

ARCO PROJECT TEAM MEMBERS: Bill Hart (project lead), Erik Boman, Lee Ann Fisk, Robert Heaphy, Cindy Phillips (all 1415), Tammy Kolda, Patty Hough (both 8962), Jonathan Eckstein (Rutgers University)

NISAC

(Continued from page 1)

overview of NISAC's technical contributions to the nation's homeland security efforts and demonstrations of several technologies.

Proposal predates 9/11, Katrina

Domenici proposed NISAC in 1999, before policymakers fully appreciated the need for such a facility. "I was a salesman selling NISAC to a country that didn't want to accept NISAC," Domenici said.

John Mitchiner, manager of System Engineering and Analysis Business Area Dept. 6320 says NISAC's mission is "to help make US infrastructures more resilient to disruption."

Before 9/11 and before Hurricane Katrina, the idea of having some of the nation's best and brightest examine bad things that hadn't happened yet seemed odd. Domenici found initial funding for the program. When it began to bear fruit, Homeland Security provided additional funding.

In remarks at the ribbon-cutting, Sandia Senior VP and Deputy Labs Director for Integrated Technologies and Systems Al Romig took note of the increasing importance of Sandia's relationship with DHS. He said the Labs is "energized" by the opportunity to continue the tradition of exceptional service to the nation as it confronts the security challenges of the 21st century.

Al said the NISAC facility is evidence of an evolving partnership between NNSA and DHS, adding that it is especially gratifying for the national laboratories to see the interagency cooperation blossom and bear fruit.

Building has collaborative workspaces

The \$7 million, 24,000-square-foot building provides facilities for individuals, teams, and distributed collaboration for some 110 people, and includes a visualization space where modeling results and simulations can be displayed for cooperative analysis and technical development. The building was designed with significant input from its occupants and has incorporated collaborative workspaces to encourage groups to interact more frequently.

NISAC employs experts from a variety of disciplines; it includes computer modelers, economists, and civil engineers. They examine scenarios of disruption from a variety of viewpoints, offering their results to those who may respond to future real events.



OPEN FOR BUSINESS — The National Infrastructure Simulation and Analysis Center is now open. It will be home to some 110 researchers and support staff dedicated to protecting the nation's vital infrastructure. (Photo by Bill Doty)

Theresa Brown at Sandia and her LANL counterpart Jim Smith serve as program managers at their respective labs.

NISAC aids decision makers in preparedness, consequence and risk analysis, policy analysis, investment and mitigation planning, education and training, and provides near real-time assistance to crisis-response organizations.

Because the US supports one of the world's highest standards of living, it relies heavily on

interconnected systems for distribution of energy, transportation of food and other goods, and information. When this flow is disrupted in one area of the country, surprising consequences can result. NISAC provides multidisciplinary consequence analysis of infrastructure disruption, which allows decision makers to have more robust information before they make critical infrastructure decisions during natural disasters or after a terrorist event.

NISAC at work: responding to hurricane threats

When a hurricane threatens, and sometimes long before it does, the NISAC team mobilizes to give planners reports, several days ahead of landfall, of where the vulnerable points are. Emergency resources can be concentrated in those areas.

During the current 2006 hurricane season, NISAC has analyzed regions vulnerable to hurricane damage so that data on key population issues, impacts of infrastructure disruptions, and economic consequences can be quickly available

to impacted communities in the event of an actual storm.

Using current models of US transportation, telecommunications, and electrical systems, they have developed scenarios and sent the results to federal officials preparing for potential hurricane landfalls.

They looked at issues such as where weaknesses in the electricity grid could lead to significant outages and where storm surges could disrupt telecommunications.

Space shuttle

(Continued from page 1)

called flat field correction.

When the level 1 images are delivered to NASA, the total number of frames is reduced by a factor of four, Mark says. This is to help the screeners avoid information overload, while ensuring that full inspection coverage is maintained.

Another ground station product is generated by registering multiple contiguous frames together into a single sharpened image. This high-quality, low-noise imagery is closely examined by NASA screeners for artifacts that did not exist on the shuttle before lift off. If any potential defects are found, an "area of interest" is declared and a request goes out to the Sandia team for a detailed report.

By using a set of in-house processing tools, workstation operators can quickly generate a report that details the length, width, and depth of the specified object, says Mark. The team can also generate a 3-D point cloud image, which can be rotated and examined from numerous angles and zoom settings.



GROUND STATION CREW — Nearly two dozen Sandians provided data to NASA generated from the LDRI sensor during the recent space shuttle *Atlantis* mission. In the foreground is Joel Jordan (2624); others are Steve Gradoville (2661), Eric Ollila (2623), Richard Taplin (barely visible), and Jose Rodriguez (both 2624).

Since the first return-to-flight mission the Sandia team has applied multiple lessons learned to improve the quality of the imagery products and the speed at which they are delivered.

"We have also created several tools to aid

NASA that go above and beyond the original requirements," says Mark. "These tools include real-time documentation of acquisition events, and web-based graphical representation of scan coverage."

New next-generation software is in the works to improve the operator interface, and to speed the delivery of processed imagery even further.

"This mission was another example of the dedication and willingness of the Sandia team to do everything possible to help NASA complete the construction of the International Space Station in a timely and safe manner," says Mark.

The Sandia ground station team includes: Tom Casaus, Dennis Clingan, Mark Heying, Joel Jordan, Bob Nellums, Todd Pitts, Gus Rodriguez, Jose Rodriguez, John Sandusky, Richard Taplin (all 2624) Erik Fosshage (12343), Steve Gradoville (2661), Simon Hathaway (2623), David Karelitz (4326), Steve Lebien (5919), Cristina Montoya (4341), Eric Ollila (2623), Megan Slinkard (2661), and Patricia Tempel (2622). Other support personnel include: Bob Habbit (2624), Dan Talbert (5413), and Larry Dalton (2622).

Benefits Choices 2007

Open Enrollment is Oct. 20-Nov. 9

What's new for employees in 2007

We want to point out a few items that are important for you to take note of during this Open Enrollment.

First, to save on costs and to take full advantage of web-based technology, employees will be sent, via internal mail, a newsletter containing an overview of their Open Enrollment options. Look for this newsletter to arrive at your mail stop mid-October. For detailed information about Open Enrollment options/plans, refer to the OE website at the URL listed in the box at bottom left of this page. Because all information is available via the web, employees will not receive an Open Enrollment booklet and Medical Plan Comparison Grid, as they have in the past.

Second, to make changes to your benefit elections during Open Enrollment this year, you must use the web-based Open Enrollment system. (Because the web system

is in place, the Open Enrollment phone system is not required or available this year.) All changes to your Open Enrollment elections, including enrollment or disenrollment, must be made on the web through Human Resources (HR) Self-Service Open Enrollment Online. This year, you will not receive a hard-copy confirmation of your Open Enrollment elections in the mail. Instead, electronic, printable confirmations recounting your Open Enrollment elections for 2007 will be available online soon after the Open Enrollment period ends.

Third, due to previously announced changes to Sandia's Group Term Life Insurance plans effective Jan. 1, 2007, Prudential is offering a special one-time opportunity to increase or initiate Voluntary Term Life insurance coverage during 2007 Benefits Choices Open Enrollment.

Finally, for the current small number of participants, HBE can no longer support premium share processing on

More benefits information

- Retiree information Page 7
- Important information about life insurance benefits changes Page 12
- Dental plan information Page 12
- Benefits fairs/presentations Page 12

Retiree information begins on page 7

an after-tax basis. Effective Jan. 1, 2007, all employee monthly premium shares will be paid on a pre-tax basis. Imputed income will still apply where applicable. Refer to the employee medical premium sharing section on page 7 for information on the monthly premiums for medical for 2007 as well as information about qualified dependents under the Internal Revenue Code Section 152. Refer to the employee dental plan options section on page 12 for information on the monthly premiums for dental for 2007.

Steps to take during Open Enrollment:

- 1) Review your current benefits under "Benefits Summary" on the HR Self-Service web internal home page.
- 2) Review the Open Enrollment newsletter and view the Open Enrollment information on the website (<http://www.sandia.gov/resources/emp-ret/emp-oe>) at work or home, and evaluate how you want to coordinate benefits with your spouse's benefits (received through his/her employer). Employees will find on the web a wealth of information and tools to assist with benefit selections available this coming year.
- 3) Attend a benefits fair to speak with the vendors and/or Sandia staff (the benefits fair/presentations schedule is on page 12).
- 4) Determine whether you need to use the web-based Open Enrollment application according to the table at right.

Helpful tip: Remember to print your elections page right after you make your changes.

Plan ahead: some questions to ask

- Do I want to open up a Day Care Reimbursement Spending Account (RSA) for my child's day care next year? Review the Payflex Tax Wizard (www.mypayflex.com) or RSA Summary Plan Description worksheet to determine whether an account or the tax credit is best for you. Remember that these accounts require an election each year.
- Do I expect to have health plan expenses (medical, dental, and vision) that will exceed \$100 during the next calendar year? Does my child need orthodontic treatment next year? Am I getting LASIK surgery? If so, should I open up a Health Care Reimbursement Spending account? Remember that these accounts require an election each year.
- Am I satisfied with my medical plan? Is my physician still in the network? If you are thinking about changing medical plans, you should visit the vendor's website to review the list of network providers.

For many people, cost is one of the key factors in choosing a medical plan. The Medical Plan Estimator Tool is specifically designed to help you estimate that cost — looking at both:

- What you are likely to pay for the services and supplies you need during the year.
 - The amount that comes out of your paycheck when you enroll in the Sandia Medical Plan.
 - You can find the Medical Plan Estimator Tool online at the following website: <http://www.active.sandia-estimator.com> (fully functional as of Oct. 2).
- Am I satisfied with my current dental plan? Do I have too much coverage or not enough? Remember that current Dental Deluxe Plan (DDP) participants will automatically be reenrolled as participants in DDP for 2007 unless the participants change their dental coverage to the Dental Expense Plan (DEP) through the HR Self-Service web Open Enrollment System during the open enrollment period.

• Do I need to add or drop any dependents? Detailed information about eligibility is available on the OE website. Remember changes made during Open Enrollment are effective Jan. 1, 2007.

• (If married to another Sandian) — Am I satisfied with the current coverage arrangement? Remember that both Sandians must make these changes through the web-based Open Enrollment system. **Note:** If an active employee is covered as a dependent of a Sandia retiree, the employee will be enrolled in the applicable retiree plan.

- Do I have enough Voluntary Group Accident insurance, or do I have too much?
- Given the life insurance changes effective Jan. 1, 2007, do I need to enroll in or change my Voluntary Term Life insurance coverage?
- Am I interested in purchasing vacation under the Vacation Buy Plan? Remember that this plan requires an election each year.
- Am I retiring next year, and if so, how does this affect my choices?

Retiring next year?

If you are retiring next year, you might want to visit the Open Enrollment website for retirees at <http://www.sandia.gov/resources/emp-ret/ret-oe> to become familiar with the plan options and premium-sharing provisions for retirees.

Make your choices early, so that you don't forget to enroll if you need to!		
	Action Required	NO ACTION
Medical Coverage	<ul style="list-style-type: none"> • To enroll if not currently enrolled • To enroll if you are currently covered under a medical plan on an after-tax basis. • To change your current medical plan • To add or disenroll a dependent • To waive coverage 	<ul style="list-style-type: none"> • To continue coverage under current plan • If you waived coverage previously and wish to remain in this status
Dental Coverage	<ul style="list-style-type: none"> • To enroll if not currently enrolled • To change your current dental plan • To add or disenroll a dependent • To waive coverage 	<ul style="list-style-type: none"> • To continue coverage under current plan • If you waived coverage previously and wish to remain in this status
Vision Coverage	<ul style="list-style-type: none"> • To enroll if not currently enrolled • To add or disenroll a dependent • To waive coverage 	<ul style="list-style-type: none"> • To continue coverage under current plan • If you waived coverage previously and wish to remain in this status
Reimbursement Spending Accounts (RSA)	<ul style="list-style-type: none"> • To enroll for 2007 even if you participated in 2006 	<ul style="list-style-type: none"> • To not be enrolled for 2007
Vacation Buy Plan	<ul style="list-style-type: none"> • To enroll for 2007 even if you participated in 2006 	<ul style="list-style-type: none"> • To not be enrolled for 2007
Voluntary Group Accident Insurance (VGA)	<ul style="list-style-type: none"> • To enroll, disenroll or change coverage 	<ul style="list-style-type: none"> • No change in your Voluntary Group Accident Insurance Coverage
Voluntary Term Life (VTL) Special Enrollment	<ul style="list-style-type: none"> • To enroll in the special <i>one-time</i> enrollment (up to 1X your salary without proof of insurability) • To increase your coverage (<i>one-time opportunity</i>) by 1X your salary without proof of insurability 	<ul style="list-style-type: none"> • No change in your current Voluntary Term Life Coverage • Not interested in electing VTL during this one-time special enrollment

To elect or change plans or to verify your current coverage, go to HR Self Service Benefits Enrollment Application.
Note: A printable summary of your elections will be available online soon after Open Enrollment ends. Hard-copy confirmation of your Open Enrollment elections will no longer be mailed to your home.

2007 employee medical plan options

The chart at right outlines the medical plan choices for 2007 for employees, which are the same choices that were offered for 2006. To view detailed plan information see the Medical Plan Comparison Grid and/or applicable Summary Plan Description at the Open Enrollment website at the URL below. It outlines specific plan designs/features of the various options.

Important CIGNA HealthCare news for New Mexico:

Hospital operations will move in early 2007 from the Lovelace Medical Center—Gibson to the Lovelace Medical Center—Downtown. The Lovelace Medical Center—Gibson will operate an urgent-care center, and approximately 100 outpatient specialists and 400 support staff will continue to reside at this center, along with diagnostics, radiology, laboratory services, and a pharmacy.

Employee	UnitedHealthcare Premier PPO	CIGNA Premier PPO	UnitedHealthcare Standard PPO	CIGNA In-Network	Kaiser HMO (CA only)
Type of Plan	Preferred Provider Organization (PPO)	Preferred Provider Organization (PPO)	Preferred Provider Organization (PPO)	Health Maintenance Organization Look-Alike	Health Maintenance Organization (HMO)
Provider Network in New Mexico	Presbyterian UNMH Independent providers	Sandia/Lovelace Health Systems UNMH Independent providers	Presbyterian UNMH Independent providers	Sandia/Lovelace Health Systems UNMH Independent providers	Not applicable
In/Out of Network Coverage	Both	Both	Both	In-network only	In-network only
Referrals to specialists required	No	No	No	No	For some services
Plan Design	Primarily coinsurance	Primarily coinsurance	Primarily coinsurance	Copays	Copays
	Out-of-network deductible	Out-of-network deductible	In- and out-of-network deductible	No deductible	No deductible
Plan Changes for 2007	None	None	None	None	None

More information

Open Enrollment website:

Employees: <http://www.sandia.gov/resources/emp-ret/emp-oe>
 Retirees: <http://www.sandia.gov/resources/emp-ret/ret-oe>

Websites will be fully active as of Oct. 2

Sandia Labs Customer Service (NM) Benefits Customer Service Center, Hours: 8 a.m.-4:30 p.m. 505-844-HBES (4237) or 1-800-417-2634, ext. 844-HBES (4237)

(CA) Benefits Helpline — 925-294-2254

Employee medical premium sharing — Effective Jan. 1, 2007

All employees pay a monthly premium for coverage in Sandia's medical plans. Nonrepresented employees' monthly premiums will depend on the employee's base salary and plan choice. Sandia partners with the consulting firm Mercer Health and Benefits to develop the monthly premium share structure for nonrepresented Sandia employees.

Note: Represented employee premium shares are established according to the provisions in the applicable bargaining agreements. The process involves initially setting the monthly premium share rates based on both a review of historical and projected claims experience. Individual plan rates are then adjusted to reflect the relative richness (or "value") of the plans (e.g., plan design, in/out-of-network benefits, etc.). Finally, they are adjusted to reflect the overall premium share amount required.

The analysis this year concluded that both the CIGNA In-Network Plan and the UnitedHealthcare (UHC) Standard PPO Plan required a rate adjustment, as the value of the benefits of each of these plans is actually closer to the Premier plans than past premiums have reflected. Therefore, the premium share rates for the CIGNA In-Network Plan were adjusted (anywhere from 14-24 percent based on coverage and tier) and are now the same as the CIGNA and UHC Premier PPO plans.

While the UHC Standard PPO Plan contributions increased significantly (in some cases almost doubling), you will notice that they are still considerably lower than the other plans, reflecting the higher deductibles, etc., of that plan. Although our underlying trend for health care costs is anticipated to be in the low double digits for 2007, due to the moderation of recent claims experience and the adjustment of the CIGNA In-Network and UHC Standard PPO Plan premiums, the UHC and CIGNA Premier PPO Plan premiums are rising only slightly. **Note:** Kaiser insured rates increased by the percentage increase in the full premium rates received from Kaiser.

The monthly premium share amount (for both represented and nonrepresented employees) will be deducted from your biweekly pay-

check in two equal installments each month. The impact of premium costs on take-home pay for all levels is decreased by the tax savings received through the pretax premium plan.

Important: Employees are required to determine if their dependent qualifies as a qualified dependent under Internal Revenue Code Section 152 guidelines for purposes of health care coverage (seek advice from your tax adviser). If your dependent is not a qualified dependent under the tax code, you are required to contact the Benefits Department to determine whether any imputed income may apply for that non-qualified dependent. This also applies to any premiums you may pay for dental coverage.

Represented employees

The table below provides the monthly premium-share amounts for represented employees for each of the plans.

Medical plan and coverage	
UnitedHealthcare Standard PPO plan	
Employee only	\$51
Employee and child(ren)	\$92
Employee and spouse	\$104
Employee, spouse, and child(ren)	\$148
CIGNA In-Network plan	
Employee only	\$60
Employee and child(ren)	\$108
Employee and spouse	\$123
Employee, spouse, and child(ren)	\$174
CIGNA Premier PPO plan	
Employee only	\$60
Employee and child(ren)	\$108
Employee and spouse	\$123
Employee, spouse, and child(ren)	\$174
UnitedHealthcare Premier PPO plan	
Employee only	\$60
Employee and child(ren)	\$108
Employee and spouse	\$123
Employee, spouse, and child(ren)	\$174

For more information about monthly premium share (Class II, Retiree, Domestic Partner etc.), visit the HR Self-Service Open Enrollment website at <http://www.sandia.gov/resources/emp-ret/emp-oe>.

Nonrepresented employees

The table below provides the monthly premium-share amounts for nonrepresented employees for each of the plans.

Medical plan and coverage	Tier 1*	Tier 2**	Tier 3†
CIGNA In-Network plan			
Employee only	\$65	\$81	\$97
Employee and child(ren)	\$117	\$146	\$175
Employee and spouse	\$133	\$166	\$199
Employee, spouse, and child(ren)	\$189	\$235	\$281
CIGNA Premier PPO plan			
Employee only	\$65	\$81	\$97
Employee and child(ren)	\$117	\$146	\$175
Employee and spouse	\$133	\$166	\$199
Employee, spouse, and child(ren)	\$189	\$235	\$281
UnitedHealthcare Standard PPO plan			
Employee only	\$7	\$23	\$39
Employee and child(ren)	\$12	\$41	\$70
Employee and spouse	\$14	\$47	\$80
Employee, spouse, and child(ren)	\$21	\$67	\$113
UnitedHealthcare Premier PPO plan			
Employee only	\$65	\$81	\$97
Employee and child(ren)	\$117	\$146	\$175
Employee and spouse	\$133	\$166	\$199
Employee, spouse, and child(ren)	\$189	\$235	\$281
Kaiser Permanente HMO plan (CA)			
Employee only	\$38	\$54	\$70
Employee and child(ren)	\$79	\$108	\$137
Employee and spouse	\$85	\$118	\$151
Employee, spouse, and child(ren)	\$119	\$165	\$211

* Tier 1: Base salary of up to \$75,000 as of January 1, 2007
 **Tier 2: Base salary of \$75,001 to \$150,000 as of January 1, 2007
 † Tier 3: Base salary of over \$150,000 as of January 1, 2007



Retiree Open Enrollment information for 2007

What's new for retirees for 2007?

Retirees will continue to receive an Open Enrollment booklet as well as a Medical Plan Comparison Grid. However, new this year, retirees will also receive a Benefit Verification Letter, which will outline current benefit selections, as well as any premium-share amounts (if required), for 2007.

Since the Open Enrollment Phone System is no longer available, to make changes for 2007, you will need to complete the Open Enrollment Change Form included in your Open Enrollment packet, and mail it to the Sandia Benefits Department (postmarked by midnight Nov. 9).

Look for your Benefits Choices Open Enrollment packet to arrive at your home address (for retirees and survivors) the week of Oct. 23.

Important note: If you make a change during Open Enrollment, you will receive a confirmation mailed to your home; **otherwise you will not receive a confirmation after Open Enrollment ends.**

For medical plan information/changes, refer to "2007 retiree medical plan options" on page 10. Also, refer to "Retiree medical plan premium sharing" on pages 10 and 11 for information on 2007 monthly premiums.

Steps for retirees to take during Open Enrollment

- 1) Review your Benefit Verification Letter to verify your coverage(s) for 2007.
- 2) Review the Open Enrollment booklet carefully to learn of any changes in your benefits and/or to identify any changes in benefits you want to make.
- 3) Attend an Open Enrollment presentation to learn more about the plans and/or to talk to a medical plan representative (where available; there is a benefits fair/presentation schedule on page 12).
- 4) Determine whether you need to complete the Open Enrollment Benefit Change form located in your Open Enrollment booklet according to the table at right. **IMPORTANT:** If you do not want to make any changes, you do not need to do anything. Your coverage(s) and dependent selections will continue into 2007.

Plan ahead — some questions to ask

• Am I satisfied with my medical plan? Is my physician still in the network? If you are thinking about changing medical plans, you should review the vendor's website to review the list of network providers.

For many people, cost is one of the key factors in choosing a medical plan. The Medical Plan Estimator Tool is specifically designed to help you estimate that cost and is available to non-Medicare retirees. The tool can assist you in looking at both:

- What you are likely to pay for the services and supplies you need during the year.
- The amount that comes out of your paycheck when you enroll in the Sandia Medical Plan.

You can find the Medical Plan Estimator Tool online at the following website, which will be fully functional as of Oct. 2: <http://www.retiree.sandia-estimator.com>.

• Do I need to add or drop any dependents? Detailed information about eligibility is included in the Retiree Open Enrollment booklet. Remember changes made during Open Enrollment are effective Jan. 1, 2007.

• (If married to another Sandian) — Am I satisfied with the current coverage arrangement? Remember that both Sandians must make these changes through the paper based Open Enrollment Benefit Change Form and/or web-based open enrollment system. **Note:** If a retiree is a dependent of an employee, the retiree will be enrolled in the applicable

employee plan.

• Am I or my spouse turning 65 next year? How does this affect my medical coverage under the different plans? Do I want to switch medical plans based on changes in coverage?

Make your choices early, so that you don't forget and miss the deadline!

See retiree plan options on page 10

Make your choices early, so that you don't forget to enroll if you need to!

	Action Required	NO ACTION
• Medical Coverage	<ul style="list-style-type: none"> • To enroll if not currently enrolled • To change your current medical plan • To add or disenroll a dependent • To waive coverage 	<ul style="list-style-type: none"> • To continue coverage under current plan • If you waived coverage previously and wish to remain in this status
• Dental Coverage	<ul style="list-style-type: none"> • To enroll if not currently enrolled • To add or disenroll a dependent • To waive coverage 	<ul style="list-style-type: none"> • If you waived coverage previously and wish to remain in this status

Homelessness - an illness, a conscious choice, or an unanticipated misfortune

A tour of St. Martin's Hospitality Center

It's a beautiful New Mexico morning as I drive into St. Martin's Hospitality Center parking lot in downtown Albuquerque. Tall, prominent buildings surround the heart of Albuquerque's homeless population.

I'm here to get a firsthand view — and gain a better understanding — of New Mexico's largest service provider for the homeless. I want Sandians to see through my eyes the reality of a United Way agency at work and the service it provides. My hope is that my insight into St. Martin's will prompt Sandians to be generous — as they always are — and to see what their generosity through the annual Employee Caring Program campaign does for our community's homeless.

As I park the car, people are streaming into the center for breakfast. (I learn later that about 300 people are fed weekday mornings and Sunday. Breakfast is not served on Saturday. Volunteers from different community churches serve breakfast on Sunday.)

I'm met in the parking lot by shelter director Linda Fuller, a woman full of energy, enthusiasm, and a huge contagious smile. In a matter-of-fact tone, she calls to some of the clients, "Did you have enough to eat? How are you doing today?" Many she calls by their first name. It is clear that they are her number one priority, and she works at letting them know.

Walking inside she tells me how proud she is to show off St. Martin's to the outside world. "We try to help as many as we can," she says.

She leads me into the dining room — and the tour begins. Many people of different ages are eat-

ing. No fancy frills here, just rows of tables. Some clients visit, most just eat. "We see clients for breakfast and they disappear until the next morning," says Linda. "They can eat until the food is gone. Some go for lunch at other agencies; others survive on breakfast."

We go into a small mail room. Slots not unlike those you'd see at a regular post office line a wall. Clients use the St. Martin's address as their own. "It is their connection to the outside world," says Linda. "Several veterans receive their checks here."

"Veterans?" I ask. "Yes," she says, "veterans." I have questions, but we continue.

"We are their one-stop shopping," says Linda. "We feed them, give them clothes, and have facilities for them to get cleaned up. We even have a system in place for them to receive their mail. We have phones available for local calls — family, job hunting. Phones for long-distance calls are available, but the requirements are stricter. The one thing we don't have is a place for them to sleep."

Donated clothes hang in a room resembling a closet. Wal-Mart donates all the returned clothes to St. Martin's, but they accept used usable clothes from anyone. Twice a week the closet is open and clients sign for what they need after showing their ID.

We walk into a washroom you'd never mistake for a spa. Worn towels, toiletries, soap, shampoo, deodorant, and razors — everything needed to get

cleaned up — await the clients. "If you buy shampoo or soap and don't like it, don't throw it away," says Linda. "Little bottles are great, but we will take whatever you don't want. Half-filled bottles, full bottles, we will take them all. We'll take all your towels too. Recently I asked my staff if they had any towels at home that they didn't want.

Most times our budget doesn't allow for new towels." Tucked away in the corner are diapers. "Babies?" I ask. "Oh yes. We have homeless families with babies," Linda says. "A local church furnishes the diapers."

Banana shipping boxes fill the shelves of a storage room. They contain clients' most treasured possessions: IDs, Walkmans, important papers, and in some instances food. Linda points to a box belonging to an 80-year-old man. He has not been seen in about a year, and she fears he may have died. "No one has come for his box," she says.

"About 75 percent of our clients are mentally ill," says Linda. "Some are physically disabled. Around 90 percent are substance abusers. Some have just come on hard times. No one was born homeless. We have stockbrokers, doctors, teachers, etc. Homelessness has no boundaries."

We finally go into Linda's office. We have not yet sat down when in comes a young man we'll call Owen. He is clean, neat, and very polite. Owen looks to me to be in his late 20s. He could be your son or mine.

She tells him about a job, and gives him two bus tokens to get there. He will get paid \$10 an hour. "What about Owen?" I ask. She doesn't know where he sleeps; she just helps him find jobs.

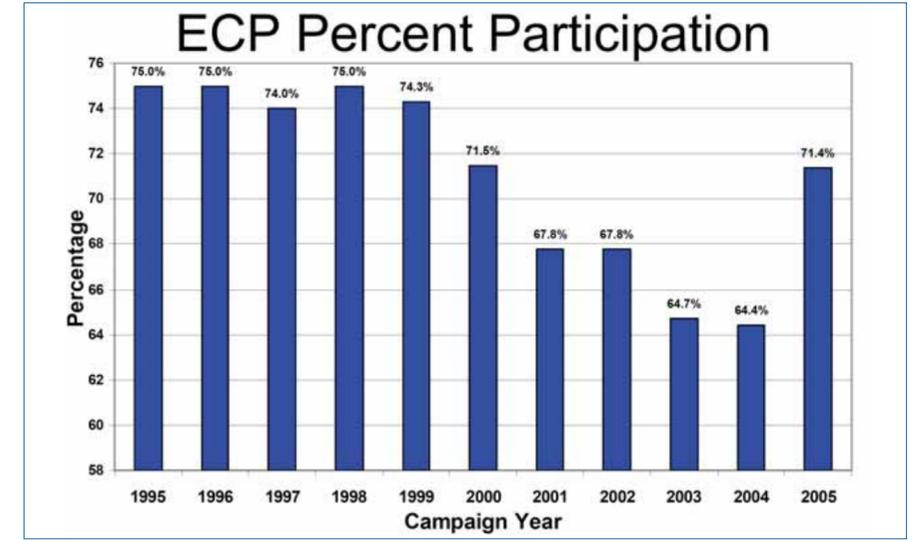
Her phone rings continuously. A constant flow of people go in and out of her office. She talks to them as if they were her best friends. Some are volunteers; most are clients.

Thank heavens the tour is over, and I leave. Driving back, I try to escape the uncomfortable eeriness I feel. Many things run through my mind. I think about the therapist who developed schizophrenia. Linda said she has no family to help her. Her two sons are in Iraq. What about Owen? Where does he sleep? What about the 80-year-old man? Is he OK? What about the babies? What about the rest of them? I have questions with many or not enough answers. For every answer, I have many more questions.

What is haunting to me is the emptiness in their eyes. It's as if they were not looking at me, but through me. I was nowhere in sight. It's like they've decided that in their world human contact causes pain and so they choose not to go there.

I can positively say I am glad there is a St. Martin's. I'm glad there are people like Linda and her staff, who along with caring volunteers, work at making a difference. I'm thankful there's a Sandia and a United Way to see that St. Martin's gets the resources — at least some of the resources — it needs.

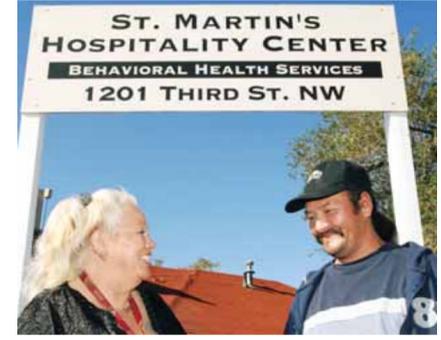
Stories by Iris Aboytes
Photos by Randy Montoya



Sandia's ECP Campaign
October 9 - 27



Sign up and information at:
<https://ws31snlnt.sandia.gov/ecp/start.do>



Programs offered by St. Martin's

Day Shelter Program	Behavioral Health Services
Day shelter	Chemical dependency/HIV education
Meals and food	Psychosocial rehabilitation
Showers and hygiene	Outreach
Clothing exchange	Mental health case management
Post office services	Housing
Telephone & voice mail services	Physical health
Short- and long-term storage	Social services
Travelers aid	Dual diagnosis
Job placement	Supportive housing program
Advocacy program	Intensive employment program
VA outreach	Medication management
	Literacy and GED services

For more information on St. Martin's see www.stmartinhospitalitycenter.com/programs.html

Joe's story

Joe started using drugs at age five. He was raised by a single mother who worked two to three jobs so she was not at home to supervise. He was the youngest of six children. His siblings introduced him to drugs. They wanted to see how the drugs would affect the little kid.

In his early 20s, he met a girl and they had two sons. Joe stopped using drugs except for pot and alcohol when his sons were born. His girlfriend did not use drugs while she was pregnant but went back to using afterward. She started beating the boys. Joe got full custody of his sons.

Joe soon met another girl. They were together for five years and during this time had a daughter. Joe went to work, gave his girlfriend his check, and she paid the bills. They owned a house and two vehicles. They had bikes, a camper, and camping equipment. They enjoyed the outdoor life and went camping most weekends. One day he got a call from a bill collector at work. He found out that his girlfriend was not paying the bills. She was using drugs, and so Joe went back to using too. She eventually left and took their daughter with her.

Joe realized he was losing everything. He sent his sons to live with his mother. For a while, he couch-surfed until he ran out of friends. He had lost everything, especially his sons, so he relocated to be near them. He stayed at his mom's for a while, but she did not want him around the boys when he was still using.

Joe knew if he was ever going to get his sons back he needed to get clean and sober. He participated in a treatment program at the Good Shepherd Center. (Run by the Little Brothers of the Good Shepherd, Good Shepherd Center is a refuge for those in need and it offers rehabilitation programs, halfway houses, counselors, medical and mental care programs and others.) Joe then came to St. Martin's and participated in the Self-Sufficiency Program which gives him rental assistance for up to two years.

He had a job when he entered the program and has gotten two raises since. His employer is very supportive. Joe was honest with his employer when he was hired.

Joe was able to be reunited with his sons. He lives his life "one day at a time." He surprises himself each day as he gets to know who Joe is and not the addict he was for about 30 years. He likes this new person, and so do his sons.



Families and homeless children

(From the National Mental Health Association)

Families are the fastest-growing segment of the homeless population and account for nearly 40 percent of the nation's homeless. On any given night, 1.2 million children are homeless. These children sleep in cars, shelters, and abandoned buildings. They relocate constantly, frequently being pulled out of school and away from friends.

Most children become homeless because their mothers and fathers are unable to find affordable housing. Traumatic events such as unemployment, illness, accidents, or violence and abuse further limit their ability to secure decent housing.

The average homeless family is composed of a young, single mother and two children under age six.

Nearly half of children who are homeless have anxiety, depression, or withdrawal, compared to less than one in five other school-age children who are not homeless.

Nearly one in three homeless children who are homeless have at least one major mental disorder that interferes with daily activities compared to nearly one in five school-age children who are not homeless.

Homeless children are hungry more than twice as often as other children, and two-thirds worry that they won't have enough to eat.

Children who grow up on the streets are likely to repeat the lifestyle with their own children.

The invisible side of homelessness

(From the Treatment Advocacy Center, Arlington, Va.)

"No vision haunts America's conscience more than the sight of the street people. The irrationality and anguish that grip so many of these individuals leap out during any encounter."

— Senator Pete Domenici

Many homeless people hide from the eyes of most citizens. They shuffle quietly through the streets by day, talking to their voices only when they think nobody is looking, and they live in shelters or abandoned buildings at night. Some shelters become known as havens for these ill wanderers and take on the appearance of a hospital psychiatric ward. Others who are psychiatrically ill live in the woods, on the outskirts of cities, under bridges, and even in the tunnels that carry subway trains beneath cities.

Many Americans with untreated psychiatric illness have nowhere to go. Homelessness is a tragic side effect of non-treatment.

Living in shelters or on the streets is likely to be difficult, even for a person whose brain is working normally. For those with schizophrenia or manic-depressive illness, this kind of life is often a living hell.

2007 retiree medical plan options: Medicare and non-Medicare

This section outlines the medical plan choices for 2007 for retirees; they are the same choices that were offered for 2006. To view detailed plan information see the Medical Plan Comparison Grid, the Retiree Open Enrollment booklet, and/or applicable Summary Plan Description at the OE website outlining specific plan designs/features of the various options.

Non-Medicare	UnitedHealthcare Senior Premier PPO	CIGNA Senior Premier PPO	UHC High Deductible Health Plan	CIGNA In-Network	Kaiser HMO (CA only)
Type of Plan	Preferred Provider Organization (PPO)	Preferred Provider Organization (PPO)	Preferred Provider Organization (PPO)	Exclusive Provider Organization (EPO)	Health Maintenance Organization (HMO)
Provider Network in New Mexico	Presbyterian UNMH Independent providers	Sandia/Lovelace Health Systems UNMH Independent providers	Presbyterian UNMH Independent providers	Sandia/Lovelace Health Systems UNMH Independent providers	Not applicable
In/Out of Network Coverage	Both	Both	Both	In-Network only	In-Network only
Referrals to specialists required	No	No	No	No	For some services
Plan Design	Primarily coinsurance In and Out-of-network deductible	Primarily coinsurance In and Out-of-network deductible	Primarily coinsurance In- and out-of-network deductible	Copays No deductible	Copays No deductible
Plan Changes for 2007	None	None	None	None	None

Medicare	UnitedHealthcare Senior Premier PPO	CIGNA Senior Premier PPO	Presbyterian Medicare PPO (NM only)	Lovelace Senior Plan (NM only)	Kaiser Senior Advantage (CA only)
Type of Plan	Preferred Provider Organization (PPO)	Preferred Provider Organization (PPO)	Medicare Advantage Preferred Provider Organization (PPO)	Medicare Advantage Health Maintenance Organization (HMO)	Medicare Advantage Health Maintenance Organization (HMO)
Provider Network in New Mexico	Presbyterian UNMH Independent providers	Sandia/Lovelace Health Systems UNMH Independent providers	Presbyterian	Sandia/Lovelace Health Systems	Not applicable
In/Out of Network Coverage	Both	Both	Both	In-Network only	In-Network only
Referrals to specialists required	No	No	No	No	For some services
Plan Design	Primarily coinsurance	Primarily coinsurance	Copays	Copays	Copays
Plan Changes for 2007	None	None	In-Network: Specialist office visit from \$20 to \$25 Chiropractic office visit from \$10 to \$25 DME from \$0 to \$10 No out-of-network changes	Outpatient surgery from \$50 to \$75 Rx drug changed from \$4/\$40 at retail to \$10/\$20/\$40. Mail order copays are triple retail copays.	None

Important CIGNA HealthCare news for New Mexico: Hospital operations will move in early 2007 from the Lovelace Medical Center–Gibson to the Lovelace Medical Center–Downtown. The Lovelace Medical Center–Gibson

will operate an urgent-care center, and approximately 100 outpatient specialists and 400 support staff will continue to reside at this Center, along with diagnostics, radiology, laboratory services, and a pharmacy.

Retiree medical plan premium sharing — effective Jan. 1, 2007

Retiree premiums vary based on when you retired, your years of service at the time you retired, as well as the plan and the level of coverage you choose.

Premiums for non-Medicare retirees are increasing 13-14 percent, on average, for 2007.

Premiums for Medicare retirees are staying the same for the Presbyterian MediCare PPO Plan, increasing 11 percent, on average, for the UHC and CIGNA Senior Premier PPOs, increasing 32 percent for the Kaiser Senior Advantage HMO, and increasing 50 percent for the Lovelace Senior Plan.

Important: Retirees are required to determine if their dependent qualifies as a qualified dependent under Internal Revenue Code Section 152 guidelines for purposes of health care coverage (seek advice from your tax adviser). If your dependent is not a qualified dependent under the tax code, you are required to contact the Benefits Department to determine whether any imputed income may apply for that nonqualified dependent.

Employees who retired prior to Jan. 1, 1995

Employees who retired prior to Jan. 1, 1995 will not be required to pay a premium share for themselves or any eligible Class I dependents at this time.

(Exception: Retirees who retired prior to Jan. 1, 1995, but who currently pay a portion of their medical coverage will continue to do so).

Employees who retired after Dec. 31, 1994, and before Jan. 1, 2003

Employees who retired after Dec. 31, 1994, pay a monthly premium for coverage in Sandia's medical plans. The monthly premium share amount will be deducted from your pension check. Use Table A to find your rate for your selected plans.

Employees who retired after Dec. 31, 2002

Employees who retired after Dec. 31, 2002, pay a percentage of the full premium based on their term of employment. The monthly premium share amount will be deducted from your pension check.

The tables:

- Use Table A if you retired with 30+ years
- Use Table B if you retired with 25-29 years
- Use Table C if you retired with 20-24 years
- Use Table D if you retired with 15-19 years
- Use Table E if you retired with 10-14 years

See below and next page for retiree medical plan premium sharing tables

Retiree medical plan premium sharing tables for 2007

Retirees should use the tables here (Tables B-E are on the next page) to calculate their monthly premium sharing cost for medical insurance in

calendar year 2007. The applicable monthly premium share amount will be deducted from your pension check.

Medicare Family (everyone in your family is Medicare-primary)									
Number of Medicare	UHC Senior Premier PPO	CIGNA Senior Premier PPO	Presbyterian Medicare PPO	Lovelace Senior Plan	Kaiser Permanente Senior Advantage				
1	\$20	\$20	\$11	\$6	\$25				
2	\$40	\$40	\$23	\$11	\$50				
Non-Medicare Family (no one in your family is Medicare-primary)									
Number of Non-Medicare	UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	CIGNA In-Network Plan	Kaiser Permanente HMO				
1	\$73	\$61	\$72	\$72	\$56				
2	\$145	\$122	\$144	\$144	\$112				
Mixed Medicare and Non-Medicare Family (your family has both Medicare-primary and non-Medicare-primary members)									
Medicare Plan:		UHC Senior Premier PPO	UHC Senior Premier PPO	CIGNA Senior Premier PPO	Presbyterian Medicare PPO	Presbyterian Medicare PPO	Lovelace Senior Plan	Lovelace Senior Plan	Kaiser Permanente Senior Advantage
Non-Medicare Plan:		UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	CIGNA In-Network Plan	Kaiser Permanente HMO
Number of Medicare	Number of Non-Medicare								
1	1	\$93	\$81	\$92	\$84	\$72	\$78	\$78	\$81
2	1	\$113	\$101	\$112	\$95	\$84	\$83	\$83	\$97
1	2	\$165	\$142	\$164	\$157	\$133	\$150	\$150	\$127

Table A

Who should use this table?

Employees who retired after Dec. 31, 1994, and before Jan. 1, 2003

Employees who retired after Dec. 31, 1994, pay a monthly premium for coverage in Sandia's medical plans. The monthly premium share amount will be deducted from your pension check. Use Table A to find your rate for your selected plans.

Also . . .

Employees who retired after Dec. 31, 2002, and retired with 30+ years of service

Retiree medical plan premium sharing tables for 2007

Retirees should use the tables here (Table A is on the preceding page) to calculate their monthly premium sharing cost for medical insurance in calendar year 2007. The applicable monthly premium share amount will be deducted from your pension check.

Table B →

Who should use this table?

Employees who retired after Dec. 31, 2002,
and retired with 25-29 years of service

Table B (includes the 3 tables below)
Employees who retired after 12/31/2002 with 25-29 years

Medicare Family (everyone in your family is Medicare-primary)									
Number of Medicare	UHC Senior Premier PPO	CIGNA Senior Premier PPO	Presbyterian MediCare PPO	Lovelace Senior Plan	Kaiser Permanente Senior Advantage				
1	\$30	\$30	\$17	\$8	\$38				
2	\$60	\$60	\$34	\$17	\$75				
Non-Medicare Family (no one in your family is Medicare-primary)									
Number of Non-Medicare	UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	CIGNA In-Network Plan	Kaiser Permanente HMO				
1	\$109	\$91	\$108	\$108	\$84				
2	\$218	\$183	\$216	\$216	\$168				
Mixed Medicare and Non-Medicare Family (your family has both Medicare-primary and non-Medicare-primary members)									
Medicare Plan:		UHC Senior Premier PPO	UHC Senior Premier PPO	CIGNA Senior Premier PPO	Presbyterian MediCare PPO	Presbyterian MediCare PPO	Lovelace Senior Plan	Lovelace Senior Plan	Kaiser Permanente Senior Advantage
Non-Medicare Plan:		UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	CIGNA In-Network Plan	Kaiser Permanente HMO
Number of Medicare	Number of Non-Medicare								
1	1	\$139	\$122	\$138	\$126	\$108	\$117	\$116	\$122
2	1	\$169	\$152	\$168	\$143	\$126	\$125	\$125	\$145
1	2	\$248	\$213	\$246	\$235	\$200	\$225	\$225	\$191

Table B

Table C (includes the 3 tables below)
Employees who retired after 12/31/2002 with 20-24 years

Medicare Family (everyone in your family is Medicare-primary)									
Number of Medicare	UHC Senior Premier PPO	CIGNA Senior Premier PPO	Presbyterian MediCare PPO	Lovelace Senior Plan	Kaiser Permanente Senior Advantage				
1	\$50	\$50	\$29	\$14	\$63				
2	\$101	\$100	\$57	\$28	\$126				
Non-Medicare Family (no one in your family is Medicare-primary)									
Number of Non-Medicare	UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	CIGNA In-Network Plan	Kaiser Permanente HMO				
1	\$182	\$152	\$180	\$180	\$140				
2	\$363	\$305	\$361	\$360	\$279				
Mixed Medicare and Non-Medicare Family (your family has both Medicare-primary and non-Medicare-primary members)									
Medicare Plan:		UHC Senior Premier PPO	UHC Senior Premier PPO	CIGNA Senior Premier PPO	Presbyterian MediCare PPO	Presbyterian MediCare PPO	Lovelace Senior Plan	Lovelace Senior Plan	Kaiser Permanente Senior Advantage
Non-Medicare Plan:		UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	CIGNA In-Network Plan	Kaiser Permanente HMO
Number of Medicare	Number of Non-Medicare								
1	1	\$232	\$203	\$230	\$210	\$181	\$194	\$194	\$203
2	1	\$282	\$253	\$280	\$239	\$209	\$209	\$208	\$242
1	2	\$413	\$355	\$411	\$392	\$333	\$375	\$374	\$319

← **Table C**

Who should use this table?

Employees who retired after Dec. 31, 2002,
and retired with 20-24 years of service

Table D →

Who should use this table?

Employees who retired after Dec. 31, 2002,
and retired with 15-19 years of service

Table D (includes the 3 tables below)
Employees who retired after 12/31/2002 with 15-19 years

Medicare Family (everyone in your family is Medicare-primary)									
Number of Medicare	UHC Senior Premier PPO	CIGNA Senior Premier PPO	Presbyterian MediCare PPO	Lovelace Senior Plan	Kaiser Permanente Senior Advantage				
1	\$70	\$70	\$40	\$20	\$88				
2	\$141	\$140	\$80	\$40	\$176				
Non-Medicare Family (no one in your family is Medicare-primary)									
Number of Non-Medicare	UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	CIGNA In-Network Plan	Kaiser Permanente HMO				
1	\$254	\$213	\$252	\$252	\$196				
2	\$508	\$426	\$505	\$504	\$391				
Mixed Medicare and Non-Medicare Family (your family has both Medicare-primary and non-Medicare-primary members)									
Medicare Plan:		UHC Senior Premier PPO	UHC Senior Premier PPO	CIGNA Senior Premier PPO	Presbyterian MediCare PPO	Presbyterian MediCare PPO	Lovelace Senior Plan	Lovelace Senior Plan	Kaiser Permanente Senior Advantage
Non-Medicare Plan:		UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	CIGNA In-Network Plan	Kaiser Permanente HMO
Number of Medicare	Number of Non-Medicare								
1	1	\$324	\$284	\$322	\$294	\$253	\$272	\$272	\$284
2	1	\$395	\$354	\$392	\$334	\$293	\$292	\$292	\$338
1	2	\$579	\$497	\$575	\$548	\$466	\$525	\$524	\$446

Table D

Table E (includes the 3 tables below)
Employees who retired after 12/31/2002 with 10-14 years

Medicare Family (everyone in your family is Medicare-primary)									
Number of Medicare	UHC Senior Premier PPO	CIGNA Senior Premier PPO	Presbyterian MediCare PPO	Lovelace Senior Plan	Kaiser Permanente Senior Advantage				
1	\$90	\$90	\$51	\$25	\$113				
2	\$181	\$180	\$103	\$51	\$226				
Non-Medicare Family (no one in your family is Medicare-primary)									
Number of Non-Medicare	UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	CIGNA In-Network Plan	Kaiser Permanente HMO				
1	\$327	\$274	\$324	\$324	\$251				
2	\$653	\$548	\$649	\$648	\$503				
Mixed Medicare and Non-Medicare Family (your family has both Medicare-primary and non-Medicare-primary members)									
Medicare Plan:		UHC Senior Premier PPO	UHC Senior Premier PPO	CIGNA Senior Premier PPO	Presbyterian MediCare PPO	Presbyterian MediCare PPO	Lovelace Senior Plan	Lovelace Senior Plan	Kaiser Permanente Senior Advantage
Non-Medicare Plan:		UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	UHC Premier PPO	UHC High Deductible Health Plan	CIGNA Premier PPO	CIGNA In-Network Plan	Kaiser Permanente HMO
Number of Medicare	Number of Non-Medicare								
1	1	\$417	\$365	\$414	\$378	\$325	\$350	\$349	\$365
2	1	\$508	\$455	\$504	\$429	\$377	\$375	\$375	\$435
1	2	\$744	\$639	\$739	\$705	\$599	\$675	\$674	\$573

← **Table E**

Who should use this table?

Employees who retired after Dec. 31, 2002,
and retired with 10-14 years of service

Life insurance benefits changes effective Jan. 1, 2007

As previously announced, Sandia's Board of Directors and DOE recently approved changes to the life insurance benefits available to Sandia employees and future retirees, effective Jan. 1, 2007. These changes are necessary in order for Sandia to manage growing benefits costs and align life insurance benefits with those offered by other employers. This article will cover the basics of the life insurance changes, the impact on employees and future retirees, and actions that may be taken to mitigate some of the impact of these changes.

What are the changes?

As of Jan. 1, 2007, the Primary Group Term Life Insurance Plan will replace the Basic and Basic Supplemental Group Term Life Insurance plans. In addition, the Voluntary Term Life (VTL) benefit will be enhanced. The changes apply to current employees and those retiring after Dec. 31, 2006.

What coverage does the new plan provide?

Employees will be provided with less life insurance coverage by Sandia under the new plan. The Basic and Basic Supplemental Group Term Life Insurance plans provided employees with combined life insurance coverage equal to roughly two times annual pay, plus an accidental death and dismemberment benefit of up to one times annual pay. The new Primary Group Term Life Insurance Plan will provide eligible employees with a single level of coverage equal to one times annual pay. This coverage will be paid for by Sandia.

What are the VTL enhancements for employees?

- Employees have a one-time opportunity to increase or initiate VTL coverage during this year's Open Enrollment, without proof of good health.
- Employees not previously enrolled in the VTL program can buy coverage of one time annual base pay.
- Employees currently participating in this plan will also have a chance to purchase an additional amount of insurance equal to one times pay.
- The maximum coverage will increase from five to six times annual base pay.
- The VTL plan is paid for by the employee through payroll deduction.

How can Voluntary Group Accident (VGA) coverage help?

The VGA plan provides an alternative way to acquire accident insurance. VGA is insurance that you may purchase for a monthly premium rate. Coverage is available in amounts ranging from \$10,000 to \$300,000, in units of \$5,000 (maximum \$300,000 combined total among three plan options). The three plan options are Employee Only, Family Plan, and employee-only Common Carrier coverage. The VGA plan is paid for by the employee through payroll deductions.

What will life insurance benefits look like for future retirees?

Life insurance benefits for those retiring with a service or disability pension:

- Employees retiring after Dec. 31, 2006, and before Jan. 1, 2009, will receive a Primary Group Term Life Insurance benefit equal to one times annual base pay. This benefit is reduced by 10% of the original amount for five years beginning at age 66. At age 70 and thereafter, the benefit equals 50% of the original amount.
- Employees retiring after Dec. 31, 2008, who were on roll prior to Jan. 1, 2007, will receive a Primary Group Term Life Insurance benefit equal to the lesser of: 1) annual base pay, or 2) \$50,000. This benefit is reduced by 10% of the original amount for five years beginning at age 66, not to exceed \$25,000 at age 70 and thereafter.
- Employees hired or rehired after Dec. 31, 2006, are not eligible for post-retirement Primary Group Term Life insurance.
- As before, employees retiring after Dec. 31, 2006, can carry the full amount of their VTL coverage (now up to six times salary) until age 65. In addition, those retirees will now be able to continue VTL coverage of up to two times annual base pay beyond age 65 for as long as they continue to pay the required premiums.

Benefits fairs/presentations

Employee Benefit Fairs

This year, the Health, Benefits, and Employee Services Center will be hosting several benefit fairs for employees. Come and ask your benefit questions of the Sandia health plan vendors and/or the benefits staff. Have your blood pressure checked by Sandia's Preventive Health staff. Please note that due to limited attendance at recent Open Enrollment meetings it was felt that time was better served through having benefits staff available at benefit fairs to answer individual questions. As such, there will be no Open Enrollment meetings for employees.

New Mexico — Steve Schiff Auditorium (Bldg. 825) Lobby from 9 a.m.-4 p.m.

Oct. 24 • Oct. 26 • Nov. 6

California — Bldg. 904/905 Area, 1 p.m.- 4:30 p.m.

Oct. 30

Retiree/Survivor Open Enrollment Presentations

This year, the Health, Benefits, and Employee Services Center will be hosting several Open Enrollment presentations for retirees/survivors.

Albuquerque

All presentations will be held at the Winrock Theatre, 201 Winrock Center

Non-Medicare-Primary Presentations

Oct. 25, 8-9:30 a.m. • Oct. 31, 10:30 a.m.-noon

Nov. 1, 8-9:30 a.m. • Nov. 2, 10:30 a.m.-noon

Medicare-Primary Presentations

Oct. 25, 10:30 a.m.-noon • Oct. 31, 8-9:30 a.m.

Nov. 1, 10:30 a.m.-noon • Nov. 2, 8-9:30 a.m.

Livermore

All presentations will be held at the Doubletree Club Hotel, 720 Las Flores Road

Non-Medicare-Primary Presentations

Oct. 30 8:30-10 a.m.

Medicare-Primary Presentations

Oct. 30, 10-11:30 a.m.

How does the new coverage compare to current coverage?		
Comparison of current life insurance benefits and new Primary Group Term Life Insurance for employees:		
	Current	Effective 01/01/07
Basic life insurance	annual base pay	N/A
Basic Supplemental life insurance	annual base pay, rounded to next \$1,000	N/A
Basic Supplemental AD&D	up to 100% of Basic Supplemental benefit	N/A
Primary life insurance	N/A	annual base pay
Voluntary Term Life insurance	1-5x pay	1-6x pay

Comparison of current life insurance benefits and new Primary Group Term Life Insurance for future retirees:		
	Current	Effective 01/01/07
Basic life insurance		
• retires < 01/01/09	annual base pay, or \$500 if no spouse	N/A
• retires > 12/31/08	N/A	N/A
Basic Supplemental life insurance		
• retires < 01/01/09		
- through age 65	annual base pay, rounded to next \$1,000	N/A
- ages 66 - 70	10% reduction each year	N/A
- ages 70 and above	50% of the initial amount	N/A
• retires > 12/31/08		
- through age 65	lesser of annual base pay, or \$100,000	N/A
- ages 66 - 70	10% reduction each year	N/A
- ages 70 and above	50% of the initial amount	N/A
Primary life insurance		
• retires > 12/31/06 and < 1/1/09:		
- through age 65	N/A	annual base pay
- ages 66 - 70	N/A	10% reduction each year
- ages 70 and above	N/A	50% of annual base pay
• retires > 12/31/08:		
- through age 65	N/A	lesser of annual base pay, or \$50,000
- ages 66 - 70	N/A	10% reduction each year
- ages 70 and above	N/A	50% of the initial amount
Voluntary Term Life insurance		
• until age 65	1-5x pay	1-6x pay
• after age 65	N/A	1-2x pay

Regarding those life insurance benefits changes

What actions can you take?

There is a chance to mitigate some of the impact of this change by taking advantage of the existing VGA coverage and the one-time opportunity to initiate or increase VTL coverage.

- If interested in replacing the AD&D coverage that will terminate after Dec. 31, 2006, consider enrolling in the VGA plan.
- If interested in increasing VTL coverage, consider taking advantage of the one-time special period to initiate or increase life insurance coverage without providing proof of good health.
 - Employees not enrolled in VTL may purchase a life benefit equal to one times their annual base pay.
 - Employees already enrolled in VTL may increase coverage by an additional one times annual base pay.

All insurance elections made during Open Enrollment will be effective Jan. 1, 2007.

This special VTL enrollment/buy-up option will not be offered again. Visit the 2007 Benefits Choices Open Enrollment website to take advantage of this limited one-time opportunity.

Where can you find more information?

To find more information about how to initiate or increase your insurance coverage, to review frequently asked questions, to view insurance rates, or to designate beneficiaries (first-time VTL participants for these plans), visit the 2007 Benefits Choices Open Enrollment website at:
<http://www.sandia.gov/resources/emp-ret/emp-oe>.

Employee Dental Plan Options

The Dental Expense Plan (DEP) is the company-paid dental plan for employees and their eligible dependents. DEP covers certain preventive and diagnostic services in full and offers basic reimbursement of covered restorative services with annual and lifetime maximums.

The Dental Deluxe Plan is a voluntary, employee-paid option that covers certain preventive and diagnostic services in full and offers an increased (approximately 25%) reimbursement of covered restorative services, as well as increased annual and lifetime maximums.

Dental Plan	Monthly Premium Charge – effective 1/1/07
Dental Expense Plan	No charge – Company-paid
Dental Deluxe Plan	Employee \$20 Employee plus one Class I dependent \$30 Employee plus two or more Class I dependents \$38

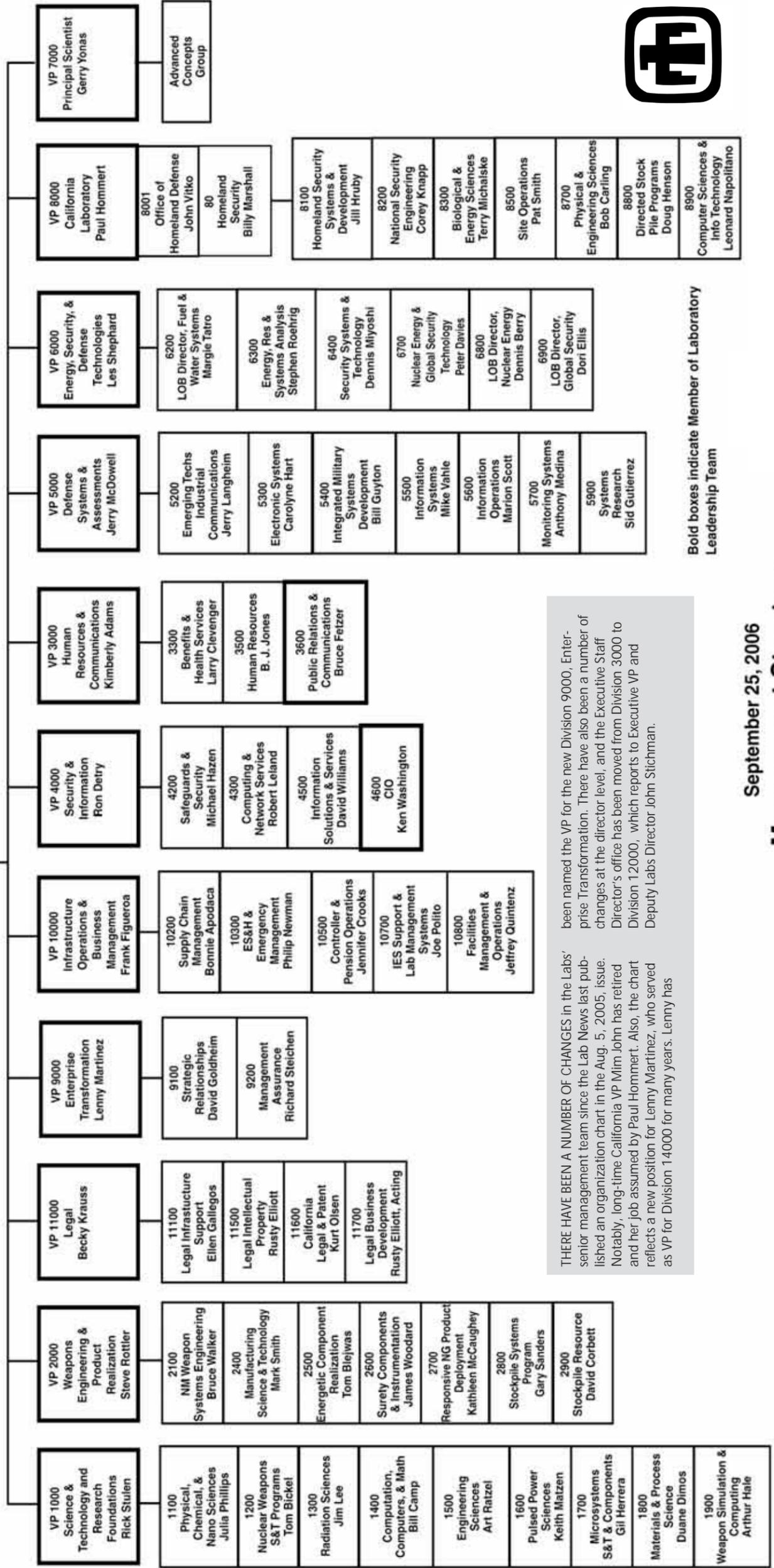
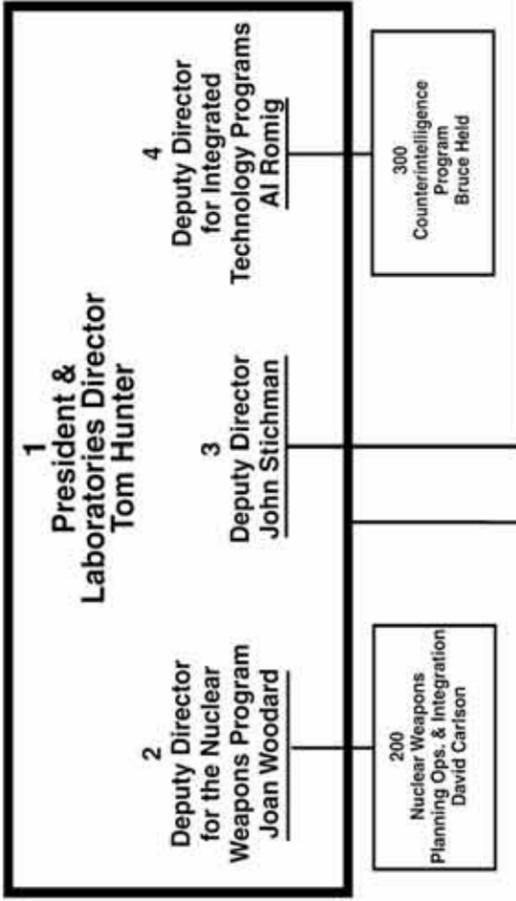
Plan changes effective Jan. 1, 2007 — None

Helpful tip

You can benefit by staying in-network when seeking dental service. By seeing a Delta Dental PPO provider, you can reduce your out-of-pocket costs by taking advantage of Delta's lower negotiated rates. Delta Dental Premier USA provider rates are also negotiated, but they are slightly higher. Regardless of the provider you choose, you will receive the same reimbursement from Sandia because the dental plans reimbursement is based on a scheduled benefit. For more information about your dental benefits and to locate an in-network provider, visit <http://www.consumertoolkit.com>.



Sandia National Laboratories



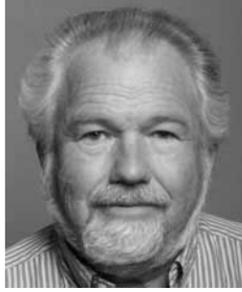
Bold boxes indicate Member of Laboratory Leadership Team

THERE HAVE BEEN A NUMBER OF CHANGES in the Labs' senior management team since the Lab News last published an organization chart in the Aug. 5, 2005, issue. Notably, long-time California VP Mim John has retired and her job assumed by Paul Hommert. Also, the chart reflects a new position for Lenny Martinez, who served as VP for Division 14000 for many years. Lenny has been named the VP for the new Division 9000, Enterprise Transformation. There have also been a number of changes at the director level, and the Executive Staff Director's office has been moved from Division 3000 to Division 12000, which reports to Executive VP and Deputy Labs Director John Stichman.

September 25, 2006
Management Structure

Mileposts

Photos by Michelle Fleming



Archie Gibson
40 43352

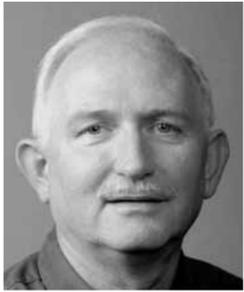


Tze Yao Chu
35 1500

Recent Retirees



Alan Smith
30 6451



Michael Lucas
35 2124



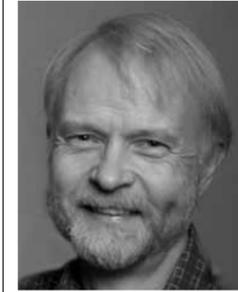
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Earl Graff
30 2111



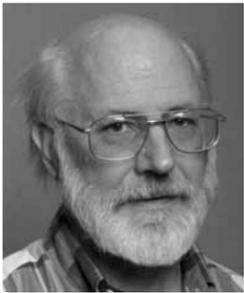
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Craig Searls
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Nancy Searls
25 5900



James Krumhansl
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Daniel Pritchard
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Gary Rochau
30 6763



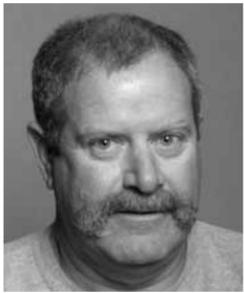
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David Tallant
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Mike Clough
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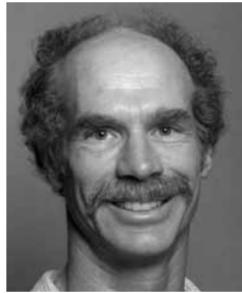
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Mark Hedemann
25 1340



R. Shawn Mooney
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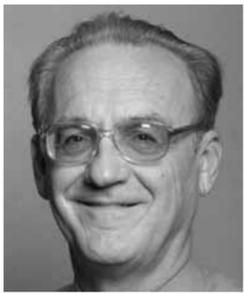
M. Barry Ritchey
25 2725



Regan Stinnett
25 6429



Ronald Allman
20 1128



Steven Bauck
20 10730



Suzette Beck
20 2029



Phillip Coleman
20 5443



David Dobias
20 10862



Barbara Esch
20 6030



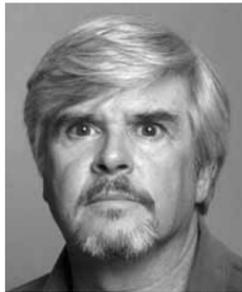
Robert Goetsch
20 10313



Linda Hall
20 10848



Carol Harrison
20 5534



Eugene Hertel
20 1516



Perry Jones
20 6333



Connie Martin
20 10741



Fredrick McCrory
20 1733



Kent Meeks
20 2820



Lorraine Mendoza
20 1055



Michael Prins
20 5532



Jonathan Rogers
20 245



Marion Scott
20 5600



Teresa Cajete
15 12820

Emergency operations exercise preps teams for the real thing



The truck "accident" wasn't real, but Sandia's emergency management (EM) team treated it like it was. The "accident" — which involved a simulated release of a toxic chemical, a "fatality," and two other injuries, triggered a day-long emergency management exercise designed to test the emergency response of more than a dozen Labs EM functions including incident commanders, consequence assessment teams, rescue-recon teams, security, public information, coordination with other agencies, and the like. The graded annual exercise involved hundreds of players and scores of evaluators, controllers, and observers. Residents of buildings affected by the drill scenario were required to follow protective action orders, just as if the situation were real. Michael Knazovich, manager of Emergency Planning, Training, and Support Dept. 10337, told players in a post-exercise debriefing that he felt the exercise met all the identified high-level objectives. The final grade for the exercise is determined by DOE; the results were not immediately available.



Sandia News Briefs

Magazine finds Sandia a top place to work

Aviation Week and Space Technology magazine, in its annual workforce survey of the aerospace and defense (A&D) industry, has found that Sandia is considered the first choice among A&D professionals as a desirable place to work in the area of technological challenge. The study, published in the Sept. 4 issue of the magazine, was called "Where A&D professionals want to work." It drew responses from a wide range of companies employing a total of more than 517,000 people. The survey asked what A&D professionals value most. It found that while pay and benefits are important, other, even more valued factors were cited by professionals, including: technological challenge (the area in which Sandia scored highest), credible leaders, career growth opportunities, and a culture that values and respects the individual.

The *Aviation Week* article cited Sandia's unique factors as: "Sandia's entire mission and budget is committed to research, development, and transition to industry/agency product; all top leaders have technical backgrounds."

Lockheed Martin scored high in the survey, too, in the area of valuing people.

Trinity Site tour is Oct. 7

The National Atomic Museum will host its semiannual Trinity Site National Historic Landmark tour Oct. 7. The tour will include docent lectures, walking Ground Zero, viewing of Jumbo, and visiting the McDonald Ranch

House. Seats are limited. Tour buses will leave the museum at 6 a.m. and return around 4 p.m. Participants will be treated to lunch at New Mexico Tech, along with a blasting demonstration. Cost of the tour is \$55 per person. Also, at 7 p.m. Friday before the tour, the museum will host a lecture about the first atomic bomb test. The lecture will be presented by Ben Benjamin, who was at Trinity during the first test. The lecture is free to tour participants; others are welcome to attend for \$3. Reservations can be made by calling 242-6083 or e-mailing the museum at store@atomicmuseum.com.

New Mexico Small Business Assistance Program calls for 2007 proposals

The New Mexico Small Business Assistance Program (NMSBA) has issued a call for ideas for leveraged projects for the 2007 proposal cycle. Leveraged projects are a group of businesses that pool resources to create a larger project, focused on solving a technical challenge, usually benefiting an industry or community. The group of five or more (limited to 25) small businesses request that a national laboratory investigate a single technical issue relating to all the small businesses involved. NMSBA can provide \$50,000 to \$100,000 worth of labor costs annually for up to three years to solve the critical challenge. Proposals can be submitted to work jointly with both labs (LANL is part of the program this year) or one or the other. To discuss your proposal idea and request a copy of the proposal request, contact Jennifer Kamm-Sinsabaugh (10222) at 844-9623 or jlamm@sandia.gov.

Sandia's 2007 ECP/United Way Campaign Kickoff

Books Are Fun
Employee Caring Program

Book Fair

See what's new!

October 3, 4, and 5
Thunderbird Cafe
10:00 am - 2:00 pm

October 10, 11, and 12
Area IV - Bldg. 960
Conf. Rm. 1001B
9 am - 4 pm

October 17, 18, and 19
Bldg. 811, Rm. 218 & 220
9 am - 4 pm

Bring your shopping list to the book fair! You'll find exactly what you want in our large selection. Shop in the convenience of your workplace. Save on an incredible selection of books and fine gift items.

Proceeds support Sandia's ECP Campaign and the United Way.

Sandia National Laboratories United Way