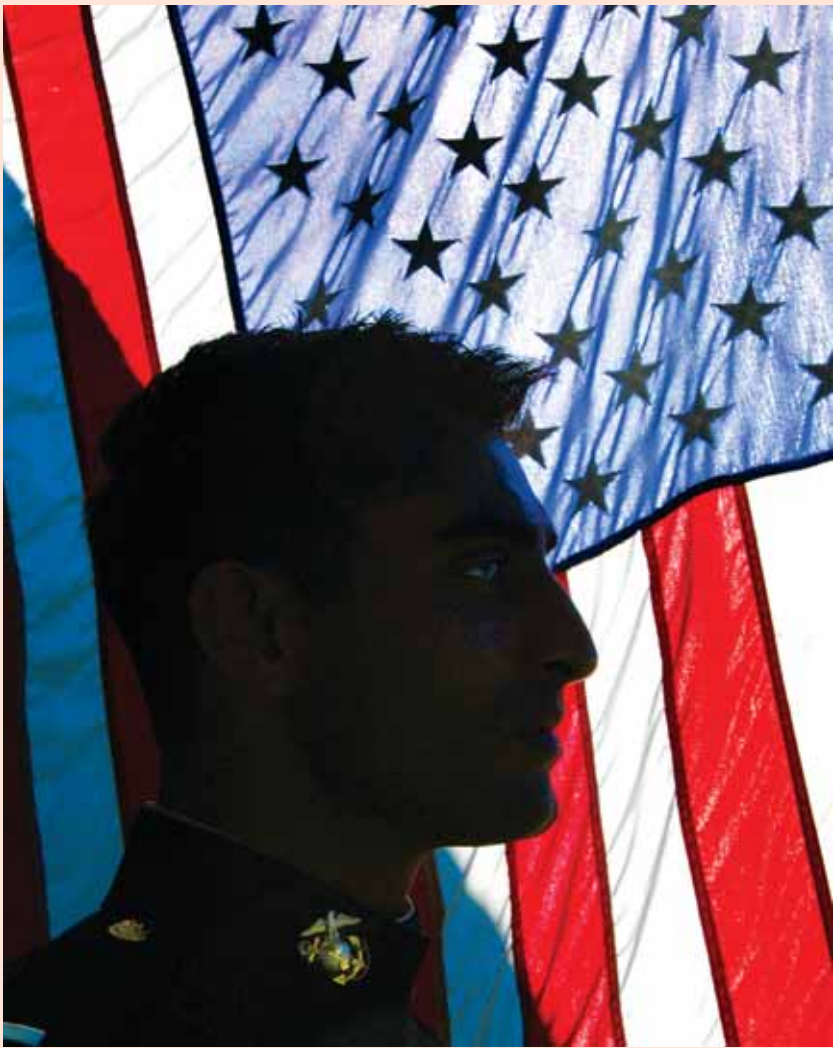


Sandia marks Veterans Day 2007



In taking note of Veterans Day 2007, Labs Executive VP and Deputy Director John Stichman called on all Sandians to “never forget the sacrifice of those who have protected our freedom. And as we honor our veterans, let us remember all who serve today and who often fight against new threats, against irregular warfare, catastrophic terrorism, and disruptive threats. Sons and daughters, spouses, and friends in the military, we celebrate, cherish, and salute you!”

John, in a note to employees, invited Sandians to visit the recently revised and updated virtual Veterans’ Wall on the internal web at www-irn.sandia.gov/event/vets. He invited Sandia veterans to register at the site, which now contains the names of more than 1,000 Sandians who have served in the nation’s armed forces. There will be an official Veterans Day ceremony at the Steve Schiff Auditorium on Nov. 12 at 10 a.m. (The observance is one several activities associated with American Indian Heritage Month. For other Sandia events associated with American Indian Heritage Month, see [page 8](#).) (Photo by Randy Montoya)

Sandia LabNews

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Managed by Lockheed Martin for the National Nuclear Security Administration

Sandia to help NRC license new generation of nuclear power plants

By Bill Murphy

Sandia and the US Nuclear Regulatory Commission (NRC) have enjoyed a long and productive relationship. Today, with a resurgence of interest in nuclear power around the nation, that relationship is poised to become closer than ever, with Sandia supporting the NRC in its regulatory capacity in licensing new US nuclear power plants.

Sandia has supported various NRC offices (Research, Reactor Regulation, etc.) primarily in safety and security research. The Labs’ work has provided vital insights that have helped the NRC develop appropriate rules and regulations for nuclear power plants. In addition, Sandia is now serving as the lead lab for DOE as it seeks certification from the NRC to operate Yucca Mountain as a nuclear waste repository.

Under its new role with NRC, Sandia will be part of an extended team of national labs and private-sector contractors directly involved with NRC’s Office of New Reactors (NRO). They will be involved in certifying new nuclear power plant designs and reviewing license applications for construction and operation. The NRC is funding Sandia’s work at up to \$25 million or 60 FTEs over a period of five years, with a possibility of more funding and more work in the future.

According to Tim Wheeler (6764), principal investigator in Sandia’s work with NRO, the NRC anticipates that over the next three years it will receive as many as 18 applications for new nuclear power plants (up to 30 new reactors) — either for design certification or for a combined license, which authorizes construction and conditional operation.

That “tsunami of applications,” as Tim calls it, comes after decades of near-dormancy in the industry. Since the 1979 Three Mile Island accident, no US nuclear power plant had been authorized to begin construction. Several plants were already in the construction phase at the time and have subsequently come on line after often protracted legal and political challenges.

(Continued on page 4)

“For a lot of us who have worked in nuclear power over the years, this is a chance to be in on the ground floor of a new era.”

— Tim Wheeler

Reductions in indirect spending will impact people, reshape services

Most budget cuts will impact Labs’ Integrated Enabling Services

The next several years will see significant increases in costs at Sandia, says Joe Polito, who heads the Labs’ Integrated Enabling Services Strategic Management Unit (IES SMU). “Over the next five years,” he says, “the Labs will be looking at the first Sandia payment into the pension fund in decades. Health care costs continue to rise and other infrastructure costs are growing. When you add it all up, the average increase per year will be \$15 million to \$25 million. Achieving cost savings in both indirect and direct programs will be needed to offset these rising cost.”

Responding to these changes will involve reductions to the Labs’ total size, changes to internal business practices, and adjustments to the workforce mix. Some layoffs are likely.

Increased costs come at a time when overall Labs revenues are expected to be flat, or nearly flat. Therefore, Joe says, if the Labs did nothing to adjust its cost structure, indirect costs would demand an ever-increasing piece of the revenue pie. Very little can be done to address rising costs

imposed on Sandia externally, but there are many things Sandia can do internally to minimize or constrain costs, Joe says. And that, Sandia’s senior management has determined, is why the Labs must develop new efficiencies in operations across the Labs.

“If we did nothing,” Joe says, “our customers would be paying more and more for the same amount of work. That’s not sustainable. We have an obligation to deliver work to our customers in the most cost-effective way we can, and we have an obligation to the nation to perform our mission as efficiently as we can. That means we need to change how we think about our operations and how we deliver services if we are going to impact those growing costs.”

While much of the discussion regarding the effort to reduce costs, Joe notes, has focused on IES, in fact, cost-cutting and efficiency-seeking efforts are occurring Labs-wide. Last year, an initiative called the Process Efficiency Transformation

(Continued on page 5)

Labs issues FY08 ‘workforce data call’ to managers

In late October, Pat Smith, acting VP of Human Resources and Communications Div. 3000, and Joe Polito, VP of Enterprise Transformation Div. 9000, issued an “FY08 workforce data call” to the Labs’ Executive Office (EO) and vice presidents.

“As you know, the FY08 indirect budget is not sufficient to support all of the people we currently have in the indirect workforce,” says the data call letter, dated Oct. 24. “We are facing the prospect of involuntary separations. We are executing a plan to analyze this situation and reach decisions in November.”

Each year, the Labs’ size ebbs and flows, based on normal attrition, hiring, the amount of temporary work, and changes in mission requirements. There also are internal personnel movements each year. This year is no differ-

(Continued on page 5)



Sandia researcher Stan Atcity has won the Technical Excellence Award from the American Indian Science and Engineering Society for his internationally recognized work in power conversion systems. See the story on [page 4](#).



As a materials engineer, Laurence Brown brings a valuable perspective to his role as the Labs’ liaison with tribal governments, seeking opportunities for technical collaboration between the tribes and the Labs. See the story on [page 8](#).

What's what

First off, here's a column note about a story about a column. The first column was in *The Wall Street Journal*. It was Detroit bureau chief and automotive editor Joe White's assessment of things learned during his Oct. 22 visit to Sandia/California as reported in his Eyes on the Road column.

The story is on page 3 of this edition of *Lab News*. It's Patti Koning's account of White's visit and subsequent column.

I mention the story because it's succinct but informative. And with more budget-driven smaller issues of *Lab News* – like this one, and the previous one – “succinct but informative” is important for thinner editions that are likely to be the future norm.

And with brevity in mind, that's all for this entry, except: Be sure to read Patti's story.

* * *

But before we leave the subject of the *Lab News*, a brief reflection on the recent announcement of new Fellows of the American Association for the Advancement of Science.

One of the four Sandians so honored (see *Lab News*, Oct. 26, page 6) was Nigel Hey, former member of the PR group, who, since retirement six years ago, has written two science books and continues to work with the Labs as a consultant, concentrating on national media relations.

Not too long before retiring a year and a half ago, former *Lab News* editor Ken Frazier was also named a AAAS Fellow. Since his retirement, Ken has continued to edit the internationally circulated magazine *Skeptical Inquirer* and just last month spoke at the international Center for Inquiry conference in Beijing.

Meanwhile, the *Lab News* won a 2007 Apex Grand Award, the highest level bestowed in the Apex competition, which draws several thousand entries annually. It has earned that same award several times in the past. In 2006, the *Lab News* was recognized by Ragan Communications as the best employee newsletter (nonprofit category), and remained in the top five in that competition this year.

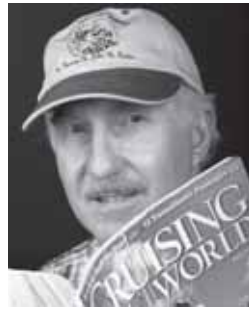
All this seems noteworthy mostly because the PR group is relatively small, and getting smaller yet, and such honors and accolades to so small a group are a true testament to the quality of its staff and work – and ultimately, its value to the Labs.

* * *

It's just barely the cusp of the holiday season, but not too early to remember the Shoes for Kids program. Sandians have been generous for years in contributing to this very worthwhile effort, as Labs Director Tom Hunter noted in a letter to all hands.

The letter was dated Oct. 31. That's Halloween. Think of it as a trick-or-treat appeal, and treat some kids to new shoes for the coming winter. There's nothing better than putting smiles on kids' faces.

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



HOWARD KERCHEVAL

John Slipke tapped to head HR division

Labs Director Tom Hunter has announced that effective Monday, Nov. 26, John Slipke will assume the role of VP of Human Resources and Communications Div. 3000. John is currently vice president of human resources for Global Sustainment, Lockheed Martin Aeronautics Company, headquartered in Fort Worth, Texas. John joined Lockheed Martin in 1979. He brings to Sandia more than 28 years of experience in various human resource disciplines. Tom said in making the announcement, “His experience and leadership will serve us well. I'm delighted that he is joining the team.”



JOHN SLIPKE

Labs Deputy Director for Integrated Technologies and Systems Al Romig led the candidate selection team. Echoing Tom's endorsement, Al said, “We are facing a changing environment at Sandia and in the national security environment. The HR function is, and will continue to be, an important partner in positioning Sandia for these changes. We interviewed a number of good candidates and John is clearly the right choice to lead this division. Please welcome him in his new role.”

John said, “I'm looking forward to this new assignment and getting to know the team in Division 3000. HR has an especially important role to play during these transformational times. I'm ready to get under way.”

Both Tom and Al extended their appreciation to Pat Smith for her leadership and energy in stepping forward as acting VP of Div. 3000 in the interim. Pat will return to her position as director of California Site Operations Center 8500.

Retiree deaths

Note: Due to a combination of technical and logistics issues, the *Lab News* has not had access to the names of retirees who have passed away over the past several months. Sandia's HR group is now in a position to provide that information again. The *Lab News* will continue to publish retiree death listings as they become available.

Raymond Raty (age 94)	July 24
Carl Hawk (88)	July 25
Alfredo Fernandez (90)	July 25
Robert Cox (90)	July 26
Lee Edward Davies (86)	July 27
Endalecio Gurule (81)	July 28
Sam Thomas Mancuso (82)	July 29
G. H. Bruington (95)	Aug. 1
William Meahl (84)	Aug. 4
Neta Tyler (87)	Aug. 5
Jerry Kennedy (73)	Aug. 6
Milton Madsen (83)	Aug. 7
Mary Flanagan (84)	Aug. 11
James Phillips (80)	Aug. 13
M. Margaret Tedesco (94)	Aug. 13
Louise Major (96)	Aug. 15
Allen Thornton (84)	Aug. 16
Sanford Erickson (84)	Aug. 16
Armen Meyers (84)	Aug. 17
John Logan (83)	Aug. 21
Jose Garcia (81)	Aug. 22
Dale Haskins (84)	Aug. 22
Richard Griffith (80)	Aug. 24
Luther Beatty (86)	Aug. 27
Glenn Elliott (75)	Aug. 27
Kenneth Swanson (67)	Aug. 29
Herbert Dumas (79)	Sept. 1
Edmund Baca (79)	Sept. 7
Robert Vaughan (64)	Sept. 9
Richard Illing (89)	Sept. 10
Alfred Elsea (76)	Sept. 15
Gerrit John Hof (93)	Sept. 17
Bruce Van Domelen (74)	Sept. 18
Doris Galloway (88)	Sept. 18
Leo Peter Navoda (84)	Sept. 20
Virginia Chapman (96)	Sept. 21
H. Judson Gregory (86)	Sept. 21
Bruce Coleman (86)	Sept. 25
Barbara Walling (75)	Sept. 27

Sandia LabNews

Sandia National Laboratories

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Others:

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Sandia's 'big brains' could tackle alternative fuels, says *Wall Street Journal* automotive editor Joe White

By Patti Koning

Last month Joe White, Detroit bureau chief and automotive editor for *The Wall Street Journal*, toured Sandia/California to learn about automotive-related happenings onsite. He wrote about his visit in his Oct. 22 Eyes on the Road column, headlined "Big Brains at Sandia National Lab Tackle the Future of Combustion."

In that column, White had this to say about Sandia: "To a man and woman, the people at Sandia today are patriots dedicated to making America safer and stronger. Still, the challenge they've undertaken to help free personal mobility from petroleum isn't so straightforward."

While at Sandia, White met with Div. 8000 VP Paul Hommert; Terry Michalske, director of Biological and Energy Sciences Center 8300; Jay Keller, manager of Hydrogen and Combustion Technologies Dept. 8367; Bob Carling, director of Physical and Engineering Sciences Center 8700; and Dennis Siebers, manager of Engine Combustion Dept. 8362. He also participated in a video conference on biofuels and the Joint BioEnergy Initiative (JBIE) with Grant Hefelfinger (8330), senior manager of Molecular and Computational Biosciences.



JOE WHITE

White toured the Micro and Nano Technologies Laboratories, where he discussed storage research with Terry Johnson (8757) and the Metal Hydrides Center of Excellence with Lennie Klebanoff and Ewa Ronnebro (both 8755). Later in the day he visited Combustion Research Facility laboratories, with discussions on homogeneous charge compression ignition (HCCI) led by John Dec (8362); alternative fuels led by Chuck Mueller

(8362); and the hydrogen internal combustion engine led by Sebastian Kaiser (8362) and Joseph Oefelein (8351).

"In Joe's world, everyone is trying to sell a point of view, a product, or a technology. He clearly appreciated Sandia's ability to provide an unbiased science and technology perspective," says Mike Janes (8528), public relations officer for the California site. "I expect we'll be seeing and hearing more from Joe in the future."

White shared his expertise in a talk titled "Green Machines" that focused on the barriers to alternatives to gasoline and internal combustion engines. He noted that in the 20 years he's spent covering the automotive industry, he's seen the current trend toward energy-efficient cars come and go several times.

"Every time there has been a spike in energy prices, a conflict in the Middle East, or a surge in environmental sentiment in the popular culture, the automotive industry has responded by throwing open the doors of its R&D labs and showing the wonderful, super-efficient, advanced technology prototypes," he said. "Then, when the heat goes off, the prototypes go back beyond the curtain and everything goes back to horsepower as usual."

Right now, all three of the indicators White describes are happening. In his Oct. 22 column, he described this as "a trifecta — an energy-price spike, a Mideast war, and a surge of green consciousness symbolized now by Al Gore's Nobel Peace Prize, which presumably will share space in his den with the Oscar for 'An Inconvenient Truth.'"

He concluded that, in his opinion, right now there is a greater willingness to invest in new technology from the incremental to the revolutionary than at any other time in the modern era.

"Sooner or later the auto industry will face enormous pressure because of climate change and the price and scarcity of oil," he said. "Twenty to 22 miles per gallon as an average is not going to cut it globally."

The biggest hurdle, says White, is cost. "Old technology is cheap. Car makers will struggle to get over the cost hurdle of truly advanced fuel-saving technology. They will need a boost, either from higher fuel prices or gasoline taxes, or tax policies that make the up-front premiums irrelevant to consumers. None of the Big Three automakers has the capital to take an all-out risk on new technology — they can't afford to sell vehicles that are too expensive or loaded with challenging, untested technology that is expensive to own and operate."

But it's a hurdle that researchers at Sandia are eager to attempt — and the brainpower and resources of Sandia and other national laboratories might just be what it takes. As White wrote in his column, "Maybe it makes sense to have a Manhattan Project to overcome the technical obstacles to wider use of clean fuel technology. Maybe it makes sense to redefine the problem."

To read the full text of Joe White's Oct. 22 column, go to <http://tinyurl.com/2zlqou>. To watch the video stream of his "Green Machines" presentation, go to <http://ln.sandia.gov/green-machine>.

Sandia California News

R&D Magazine names Mode-Filtered Fiber Amplifier Most Enabling New Technology of 2007

By Patti Koning

At the R&D 100 Awards ceremony in Chicago last month, Sandia's Mode-Filtered Fiber Amplifier received the Editors' Choice Award for the Most Enabling New Technology. The award came as a surprise to Dahv Kliner and Jeff Koplou (both 8368), the Sandia inventors, and Bob Carling (8700), director of Physical and Engineering Sciences.

"Many very significant inventions received R&D 100 awards," says Dahv. "We are honored to be chosen from among this group as the most enabling new technology."

Martha Walz, the managing editor of *R&D Magazine*, says the Mode-Filtered Fiber Amplifier was chosen because it has become the de facto standard for power scaling of pulsed and continuous-wave fiber lasers and amplifiers. "The editors of *R&D* believe this will enable many breakthroughs in optical technologies due to the fact that it can finally unlock the full potential of fiber lasers," says Walz.

The Mode-Filtered Fiber Amplifier was one of three R&D 100 Award teams to receive Editors' Choice awards. The Active Protection System from Dow Corning received the Editors' Choice Award for Most Innovative New Technology. The Editors' Choice Award for Most Amazing New Technology went to the BrainGate Neural Interface System from Battelle and Cyberkinetics Neurotechnology Systems.

Sandia received five R&D 100 awards this year. In addition to the Mode-Filtered Fiber Amplifier, Novint Falcon and Novint/Sandia 3D-



SANDIA WAS AWARDED FIVE R&D 100 AWARDS this year. At the ceremony held last month in Chicago, the Mode-Filtered Fiber Amplifier was named the Most Enabling New Technology. Attending the ceremony were (left to right): Hongyou Fan (1815), Dahv Kliner (8368), Wen Hsu (8368), Dorothy Stermer (0330), Bob Carling (8700), Stanley Kravitz (1723), Carrie Schmidt (1723), Bruce Burckel (1815), Larry Schneider (1650), Michael Dinallo (1653), John Barnum (6452), Jeffrey Koplou (8368), and Nathan Golden (1031).

Touch Software, ElectroNeedle, ArcSafe® with Pulsed Arrested Spark Discharge, and Self-Assembling Process for Fabricating Tailored Thin Films

were recognized (*Lab News*, July 20). Including these five, Sandia has accumulated 80 R&D 100 awards since 1976.

Teaming with NRC

(Continued from page 1)

Much has changed in the political climate, in the climate of public opinion — and, indeed, in the climate itself — since 1979. In recent years, utilities have again decided that nuclear power is a good bet and are jumping in. And the NRC, sensitive to criticisms going back decades that its licensing process took too long, has pledged to handle this new generation of license applications more expeditiously, says Felicia Durán, a key member of the Sandia team working with the NRC.

The renewed interest from industry and investors toward nuclear power got a significant boost with the passage of the Energy Policy Act of 2005, which was signed by President George W. Bush at Sandia in August 2005. That act, championed by Sen. Pete Domenici, R-N.M., and Sen. Jeff Bingaman, D-N.M., includes provisions making nuclear power a more viable option for utility companies than it has been in decades.

NRC's Office of New Reactors provides a solid regulatory framework to deal with the flood of new applications, says Felicia. NRC has substantially ramped up its own hiring program and is teaming with several national laboratories and some private-sector contractors to facilitate the licensing process. The national labs working with NRC are valued both for their technical competence and because they bring no conflicts of interest to the table, says Felicia.

Each license application is a complex, multifaceted document that spells out in meticulous detail the technical, environmental, and safety aspects of the applicant's proposal. Each aspect of the application — there are 230 subsections in a typical application, and each will require a technical review —

must be evaluated against the standards established by NRC. Currently, Sandia will be supporting two branches of the NRO that together account for 41 distinct review activities. These areas fall under the general heading of "balance of plant," which encompasses virtually everything but the reactor and its related systems, the nuclear steam supply system, and the emergency core cooling system. Sandia also expects to play a significant role in reviewing these critical systems as NRO's requirements evolve. Sandia is in discussion with other NRO branches to support additional review activities.

Sandia, Tim notes, brings a broad suite of capabilities to its work with NRC, as well as an unparalleled reputation for delivering impeccable research. The work for NRC, he adds, is a good match for Sandia, advancing as it does a new generation of nuclear power facilities around the country. Those facilities, in turn, advance the nation's energy security, which is a key element of Sandia's national security mission.

Tim says his biggest immediate challenge will be assembling a team of Sandians from a broad range of disciplines from metallurgy, geology, and fire safety to human factors, structural analysis, and health physics. Tim says he plans to aggressively seek qualified personnel from throughout the Labs to join the Sandia effort, adding that a number of Sandians who have worked on NRC projects in the past but have moved to other positions are contacting him saying they want to get back on the team.

That doesn't surprise Tim. "For a lot of us who have worked in nuclear power over the years," he says, "this is a chance to be in on the ground floor of a new era."

The NRC is bracing for a "tsunami" of new license applications, marking a resurgence of interest in nuclear power among the nation's energy companies. As the licensing process moves forward, a new generation of nuclear power plants may rise above the nation's landscapes, much like this power plant, Byron Nuclear Generating Station, in Ogle County, Ill.

Stan Atcitty receives coveted Technical Excellence Award from AISES

By Iris Aboytes

"Often, there was no food the last week of the month," says Stan Atcitty (6336), yet somehow my mother, Betty Mae, always found some. There was more than 40 percent unemployment, more than 30,000 homes without power, water, sewers, or roads."

Despite the challenges of his childhood, Stan persevered. He was recently honored with the Technical Excellence Award by the American Indian Science and Engineering Society (AISES) for his research and development of power conversion systems and energy storage, in particular for advancing the understanding of the system-level performance of electrochemical capacitors. Stan is an internationally recognized expert in his field.

"Working at Sandia allows me to perform different areas of research and development with world-class equipment and people who make it even more rewarding," says Stan.

At Sandia, Stan oversees simulations of energy storage technology integration. His professional accomplishments include an R&D 100 Award for the development of the Emitter Turn-Off Thyristor (ETO) and two patents. He graduated from the Sandia Weapon Intern Program in 2002.

Betty Mae, a single mother, raised Stan and his two older siblings on the Navajo reservation in Shiprock, N.M. "I came

from humble beginnings," says Stan. "I was raised in a less than 500-square-foot substandard house." It had no insulation, so it was hot in the summer and cold in the winter. He remembers looking up at the ceiling and seeing the two-by-four crossbeams.

His mother wove rugs, a skill she learned from her mother. She sold them to support her family.

Stan always enjoyed taking things apart and reassembling them to see how they worked. He loved math and science. When Stan was in high school, a counselor changed his class schedule to include more

challenging subjects in math, chemistry, and physics. But after graduating from high school, Stan worked as a laborer. "On a project where I had to dig a trench for a foundation with a shovel," says Stan, "I asked myself, 'Do I want to do this for the rest of my life?' The answer was a resounding 'no.'"

He decided to continue his education. "My mother did not understand the entire education process," he says. "But she knew it was good and supported me all the way."

Stan's college education began at San Juan Community College in Farmington, N.M., and continued at New Mexico State University (NMSU). During an electronics class, he realized that he understood the concepts. As his self-confidence grew, he attained a greater level of achievement.

Stan began his career at Sandia during his junior year at NMSU when he was offered a co-op position by Sandia's Critical Infrastructure group. Stan went on to receive his MS in electrical engineering, and in 2006 was the first Native American male to receive a PhD in electrical computer engineering from Virginia Polytechnic Institute and State University (Virginia Tech).

Stan and his wife Lisa have four children, Kimimila, Solomon, Aaron, and Daniel. He considers Lisa and his children vital partners in his challenging and exciting journey.

Through his community involvement, Stan is helping to chart a path for upcoming Native American scientists and engineers. He has a heart for the Native American students. "I love to see them succeed, especially the ones who grow up in difficult financial situations," he says.

"My mother may not have understood much about the education process," says Stan. "But she was right. It was good. My family's dream of the path for a better life has come true — I am living it today."



STAN ATCITTY with wife Lisa and children Solomon, Aaron, Kimimila, and Daniel.

Rich Neiser named fellow of ASM International

Richard Neiser has been inducted as a fellow of ASM International, the premier society for materials scientists and engineers, "for pioneering contributions in innovative process diagnostics and modeling to enhance fundamental understanding and improve control technology for thermal spray processes, and for exceptional leadership in thermal spray safety education."

The induction came during the 2007 Materials Science & Technology Conference in Detroit.

Rich is manager of Applied Systems and Materials Science Dept. 5918 in Systems Assessment and Research Center 5900.

After coming to Sandia in 1991, Rich spent the next 14 years helping build Sandia's Thermal Spray Research Lab (TSRL) into a highly respected member of the worldwide thermal spray community. Some of the major projects tackled at the TSRL during this time include developing and fielding a complex coating process for the MC4380a neutron generator, and creating an eight-company consortium to lead the effort to mature a Russian deposition technique called cold spray into a commercially viable technology.

Rich was born and raised in Pittsburgh, Penn. He received his bachelor's and master's degrees in materials science and engineering from Virginia Tech in Blacksburg, Va., and his doctorate at the State University of New York at Stony Brook, Long Island, N.Y.

Rich worked for six years at Brookhaven National Laboratory on Long Island operating X-ray facilities for the Naval Research Laboratory and Oak Ridge National Laboratory. Upon completing his doctorate, Rich received an Alexander von Humboldt fellowship to study in Germany. He performed postdoctoral research at Aachen Technical University and at the University of the Federal Armed Forces in Hamburg.



RICHARD NEISER

Indirect impacts

(Continued from page 1)

Project (PETP) was launched. It resulted in \$26 million in FY07 savings, of which about \$15 million to \$20 million came from IES. The balance was achieved in direct programs. PETP will continue in FY08.

The IES SMU is a critical element of achieving cost efficiencies for Sandia, and the Executive Office (EO) has established multiyear goals for cost reductions and reductions in indirect personnel. For FY08, the IES operating budget decreased slightly, and about \$27 million of adjustments in the remaining budget needed to be made to cover new needs and cost growth.

As the scope of the challenge to reduce costs in IES became clear, Joe says, he and his leadership team realized they needed to develop a comprehensive approach to evaluate and implement reductions.

Tom Blejwas and the IES Program Leaders Council (PLC) developed a three-pronged approach to address the challenge: It is systematic and risk-based; it includes the use of productivity tools (both technology-based tools and best practices such as Lean Six Sigma); and it considers alternative customer service models. The analysis of the IES portfolio employed those approaches and involved everyone from first-level managers through directors. When the FY08 portfolio adjustment was completed, about 70 percent of the IES portfolio was not changed substantially; the approximately \$27 million in IES budget adjustments and reductions are coming mostly out of the remaining 30 percent of the IES portfolio.

Targeted reductions in the IES budget will continue for the next few years in order to achieve EO objectives, Joe says, adding that it is "imperative" that the IES SMU redesign the way it delivers services around the Labs.

An excellent but standard level of service

Joe says IES is moving from a "customer intimacy" model, which involved a great deal of cus-

tomization to meet requests, to an approach that focuses on an "operational excellence" model of service delivery. That approach is based on delivering an excellent, but standard, level of service to everyone, Joe says.

"We're examining our entire portfolio [of services] to define a set of standards," he says. "The goal is to deliver a consistent level of service that enables the Labs to do its work, does not adversely impact Sandia's external customers, and overall costs less. Specialized services or needs above the standard will be available but will be customer-funded. This will require a lot of work, and we won't get it all done in FY08; but ultimately, it is a better, more cost-effective way for us to do business."

Tom says the FY08 process to reduce IES costs was done "in a relatively short time frame" and "we didn't communicate the process all that well." In the near future, he says, there will be a website where Sandians will be able to see the strategy and plans the IES SMU is using to help the Labs continue to be cost effective. There will also be regular communications to managers, so they can share this information with their staff, Tom says.

'Starting FY08 with more people in IES than we can afford'

"As we become more efficient and change our approach to infrastructure services, Sandia will be adjusting its workforce to accommodate reduced indirect costs and FTEs," Joe says. "Between absorbing inflation and additional costs, we are starting FY08 with more people in IES than we can afford. We're analyzing the situation to mitigate the impact on the workforce."

The EO established FTE targets in August that call for IES workforce and Labs-wide Center Support reductions, Joe notes. Indirect FTE reductions did not occur at the targeted level during FY07, so the FY08 targets are more aggressive, he adds.

It is expected that FY08 indirect FTE targets — a reduction of about 200 from IES charging at the end of FY07 — will be met based on anticipated normal attrition (which is expected to be 100-120 indirect workers in FY08), retraining opportuni-

'Affordability' vs. FTE targets

As Joe Polito, Tom Blejwas, and the leadership of the Integrated Enabling Services SMU continue to address the need to downsize IES in FY08 and beyond, they're actually aiming at two targets: a budget target, which might be called an "affordability" target, and an FTE (full-time equivalent) target.

The budget target is based on agreements with the Executive Office to reduce indirect costs over the next few years to help offset growth in costs of about \$100 million by FY12. They're also working to meet EO FTE targets established in August for the entire Labs, including IES.

Reductions in indirect FTEs will permit growth in ITS direct FTEs while still constraining total lab size. The FY08 FTE target for indirect is 2,450 FTEs, which will be reduced incrementally to 2,150 FTEs by the end of FY11. Indirect started the fiscal year at about 2,650 FTEs. While the budget and FTE targets are not always perfectly aligned, Joe says, IES will work over time to achieve both targets to help offset cost growth and to maximize the number of FTEs performing direct work for external customers.

ties, transfers to other jobs within Sandia, and layoffs in limited numbers through the realignment process that could range from 40 to 80 Sandia employees, Joe says.

Realignments will be targeted to functions identified through a described process and will be activities that Sandia will no longer perform, fund, or provide at the same levels. No incentive programs are being planned to accompany reductions in FTEs, Joe says. (See "Labs issues workforce data call" on page 1.)

Joe notes that the focus on reducing indirect costs is not related to the current congressional continuing resolution. The continuing resolution resulted from the fact that Congress has not passed a nuclear weapons budget for FY08. As previously communicated, when a final FY08 nuclear weapons budget is determined by the Congress, Sandia may face additional impacts.

'Block party' celebrates Labs' diversity



SANDIA'S CORPORATE DIVERSITY TEAM last month held its second Block Party (the first was held in 2003) with the theme of "The Mix is What Matters." According to Labs diversity officer Rochelle Lari (above, second from right), the purpose of the block party was to "recognize and celebrate the fact that every person at Sandia is a part of that mix." Says Rochelle: "Diversity at Sandia is any collective all-inclusive mixture of people, groups, items, or ideas characterized by similarities and differences and includes all of us." The Diversity Block Party was hosted by Labs Director Tom Hunter, who is also Sandia's Diversity Champion. The event featured exhibits from several of the Division Diversity Councils, outreach committees, networking groups, and employee-based programs. In the photo above, Executive VP and Deputy Labs Director John Stichman (right) joins Rochelle and, from left, James Vergo (guest), Sammy Fresquez (who provided entertainment), and Angie Gurule-Vergo (retired Sandian). The group is standing by part of the Div. 3000 Workplace Enhancement Council exhibit showcasing generational aspects of the Sandia workforce (Traditionalists, Baby Boomers, Generation Xers, and Millennials). (Photo by Bill Doty)

Workforce data call

(Continued from page 1)

ent in that respect, says Pat. In FY08, the total Labs employment level will remain relatively constant (about 8,400 FTEs) but with continued reshaping due to decreases in nuclear weapons and Integrated Enabling Services (IES) work and complementary growth in Integrated Technologies and Systems (ITS). Normal attrition for the Labs is projected to be about 400 people in FY08, which will require a strong hiring program to replace critical skills in nuclear weapons work and to enhance capabilities in ITS. The operating plan shows IES FTE targets going down about 100 FTEs per year over the next few years.

What is different is that the IES year-end total was nearly 90 FTEs over the FY07 goal, Pat says. Therefore, not only is IES facing a 100 FTE change in the FY08 target, but the SMU also needs to account for the FTEs that were not resolved last year. The data call asks each division to identify "work that is not affordable this year and to identify potential opportunities to reassign individuals to other work that may be available in the Lab." The information will help identify whether the Labs has "surplus" employees and in what categories, Pat says. Divisions were asked to provide the information no later than Nov. 2.

Pat says IES and the Human Resources organization will analyze the data and then provide recommendations to the EO for a decision on the path forward.

"The EO will look at the data and make a decision by the end of November," she says. Meanwhile, managers of impacted indirect functions are already sharing information with staff affected by these changes and identifying next steps, such as working with HR to seek job opportunities in direct programs across the Labs. If placements can't be made, and if natural attrition is insufficient, then Sandia's realignment process or collective bargaining agreement will be followed and employees may be laid off.

Layoffs are a final step in an extensive process to match people with work. "We will try to find fits for everyone, including the possibility for retraining," Pat says. Based on expected attrition and potential internal movements, the aim is to minimize involuntary separations as much as possible.

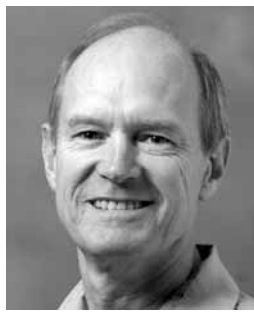
Employees should talk to their managers and their division HR consultants about changes and impacts. They may be directed to other resources as needed.

Mileposts

New Mexico photos by Michelle Fleming



David Baldwin
35 5443



Ronald Lipinski
30 6774



Richard Westfall
30 1342



Jerome Ford
25 9338



J. Michael Griesmeyer
25 5524



Richard Howe
25 2951



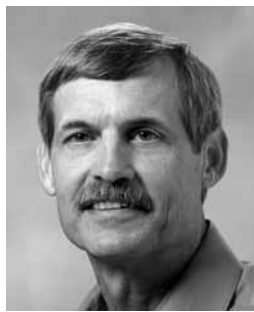
Riley Kilgo
25 5762



Mark Poiles
25 2736



Mark Rosenthal
25 2130



Fred Zutavern
25 5443

Recent Retirees



Richard Toth
40 5925



John Brainard
37 2730



Robert Anderson
36 1821



Gina Simpson 30 1822
Walter Simpson 33 1672



Chris Tolendino 29 4112
Larry Tolendino 31 9334



Robert Longoria
30 2662



Floyd Gentry
24 12342

Take a turkey to work day

Roadrunner Food Bank will distribute to needy families

Sandia employees and contractors are asked to bring a frozen turkey to work on Monday, Nov. 19, for distribution to needy families by the Roadrunner Food Bank of New Mexico.

"Last year we collected more than 200 frozen turkeys," says Patty Zamora with Sandia Community Involvement (3652). "This is a great opportunity to help ensure needy families will have turkey to enjoy for the holidays."

The frozen turkeys will be collected from 6:30 to 8 a.m. in marked vehicles in front of Bldg. 800, Bldg. 825 (Steve Schiff Auditorium), and Bldg. 887 (northeast parking area just inside the Eubank Gate). Balloons will help mark the donation locations.

The Office Professionals Quality Council Community Outreach Team and Community Involvement's annual Roadrunner Food Bank Virtual Drive runs through Nov. 19. Donations are accepted through the Food Bank's secure

website at <http://www.rrfb.org/sandialabs.html>. You also can contribute by transferring money from your Sandia Laboratory Federal Credit Union account to Roadrunner Food Bank account 522830/00-01 for a general donation or 00-02 for the Food for Kids program. The last name on the account is "Roadrunner."

If you would rather donate actual nonperishable food items, they may be taken to any SLFCU branch.

Volunteers are needed to sort food collected during the Letter Carriers Roadrunner Food Bank Food Drive. Sorting will take place at the Steve Schiff Post Office (Candelaria and Eubank) Saturday, Nov. 17, 3-5 p.m. or 5-7:30 p.m. Roadrunner Food Bank is also recruiting volunteers for Sortin' Sunday, Nov. 18, 9 a.m.-4 p.m., at Roadrunner Food Bank.

For more information, contact Patty at 844-2146. — Chris Miller

Sandia celebrates Recycling Awareness Month by recapping recycling accomplishments

November is New Mexico Recycling Awareness Month as proclaimed by the New Mexico Recycling Coalition. And, in support of this proclamation, the Sandia/New Mexico Pollution Prevention (P2) Program recaps Sandia's latest recycling accomplishments.

"The P2 Program is continuously improving existing recycling collection programs and introducing new recycling streams," says Ralph Wrons (4131), P2 program coordinator.

During FY07, materials sent for recycling earned \$147,000. Some of this money was used to cover the cost of transportation and other expenses, but a major portion of the revenue paid for a new sprung-structure tent installed at the Reapplication Services yard.

Other recycling advances made in FY07 include:

- Shipping more electronics for recycling.
- Putting more recycling collection containers in departments, with nearly 200 new containers purchased.

- Redirecting toner supplies valued at \$55,740 to new users, finishing the fiscal year with a new record total.
- Adding Styrofoam recycling to the list of materials recycled in the technical areas.
- Taking wood pallets left on loading docks to Reapplication Services for reuse.
- Using a new 100 percent post-consumer recycled-content line of copy paper.

Margie Marley (4131), a P2 program team member and the lead for the P2 recycling program, says Sandia has been successful with its recycling program because of teamwork.

"Success of the recycling program requires a lab-wide effort. Each Sandia community member who personally accepts responsibility for recycling and minimizing waste makes a positive contribution. We particularly give credit to Custodial Services, Solid Waste Transfer Facility, and Reapplication Services staff," Margie says.

More information about Sandia's recycling program can be found at www-irn.sandia.gov/

esh/p2/recycling.htm. To learn more about New Mexico Recycling Awareness Month and America Recycles Day, visit www.recyclenewmexico.com/NMRAM_2007.htm.

FY07 results and FY08 goals

- Sandia/New Mexico recycled 21.4 million pounds of materials or 68 percent of all solid waste by mass generated in FY07, which includes construction and demolition (C&D) waste.

- Excluding the C&D waste, Sandia/New Mexico recovered almost 890,000 pounds or 46 percent of waste materials for recycling.

- The P2 Program has set an FY08 goal to increase recycling recovery to 47 percent of solid waste by mass while reducing solid waste 5 percent. Meeting these goals requires commitment from the Labs population. —Chris Burroughs

Laurence Brown works with Indian tribes as Sandia's tribal government relations manager

By Chris Burroughs

As Sandia celebrates American Indian Heritage Month this November, Labs government relations tribal liaison Laurence Brown (12125) took time to talk to the *Lab News* about his many roles and responsibilities.

"There are more than 550 federally recognized tribes with 41 of them in New Mexico and Arizona, and I work to stay informed of leadership changes at them as well as to seek collaboration opportunities for Sandia," says Laurence, a manager in Sandia's Government Relations Office. "I'm also the point of contact for the DOE Office of Indian Energy Policy and Programs, which means I help ensure implementation of DOE's American Indian and Alaskan Native Tribal Government policy."

Over the past five years Laurence has served in the position, the chemical and materials engineer has seen Sandia's interactions with Native people grow. Today the Labs has memorandums of understanding (MOUs) with the Navajo Nation, Jemez Pueblo in New Mexico, and the Hualapai Tribe in Arizona. Plus, he interacts with many other Indian groups on a regular basis.

Among his current activities teaming with technical programs are:

- Working with the Pueblo of Laguna Utility Authority on its water supply needs. He will be taking representatives of the pueblo to visit the new brackish groundwater National Desalination Research Center in Alamogordo in mid-December.

- Working with the Pueblo of Santa Ana regarding arsenic removal technologies tested in pilot programs at Jemez Pueblo and Ramah, a satellite Navajo community south of Grants.

- Working with border security programs to develop a system of emergency communications for safety and security in tribal communities. Concerns are that terrorists could take advantage of rural communities and jurisdictional ambiguity to hide dangerous materials on Indian lands.

- Working with the DOE/Sandia Tribal Energy Program to support a Los Alamos project that is helping develop a renewable energy project at a New Mexico pueblo.

The biggest issues that Laurence sees emerging today for the tribes surround water and energy.

Laurence assists Sandia departments either



LAURENCE BROWN at the Indian Pueblo Cultural Center in Albuquerque.

(Photo by Randy Montoya)

thinking of or just beginning relationships with tribes.

"I try to help the technical program people who will be working face to face with the tribal representatives understand tribal sovereignty, government, culture, and protocols," he says.

In addition, leadership changes in many tribes every year or two. Among pueblos in New Mexico, many will not permit an individual, who may be a Sandia employee, to turn down an appointment to serve as governor or in another high position. Laurence helps an appointed employee better understand their immediate transition to government service and their return to Sandia through a leave of absence program.

Like many members of Sandia's American Indian Outreach Committee, Laurence is involved in the American Indian Science and Engineering Society (AISES), a national organization dedicated to increasing substantially the representation of American Indian and Alaskan Natives in engineering, science, and other related technology disciplines.

Laurence represents Sandia on the AISES Corporate Advisory Council and recruits American Indians to come work at Sandia through the society. He also helped develop a national and internal process for nominating and selecting the AISES Professional of the Year.

Upcoming American Indian Heritage Month activities

- Nov. 12 — Veterans Day observance, 10 a.m., Steve Schiff Auditorium

- Nov. 14 — Kinaalda, coming of age for Navajo girls, 11:30 a.m., Steve Schiff Auditorium

- Nov. 19 — Native American healing & spirituality: Good medicine-bad medicine, a contemporary perspective, noon, 823 Breezeway

- Nov. 28 — Traditional fashion show, 12:30 p.m., Steve Schiff Auditorium

Laurence Brown remembers growing up with no electricity or running water

Laurence Brown (12125) understands the need for energy and water in tribal communities. He grew up on the Navajo reservation, 23 miles south of Bloomfield, N.M. There was no electricity, and with no running water, he had to haul water to the house. He herded his grandfather's sheep and used kerosene lamps for light.

His father died when he was in the third grade, leaving his mother to raise four children by herself. A year before the death of his father, his mother got a job with the Bureau of Indian Affairs (BIA), and the family moved to a dorm on the BIA campus where Laurence had his first opportunity to live with electricity and water flowing through a tap.

He got his first job in the eighth grade working for local Navajo government. By the time he was 16, he was a welder's helper in the oil fields.

"I knew I wasn't going to work in the oil fields the rest of my life and asked myself, what can I do differently?" says Laurence, who speaks Diné, the Navajo language, fluently.

He realized that college was the answer and went to New Mexico State University — paying his way through odd jobs and summer internships at technical companies around the country. After obtaining his BS in chemical engineering, he worked three years at IBM in Tucson. He then came to Sandia where he participated in the Labs' One Year On Campus program, obtaining an MS in materials engineering from Stanford University.



Photo by Randy Montoya

He spent the next 12 years working in thin film, vacuum, and electronic packaging at Sandia, eventually moving into the government relations management position. Laurence misses the technical work but says, "It's nice to coordinate technology programs with the tribes. There's a lot of depth and breadth to my job." — Chris Burroughs

Homeland security conference draws more than 300

Last month, the sixth annual Homeland Security Conference, sponsored by Sandia and others, attracted more than 300 attendees from 14 states and seven foreign countries. The event, conducted this year at the Albuquerque Marriott, is the only continuously running homeland security conference that has been held yearly since 9/11. The conference has drawn more than 2,500 attendees over the past six years.

Topics at this year's conference included: identifying and discussing emerging threats; highlighting cutting-edge technological resources; assisting in the formulation of appropriate response strategies; radical Islam — domestic and international; agro-terrorism; facilitating the development of interdisciplinary partnerships; intelligence fusion; interoperable communications; and international gangs.

In addition to Sandia, other sponsors of the conference included New Mexico Tech, the Albuquerque Police Department, University of New Mexico's Health Sciences Center: Center for Disaster Medicine, and TRC Solutions.

Internationally recognized speakers at the conference came from as far away as Russia, Afghanistan, Israel, and Iraq. Highlights of the conference included presentations by Hank Crumpton, who headed the CIA's highly regarded campaign in Afghanistan after 9/11; Emile Nakhleh, a retired CIA expert on Islamic radicalism; biosecurity expert David Franz; and US Army intelligence expert Thomas Davidson.