

# Accident modeling software to help make nuclear plant operations safer

## MELCOR 1.8.5 to help define, refine tomorrow's safety regulations

By John German

There are some lessons you'd rather learn in cyberspace than in real space. How not to respond to a nuclear power plant meltdown is one of them.

Researchers in Nuclear & Risk Technologies Center 6400 in November released MELCOR 1.8.5. The updated accident-simulation software, distributed on a compact disk, incorporates the results of 20 years of nuclear safety research prompted by the 1979 accident at the Three Mile Island nuclear power plant.

MELCOR models the complex physical phenomena that occur as a simulated nuclear power plant accident progresses. By using the latest experimental data available, the software can help regulators and utilities more sensibly define their operational margins of safety — historically bounded around “the worst-case scenario” — and minimize the burden of unnecessary regulation on the nuclear power industry.

“It will allow them to revisit some of the perhaps overly conservative regulations and identify

areas where no safety enhancements are gained, then refocus on areas where greater safety precautions might really make a difference,” says MELCOR project leader Randy Gauntt (6415). (See “Better modeling of better data brings better regulations” on page 5.)

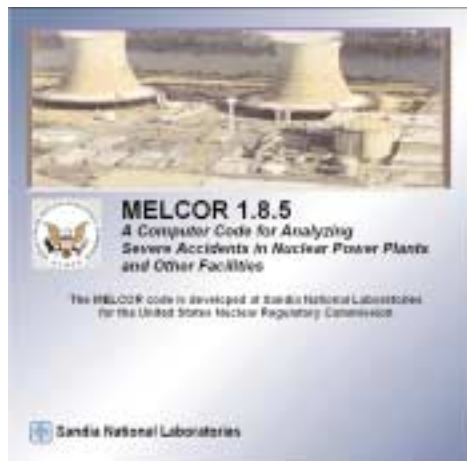
Unlike other accident codes that render a detailed look at one or a few individual plant functions during an accident, MELCOR models the whole plant, from the cooling-system plumbing and control wiring to the physical interactions between the nuclear fuel rods and their steel and concrete containment vessels during a meltdown.

“An accident is a melting pot of complex physical phenomena all interacting simultaneously,” he says. “The nuclear core is a

modest part of what's happening.”

To use MELCOR, the user defines details such as the plant's design and equipment, as well as any predetermined operator actions. He then specifies an initiating event — such as a rupture in a cooling-system pipe or a power outage.

*(Continued on page 5)*



MELCOR 1.8.5 CD-ROM dust cover.



MODELING MELTDOWNS — Randy Cole (left) and Randy Gauntt show off CDs containing Sandia's MELCOR 1.8.5, recently distributed to more than 40 regulators and utility companies. Behind them is a 1/4-scale model of a pre-stressed concrete containment building used by Sandia recently to gather the type of experimental data about nuclear power reactors that MELCOR factors in when it models the progression of a severe accident at a power plant. (Photo by Randy Montoya)

### Nine PQA Gold winners

An unprecedented nine teams have won a Gold Award in the annual Sandia President's Quality Awards (PQA) program. See story on page 4.



## \$4 million allocation made to bolster critical education and training programs across Labs

By Chris Burroughs

A \$4 million allocation from Sandia's Infrastructure Council, encouraged by Executive VP Joan Woodard and Human Resources VP Don Blanton (3000), will bolster the education and training programs across the Labs. The focus of the funding is in five critical areas: Information Technology/Computer Science, University Programs, Technical, Leadership/Management, and Compliance.

Charline Wells, Manager of Programs Operations Office Dept. 3525, sees the \$4 million allocation as an “affirmation of Sandia's commitment to ensuring that the Labs is an organization that values learning and development of people.”

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*Sandia lags behind other benchmarking companies in several key training metrics.*

# Sandia LabNews

Vol. 52, No. 24

December 1, 2000



## Sandia to standardize 'enterprise' PCs around HP, Dell platforms, Windows 2000 Labs reaffirms commitment to Macs and Unix boxes, too

By Bill Murphy

Come January, Sandia will be taking another step in the on-going process toward standardizing its so-called “enterprise” computers. Those are the computers that sit on almost every desktop and are used by Sandians for such day-to-day applications as e-mail, Web access, and word processing.

Under previous procurement policies, individuals have wide latitude in deciding which brand of PC to purchase. As a result, there are many different brands of PCs around the Labs, each with its own maintenance and support requirements. This large variation of PC platforms is very expensive and is not good use of scarce Indirect funds, says Labs Chief Information Officer Pace VanDevender.

At the direction of Executive VP Joan Woodard, Pace and Chief Financial Officer Frank Figueroa and their teams are developing processes intended to encourage the move to standard, approved computers: Hewlett-Packards and Dells.

To further standardize and save money, Sandia is ending Indirect support for Windows 3.1 and Windows 95; as of Jan. 15, machines still using those operating systems instead of the COE (com-

mon operating environment) operating systems (Windows 2000 or Windows NT) will be supported only through hourly billing. The security vulnerabilities of these older operating systems and of Windows 98 constitute a risk for Sandia; the new processes should minimize that risk, says Pace.

Herb Pitts, Director of Personal Computing Center 9600 — which includes the Labs' Computer Support Units (CSUs) — reaffirms Sandia's long-term commitment to supporting three enterprise computers: PCs, Macs, and Unix machines. The current standardization initiative affects only PCs, although standardization within Macs will be considered when OS-X is reliably available. Also, the standardization move does not affect research computers.

Under procurement procedures that will take effect in January, a surcharge of some kind will be attached to the purchase of any Windows-based PC other than the two approved platforms. Details are being worked out, but could be based on a one-time fee, an annual “license” or some other approach.

Herb says the new policy won't affect machines already on Sandians' desktops. If you own a Micron, a Gateway, a PC Magic, or some other brand, it will be grandfathered in and will continue to be serviced without any kind of surcharge attached.

Pace says greater standardization of enterprise hardware and software operating systems will enable the Labs' CSUs to render better service, reduce downtime for customers, position the Labs to more effectively meet emerging cybersecurity requirements — and reduce costs.

*(Continued on page 3)*



**3** Former Cold War KGB officer Oleg Kalugin talks about Soviet intelligence

**8** Once again, Sandians show giving spirit with abundance of holiday food, gift drives

# This & That

In your dreams - I'm writing this column for regular columnist Larry Perrine, who was away a few days. I had an unusual experience anticipating it. In my head, I prepared an entire Sandia-related item reporting about something I had learned that would be of special interest to employees and retirees. Then I woke up. I was in bed, and I had dreamed it! It wasn't true. Two questions arise: I have always said that when I start dreaming about Sandia I'm in real trouble. . . so what should I do now? And second: Since I'm filling in for Larry, given his propensity for creative prevarication (yes, he has been known to make things up), if it's not really true, does it matter?

\* \* \*

This is true - It was a standing-room-only audience, with other Sandians watching by videolink from remote sites and still others turned away. The occasion was a special presentation in the TTC one recent afternoon by Senior VP Tom Hunter on the future of the Labs' nuclear weapons program, Sandia's core mission. The tone was positive and upbeat. New systems-design work. New construction. An increased budget. An organization of the Labs' Nuclear Weapons Strategic Business Unit to maximize effectiveness. An aggressive hiring program. A determination to cut red tape and allow technical managers to concentrate more on the work, not the money. It was refreshing, even exciting. We hope to have more in future issues of the *Lab News*.

\* \* \*

A Page-turner - Back to fiction again. The fine writer Jake Page, a longtime friend, has recently had a novel published by UNM Press called *Cavern*, set in and around the WIPP site near Carlsbad and with a few peripheral characters who are Sandia researchers. It's part adventure-suspense and part science fiction (one chapter in particular recalls the feel of a Jules Verne novel). It involves the discovery of a majestic new underground cavern nearly adjacent to the WIPP site - and something still alive from the Pleistocene that lives in it. If you like well-written, speculative, "What if?" novels, especially scary ones, you'll like *Cavern*. I will warn you, however: The WIPP site's parent agency is not treated altogether flatteringly, and the first victim to be eaten... er killed, is a Sandia engineer.

\* \* \*

If the shoe fits... - It's so easy. And so rewarding. For each holiday season for 44 years Sandians have generously helped local kids get new shoes. Last year nearly \$12,000 was raised. Now's the time again. Call the Sandia Laboratory Federal Credit Union to make a transfer donation to Shoes for Kids, at 293-0500. Or visit. They'll show you what to do.

- Ken Frazier, Editor (kcfrazi@sandia.gov)

## \$4 million

(Continued from page 1)

She says over the last several years Sandians have had the perception that the emphasis on education and training had eroded.

This perception, she notes, became a concern for Joan, who earlier in the year requested Bob Floran (12111) to research the issue. He worked with members of Corporate Training and Development (CTD), studying Sandia's philosophy and level of investment in education.

His finding: Sandia lags behind other benchmarking companies in several key training metrics and Sandia's overall spending is below the US industry average.

The result was the allocation of \$4 million at Joan's request.

### \$2 million to computer retraining

Half of the money - \$2 million - goes to the Information Technology/Computer Science Retraining Program. The goal, says Belinda Holley, Manager of Technical and Compliance Training Dept. 3524, is to retrain Sandians with expertise in other fields to transition to the high-need area of information technology. Over a seven-month period, individuals participating in some aspect of the program attend compressed classes in information technology and receive a certificate in Principles of Computer Science plus three courses toward a graduate degree.

About half million dollars has been reserved and added to the existing funding for University Programs. The funding will be used for One-Year-On-Campus (OYOC), Special Masters, Doctoral Studies, and University Part-Time - all programs designed to encourage staff to pursue advanced degrees. OYOC is an affirmative action program that supports students while they complete a Masters Degree in engineering or computer science in three semesters. The number of students in OYOC is targeted to increase from nine to 15 through the 2002 school year. The students then have a commitment to work at Sandia for at least a year.

The Special Masters Program (SMP) is a program, similar to OYOC in its intent, designed to assist on-roll Sandians to achieve their masters degree. Currently, no Sandians participate in the SMP and the goal is to have five people enrolled in the program through the 2002 school year.

### Free career-enhancing technical courses

The Doctoral Study Program (DSP), which sends employees to school for up to three years to obtain a doctorate, currently has five participants. The goal is to increase that number to nine.

In addition, the funding is being used to increase programs similar to the former In-Hours Technical Education Curricula (INTEC). This will include more career-enhancing technical courses to be offered free to employees in the areas of materials science, advanced manufacturing, and computer science/software engineering.

Leadership/Management programs are being expanded. To be added to the current pre-management and new management courses will be an "experienced manager" curriculum.

Employees interested in learning more about the enhanced training and education opportunities should visit the CTD Web site or watch for notices in the Sandia Daily News or on Sandia Video. They may also call the CTD InfoLine at 845-CLAS.

"We see this new thrust in education and training as investment funding," Belinda says. "We are investing in our employees so they will be of even greater benefit to the Labs in the future."

## Take Note

Retiring and not seen in *Lab News* pictures: **David Davis** (9134), 38 years; **Paul Erickson** (2996), 24 years; **Betty Pierce** (5711), 20 years; **Lillian Pilon** (2147), 11 years; **James Kannolt** (2955), 42 years; and **Robert Wilson** (1614), 15 years.

## Sandia LabNews

Sandia National Laboratories

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

Albuquerque, New Mexico 87185-0165  
Livermore, California 94550-0969  
Tonopah, Nevada • Nevada Test Site • Amarillo, Texas •  
Carlsbad, New Mexico • Washington, D.C.

*Sandia National Laboratories is a multiprogram laboratory operated by Sandia Corporation, a subsidiary of Lockheed Martin Corporation and a prime contractor to the US Department of Energy.*

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Lab News fax .....505/844-0645  
Classified ads .....505/284-3704

Published on alternate Fridays by Media Relations and Communications Dept. 12640, MS 0165

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## Retiree deaths

Ervin J. Molitor (age 81) .....June 6  
J. Morrison Houston (95).....June 20  
Ernest Costales (60) .....July 30  
Johnnie E. Johnson (85) .....Aug. 5  
Henry G. Neues (77) .....Aug. 8  
Benjamin E. Foster (81) .....Aug. 10  
Martin L. Dieter (72).....Aug. 11  
Irene B. Berger (85) .....Aug. 13  
Tonni B. Nunley (62) .....Aug. 18  
Billy Johnson (81) .....Aug. 19  
Homer H. Wilhelm (83) .....Aug. 25  
Joy C. Lewing (88) .....Sept. 3  
Robert R. Harnar (78) .....Sept. 6  
Louis A. Hopkins Jr. (83) .....Sept. 6  
Frank M. Batchelor (85) .....Sept. 7  
Eugene F. Carter (77).....Sept. 9  
James R. Dillard (91).....Sept. 10  
Joffe P. Myers (81) .....Sept. 11  
Milton Waite (80).....Sept. 13  
James E. Taylor (82).....Sept. 13  
Charles L. Stoner (80).....Sept. 16  
Roger W. Thorp (64).....Sept. 21  
Robert L. Crotzer (71).....Sept. 21  
Earl C. Saxton (73).....Sept. 22  
Charles E. Shinneman (84) .....Sept. 25  
Raymond L. Negus (84).....Sept. 26  
Donald D. Wader (77).....Sept. 28



# Former Cold War KGB officer talks about Soviet Intelligence

By Barry Schrader

The Cold War may be over and the Soviet Union dismantled, but the KGB remains intact and is as active as ever. That is the message delivered to a Sandia/California audience by Oleg Kalugin recently as he spoke in the Bldg. 904 auditorium.

Kalugin is a retired major general of the Soviet KGB for foreign counterintelligence as well as a former member of the Supreme Soviet. Now living in the US and chairman of a consulting firm that provides information for businesses in Russia, he is on contract to the Department of Energy and lectures around the country.

Kalugin first came to the US to conduct espionage under the cover of a student at Columbia University and a journalist. He returned to the Soviet Union where in the 1970s and 80s he became the youngest general in the KGB and handled important espionage cases. His internal criticism of the KGB eventually led to his demotion and an eventual run for the Supreme Soviet, which he won and served in the parliament of the USSR.

## Russian intelligence remains intact

After the breakup of the Soviet empire in 1991 the KGB was divided into five parts, Kalugin said, but the Russian intelligence agency has remained intact and has never been touched "for one major reason — Russian leadership was afraid the number of defections from the KGB would multiply, after some three dozen had already left and become moles or spies for the West." He says the KGB still hates the reforms, the new democracy, and up until President Vladimir Putin came to power, even the Russian leadership. Putin belongs to the generation of KGB officers that came from the 1970s and still has ties with the agency.

He quotes Putin as saying "there are three ways to influence people — vodka, blackmail, and a threat to kill." The Russian leader is tightening



OLEG KALUGIN

## Sandia California News

*"To think the old days are over would be a major error. Russian Intelligence will never sleep — they are there to provide vital information and protect the national security of their country. They do their best to penetrate, recruit, and make their country safer."*

the screws on the media and those who criticize him. He pays lip service to democratic change while at the same time trying to create a police state, according to Kalugin.

Even though the Cold War is over, Kalugin says the chances of its being revived, with anti-Americanism on the rise in Russia, is very real. "To think the old days are over would be a major error. Russian Intelligence will never sleep — they are there to provide vital information and protect the national security of their country. They do their best to penetrate, recruit, and make their country safer."

He says a counter-revolution is under way in the country because they never went as far as the Germans who "de-Nazified" Germany, whereas the foundation of communism has never been destroyed. "People feel nostalgic about the old days, they all had jobs and some money. Now the unemployment rate is 13 percent and medical services and education are no longer free.

Today anti-Americanism is evident in their movies like "Brother," which vilifies the US, a new hit song about "killing the Yankees," and the spread of rumors about the US being responsible for the sinking of the Russian Navy submarine.

Kalugin related some examples of KGB ideas in the recent past, such as playing the new Euro dollar against US currency, using the American stock exchange to bring down the US economy,

and sophisticated attacks on government computer systems. He cited a recent case of computer hacking that has been traced to St. Petersburg, Russia, as an example of testing the Internet for vulnerabilities. Now computer information warfare is their number-one tactic, he adds.

## No concrete barriers

He cautions that the worst thing for the US to do is emulate the Russian experience — enforcing regulations that run counter to America's democratic traditions, for example putting concrete barriers around the White House which stood out in his mind. "You should not surround yourself in an 'Iron Curtain' but instead work smart — you have to know the psyche and mindset of your opponents." The US now has to deal not only with Russian counterintelligence, but rogue states like Libya, Cuba, and North Korea. "You can either erect barriers that will hamper your culture and science... or simply infiltrate inside your potential enemies."

Saying he is really an optimist, he offered some advice: A good way to improve relations with Russia is to widen the contacts with the young people of both countries. He explains that one reason he is living in the US today is his one-year at Columbia where he was exposed to America's culture and freedoms that "left an indelible impression on me."

Kalugin published his autobiography, *The First Directorate: My 32 Years in Intelligence and Espionage Against the West*, and collaborated with the late

*"You should not surround yourself in an 'Iron Curtain' but instead work smart — you have to know the psyche and mindset of your opponents."*

William Colby, a one-time CIA Director, to produce the popular CD-ROM game Spycraft, released on Activision. His talk was arranged by Grace Delgado (8511), program administrator of the Sandia/California Office of Counterintelligence, and he was introduced to the audience by Sherry Angelini, senior counterintelligence officer. Jay Colvin, counterintelligence officer, is also part of the California team sponsoring the talk.

## Computing

(Continued from page 1)

In a memo to LLT members, Joan wrote that "the wide variety of computers and operating systems increases both the cost of software deployments and the time that the customer is out of service when maintenance is needed. It also undermines customer satisfaction in subtle ways. According to the Gartner Total-Cost-of Ownership model for computer support [the GartnerGroup provides analyses of information technologies for business], greater standardization of the enterprise desktop computing environment within all three computing platforms would help save an estimated \$1.2 million per year after full standardization. . . . Because of substantial benefits, all Sandia enterprise computers should be standardized within three years."

CSU Operations and Development Dept. 9623 Manager Dorothy Rarick notes that one of the chief reasons for the wide range of PC brands in the labs is that the superficial up-front cost of a name-brand computer — an HP or a Dell, for example — is higher than the cost for a "garage-made" or discount store, or mail-order computer. However, she notes, "the initial hardware cost is insignificant compared to the overall lifetime cost of maintaining the computer." The "savings" of lower cost computers, then, are mostly illusory; the added cost of supporting a panoply of brands more than offsets the initial expenditure.

Karl Wiegandt, Manager of CSU Common Sup-

port & Help Desk Dept. 9624, emphasizes that the move to standardize around Dell and HP in no way is intended to imply that those machines are superior to the many other brands used by Sandians.

Rather, the two brands were selected based on analysis by the widely respected GartnerGroup, which includes Dell, HP, Compaq, and IBM machines in its so-called "enterprise tier." The products in that tier aren't chosen based on hardware quality, Karl notes; rather, Gartner uses the strength of the company and other factors that would indicate an ability to support high-volume enterprises. Karl adds that Sandia decided not to include IBM on its preferred list because so few Sandians were purchasing that brand. As for Compaq, it had a tendency in the past to produce machines with proprietary features, a no-no in any attempt to move toward standardization. (Compaq has moved away from the proprietary paradigm, Karl says, and in the future might be included on an approved procurement list.)

Karl answers a hypothetical question that might be posed: even if Sandia sticks with HP and Dell, why aren't some of the lower-end models from those companies on the approved list? Comparing the prices for HP's business-class Vectra machines with its consumer-class Pavilion machines, Karl says, is like comparing apples and oranges. Although both may have the same Intel processor, there are significant differences that may not be immediately apparent. Business-class machines, he notes, use proven technology and have greater stability in the workplace. Also, business class machines offer out-of-the-box network compatibility, a vitally important consideration for Sandia.

## Newly recruited newlyweds



WELCOME, NEWLYWED NEW-HIRES! — Newlyweds Greg Fiechtner (8360) and Linda Blevins (8361) got a special welcome from Department Manager Don Hardesty (8361) before they reported for work during their honeymoon so they could attend a meeting with Don. Sandia T-shirts and caps were wrapped up and delivered to their wedding. Don says he will go to "any expense to recruit the best and get them on board fast. . . ." Greg is an SMTS mechanical engineer in the Combustion and Industrial Technology Department and Linda an SMTS mechanical engineer in the Industrial and Combustion Processes Department. Both joined Sandia in October following their Sept. 23 wedding.

# Nine teams win 2000 Gold President's Quality Awards

An unprecedented nine teams were named Gold Award winners Nov. 15 during the eighth annual Sandia President's Quality Awards (PQA) program. Also awarded were eight silver awards and 14 turquoise awards.

"Awareness of quality is a critical element of our success," Executive VP Joan Woodard told the audience in the Steve Schiff Auditorium prior to presenting the Gold Awards. "As a laboratory, we understand the requirements for performance excellence — and we share and encourage the use of effective strategies and methods."

"By using the PQA criteria for self-assessment, feedback, and improvement," she added, "you are making a commitment to continuous improvement in the services we provide our customers."

The awards are based on the Malcolm Baldrige National Quality Award Criteria for Performance Excellence. The PQA program encourages Sandia teams to identify customer needs and requirements, implement improved processes, and monitor process quality of goods and services provided to customers.

Independent PQA Examiners evaluate all the teams' applications and recommend recipients of the gold, silver, and turquoise awards.

Mary Nation (12142), PQA project manager, says that "while 31 teams received awards, all 48 applicants should be recognized for their efforts to self-assess their processes and continually improve their performance with their customers."

Teams winning Gold Awards must have achieved and sustained excellent results relative to customer requirements. Silver winners had to achieve and sustain very good to excellent results, and Turquoise winners had to show very good results relative to key customers.

Here are this year's Gold Award recipients. The teams provided the text describing their activities.

## Annular Core Research Reactor W76 ACORN and Neutron Generator Hostile Radiation Environment Testing

The Annular Core Research Reactor (ACRR) successfully provided hostile radiation environments to support a FY00 certification of the W-76 ACORN for Los Alamos National Laboratory and Sandia's neutron generator program. To provide these services, the ACRR staff performed extensive modifications and testing of the reactor. Using a quality-based approach, the ACRR staff completed the modifications, testing, and reauthorization processes necessary to perform the critical mixed-field radiation certification of the W-76 ACORN and conducted more than 100 reactor operations supporting the neutron generator program's major milestone. Goals were met on time, within budget, and to the customer's delight.

Team members include: Mitch McCrory, James Bryson, Richard Gomez, Ronald Farmer, Kenneth Boldt, Danny Beets, Lance Lippert, Lonnie Martin (all 6431), Theodore Schmidt (6430), Frank Trowbridge (2616), John Garcia (6423), James Fisk (6433), Paul Helmick (6423), Paul Pickard (6424), Todd Culp, James Duncan, and Mary Horvath (all 7123).

## MC4033 Independent Radar Review

The MC4033 Common Radar has experienced several production problems during the last three years. An independent team consisting of experienced engineers from Sandia and Honeywell Federal Manufacturing and Technologies (FM&T) Kansas City Plant (KCP) was commissioned to review design implementation and production processes used to manufacture the radar and provide recommendations for future production. The team reviewed past design and production problems, interviewed design, production, and component engineers, toured the KCP production facilities, and performed benchmarking of the manufacturing processes against those of other companies. Corrective actions were developed and presented to upper management at DOE, FM&T, and Sandia.

Team members include: John Schwartz (2952), Jame Woods (2346), Florencio "Yaz" Aragon (12336), Bruce Lenhardt (non-Sandian), Charles E. Warren (2346), and John Emerson (14172).

## International Procurement Team

In the face of the rapidly changing international contracting environment, Sandia's International Procurement Team has continued a process of adaptation to optimize its service to customers. By moving co-location to a stage of strategic partnering with customers, the team has strengthened its value-added contribution as professional business consultants. The team's role is a vital component of Sandia's efforts in nuclear material security and safeguards in the former Soviet Union.

Team members include Todd Dunivan, Fred Romo, Beverly Polyard, David Ellis, Patty Jojola, Linda Bonnefoy-Lev, Roy Fitzgerald, and Ramona Plummer (all 10251).

## Purchased Material Team

The Purchased Material Team (PMT) was formed at the request of the Production Supply Chain Management Team to develop and implement an overall procurement methodology for neutron generator piece parts and raw materials. The Management Team determined that a new approach to supplier quality was needed due to low volume, minimum growth, high-precision parts, and complex business needs — all of which are characteristic of the NG area. The PMT



RADAR REVIEW — Members of the MC4033 Independent Radar Review team look at a radar unit they tested. Team members are, standing from the left, John Schwartz, John Emerson, James Woods, and Charles Warren. Seated is Florencio "Yaz" Aragon. In the foreground is a model of a radar unit.

(Photo by Randy Montoya)

partnered with Honeywell/FM&T Division to develop and document the neutron generator piece parts and raw materials procurement methodology.

Team members include Nancy Nesbitt, Gilbert Theroux, Kenneth Varga, Diane Gibson, Douglas White, Bruce Bowles (all 14409), James Eanes (10252), and David Esry (non-Sandian).

## Clinical Laboratory Team

The Clinical Laboratory Team in the Benefits and Health Services Center strives to assure exceptional on-site clinical laboratory and substance-abuse testing services to all our customers. They provide clinical information (test results) used in the identification, prevention, treatment, and monitoring of disease or health status. Their convenient services are delivered consistently in an efficient, accurate, and professional manner. The team maintains a customer satisfaction rating of 9.88 (10-point scale), with their most notable accomplishments being a rapid cycle time of less than one hour and an overall total cost savings to Sandia of \$1.17 million per year.

Team members include Marti Ann Peters, Eileen Mahn, Carol Dukart, Pam Crine, and Kay Sanderville (all 3333).

## Disability Management Team

The Disability Management Team in Occupational Health Programs Dept. 3335 administers the Workers' Compensation and Sickness Absence Programs for Sandia employees. The team provides medical case management to deliver service to their customers. Their approach provides a central point of contact for medically related issues. Their vision is to return employees to function as early and safely as possible; assure that disability benefits are made available in a timely, accurate, appropriate and simple manner; and optimally manage direct and indirect costs associated with disability.

Team members include Wendy Singer, Jacqueline Kelly-Romero, Judy Boswell, Miguelito Rogo, Michelle Padilla, Robyn Carr, Deidre Anderson, Carolyn Beeler, Linda Duffy (all 3335), Patti Bowles, Debra Sanchez (both 3333), and Larry Clevenger (3300).

(Continued on next page)

## Silver and Turquoise Award winners

Here are the Silver and Turquoise winning teams.

Silver Award winners and their points of contact: **International Travel Clinic (ITC)**, Lisa Ramirez (3333); **SRN Web Fileshare Application**, Tamara Orth (9522); **Trades Training Program**, Paul Lemke (14100); **Survey of Weapons Development & Technology (WR708)**, John Hogan (2907); **Receiving Team**, Shannon Letourneau (10262); **Lithium Batteries for Hybrid Electric Vehicles**, Daniel Doughty (2521); **Quality/Excellence from Suppliers Team**, Nora Armijo (10205); and **Conference Room Scheduler**, Jerriann Garcia (9513)

Turquoise Award winners and their points of contact: **The Occupational Medicine Team**, Jennifer McGill (3335); **Neutron Generator Facility ES&H Customer Support Team**, Dave Furgal (7126); **WebSIMS - Sandia Issues Management System**, Lori Kozlowski (9513); **Com-**

**puter Support Units (CSU) Process Team**, Cynthia Caton (9623); **Sandia Safety Campaign - an Innovative Program to Raise Safety Awareness**, Kerry Sturgis (7123); **SNL On-Site Balance Calibration**, Lisa Bunting Baca (2544); **Electronic Time Invoice System (ETI)**, Mark Lynam (9513); **Automated Software Release Management**, Mary Lynn Clark (9515); **Congressional Hearing Preparation**, Bruce Dale (12112); **Sandia Business School — Financial Management Branch — Oracle Implementation**, Gwen Pullen (10511); **Building Bridges: Sandia's Participation in the Department of Energy Mandatory EEO/Diversity Standdown**, Margaret Harvey (3511); **Electronic Timekeeping Time Allocation**, Mark Lynam (9513); **Sandia/California Procurement's Extreme Ultraviolet Lithography (EUVL) CLOSE WATCH Program**, John Beitia (8523); and **Sandia Facilities Relocation Team**, Steve Neely (8512).

# Telephone operator's voice reaches every Sandia area

By Neal Singer

The calm, helpful voice with the flawless American diction one hears upon dialing the Sandia telephone operator belongs to Alma Sage, a six-year contract employee from Verizon Enterprise Solutions (formerly GTE).

Whether providing information, a telephone connection, or emergency assistance, Alma's voice travels the entire extent of Sandia's kudzu-like wiring to materialize in any room — lab, office, or conference facility — in which there is a phone.

Her territory is large, but the woman who, when asked, connects anyone anywhere accomplishes this from a desktop phone in a single office cubicle off a nondescript corridor toward the rear of Bldg. 892.

Retired from 25 years of service as an Albuquerque-based long-distance AT&T operator, she reminisces about the days when she worked along

with groups of operators and knew customers by name. She remembers the "cord boards" she used early in her career, which induced exercise by forcing operators to stand to reach the top of the phone board for certain connections.

Now the solitary simplicity in which she works — "I plug my headset into a jack, use a password to activate my ports" — makes her an invaluable resource in emergencies.

When a child takes sick in school, a spouse is hospitalized, or other emergencies threaten, Alma ignores other calls and goes hunting electronically to notify the proper Sandian. She does not stop upon encountering voicemail but instead rings secretaries, coworkers, and managers — whomever it takes to find the person she is seeking. "I don't let go till I feel comfortable things have been arranged," she says quietly. If she senses harassment or an ongoing family quarrel, she may call Security.

Her sense of responsibility seems an extension of her close-knit family life. She grew up in Santa Fe with an orchard and swimming pool — Alma's dad worked for the Gas Company — and is still in regular touch with her band of four sisters, one brother, and two married sons in their 30s — Greg, who lives in Edgewood and drives a bus for the Moriarity school district, and Kelly, who lives in Albuquerque and drives for Coca Cola.

She is proud to be called by people who have computer access to the Sandia telephone directory but may not have the time to look up a name and number. "I'm accurate," she reflects, "and fast." She recites the requested number to the caller before connecting to it, but "the majority of the time, the caller doesn't write the number down." How does she know that? "They call back. I recognize their voices." She handles more than 200 calls a day.

Once she located a Sandian's phone number for a man calling from a Kirtland gate who knew



ALMA SAGE at work.

(Photo by Randy Montoya)

## PQA Awards

(Continued from preceding page)

### Annual Conference on the Southwest as a Region of Innovation

The Second Annual Conference on the Southwest as a Region of Innovation brought together representatives from Arizona, Colorado, New Mexico, and Utah to begin working toward the creation of a Southwestern microsystems industry cluster. The conference, held in Albuquerque, attracted 338 attendees who discussed steps to take to form this cluster. The conference focused on using the microsystems expertise, facilities, and other resources already present in the Southwest. A regional leadership team was identified, which is working toward creating the microsystems cluster. The new Microsystems Engineering Sciences & Applications (MESA) facility is envisioned as the cornerstone facility of this cluster.

Team members include: Jackie Kerby Moore (14004), Lisa Polito (12640), Mial Warren (1743), Kwok Kee Ma (1735), Jim Clinch (14004), John Cummings (1010), Janice DeMeza (14004), Stephen Martin (1744), Bruce Fetzer (12640), Marie Garcia (1311), Steve Walsh (non-Sandian), Sandy Smallwood (12640), David Williams (1700), Thom Fischer (1745), Carol Sumpter (1702), Gloria Zamora (12123), Al Romig (1000), Lenny Martinez (14000), Kevin Bieg (1900), Michael Lanigan (12640), and Sandy Sanzero (1311).

### The Employee Assistance Program

The Employee Assistance Program (EAP) is a workplace-based program that assists employees in the early identification and resolution of personal concerns that may impact job performance, assists managers and the organization in addressing productivity issues, and supports Sandia's commitment to provide a safe and healthful work environment. The mental health and emotional well being of all Sandia employees is an integral part of Sandia's mission to safeguard national security, the environment, and the public.

Team members include Arelene Price, Deirdre Anderson, Brian Hayden, Ruby Chavez, Crawford Dennis, Linda Duffy (all 3335), and Tamara Cagney (8527).

### Work For Others (WFO)/Federal Agency e-Commerce Proposal Team

The Work For Others (WFO) has an automated e-mail distribution and pdf imaging system to help customers develop proposals. It consists of help menus, a spell checker, historical scanned images, automated look-up lists, and URL links to other sites.

Team members include: Scoti Hagerman, Bill Lovejoy (both 1322), Bobbie Vital (8521), Rebecca Moore (non-Sandian), Susan Homer (1317), Gladys Shaw (1321), Shawn Littleford (non-Sandian), Joan Harris (7131), Marian Van Delinder (10005), Donald Rohr (1701), John Salmonson (non-Sandian), Gerry Jewell (1701), Barbara Hawkins (6401), and Gail Holton (non-Sandian).

— Chris Burroughs

## Accident code

(Continued from page 1)

MELCOR does the rest, calculating a mathematical play-by-play summary of the accident.

"It marches through time, predicting plant behavior from the initiating event to the final outcome of the accident," says co-developer Randy Cole (6415). "It includes estimates of damage to the plant and of any releases to the environment."

Along the way MELCOR factors in "coupled effects" and feedback mechanisms, such as what happens when the reactor core melts down and the heat source drops to the bottom of the pressure vessel, says Randy Gauntt.

### MELCOR a decade ahead

Sandia began developing MELCOR in 1982, with its first full release in 1989. Since then, four updated versions have been released as the code's capabilities have improved. The Nuclear Regulatory Commission (NRC) endorsed version 1.8.5 in May.

In mid November Sandia mailed 40 copies of MELCOR 1.8.5 to interested utility companies and regulators in the US and around the world.

"Previous releases of MELCOR are among the standard tools being used by utilities and the nuclear regulatory community to evaluate the adequacy of plant safety," says Randy Gauntt. "It is a decade ahead of any other similar effort around the world."

In addition to MELCOR's widespread use within the US NRC, regulators and researchers in Belgium, France, Spain, Germany, Italy, the Czech Republic, Russia, Korea, and Japan, to name a few, use versions of MELCOR to evaluate plants in those countries as well, he says.

Other people intimately involved in MELCOR's creation include Sam Thompson (dec.), Mike

only a first name.

One reason why Alma is almost always pleasant as well as business-like is that she likes her job. An early supervisor told her, "Every call you take, think of it as an adventure," and she has never forgotten the advice. "I help my customers," she says.

Dialing zero, or, from off-base, 845-0011, reaches Alma — "the locator service for Sandia Labs and the US Department of Energy. "If she's busy, her recorded voice explains, "The operator is assisting other customers. Please wait and your call will be answered in the order it was received." If her queue is deep — her line stacks as many as ten calls — one hears, "One moment please; an operator will be with you shortly," usually soon followed by Alma's real voice: "Locator, how can I help you?"

"She can find people and places no one else can," says co-worker Carolyn Weinreich, one of a number of Verizon personnel in Bldg. 880 who alternate in providing back-up for Alma on her vacation days, lunch breaks, and busy times.

Sandia's telephone operators are overseen by Michael Sjulín, Manager of Telecommunications Operations Dept. 9334.

McGlaun (5903), Randy Summers (9231), and some 20 other Sandians.

"With increasing energy costs, shortages of fossil fuels, and our improving understanding of the causes of global warming, we believe nuclear energy is eventually going to play a more significant role in meeting our energy demands," adds Randy Cole.

"This release of MELCOR brings us significantly closer to the goal of having a detailed best-estimate tool for predicting a whole plant's behavior in an accident," he says. "Our hope is that it helps gain back public support for the nuclear power option by demonstrating that we can do credible accident analyses."

### Better modeling of better data brings better regulations

Current nuclear safety regulations subscribe to a bounding approach, says Randy Gauntt (6415). Whenever there is a lack of good data about what physical phenomena might occur in an accident, the regulations presume that the worst possibility is going to come true, he says.

Thus, the resulting regulation is built around wide margins of safety. But as experimentation provides better data, and as software to model plant operations gets better, regulators in the US and abroad are moving cautiously toward what they call "risk-informed regulation."

"Unwarranted conservatism is rapidly being taken out of the codes," he says.

"By testing all phenomena and events together using actual physics data, we can predict outcomes without being wildly conservative," he says. "That, we hope, will encourage more appropriate safety margins and lead to a better regulatory environment for plant operators."

# 93 Sandians advance to Distinguished, Senior levels

As has been its practice for many years, the *Lab News* again this year presents photographs of Sandians who have received special appointments under the Integrated Job Structure (IJS). The 15 Distinguished Administrative Staff Associates (DASAs) named this year — the first ever — join more than 75 of their colleagues who received special appointments as Senior Scientist/Engineers, Distinguished Members of Technical Staff, Distinguished Members of Laboratory Staff, and Distinguished Technologists.

Employees selected for advancement to the highest levels in their respective IJS ladders have been recognized with a special plaque and a non-base salary award, in addition to this special acknowledgement in the *Lab News*.

According to Corporate Process requirement documents, "Placement in the Distinguished Level signifies a promotion to the highest level of the Technical Staff, Laboratory Staff, Technologist, or Administrative Staff Associate Ladder." Photos of 48 of the new "distinguished" and senior Sandians were printed in the Nov. 17 *Lab News*.

*New Mexico photos by Walter Dickenman and Bill Doty  
California photos by Lynda Hadley*



Rick Behrens  
DMTS 8361



David Beutler  
DMTS 15341



Tom Bomber  
DMTS 9811



Bryan Burns  
Sr. Sci/Engineer 2348



Jerry Cashen  
Sr. Sci/Engineer 8418



Robert Chambers  
DMTS 9123



Randall Cygan  
DMTS 6118



Armin Doerry  
DMTS 2345



Peggy DuBois  
DASA 12830



John Emerson  
Sr. Sci/Engineer 14172



Roger Everett  
DMTS 2263



Faraj Ghanbari  
DMTS 2951



Stewart Griffiths  
Sr. Sci/Engineer 8728



Fred Harper  
DMTS 5317



Ron Hartwig  
Sr. Scientist/Eng. 2100



Cynthia Jensen  
DASA 2211



Mike Johnson  
DMTS 8114



Rudolph Jungst  
DMTS 2521



Kurt Lanes  
Sr. Sci/Engineer 5711



Mark Mickelsen  
DTNG 2256



Teresa Mills  
DMLS 6001



Dominic Montoya  
DMTS 2663



Maria Owens  
DASA 2564



Duane Patrick  
DTNG 9134



Cynthia Phillips  
DMTS 9211



Anita Renlund  
Sr. Sci/Engineer 2554



Dianne Sanchez  
DASA 10254



Paul Schlavin  
DMTS 7850



Bob Sheldahl  
DMTS 15415



Tim Sheridan  
DTNG 15343



Annette Sobel  
DMTS 5907



Mark Stavig  
DTNG 14172



Nora Tankersley  
DASA 5321



Wayne Trott  
DMTS 9112



Vicky Vivian  
DASA 5933



Mary White  
DTNG 2992



Kathie Woods  
DTNG 2334



# Sandia Classified Ads Sandia Classified Ads Sandia Classified Ads Sandia Classified Ads

## MISCELLANEOUS

WOODEN ROCKING HORSES, hand-crafted, solid oak, lead-free paint, 25-1/2"H, 31"L (tip-to-tip), 12"W, will become a family heirloom, \$140. Martin, 281-7227.

RADIAL-STEEL TIRES, Pathfinder 4WD, P235/75R15, \$15 ea.; king bed, brass-plated headboard & footboard, \$400. Zender, 294-8210.

TROMBONE, BACH STRADIVARIUS, 42B, open wrap, gold w/light-weight silver slide, excellent condition, \$500. Buttz, 239-8752.

BF GOODRICH LOW-PROFILE TIRES on American Racing Sniper rims, used on a '96 Honda Accord, \$350 OBO. Armijo, 877-7511.

CLUB CHAIR W/OTTOMAN, floral upholstery, \$150; white upholstered bench, \$110; wood chair w/upholstered seat, \$50; bench, \$65. Partridge, 256-0215.

MATCHING COUCH & LOVESEAT, couch is queen-size sleeper, brown, very good condition, \$200. Dwyer, 271-0741.

RIMS/TIRES, Kiotic "Reactors," excellent condition, 17-in., chrome, w/5-bolt pattern, \$1,500, Rockford Fosgate system, \$500. Maldonado, 839-0023.

PLAYSTATION, w/lots of extras. Jared, 865-5745.

BOY SCOUT LUMINARIAS, \$5/doz., free metro delivery w/4 doz. or more; Troop 183 says thanks. McInteer, 296-1656.

OLYMPUS OM-INMD BODIES, \$180 ea.; Zuiko 200mmf4, \$100; 75-150mmf4, \$100; 28mmf2.8, \$75; Winder-2, \$100; T-20 flash, \$40. Montoya, 296-4268.

LOVESEAT & SOFA, Southwestern print, great condition, \$300. Romero, 299-6283.

COMPOUND MITER SAW, 10-in., Delta model 36-220, hardly used, \$140 cash; Delta sander, 1-in. belt, 5-in. disk, nice \$60 cash. Duvall, 881-4406.

INDIAN FANTAIL PIGEONS, quality stock, \$5-\$10, many colors to choose from. Lujan, 294-4215.

AUTOMATIC LENSES, 35mm Pentax-thread-mounted Takumar, f1.8-55mm, f3.5-35mm, leather cases, \$20 ea. Auerbach, 296-1489.

SKI-TYPE EXERCISE MACHINE, w/hand poles, electronic gauges, Sears Lifestyler, \$60. Kelly, 237-9709.

KING-SIZE BED, w/frame & box spring, \$100. Owen, 293-8149.

WHITE CHRISTMAS TREE, 12-ft., from Bronner's, \$500 worth of rose lights, crystal icicles, and ornaments, \$400 complete. Tilgner, 296-7064.

WHEELS, J14X6JJ, 2 14-in. steel wheels from Toyota 2WD pickup, 5-bolt, great for snowtires, \$25 ea. Luna, 872-0193.

FIVE-SHELF BOOKCASE, \$15; 4-shelf etagere, \$20; oak & metal futon, \$85, racquetball racquet, \$10. Kiro, 255-0890.

PEDESTAL BEDFRAME/HEADBOARD, Cal King, modular design, 12 drawers, good condition, \$175 OBO. Coverdale, 268-3040.

ANTIQUA DINING ROOM SET, table w/2 leaves, 6 upholstered chairs, light finish, good condition, \$350. Tucker, 822-5560.

TIG WELDER ADAPTER, includes high frequency stabilizer, TIG torch, & gauge, \$45. Bentz, 857-0728.

HOLIDAY ARTS AND CRAFTS FAIR, Sat., Dec. 2, 9 a.m.-4 p.m., 150 crafters, breakfast/lunch, La Cueva High School (Alameda/Wyoming). Ekman, 296-3758.

DOLLHOUSE, Victorian, wood, furnished; Technics dual cassette deck; Sony turntable; Pet Porter. Clauss, 291-8060.

CAMERA, medium-format SLR, Pentax P646/55 & 150mm lenses, excellent condition. Smith, 256-9413, leave message.

CHRISTMAS TREE, 6-1/2-ft. noble spruce, 2-piece, easy to assemble, bought at Rowlands, see at <http://members.home.net/rick.kris/forsale.html>, \$50. Kominek, 856-5424.

SOUTHWEST ONE-WAY TICKET, anywhere SW flies, expires 4/14/01, \$125, cash only. Holt, 844-0537.

MACINTOSH Performa 575 with printer, great for student, \$200 OBO; leaf blower, \$25; Christmas tree, \$25. Catanach, 265-2290.

SNOW TIRES, 175SR14, mounted on 5-hole rims, Toyo steel-belted radials, w/studs, \$50. Lagasse, 298-0977.

FOUR-HARNESS LOOM, 36-in., w/accessories, by appointment. Merillat, 242-4873.

ALUMINUM MINI-BLINDS, 11, white, like new, excellent condition, \$410 retail, asking \$40 firm. Locher, 323-0722.

GIRL'S BIKE, Huff, 20-in. 2-yrs. old, excellent condition, \$30. Meeks, 828-9825.

OLYMPIC WEIGHTS 39¢/lb.; dumbbells 39¢/lb.; hoist bench, \$250; leg press to 900 lbs., \$600; power rack, \$250. Denney, 299-8595.

## How to submit classified ads

DEADLINE: Friday noon before week of publication unless changed by holiday. Submit by one of these methods:

- E-MAIL: Sandy Smallwood, (sksmall@sandia.gov)
- FAX: 844-0645
- MAIL: MS 0165 (Dept. 12640)
- DELIVER: Bldg. 811 Lobby
- INTERNAL WEB: On Internal Web homepage, click on News Center, then on Lab News frame, and then on the very top of Lab News homepage "Submit a Classified Ad." If you have questions, call Sandy at 284-3704. Because of space constraints, ads will be printed on a first-come basis.

## Ad rules

1. Limit 18 words, including last name and home phone (We will edit longer ads).
2. Include organization and full name with the ad submission.
3. Submit the ad in writing. No phone-ins.
4. Type or print ad legibly; use accepted abbreviations.
5. One ad per issue.
6. We will not run the same ad more than twice.
7. No "for rent" ads except for employees on temporary assignment.
8. No commercial ads.
9. For active and retired Sandians and DOE employees.
10. Housing listed for sale is available without regard to race, creed, color, or national origin.
11. Work Wanted ads limited to student-aged children of employees.
12. We reserve the right not to publish an ad.

BREAST PUMP, Medela "Pump-in-Style," used less than 10 times, \$150. Croessmann, 281-2014.

CHINCHILLAS, male & female, gray, less than 3 years old, incl. cage & extras, \$200. German, 839-1583.

K2XPLORER SKIS, 183cm, w/Salomon 850 bindings, used 6-8 times, excellent, \$270. Healer, 298-6967.

OAK DINING ROOM TABLE, 1 captain's chair, 5 chairs, & buffet, 1920's, excellent condition, \$1,500 OBO. Wagner, 821-2933.

ORIGINAL R.C. GORMAN, 1977, framed, approx. 36" x 32". Baca, 296-6985.

## TRANSPORTATION

'88 CHRYSLER NEW YORKER, AT, PW, PD, AC, 189K miles, V6 engine, dark burgundy, excellent condition, \$3,000 OBO. Vigil-Lopez, 242-7001.

'95 GMC PICKUP, SLE, 2WD, all extras, excellent condition, Esch, 298-8914.

'90 ASTRO VAN, good condition, \$1,195. Jelinek, 271-1905.

'92 OLDS 88 LS, PW, PL, PS, cruise, tilt, leather, custom wheels, \$4,250. Jaramillo, 864-2731 or 720-2573.

'91 FORD BRONCO, Eddie Bauer, PDL, PW, PL, PS, PB, AC, AM/FM CD stereo, great condition, \$5,500 OBO. Gallegos, 332-3821.

'86 DODGE PICKUP, short bed, AT, 4-WD, AC, 128K miles, runs great, \$2,400 OBO. Haley, 281-2898.

'97 TOYOTA CAMRY LE, 4-cyl., loaded, clean, 50K miles, 35-mpg, ideal for students/commuters, \$10,995 OBO. Hareland, 293-9011.

'96 SATURN SL2, \$7,600, 4-dr., low miles, PW, PD, remote entry, extended warranty, great shape. Bandy, 890-8317.

'85 FORD ECONOLINE VAN, 15-passenger, extended, 100K miles, good condition, \$2,000. Leigh, 237-2237.

'92 TOYOTA 4RUNNER, SR5 V6, fully loaded, new BFG/KO tires, meticulous condition, 99K miles, \$11,500 OBO. Goodson, 286-1267.

'98 OLDS INTRIGUE, 6-cyl., 36K miles, remote entry, CD, rear spoiler, power seat, \$13,800 OBO. Dowding, 922-9813.

'97 FORD TAURUS LX WAGON, 63K miles, white/gray leather, excellent condition, fully loaded, must sell, \$9,900. Rolfe, 833-5109.

'94 FORD 150, 300 6-cyl., 5-spd., AC, AM/FM cassette, short bed, camper shell, good condition. \$5,250. Holmes, 897-0916.

'96 DODGE GRAND CARAVAN SE, 65K miles, 3.3L V6, child seats, driver-side sliding door, \$12,500. Gonzales, 890-5614.

'92 PONTIAC BONNEVILLE, 123K miles, AC, AT, good condition, \$4,500. Krein, 897-2565.

'90 FORD ESCORT LX, 4H, 5-spd., maintenance records, excellent car for student or commuter, 84K miles, \$1,950 cash. Sherwin, 375-9134.

'95 MERCURY MYSTIQUE LS, V-6, AT, ABS, traction control, AC, remote PL, PW, \$4,200. Klett, 884-8354.

'95 FORD WINDSTAR, well equipped, outstanding condition, extra clean, \$7,200 OBO. Perrine, 293-1429.

'92 HONDA CIVIC, white, 5-spd., AC, cassette, recent timing belt & brakes, 81,500 miles, high mpg. Holmes, 292-0898.

## REAL ESTATE

BOSQUE FARMS BEAUTY, 3/2/2, 1/2-acre, remodeled, lots of upgrades, new stucco, Pergo, screened-in patio, moving, must sell. \$142,000. Stoy-McLeod, 271-8269.

3-BDR. TOWNHOUSE, 1-1/2 baths, 2-car garage, 2,100 + sq. ft., new stucco & paint, Montgomery & Morris \$135,000. Domme-Hansen, 275-9917.

## WANTED

USED TIMBALES, preferably with a stand. Skogmo, 292-9773.

SMALL POTBELLY WOOD STOVE. Kinabrew, 869-6300.

FUNCTIONAL HP 15C CALCULATOR. Larsen, 292-7896.

TWO TICKETS, to the Scottish Christmas performance at Popejoy Hall, Sunday, Dec. 17. McAlees, 821-7894.

ROOMMATE, nonsmoker, to share 4-bdr. house, Menaul & Juan Tabo area. Dumas, 323-4147.

VIOLIN, for elementary student, reasonably priced. Ceballos, 792-0126, ask for Denise or Alex.

ROOMMATE, nonsmoker, female, to share remodeled 3-bdr., furnished Nob Hill home, \$350/mo. Jones, 266-1074.

MALE DOG, 4-6 lbs., sweet-tempered, needed in January for stud service w/small mixed breed. Sutton, 298-0001.

ROOM/APT. for rent, private bath, furnished, for nonsmoking, quiet female, Heights or Nob Hill area. Rahimian, 323-1940.

## LOST & FOUND

LADIES GLOVES LOST, brown leather. Glass, 845-8050.

EARRING, diamond (or diamond-like) found in front of Coronado Club, call & describe to claim. Briscoe, 845-8464.

FLAT, TEAR-DROP-SHAPED EARRING, gold & silver, lost near Credit Union on Nov 19. Walker, 845-9210.



## Sandia News Briefs

### Jackie Kerby Moore honored by UNM's Anderson School

Jackie Kerby Moore (14004), a Sandia Science & Technology Park program manager, is one of the New Mexicans who received an "Up & Comers 2000" award from UNM's Anderson School of Management on Nov. 21. The awards "honor individuals under the age of 45 who are making their mark through their work and service to the community."

### Video Services receives AXIEM Silver Awards

Video Services Dept. 12610 recently received silver (second place) awards in the Absolute Excellence in Electronic Media (AXIEM) Awards for "Nanotechnology: Thinking Big in a Nanosize World," produced for Tom Picraux and Alan Nichelason (both 1100); and for "Habitat for Humanity Volunteers," produced for Darlene Leonard (12650). Both videos were produced by Regina Valenzuela. Only 36 percent of the more than 1,300 entries received either first- or second-place recognition. Each entry was evaluated in four categories — innovation, creativity, technical merit, and overall experience of the piece.

### Sandians join the Naval Reserve's science and technology unit

Naval Reserve Lt. Commander Ron Farmer (6431) and Lt. Bernie Gomez (2951) have been selected to be inaugural members of the Naval Reserve's newest science and technology unit. The unit was established on Oct. 28 and is located in Albuquerque. From "Discovery to Deployment," the Naval Reserve Office of Naval Research Test and Evaluation Detachment 611 will support the active-duty Navy by applying in-depth fleet experience and scientific/technical expertise in areas such as computer science, engineering, and aviation.

## Recent Patents

William Sweatt (1743) and Richard Stulen (8400): Method for Maskless Lithography.

William Warren (1802), Karel Vanheusden, Daniel Fleetwood, and Roderick Devine: Memory Device Using Movement of Protons.

Rudolph Jungst (2521), James Armijo, and Darrel Frear: Thermal Disconnect for High-Temperature Batteries.

## Congratulations

To Jeanne and Mike Padilla (both 7140), a son, Julian, Oct. 8.

To Nancy (10267) and John (9134) Pantuso, a daughter, Johanna Lynn, Oct. 25.

## Retirement open house

Sandia is hosting an open house in honor of retiree Miguel (Mike) Robles (12700) in the Coronado Club on Tuesday, Dec. 12, 5-7 p.m. Friends, acquaintances, and co-workers who he has worked with over the last 32 years are invited. Miguel says, "Sandia has been really good for me and my family, especially the great people I have had the good fortune of working with over the years, and I really want to say thanks, so please come and join me in this celebration." Miguel also asks everyone to complete his memory book electronically at <http://www-irn.sandia.gov/memorybook>, or give him a call to receive a paper copy of the memory book form.

# Holiday drives beginning around the Labs

By Janet Carpenter

As they do each year, Sandia's employees are gathering together to share their holiday bounty with those less fortunate. For example, last year several organizations donated 1,000 pounds of food to Roadrunner Food Bank; provided gifts for 30 Native American women and children through Morningstar, a community-based advocacy program for Indian women and children in Albuquerque; donated 180 hats and 90 gloves, socks, and shirts to Joy Junction, a shelter for homeless and transients; collected toys for Healing the Children, a program to bring children to the US from other countries for medical treatment; provided personal hygiene products for Haven of Love mission, a transitional living shelter for teens and young adults; and gave gifts and food to families from Alta Mira Specialized Family Services, which provides respite care and education for children with developmental delays; and Martineztown House of Neighborly Service, which provides various services for a specific low-income Albuquerque neighborhood.

Following are descriptions of a few drives already started. More will become available as the season progresses. Look for coordinators in your organizations, conduct your own drive (see Holiday volunteer guidelines below), or contact the groups listed below to get involved.

## Employee drives

Employees in Depts. 9512, 9513, 9515, 9517, and 9523 are providing 10 food baskets for La Familia, which provides mental-health outpatient services, treatment, foster care, adoption services, independent living services for teens, and senior referral services including guardianship, conservatorship, and asset management. Elaine Lieberman, 284-3200, is the contact for this project.

Weapons Systems Support Center 2900 employees are sponsoring a holiday wish tree for

children who were identified by counselors in the Albuquerque Public Schools. The children's names and gift wishes are put on a tree for employees to select. Anthony Trujillo (2994), 844-4479, is the project contact.

The Division Diversity Council for Orgs. 10000/11000/12000 has selected Alta Mira, Hogares, and All Faiths Receiving Home to help with food baskets. Contact Rebecca Ebberhart (10268) at 845-3157.

## Fill a Semi OPOC drive for Roadrunner Food Bank

Sandia's Office Professionals Quality Council (OPQC) Community Outreach Team, in conjunction with Community Outreach Dept. 12650, spearheaded the drive at Sandia this year to collect a semi-trailer truckload of food to donate to Roadrunner Food Bank's annual holiday food drive. Sandia's Transportation Team (10268) contributed a significant amount of time and effort with distribution, pick-up, and loading of collection boxes. Secretarial Services kept employees informed about the progress of the drive. More than 70 office professionals across the Labs volunteered to help coordinate the drive in their respective buildings, and Sandians all across the Labs responded by making donations.

Sandians donated an estimated 28,000 pounds of nonperishable food to this year's drive, plus about \$2,500 in cash donations. Donations are accepted by Roadrunner all year round, not just during the holidays. OPQC food drive coordinators were Loa Buckwalter (9000), 844-2358, and Kristy Savage (9400), 844-5180. "The success of the drive can be attributed to outstanding teamwork across the Labs," says Loa. Although the drive has officially ended, donations are still coming in; the Credit Union account will remain open until after the holidays.

## Shoes for Kids

The annual Shoes for Kids Drive is taking donations. This program began 43 years ago when employees decided they wanted to give the money they spent on each other for cards



PSEUDO SEMI — Bldg. 892 food drive coordinator Virginia Garcia (2994) came up with the idea of building a semi-trailer out of food donations during the recent "Let's Fill a Semi" Roadrunner Food Drive. With the help of designer Tony Trujillo (2994), this semi-trailer took shape in the southwest hall of Bldg. 892. More than 70 office professionals coordinated food drives for their buildings. If you missed the collection, donations are still being accepted through SLFCU account #522830. Every dollar deposited is equal to three pounds of food. (Photo by Randy Montoya)

and gifts to children who needed shoes. This project has helped more than 7,000 children in our local community. "It's a heartwarming program that has been so successful because of the generosity of Sandians and the cooperation of our many partners," says coordinator Pam Catanach (12650). "In 1999 Sandia employees donated more than \$11,800 to buy shoes for many needy children."

Partners involved in making this such a success include Sandia employees and retirees, Sandia Laboratory Federal Credit Union, Albuquerque Public Schools, and Mervyn's department store. This year shoe fittings will be on Monday and Wednesday mornings. "Imagine the buzz in the air when 25 children and their chaperones enter the store," says Pam. "The kids bring a lot of joy to the customers. Last year a customer in Mervyn's enjoyed it so much she purchased a package of socks for each child."

Donations can be made at the Credit Union to account #223180, or call 293-0500 to request a transfer. Volunteers are also welcome to help with the shoe fittings. Contact Pam at 284-5211.

## Coronado Club

Dec. 7 & 14 — Adult bingo. Early bird, 6 p.m.; regular, 6:15 p.m.

Dec. 8 — Dining, 6-9 p.m.; Dancing with Isleta Poorboys, 7-11 p.m.

Dec. 9 — Children's Christmas party. Breakfast with Santa, 9-11 a.m.

Dec. 10 — Thunderbirds Christmas party brunch. Swingshift, 1-4 p.m.

Dec. 15 — Dining, 6-9 p.m.; Dancing with Midnight Magic, 7-11 p.m.

## Sandia Annual Report 2000 published

*Sandia Annual Report 2000*, an attractive, 46-page, full-color report on Sandia's major programs and activities, has just been published.

Subtitled "Perspectives on Science and Technology," the report has brief, well-illustrated sections on "A Year of Extraordinary Challenges, Remarkable Achievements" (a letter by Director C. Paul Robinson and Deputy Director Joan Woodard); "Guardians of Our Nuclear Arsenal"; "Science and Engineering: Creative Minds, Extraordinary Innovations"; "Keeping America Running" (energy and critical infrastructures); "Non-proliferation: Waging Peace in a Perilous World"; "Protecting America from Emerging Threats"; and "Sandia Reaches Out: A Community of Partnerships."

*Sandia Annual Report 2000* is produced by Media Relations and Communications Dept. 12640. The staff includes Chris Miller (12640), editor; Randy Montoya (12640), photography;



Doug Prout (Technically Write), design/layout; and Peter Nolan (Technology Marketing), Katharine Beebe (Technically Write), and Julie Clausen, writers. Copies are being distributed to managers and above over the next few days and are available by calling (505) 844-4902 or sending an e-mail to [cmiller@sandia.gov](mailto:cmiller@sandia.gov).

## Holiday volunteer guidelines

If you are interested in collecting items from your group for a community agency during the holidays, here are guidelines established by the Sandia Volunteers Program:

1. If you don't have a specific holiday-giving project in mind and wish to identify an agency or group to help, contact Darlene Leonard (12650) at 844-8024 to indicate your interest and to be connected with suitable agencies based on your desired focus. Darlene will send volunteers a Holiday Sharing booklet from United Way that lists community needs and people to contact.

2. A volunteer from your organization will be responsible for delivering the collected items. There is no case number for time spent.

3. Collect in small file-size cardboard boxes for easy transport.

4. Do not accept monetary donations.

5. Keep an estimated record of total collected.

6. Drive coordinators are also asked to contact Darlene with the results of their campaigns.