

Sandia's robotics R&D gets a new home in RMSEL

Dignitaries, industry partners to attend building dedication Monday

There's no place like home — It's a common sentiment among the more than 150 Sandia researchers and managers in Intelligent Systems and Robotics Center 9600 (ISRC) who, for the first time in the program's 14-year history, find themselves and the majority of their robotics-minded colleagues under the same roof.

ISRC's new headquarters — to be dedicated Monday afternoon during a ceremony in the building's parking lot — is the striking new 73,000-square-foot Robotics Manufacturing Science and Engineering Laboratory (RMSEL) east of Tech Area 1 (Bldg. 895). Various dignitaries, industry partners, and Lockheed Martin, DOE, and Sandia executives are scheduled to attend. An open house, during which all Sandia employees may tour the building, is scheduled for Nov. 5 during Take Our Sons to Work Day. (See "Sandians invited to see RMSEL Nov. 5" on page 8.)

Facility designed to encourage creativity

As the nation's largest facility dedicated solely to robotics and intelligent systems R&D, RMSEL is intended to bring newfound coherence to a program that has existed since its inception as a hodgepodge of laboratories and offices scattered geographically across the Labs. Those arrangements, says ISRC Director Pat Eicker (9600), "encouraged separate cultures to grow up within the ISRC. It stifled creativity."

But teamwork is the lifeblood of any good engineering organization, he
(Continued on page 6)



RMSEL's STRIKING DESIGN is symbolic of its mission. The building's exterior materials, colors, and features — including a massive, curving pueblo-style stucco wall that converges on the metallic-and-glass structures of the main entry area (foreground) — represent the juxtaposition of regional traditions versus high technology.

Fireball seen over Southwest, then California, Oct. 3 may have been a returning meteor

It came twice.

That bright meteor first reported over New Mexico and Texas the evening of Thursday, Oct. 3, apparently became Earth's second moon for one orbit before reentering the atmosphere and exploding over Southern California about an hour and 40 minutes later.

That's the hypothesis of Sandia physicist Mark Boslough (9232) and John Wasson, a professor and meteorite researcher at UCLA. They developed the following scenario, which they announced last week in a flurry of national and international news coverage.

The object first entered Earth's atmosphere at about 8 p.m. MDT on Oct. 3, east of Las Cruces, N.M. It was headed in an approximately east-northeast direction as it descended at a very shallow angle toward eastern New Mexico. It began to slow and made its closest approach to the surface over the Texas Panhandle, where aerodynamic forces began to break it apart, showering multiple meteors that burned up in a brilliant display extending along the track to points east of Amarillo, Texas.

The main fragment, however, was still moving so fast that its momentum carried it back out into space. Its velocity had been slowed from as great as 45,000 mph to about 18,000 mph, too slow to allow it to escape the Earth's gravitational field. As a result, it went into orbit around the Earth. The object circled the Earth once, and

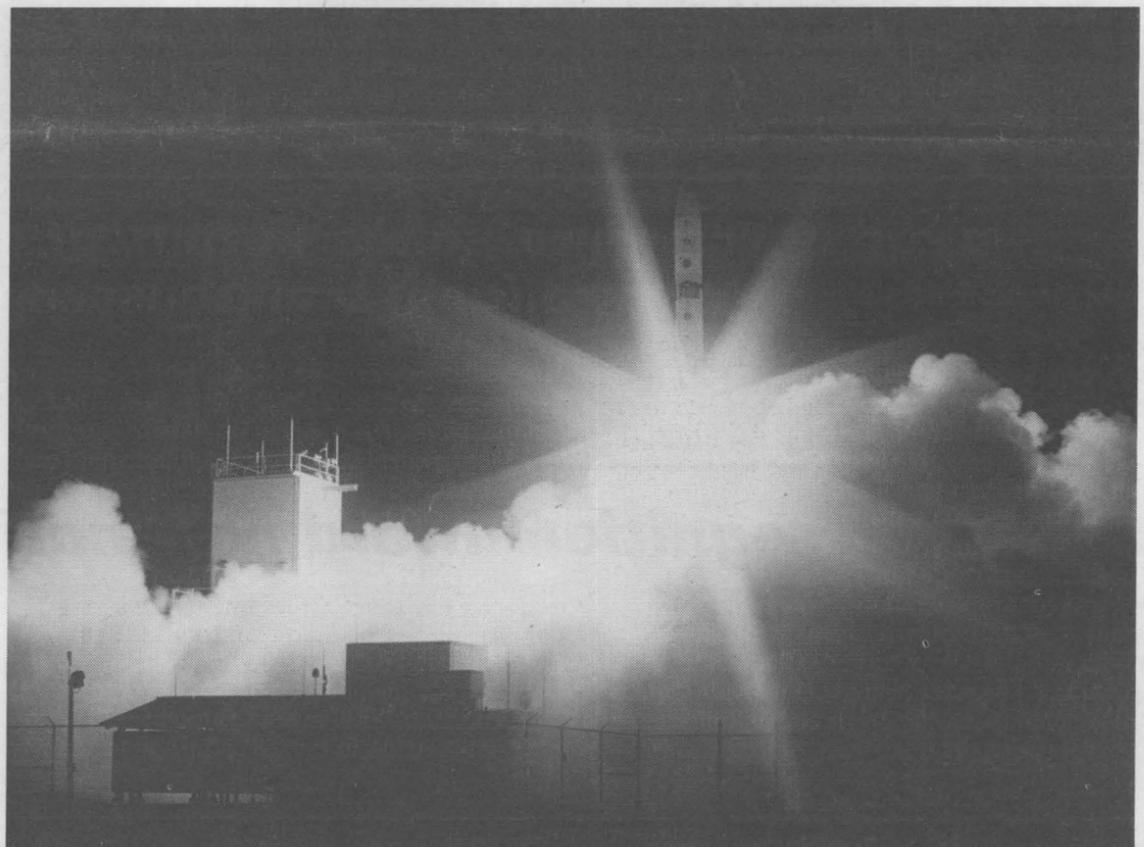
(Continued on page 4)

*Hypothesis:
The meteor's momentum carried it back into space, but its velocity had been slowed enough that it orbited Earth and returned.*

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STARS LIFTOFF — Number four in the series of Strategic Target System (STARS) missiles lifts off from Sandia's Kauai Test Facility just before dawn, Aug. 31, to begin its 20-minute journey toward Kwajalein Atoll 2,300 miles downrange. Lead missile engineer Brent Sims (2425) says MDT-II, the experiment's official name, was the most successful STARS launch to date, producing more and better data than any previous STARS test. During the flight, 26 mock reentry vehicle targets were deployed from the three-stage missile and used by the Ballistic Missile Defense Organization to test the performance of a variety of sensor and antenna packages on board its Midcourse Space Experiment (MSX) tracking satellite. Sandia designed and built the STARS post-boost vehicle and target payload and provided launch support for the test. Some 50 Sandians from centers 2400, 2600, 2300, and 8100 were directly involved in the test, with support from a variety of other organizations. Data from the launch will be used to develop advanced missile defense technology. The STARS program is sponsored by the US Army Space and Strategic Defense Command. (Photo by Diana Helgesen, 9732)

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9 Benefits Choices '97 — Open Enrollment through Nov. 9

10 New bubble cover opens C-Club pool for year-round use

This & That

Ping-Pong Perrine bounces back - Thanks to *Lab News* Editor Ken Frazier, who wrote this column for the past two issues while I was away for four weeks on a special Lockheed Martin assignment. (Don't ask; you know what I'd have to do to you if I told you more.) I hope this doesn't sound pretentious, but I should mention that Lockheed Martin stock went up about 10 percent while I was on the special assignment. Modesty prevents me from taking much personal credit, however.

* * *

John German stays - I'm pleased to announce that John German has decided to stay with the *Lab News*. I announced in late August that he was leaving to edit a computer-industry magazine in California, but John changed his mind while I was gone. Everyone here is delighted.

* * *

Killing some rumors - I hadn't been back in my office for 10 minutes when I started hearing the latest rumors about whether the Labs will have a new voluntary separation incentive program (VSIP) this year. They range from no VSIP to "a big one." As best I can determine, it will be a while before the powers decide, mainly because Sandia officials don't know yet how DOE will finally apportion FY97 work and dollars.

I can, however, kill some related rumors. Sandia is NOT planning to get around offering a VSIP by instead constantly piping "La Macarena" music into our offices until many of us quit. (I'd last 30 minutes max!) And there is absolutely no truth to the rumor that the Sandia Quality Leadership Council (SQLC) begins each meeting by doing the Macarena; after all, that would require some coordination. (Just kidding, SQLC friends! Really. Kidding. I need this job.)

* * *

Still time to help - We still have time to sign up to help needy people and groups in our communities through the Employee Contribution Plan (ECP) in New Mexico and the Livermore Employees Assistance Program (LEAP) in California. To contribute, New Mexico employees should call 845-0070 by Oct. 30; enter your Social Security number, then your four-digit PIN (month and day of birth - for example, 0621 for June 21), and follow the prompts. California Sandians should turn in pledge cards by Nov. 1. Now's a good time to sign up while you're thinking about it.

* * *

Bill eats after all - Bill Lovejoy (4532) planned to take his wife out for a nice dinner with the \$200 individual performance award (IPA) he received recently. (This size IPA was in fact once called a "dinner for two" award.) But Bill scaled back his plans after receiving the Sandia payment stub in the mail. It showed total deductions (taxes and others) of \$200, leaving him a net of *absolutely nothing*.

But Bill and his wife will eat. After checking with the Payroll Dept., Bill discovered his \$200 turned into a net zero basically because he recently requested that his tax withholding be increased; that kicked in at just the wrong time for the IPA. Some helpful folks in Payroll "reciphered" everything and Bill will now get about 90 bucks net. Now he and the Mrs. may even be able to have dessert and after-dinner coffee.

Larry Perrine (845-8511, MS 0129, lperrri@sandia.gov)

Nobel laureate Murray Gell-Mann to speak at Sandia Nov. 6

Murray Gell-Mann, who helped revolutionize the study of subatomic physics in the 1960s and 1970s before focusing on theories of complex adaptive systems at the Santa Fe Institute, which he helped found, will speak at Sandia on Wednesday, Nov. 6, from 10-11 a.m. in the auditorium of Bldg. 962 in Area 4.

The title of the talk is, "From Simplicity to Complexity."

Gell-Mann currently is concerned with how knowledge and understanding can be extracted from the welter of information that now can be transmitted and stored digitally.

Gell-Mann won the Nobel Prize in 1969 for his scheme, "the eight-fold way," that brought order to the chaos created by the discovery of more than 100 kinds of particles that emerge from collisions involving atomic nuclei.

Theorized the 'quark'

He captured the popular scientific imagination when he further theorized that all those particles, including the neutron and proton, were themselves composed of units of matter he named quarks. The odd word, taken from the widely honored but little-read novel by James Joyce, *Finnegans Wake*, was the visual form of the sound Gell-Mann had conceived internally as appropriate.

The existence of six types of quark has been confirmed by experiment - most recently by hundreds of physicists working at Fermilab who recently announced they had found the so-called top quark.

Gell-Mann is a member of the National Academy of Sciences and is the Robert Andres Millikan Professor Emeritus at Caltech, where he taught for 37 years. He is a director of the J.D. and C.T. MacArthur Foundation and currently serves on the President's Committee of Advisors on Science and Technology.

The visit is sponsored by Information and Pulsed Power Research and Technology Div. 9000 (Gerry Yonas, VP).

- Neal Singer



MURRAY GELL-MANN

Employee recognition award nominations sought

For the fourth consecutive year, Sandians are invited to nominate colleagues and managers for Employee Recognition Awards. Nominations will be accepted Nov. 1 through Dec. 2.

The recognition awards program was instituted when Lockheed Martin assumed management of the Labs in 1993. Formal programs to

recognize employee achievements are a long-standing tradition among Lockheed Martin facilities.

Last May, more than 100 Sandians were recognized at a special awards banquet at the Albuquerque Marriott; a similar banquet for 1997 winners is scheduled for next May.

Laboratories President and Director C. Paul Robinson encourages Sandians to nominate deserving colleagues. "There is a suggestion," he says, "that all humans wear an invisible button that says, 'Please, make me feel special.' If you believe that might be true, then here's your chance to respond for Sandians whose work or contributions you believe have been exceptional. Take the time to nominate them for an employee recognition award."

Awards in four categories

The Sandia Employee Recognition Awards program is intended to call special attention to superior results in four general categories for individuals and - new this year - two categories specifically for teams. For individuals, the categories are: exceptional service; teamwork; technical excellence; and leadership. For teams, the categories are business/operational excellence and technical excellence.

The nomination categories are consistent with the Lockheed Martin employee awards program, NOVA. Sandia's executive management will submit Sandia's nominees for consideration

for the NOVA award. The 1997 NOVA recipients will attend a Lockheed Martin corporate celebration next summer.

Any current Sandia employee may be nominated for any category in which he or she meets the criteria (which are listed on the nomination forms). Team nominations must specify a single individual as team representative. Team members may include nonregular employees and contractors. Nominees must have been Sandia employees since Oct. 1, 1995; nominations must be for an accomplishment during FY96 (Oct. 1, 1995 - Sept. 30, 1996).

Nomination forms with detailed instructions are available at all division and center offices as well as from personnel representatives and customer service managers. Nomination forms are available on Sandia's Internal Web at <http://www-irn.sandia.gov/era/97era.htm>.

The primary requirement of the nomination process is that the nominee's achievements be described in 250 words or less. For each nomination, supplemental material supporting the achievement may be added. If included, this material may be a maximum of one page.



New Mexico - William Aldrich (2413), Dante Berry (2674), John Myre (2665), Steven Wix (1252)
Puerto Rico - Guillermo Negron (6400)

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LOCKHEED MARTIN

Former Tritium Research Laboratory becomes Chemical and Radiation Detection Laboratory

Facility transformed into a 'showcase and gateway' for Sandia's advanced detection technologies

By Nancy Garcia

California Reporter

Recognizing an urgent need for selective, specific sensors to detect chemicals and radiation, Sandia has rededicated the former Tritium Research Laboratory as a center for laboratory work in advanced detection technologies.

The Chemical and Radiation Detection Laboratory, or CRDL, is both a showcase and gateway for detection technologies that can be "expanded in very revolutionary ways," says California Laboratory VP Tom Hunter. Advanced detection can counter threats to national security in defense, nonproliferation, and environmental realms. It also offers industrial and biomedical applications.

The CRDL makes new use of an old building at the Livermore site. Researchers carrying out some \$20 million in work in sensing technologies were presented a unique opportunity when Sandia officially ceased research into safely handling tritium, a radioactive isotope used to increase yield in fusion reactions, in 1994. Rather than tear down the building as part of decommissioning, Sandia and DOE devised an unprecedented approach to devote the structure to a new mission.

Sandia keeps transforming itself

"This event illustrates stewardship, in particular stockpile stewardship, at its very best," Sandia Executive VP John Crawford said in keynote remarks at a rededication ceremony. "What we see before us now is a brand-new laboratory building full of potential and full of promise, rather than an unusable, boarded-up radioactive facility. There is not 10 million cubic feet of buried waste out in Nevada, which would have happened if we had bulldozed this place and declared it all as radioactive waste and shipped it off-site.

"Sandia's future," he added, "lies in its ability to continually transform itself from what it is to what it needs to be. We are a laboratory that has dedicated ourselves to the security of this nation, and we must move at least as fast as the threats to this nation evolve."

The rededicated facility, he says, represents Sandia's future challenge to reduce the threat to this country from all weapons of mass destruction. "As marvelous as this building is," John said, "this is not the end, but it is the beginning."

Rep. Bill Baker, in brief comments at the ceremony, said the CRDL will help the country determine if there are "bad guys" operating in the world today and also help detect any chemicals or radiation loose in the environment. Baker thanked Sandia for "another job well done." Livermore Mayor Cathie Brown said Sandia is both a national and local asset.



CHEMICAL GATEWAY — California Laboratory VP Tom Hunter snips the ribbon blocking the doorway to the rededicated Chemical and Radiation Detection Laboratory. With him, from left, are Rep. Bill Baker, Livermore Mayor Cathie Brown, DOE Kirtland Area Office acting manager Mike Zamorski, Sandia Executive VP John Crawford, and Executive Staff Director Ron Detry.

Later that day, monitoring of the building's exhaust stack was discontinued in the presence of environmental officials. Since beginning operation in 1977, the building had an outstanding safety and environmental record, noted Mike Zamorski, acting manager of DOE's Kirtland Area Office. Zamorski had worked with Sandia to gain acceptance from DOE headquarters for the new transition process. He says the transition, subject to several awards, saved some \$106 million and was completed about 18 months ahead of schedule and \$5 million under budget.

The transition process was initiated in 1991 because Sandia management recognized that the need for tritium research was declining. As part of the process, some \$43 million in equipment was transferred to Los Alamos National Laboratory and Savannah River, where tritium research continues. The transition reduced operational costs and saved a functional, modern laboratory building.

Recycling an entire building

"Just keeping the doors open cost about \$4 million a year," explained 12100 Executive Staff Director Ron Detry, who was a California site director at the time and oversaw the process. The building had been completed in 1975 and was operated from 1977 until 1991. National Security Programs Division 5000 VP Roger Hagengruber invested \$21 million for cleanup and transition because he was a "good steward" of his funds and also "believed in this new process of reconfiguring and reusing," Ron says.

A new building would have cost \$6-7 million and would have taken 5 to 10 years to receive approval and complete, Ron said. Furthermore, tearing down the current building to prepare the site for construction would have taken nine years. Newly outfitting the 15 individual laboratories in the building should be completed next year and is expected to cost only \$2.5 million.

In recognizing key contributors, John says Mim John, Director of Exploratory Systems and Development Center 8100, and her staff had recognized the potential of adding value to DOE through advanced chemical and radiation detection. He called former TRL manager Jim Bartel (8418) and his staff "paradigms of quality in action" and thanked transition project manager Alice Johnson (8346) for "making it all happen."

Projects gathered in the facility from throughout Sandia can now receive greater emphasis. This proximity will also encourage an interplay of ideas and problem-solving approaches, says John Vitko (8102), who manages a variety of sensing programs at Sandia and has championed the transition.

A technical revolution in sensing

Also, the laboratory's location in an unclassified area allows easy access for outside collaborators. The CRDL should allow guests and visitors to interface with sensing technologies there and to access technical resources throughout Sandia. The means to sensitively and selectively detect chemicals and radiation has undergone a technological revolution in the last decade, John Vitko said. "We can measure things we could never measure before." These capabilities have applications in



RENEWAL RECOGNITION — California Laboratory VP Tom Hunter and DOE Kirtland Area Office acting manager Mike Zamorski display a plaque presented to members of the Tritium Research Laboratory transition team.

Sandia California News

environmental cleanup and monitoring, defense, and countering terrorist activities.

"When you read the headlines, you see the public wants to clean up the environment, to do something about weapons of mass destruction, and to predict and prevent terrorist activities," he said. "Those new challenges require new tools, and a revolution in tools has been made possible by advances in detection, microelectronics, and computing power."

A lab on a chip and shirt-pocket nuclear detection

Several projects of Sandia's new Chemical and Radiation Detection Laboratory were described by VP Tom Hunter at the Oct. 10 ceremony opening the laboratory. One seeks to shrink the capabilities of a large chemistry lab onto a small electronic chip. He likened this goal to detecting "complex chemical mixtures with something as small as the end of a fountain pen." In other work, nuclear radiation detection with suitcase-sized assemblies, sometimes cooled by liquid nitrogen, will be shrunk into semiconductor devices "small enough to put into a shirt pocket." The facility also houses work in lasers that look afar for chemicals that might present a threat.

"We believe great things can happen when we bring people together who are motivated, ambitious, eager, and bright," Tom says. "We're going to partner in everything we do. This will be the basis for the future of the California site, which will be more efficient, less costly, and provide a greater quality of work environment."

"I truthfully think we're at the tip of a revolution in chemical and radiation sensing," John Vitko remarked shortly before the ceremony. "People will know much more about what's in their environment than ever before, which will enable much more efficient solutions of the environmental and security issues confronting all of us."

Fireball

(Continued from page 1)

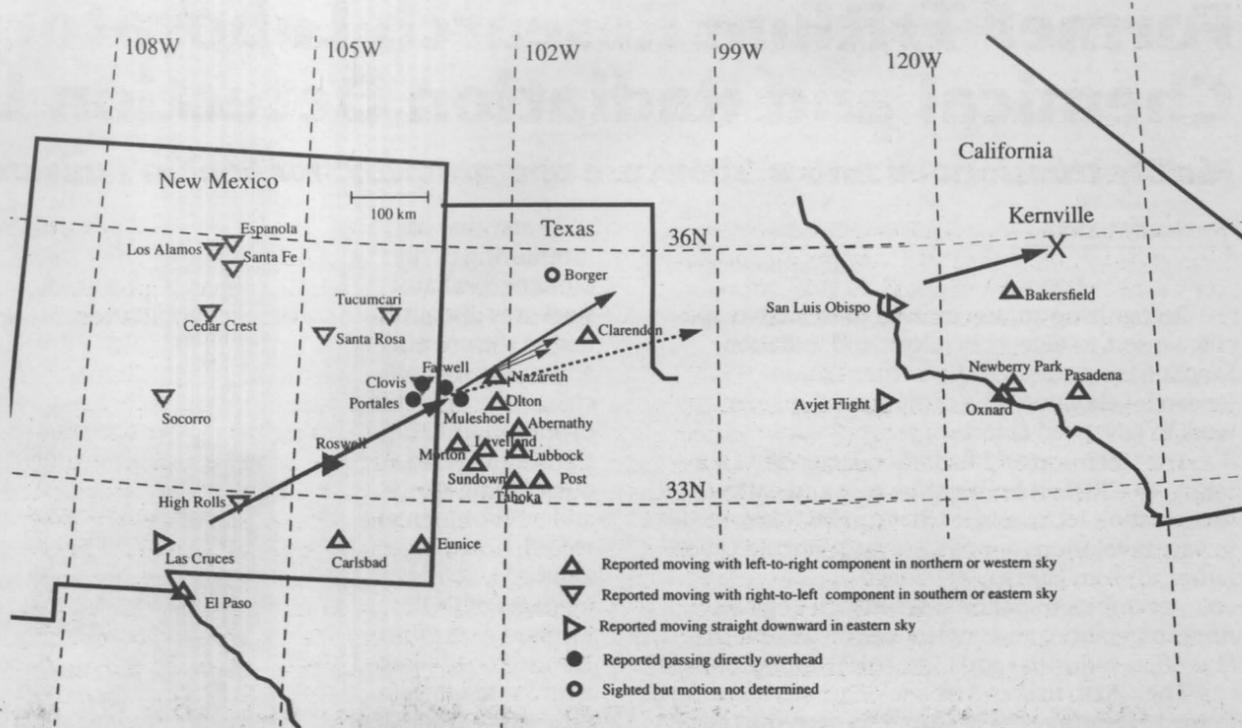
returned about one hour and 40 minutes later. By that time, the Earth's rotation had moved Texas out of the way and replaced it with California. The object reentered the atmosphere over the Pacific and reached the California coast near Point Conception. It passed just north of Bakersfield.

The largest mass ceased to be incandescent northeast of Kernville, Calif., in the Sierra Nevada. Sonic booms were heard throughout the area. Several glowing embers were observed to descend. The largest may have gone as far east as the Owens Valley around Coso Junction.

Great scientific interest

Confirmation of their hypothesis awaits a detailed analysis of a videotape taken in El Paso, seismic signals recorded in California, any meteorites that are recovered, any photographs or other data that turn up, and other scientific observations just now coming to light.

This capture and reentry event is of great scientific interest for several reasons, according to Mark and Wasson. Such an occurrence has been postulated but has never before been observed. Because the meteorite had such a long flight path through the atmosphere, and entered twice, it may be possible to determine its pre-impact trajectory and flight through the atmosphere with unprecedented accuracy. This will allow meteorite special-



DOUBLE WHAMMY — Provisional estimated path of the Oct. 3 fragmenting meteor, first over New Mexico and Texas, then one orbit later over California. Sandia's Mark Boslough says the path is subject to revision as further reports arrive and are evaluated.

ists to determine its preterrestrial orbit around the sun and permit physicists to refine their models for hypervelocity impacts into atmospheres.

Mark and Sandia colleague David Crawford,

also in Dept. 9232, earlier received scientific accolades for their work using Sandia computer codes to correctly predict that the fireball from the collision of comet Shoemaker-Levy 9 into Jupiter in July 1994 would be visible to Earth-based telescopes.

This month's meteor was similar in many ways to the so-called "Peekskill fireball" on Oct. 9, 1992, which was captured on videotape from numerous locations throughout the eastern US — it occurred on a Friday evening when many parents were videotaping at high school football games — and resulted in the impact of a meteorite into a Chevrolet parked in a driveway in Peekskill, N.Y. It was also similar to the Earth-grazing fireball of Aug. 10, 1972, which skimmed through the atmosphere above the northern US and Canada, and was filmed by a tourist at Grand Teton National Park. That object was not captured, but was thrown into a new orbit that scientists think will bring it back near Earth next year around Aug. 11.

Eyewitness reports, meteorite fragments sought

Sandia's Mark Boslough and other scientists are anxious to collect more information about the exact flight path of the Oct. 3 meteor and hope to recover fragments of the object on the ground. Observations in eastern New Mexico and the Texas panhandle would be especially valuable, Mark says. He and Wasson would still like to hear from people under the track who observed this meteor falling straight down in the eastern sky, and are hoping that video or audiotapes, still photographs, or security camera recordings will be found. Notice of such information or materials should be sent via e-mail to

mbose@sandia.gov or wasson@igpp.ucla.edu.

The scientists believe that small pieces broke off the main object and could have fallen almost anywhere directly below the luminous paths, both in New Mexico-Texas and in California. They are urging persons living under these paths to look in their yards and on their roofs for small black stones with a very fresh, probably matte texture. Mark says such samples should be sent to Wasson at the Institute of Geophysics, UCLA, Los Angeles, CA 90095. Each sample will be acknowledged, but those that are not meteorites will not be returned unless a return envelope is provided.

Four Sandians win DOE environmental technology awards

Sandia scientists have won four of 54 environmental technology partnership awards distributed by DOE to national labs, universities, and other research institutions.

The awards, which total \$16 million, were announced Oct. 2. They are part of DOE's effort to create what it calls "the foundation for new technologies in pollution prevention, energy efficiency, and improved environmental quality."

The awards for Sandia are in areas of basic research. All except the first are in geoscience. The recipients:

- Bennie Blackwell (9113), \$454,000 for math and computational science research that will improve manufacturing control
- Robert Glass (6115), \$279,000 for research that will improve understanding of fluid flow
- Harlan Stockman (6118), \$230,000 for research leading to improved understanding of convection in porous media
- Vincent Tidwell (6115), \$165,000 for research leading to improved understanding of fluid behavior

Sandia was the third-largest award winner after Pacific Northwest National Laboratory, which won six, and Oak Ridge, which won five. Los Alamos won one.



How you can provide shoes to needy children

Signs are going up soon to promote the annual Sandia Shoes for Kids campaign. Continuing a 40-year tradition, employees are being asked to donate as generously as they can to make the holiday season a little brighter for those less fortunate. Sandia has teamed with various partners over the past 40 years to provide impoverished children with more than 6,000 pairs of shoes.

Donations will again be collected by Sandia Laboratory Federal Credit Union (SLFCU). Make checks out to "Sandia Laboratory Federal Credit Union" with a notation at the bottom of the check: "For the benefit of Shoes for Kids, account #223180." Mail or deliver your donation to either SLFCU branch. You may also call the SLFCU at 293-0500 and request a direct transfer of funds from your personal account to the Shoes for Kids account #223180. Although the account remains open year-round, making your donation before Dec. 10 ensures that the majority of the children selected will receive their shoes before the holidays.

Team members who make Shoes for Kids a success include Sandia employees, SLFCU (donation collection), Kinney Shoes (provides discounted shoes), Albuquerque Public Schools (teachers identify needy children), numerous private bus companies (transport children from school to shoe store and back), and the APS Foundation (financial agent that handles funds disbursement).

Here are a few examples of comments from children who have received shoes during the holiday season: "My feet are warmer now." "I can jump higher." "I can run faster." "I'm going to sleep with mine on."

Thank you Kinney Shoes & Sandia Labs. in every shoe there's a party.



"IN EVERY SHOE there's a party" is one child's way of saying thank you for the shoes she received through the Shoes for Kids campaign.

"As you can see, these children are truly appreciative of your generous gifts," says Lisa Polito, Community Involvement and Issues Management Dept. 12650. "I'd like to express my sincere thanks and gratitude to employees for their generous donations in the past and their continued support in the future." For information about the Shoes for Kids program, call Lisa at 845-0089.

Congratulations

To Maryann (6472) and Ron (9421) Hospelhorn, a daughter, Merry Mae, Aug. 2.

To Marcy (6641) and Steve (5807) Jordan, a daughter, Marissa, Oct. 4.

Laser-based treatment supported by Sandia research could help thousands of stroke victims

Getting the right laser pulse to the right place is the key

Sandia is helping Wellman Laboratories of Photomedicine, one of the nation's leading research institutions on laser/tissue interactions, to better understand a new laser-based therapy for victims of a type of stroke that afflicts some 28,000 people a year.

Subarachnoid hemorrhage (SAH), which produces bleeding between the brain and the skull, kills nearly half of its victims within a month of the stroke and leaves some degree of brain damage in its survivors. With proper treatment, however, brain damage to SAH survivors may be reduced or prevented.

"Our goal is to provide Wellman with a scientific foundation that gives them the confidence to proceed soon with human trials, and ultimately to develop a general procedure that can be widely used," says Robert Setchell (1152). He is coordinating Sandia's involvement in the project.

Current treatments, such as general or local muscle relaxants and balloon angioplasty, have been largely unsuccessful. The new procedure, called "pulsed laser hydraulic vasodilation," offers more hope.

It would be used within 3 to 10 days after a patient suffers an SAH stroke, the period of time when the patient's cerebral arteries typically experience severe constriction, interrupting blood flow to parts of the brain.

The procedure requires placing a very flexible catheter in the artery that extends from the patient's leg up to the brain. The catheter contains and guides an optical fiber and saline solution to the constricted area. A laser is fired through the optical fiber, instantly causing the saline near the end of the fiber to heat to above the boiling point.

A vapor bubble forms and grows, which produces a fluid surge or "hydraulic pulse" in

the artery. This results in a sudden pressure increase that forces the artery to stretch and remain open.

The technique takes only a fraction of a second and produces a dilated area at the end of the catheter that appears to be permanent in tested animals.

Sandia is helping Wellman increase the understanding of the physical processes that take place during the procedure and determine how to deliver the treatment safely.

"This is a pioneering problem in analyzing and diagnosing miniature-scale mechanics," Robert says. "We are developing skills that also should prove useful in other application areas such as miniaturized actuators and sensors."

Wellman Laboratories of Photomedicine is affiliated with Massachusetts General Hospital of Boston.

— Tammy Locke

VP Gerry Yonas: Security challenges 'scary,' science and technology crucial

In an occasionally wry address at Cornell University, Gerry Yonas, VP for Information & Pulsed Power Research and Technology 9000, assessed security challenges facing the United States and the resources needed to deal with those threats.

The invited talk at Gerry's alma mater was given on Sept. 21 — the 50th anniversary of Cornell's school of engineering physics.

Gerry advocated continued improvements of sensors and weapons to permit possible preemptive action against criminals, terrorists, outlaw states, and those who would destroy a negotiated peace.



GERRY YONAS

"The immediate future I see is a scary one," he said, "but it is one in which science and technology will be extremely important."

Federal outlays for defense have dropped from 60 percent of total outlays in the 1950s to 17 percent today, he said. "It would appear that defense is not a growth industry," he commented dryly. The number of threats to world peace mean that "the new world order did not arrive on schedule, and we are now faced with the need for new solutions to a new world disorder."

Nonlethal weapons part of solution

The new solutions include nonlethal weapons. Obviously, he said, "Pakistani peace keepers in Somalia needed something besides machine guns when they were swarmed by women and children shielding Aidid's forces."

Of crime, he urged that in addition to dealing with root social causes "and also hiring a lot more police," "we make our law enforcement much more effective by using improved sensor and information technology under carefully administered political and judicial safeguards."

He saw Cornell's contribution to US security in four areas of research: microelectronics and optoelectronics, modeling and simulation, advanced materials and manufacturing processes, and high-performance computing and information technologies.

The US, to be secure, needs "vast improvements in sensors that can see, hear, smell, and think" in order to achieve better surveillance,

location of targets, and real-time damage assessment. The country needs advances in complexity theory, biological models of complex systems, and other tools to "distill the ocean of data flooding into our information systems into a few drops of useful knowledge." It needs to quickly manufacture materials and products as "custom solutions in zero time. . . when the bad guys can buy better hardware off-the-shelf at Radio Shack and we urgently need a silver bullet." Finally, it needs new parallel algorithms and computer architectures to permit teraflop [a trillion operations per second] computing at affordable costs.

These problems and solutions extend beyond the technological into economic and political realms, he said in closing. He expressed hope that a broader education would enable future technical workers and public servants to value each other's expertise.

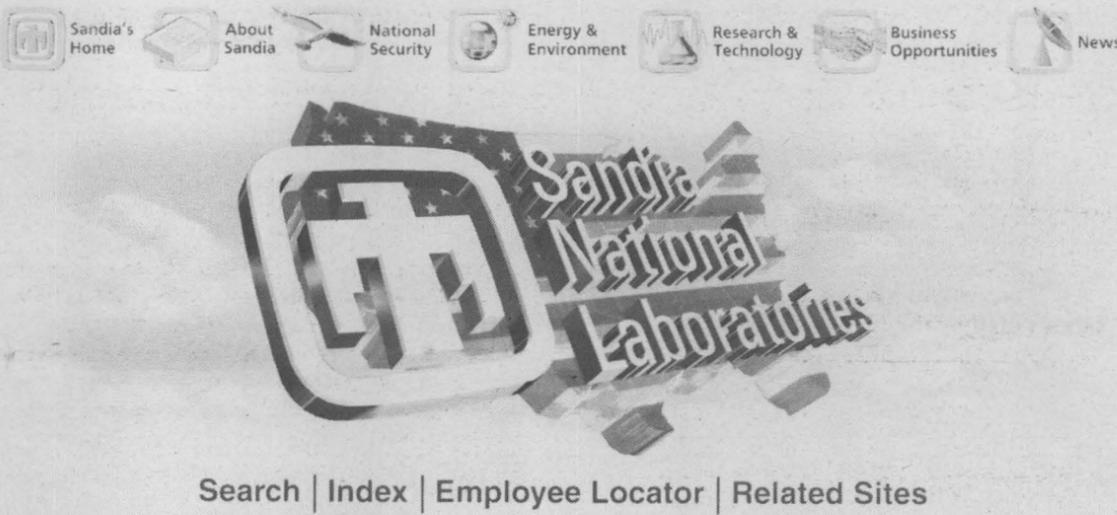
"The part of my talk the audience found most interesting," Gerry said later, "was my

"The immediate future I see is a scary one, but it is one in which science and technology will be extremely important."

comment that though Cornell has learned to combine physics and engineering, the challenge now is to train engineers to understand politics, and even more important to train politicians to understand engineering."

— Neal Singer

Sandia shines in new External Web design



NEW-LOOK EXTERNAL WEB — Sandia's External Web has an attractive new look and is now easier to use and more useful to customers. The redesigned External Web was launched two weeks ago. John Bell (12615) designed this new Sandia banner for the top of the External Web home page. The continuing redesign and redevelopment of the External Web is a joint project of Chief Information Officer Org. 4010 and Public Relations and Communications Center 12600, with cooperation and input from groups throughout the Labs. The Internet address remains the same: <http://www.sandia.gov>; it can also be accessed by clicking on the "External Web" button on Sandia's Internal Web home page, then on "Sandia's External Web Page." A *Lab News* article will give details next month.

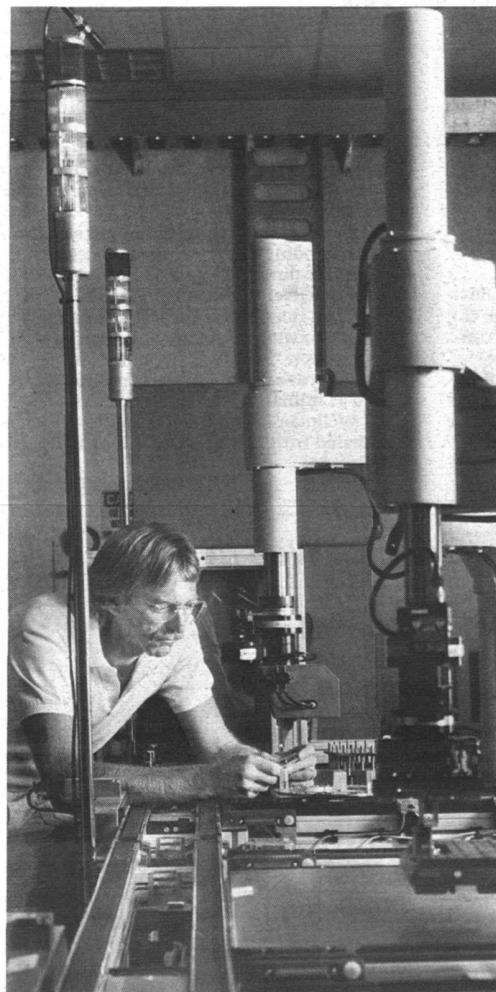
Retiree deaths

Bessie Passmore (93)	.....7423	.....June 2
Lester Simons (91)	.....8252	.....Aug. 19
Lloyd Spohr (81)	.....7651	.....Sept. 2
Donald Loehle (68)	.....3424	.....Sept. 10
Virginia Hoff (78)	.....4001	.....Sept. 11
Eve Baughman (69)	.....0400	.....Sept. 13
Pauline Loomis (84)	.....3322	.....Sept. 14
Helen Culley (87)	.....3321	.....Sept. 15
John Abeyta (77)	.....2715	.....Sept. 21
Andrew Fuller (82)	.....3531	.....Sept. 21
Henry Tendall (79)	.....7614	.....Sept. 29

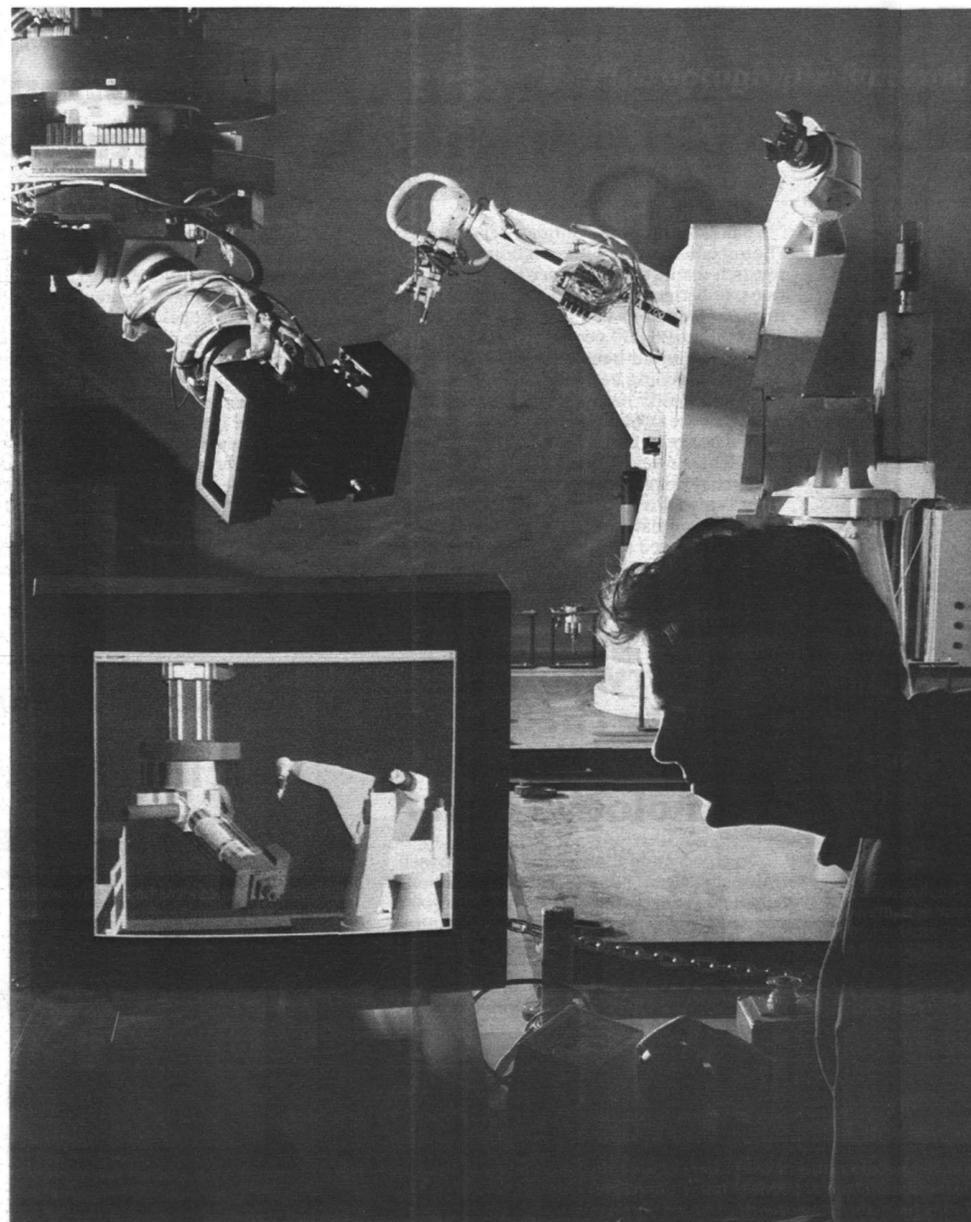
Organization numbers indicate retirees' positions at the time of retirement and may not correspond to present-day organizations.

Sympathy

To Dexter Boone (14401) on the death of his mother in Richmond, Va., Oct. 5.



Cliff Loucks (9671) works on Sandia's Agile Manufacturing Prototyping System (AMPS), a modular system of manufacturing hardware and software tools enhanced with Sandia-developed sensor and automation software technologies. Together the system comprises a flexible production line capable of assembling a range of electromechanical products. AMPS is available to industry partners for validation of a variety of agile manufacturing approaches.



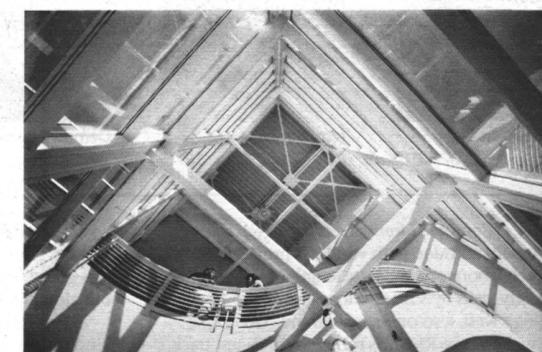
Michael McDonald (9661) programs three large manipulator robots in RMSEL's "megalab" with the help of Sandia's Sancho graphical programming system. Sancho allows operators to test robot motions on a computer, then download and execute the motions on actual robots. The system should help reduce the costs of integrating robots from multiple vendors on the production floor.



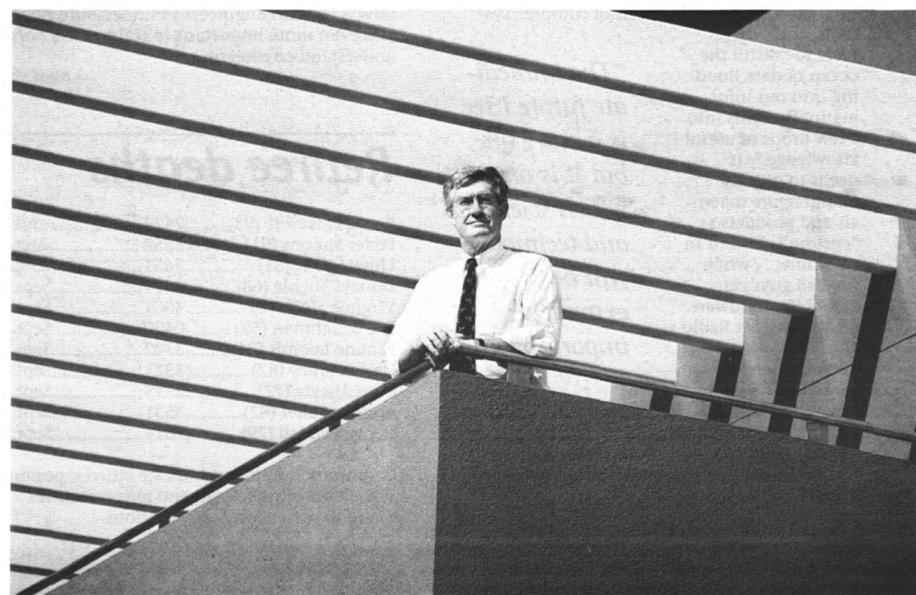
Mike Saavedra (contractor in 9671) hooks up the electrical system for the Automated Component Cleaning (ACC) robot. As part of a project with Allied Signal/Kansas City, Sandia researchers developed a system of automated path planning and programming software that allows the robot to clean a variety of electronic components based on computer-aided design models of the parts and without the use of environmentally harmful solvents.



Carla Montoya (9671) measures a mockup of a nuclear weapon gas generator held by Sandia's Automated Gas Generator Disassembly System (AGGDS). The system is currently being installed for disassembly work at the Pantex Plant near Amarillo, Texas.



RMSEL's interior design features are intended to provide an "industrial and utilitarian feel," according to ISRC Director Pat Eicker. An abundance of windows, most notably along the building's clerestory, provides natural lighting throughout.



Intelligent Systems and Robotics Center (ISRC) Director Pat Eicker surveys the ISRC's new home.

New robotics facility

(Continued from page 1)

says. "RMSEL was designed to encourage staffers to help each other generate new ideas. In some cases, people are getting to know each other for the first time. I hope having everyone together will lead to a single, entrepreneurial culture that aggressively seeks out new business."

RMSEL's project architect, Tom Wilber of the Albuquerque firm Flatow Moore Shaffer McCabe Architects, calls the building's striking exterior design "an iconic representation of the innovative and dynamic sciences housed within."

He says RMSEL's prominent exterior features — including a massive, curving pueblo-style wall that converges on the precise metallic-and-glass structures of the main entry area — symbolize the "inherent tensile relationships" of man and science, of the unknown versus discovery, and of regional traditions versus high technology.

Inside, the facility consolidates ISRC staff and laboratories into what Pat describes as "the highest quality, largest robotics program in the US and perhaps the world."

The two-story, utilitarian floor plan provides 34 laboratories, including an expansive high bay called the "megalab" that houses ISRC's large, gantry-type robots, soon to be available to industry for on-site collaborative research and development.

Other laboratories provide space for research in simulation, sensors, telerobotics, and intelligent micromachines, to name a

(Continued on page 8)

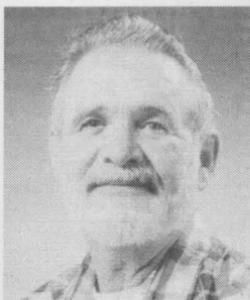
Sandians invited to see RMSEL Nov. 5

Intelligent Systems and Robotics Center 9600 invites all Sandians to see the Labs' new Robotics Manufacturing Science and Engineering Laboratory and to attend demonstrations of two new robotics technologies during Take Our Sons to Work Day the morning of Nov. 5.

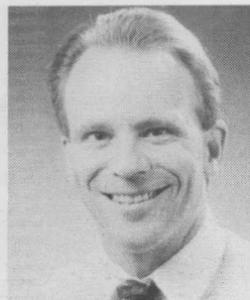
The Miniature Autonomous Robotic Vehicle (MARV), a computerized mini robot that is among the smallest self-contained vehicles in the world, will be demonstrated following a buried wire cable at 9:30, 10:30, 11, and 11:30 a.m. in Rm. 1131. The Agile Manufacturing Prototyping System (AMPS), a highly flexible and modular automated production system for light electro-mechanical processes such as assembly, will be demonstrated at 9:15, 9:45, 10:15, 10:45, 11:15, and 11:45 a.m. in Rm. 1111.

Mileposts

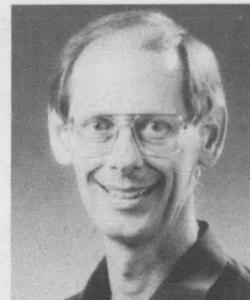
October 1996



Fred Franklin
30 1128



Robert Banwart
15 7002



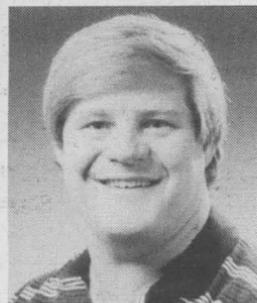
Thomas Hinkebein
20 6113



Cliff Renschler
15 1812



Olivia Harris
20 10507



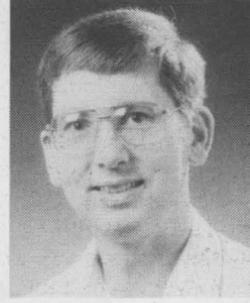
Rob Sorensen
15 1832



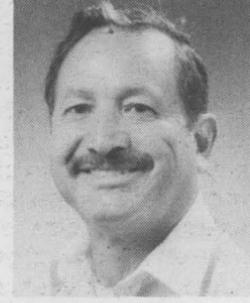
Carla Chirigos
20 1403



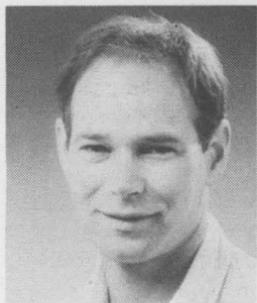
Douglas Smathers
30 9403



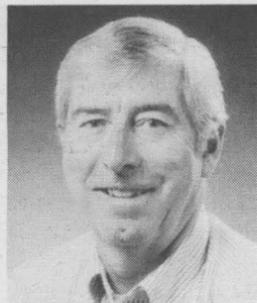
Rob Cutler
15 6114



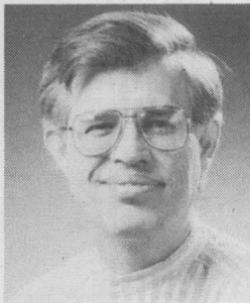
Frederick Norwood
30 9232



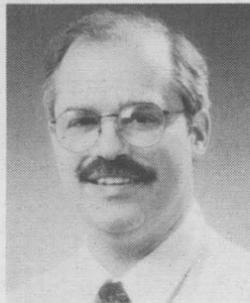
Brett Bedeaux
20 9305



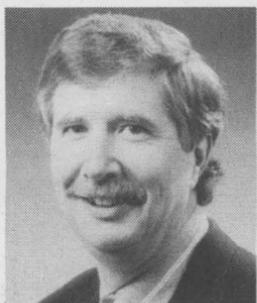
Jerry Biedscheid
15 12361



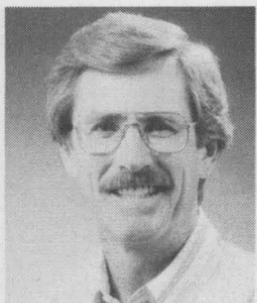
Gary Romero
25 10231



Daniel Horschel
15 9661



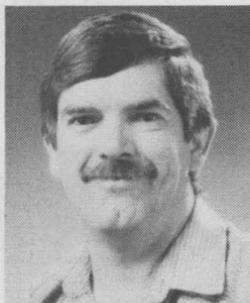
George Allen
20 6610



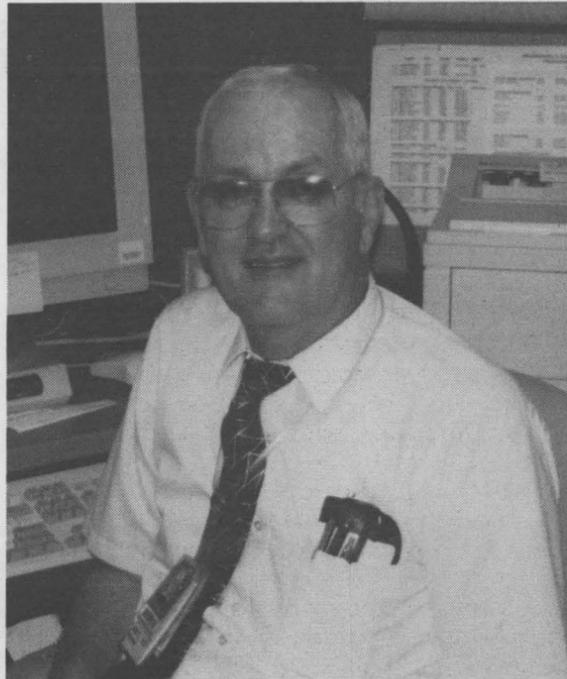
Jerry Soden
20 1275



Demmy Edwell
20 9401



Richard Stump
20 7514



Robert Martin
35 2106

(Continued from preceding page)

few. A main corridor, with windows providing views into each laboratory, runs the length of the building for facility visits by VIPs and tour groups. To the building's west, a second-story veranda overlooks what will soon be RMSEL's robotic vehicle test track, for putting mobile robots through their paces.

The building's office space accommodates more than 150 people. Most offices have exterior windows for natural lighting. Several conference rooms and discussion alcoves, a small library, and an employee break room are included to encourage interdepartmental interaction, says Pat. Offices and labs are wired to a high-bandwidth ATM (asynchronous transfer mode) network for advanced computing and communications.

The building's lobby and auditorium were designed with industry and university collaboration in mind, says Pat. The auditorium is outfitted with multimedia equipment and can accommodate some 75 people. The lobby is set up for expedient badging of conference attendees and tour groups.

"In the future, long-term relationships with individual government and industry partners, each involving a range of technologies, is how we'll do business," he says.

National robotics resource

Former Sandia President Al Narath first suggested a dedicated facility for Sandia's growing robotics program back in 1989, says Pat. After several years of planning and environmental assessments, DOE committed to funding in 1993. Construction began in fall 1994.

Pat says he toured the construction site about

a year ago. "By that time only the steel was up," he says, "but when I left I was shaking. I knew this was going to be a special place. That humbled me, but along with that came a lot of responsibility."

He says RMSEL makes the ISRC a one-of-a-kind research group, with a greater breadth of expertise (including sensors, computer science, and systems research) and a broader customer base (including DOE, DoD, and industry) than any other robotics R&D facility in the world.

"We can do anything, from very large stuff in

the megalab to teeny tiny stuff involving intelligent micromachines," he says. "And the same basic technologies unite all these applications. No one else is situated like us."

"From the beginning, RMSEL was intended to be a national resource — to combine the best research staff, Sandia's reputation as a national technical leader, and a unique range of expertise into a coordinated R&D program dedicated to meeting the robotics and intelligent automation needs of the nation," he adds. Those needs stem from such diverse areas as manufacturing, environmental cleanup, weapons production and dismantlement, demining and munitions disposal, and biomedicine and microsurgery, he says.

"DOE always will be our main customer, but we intended for RMSEL to have a national impact beyond DOE, and we're starting to do that now," he says. (The ISRC is designated a "user facility.")

Along those lines, Sandia is participating in a National Science Foundation/DOE national needs workshop on robotics Oct. 28-30 in Albuquerque that will bring together industrial users, vendors, and researchers from throughout the US to identify barriers that impede progress in the development of robotics and intelligent machines. Attendees have been invited to tour RMSEL on Monday prior to the dedication ceremony. (See "Needs workshop brings together industry 'doers'" at left.)

"Pulling together important people from the robotics community is a sign of the maturation of our vision," says Pat. "My hope is that we'll have a positive impact on the robotics R&D enterprise of the whole country."

—John German

Robotics workshop brings together industry 'doers'

In conjunction with the dedication of Sandia's new Robotics Manufacturing Science and Engineering Laboratory (RMSEL) on Oct. 28, the Robotics and Intelligent Machines Coordinating Council (a joint committee of the Robotic Industries Association and the IEEE Robotics and Automation Society), along with the National Science Foundation and DOE, are sponsoring the first-ever "Workshop on research needs in robotics and intelligent machines for emerging industrial and service applications" Oct. 28-30 in Albuquerque.

Attendees will propose research and development agendas to overcome barriers and develop plans to become world leaders in the industry. The workshop also will provide a forum for industry representatives to voice their technological needs to researchers.

You have only until Nov. 9 to change your benefits choices for the coming year

A lot of new things to consider

It's time again to evaluate and make your benefits decisions for the coming year, Health & Work/Family Benefits Dept. 3343 reminds you.

Sandia's annual open enrollment period is Oct. 20-Nov. 9 each year. As in the past, elections must be made using the automated Open Enrollment Phone System.

By now you should have received your Open Enrollment booklet, *Benefits Choices '97*. The 20-page booklet with a white and blue cover describes the annual benefits options as well as instructions for using the phone system. Options available in this year's Open Enrollment are: 1) medical plan choices of the Triple Option Plan or Lovelace or Kaiser; 2) premium sharing options including dependent changes, waiver of coverage, and Pre-Tax Premium Plan; 3) Reimbursement Spending Accounts options; and 4) Voluntary Group Accident Insurance options.

Here are a few highlights of the options on the medical plan choices and the changes in that area for 1997. Additional details are in your Open Enrollment booklet. The box below discusses premium sharing. Informational meetings for employees and retirees are now under way in both Albuquerque and Livermore and will continue through Nov. 6. Dates, times, and places are listed on the back cover of the booklet.

The basic design of the Triple Option Plan (TOP) will remain the same with the exception of a few changes for 1997. Changes include:

- Prudential HealthCare has expanded its network in the Albuquerque area to include the MedNet Group (St. Joseph-affiliated physicians) and all St. Joseph facilities.

- The cost for an urgent care visit with a Primary Care Physician referral has been reduced from a \$15 copayment to a \$10 copayment per visit.

- Medicare-primary participants pay zero copay for any services obtained in the Primary Care Physician Option. (That change became effective Aug. 1.)

An up-to-date listing of Prudential network providers is now available through the World Wide Web. The providers are listed on Prudential HealthCare's page located at <http://www.geoaccess.com/referralonline/prudential/>.

Changes will also be implemented in the Triple Option Plan Prescription Drug Program (PDP) administered by Caremark. An optional formulary of drugs (listed in Appendix A in the Open Enrollment booklet) will be implemented along with appropriate copayment changes.

The 1997 copayments for the PDP are shown in the table above.

In addition to the copayment changes, there is an important change to the network retail pharmacy benefit if you don't identify yourself as covered through Sandia Labs. If you do not show your TOP ID card upon purchase, you will be required to pay the full cost and submit a claim to Caremark for reimbursement. Your out-of-pocket cost will be the applicable copayment plus the

Mail-order program (for maintenance prescription drugs)	Caremark network retail pharmacies	Non-network retail pharmacies
<ul style="list-style-type: none"> • \$7 copayment for generic prescription drugs • \$16 copayment for brand name formulary prescription drugs • \$20 copayment for brand name nonformulary prescription drugs • Maximum of 90-day supply 	<ul style="list-style-type: none"> • \$5 copayment for generic prescription drugs • \$12 copayment for brand name formulary prescription drugs • \$15 copayment for brand name nonformulary prescription drugs • Maximum of 34-day supply 	<ul style="list-style-type: none"> • 50 % reimbursement • Maximum of 34-day supply • File your claims with Caremark Prescription Services

difference between the price you paid and the discounted price (for up to a 34-day supply).

Lovelace changes

The Lovelace plan has added some enhancements for 1997. Changes include:

- Lovelace has expanded its network of providers to include Internal and Family Medical Associates, New Mexico Medical Group, MedNet, and St. Joseph Westside Hospital.

- An out-of-network benefit option will now be available. Participants may self-direct their care to any licensed provider of their choice using the out-of-network benefit. Services received utilizing this option will be paid at 70 percent of allowable

charges after a \$500 individual/\$1,500 family annual deductible has been met. A \$3,000 individual/\$9,000 family annual out-of-pocket maximum also applies. (Note: All in-network care except durable medical equipment will continue to be at the same copayments as 1996.)

- No copayment for durable medical equipment (wheelchairs, oxygen supplies, etc.) with unlimited benefits based on medical necessity.

Kaiser changes

The only change to Kaiser for 1997 is the addition of chiropractic benefits at \$5 per visit with a maximum of 20 visits per year. All care must be provided by Kaiser-contracted providers.

Premium sharing begins Jan. 1 — you have some options

As announced earlier, effective Jan. 1, all active employees and those who retired after December 31, 1994, will pay a monthly premium for coverage in Sandia's medical plans. The rate will vary based on the plan you choose and your annual salary.

The premium sharing rate charts appear on pages 12 and 13 of your Open Enrollment booklet. Related to that, here is some brief information on dependent changes and on the Pre-Tax Premium Plan for active employees.

Adding/dropping dependents

Due to the Internal Revenue Service (IRS) tax code regulations to provide the Pre-Tax Premium Plan for Sandia, the following requirements for adding or dropping dependents from any health care plans will be strictly enforced for all employees and retirees.

Adding a dependent: Eligible dependents may be added during the annual Open Enrollment period or based on a family status qualifying event (i.e., marriage, birth, or adoption). If you wish to add a dependent midyear based on such an event, you must contact the Benefits Department Eligibility Desk at 845-9702 (in California call 294-2254) and turn in completed paperwork within 31 days of the event. If you do not notify the Benefits Department within 31 days, the next chance to enroll the dependent will be during the next annual Open Enrollment period for the following calendar year.

Dropping a dependent: If a dependent loses eligibility based on a family status qualifying event (i.e., divorce, financial dependency, marriage, etc.), you must also notify the Benefits Department Eligibility Desk (same numbers as above) and turn in completed paperwork within 31 days of the event. If you have

elected the pretax option and fail to notify the Benefits Department within 31 days, you will be required to pay the appropriate premium for that dependent for the remainder of the calendar year even though your dependent will not have coverage.

Option to waive coverage

Due to implementation of premium sharing, you will now have the option to waive coverage in Sandia's medical plan for yourself or any dependents. If you waive coverage for yourself, you are also waiving coverage for all dependents. If you waive coverage, you may reinstate at the next annual Open Enrollment period. No midyear enrollments will be allowed without a family status qualifying event. If you wish to waive coverage, you must call the Open Enrollment Phone System and choose that option under "Medical Coverage Options." If you do not actively waive your coverage, you are giving authorization to Sandia to deduct the appropriate medical-coverage premium from your paycheck or pension check beginning Jan. 1.

Pre-Tax Premium Plan

Under Section 125 of the IRS Code, Sandia set up the Pre-Tax Premium Plan, which allows employees to have premiums taken out of their paychecks before federal, state, and Social Security (FICA) taxes are deducted. The vast majority of employees who are currently paying the required premiums for dependent medical coverage are doing so on a pretax basis. Information regarding enrollment and dependent eligibility, as well as examples illustrating potential tax savings and the potential impact on your Sandia Savings Plan, is included in the Open Enrollment booklet.

Recent Patents

Darin Graf (9752) and Norman Warpinski (6114): Bridge Permeameter.

Barney Doyle (1111) and Kevin Horn (9351): Ion-Induced Nuclear Radiotherapy.

Randolph Brost (9621); Kenneth Goldberg, Los Angeles, Calif.; Aaron Wallack, Albany, Calif.; and John Canny, Berkeley, Calif.: Processor and Method for Developing a Set of Admissible Fixture Designs for a Workpiece.

Larry Whinery, Donald McBride, Daniel Luna (all 9116), James Nelsen, Joseph Holder, Richard Bliton, and Kenneth Gwinn: Structurally Efficient Inflatable Protective Device.

Paul Vianco, Floyd Hosking (both 1833), Robert Fisher (1800), and Frank Zanner (1803): Methods of Making Metallic Glass Foil Laminate Composites.

Coronado Club pool launches year-round schedule with bubble cover



UP IN THE AIR — Coronado Club lifeguard Karen Salas takes a flying leap into the newly "bubbled" pool. Karen is one of the lifeguards who will see duty during the pool's year-round, seven-days-a-week schedule. (Photo by Randy Montoya)

The Coronado Club last week celebrated the official opening of its long-awaited swimming pool cover, an inflatable fabric "bubble" that makes the main pool usable year-round. Following an afternoon ribbon-cutting ceremony, the covered pool was open that night for free swimming.

Several Coronado Club board members, joined by Human Resources Division 3000 VP Charlie Emery and Benefits and Medical Services Center 3300 Director Dr. Larry Clevenger, stood by as board member John Hancock (12324) cut the ribbon opening the \$160,000 facility. Board President Brian Behling (9702) singled out John for special thanks. John headed up the steering committee that coordinated the planning, acquisition, and construction of the removable bubble. The bubble was purchased using Coronado Club funds only; no DOE, Sandia, or Lockheed Martin funds were used.

The new all-season Coronado Club pool will be open seven days a week through next May, at which time the pool will be closed while the bubble is removed for the summer season. The Coronado Club has planned a comprehensive schedule of swimming lessons and other pool activities throughout the winter. Annual pool passes are available. In addition, Club members without passes can swim for \$1.50 per session.

For information, call the C-Club at 844-8486.

Activities planned for 'Take Our Sons to Work Day' on Nov. 5

"Take Our Sons to Work Day" at Sandia is scheduled for Tuesday, Nov. 5. The day is devoted to boys ages 9-15 to expose them to Sandia's contributions to the nation's security, technological advancements, and energy programs. The event is sponsored by Charlie Emery, Vice President of Human Resources Div. 3000, and Community Involvement and Issues Management Dept. 12650.

Sandia, contractor, and DOE/KAO employees are invited to bring their sons or male relatives and friends between the ages of 9 and 15 to work that day. Registration will take place at the Technology Transfer Center (Bldg. 825) between 7 a.m. and 1 p.m.

Several demonstrations will be available to Son's Day participants:

- The National Solar Thermal Test Facility (Solar Power Tower) will provide a 10-minute video, displays, and cookies baked in a solar oven (weather permitting).

- Electro-Mechanical Design Services will provide demonstrations at 9 and 10 a.m. and 1 and 2 p.m. in Bldg. 860, Rm. 205B (north end of the building), west of the Sandia Cafeteria. Demonstrations include seeing computers at work, printed circuit board design, and 3-D mechanical solid modeling.

- Intelligent Systems and Robotics Center will demonstrate MARV and AMPS. MARV (Miniature Autonomous Robotic Vehicle), one of the smallest (one cubic inch) self-contained vehicles in the world, will follow a buried wire carrying a 96 kHz radio signal. AMPS (Agile Manufacturing Prototyping System), a highly flexible automated production system focused on light electromechanical processes such as assembly, is used as a testbed for developing technologies for rapid integration of advanced manufacturing technologies. Demonstrations will be held at the Robotic Manufacturing Science and Engineering Laboratory (Bldg. 895). MARV demonstrations will be in Rm. 1131 at 9, 9:30, 10, 10:30, 11, and 11:30 a.m. AMPS demonstrations will be in Rm. 1111 at 9:15, 9:45, 10:15, 10:45, 11:15, and 11:45 a.m. If you have questions, please call the receptionist at 284-4009.

- The Technical Library (Bldg. 804) will demonstrate its CD-ROM products, including the interactive encyclopedia and map packages. Short searches can be performed on the online database, SciSearch. Demonstrations will be held in Rm. 10, 9-11 a.m. and 1-3 p.m.

Registration forms can be obtained by fax at 284-INFO or on the Sandia Internal Web at <http://www-irm.sandia.gov/pubs/wb/Pages/sonsdaysform.html>.

See the Oct. 14 *Weekly Bulletin* on the Internal Web at [http://www-](http://www-irm.sandia.gov/pubs/wb/Pages/Publication.1996.10.14.html)

[irm.sandia.gov/pubs/wb/Pages/Publication.1996.10.14.html](http://www-irm.sandia.gov/pubs/wb/Pages/Publication.1996.10.14.html) for information about safety requirements. Forms also will be available for pickup at the reception areas in Bldgs. 800 and 823 and the Sandia Vista Building. Please bring the completed forms (manager approval needed) with you on Nov. 5.

For information or to volunteer to help with Son's Day activities, contact Lisa Polito (12650) at 845-0089. This is strictly volunteer time. There will be no case number to charge your time to.



HIGH ACHIEVER — Nestor Ortiz, Director of Nuclear Energy Technology Center 6400, received the highest of seven national Outstanding Achievement Awards from the Hispanic Alliance for Career Enhancement at ceremonies in Chicago Oct. 4. In this picture, Nestor is examining the lower head failure experiment as part of his work in reactor safety. He was recognized for his work in nuclear reactor safety at Sandia and for his work at universities and in the community to encourage Hispanics and other minorities to pursue careers in science and engineering. Nestor was nominated for the award by Lockheed Martin to represent its 190,000 employees. (Photo by Randy Montoya)

Sandia Classified Ads Sandia Classified Ads Sandia Classified Ads Sandia Classified Ads

MISCELLANEOUS

- SANDIA T-SHIRTS, \$9; golf shirts, \$15; Panama hats, \$15, caps & mugs, \$8 ea., for South 14 Village Project, at Lab News Bldg. 811. Shunny, 844-7522.
- REMINGTON COPY, .44 New Army 1851 pistol, 7-1/2 in. barrel, cap & ball, spare cylinder, holsters, \$160. Lyons, 281-9283.
- DRUM PRACTICE KIT, 3 tom pads, kick pad, pedal, rack, quiet, \$100. Bieber, 898-3826, call 10 a.m. - 10 p.m. only.
- QUEEN WATERBED, waveless mattress w/liner, \$75; lead-glass light fixture, \$50; Vetta professional bike trainer, \$75. Gonzales, 266-2302.
- SUPER NINTENDO, 11 games, \$125; Gameboy, 9 games, Super Gameboy, case, \$70; Superscope, 3 games, \$30. Sorensen, 822-1733.
- BEDROOM SET, 10-piece, white, double twin/foundation, dresser, \$350; dog cage, medium, \$18; stationary bike, \$45. Garcia, 888-3686.
- WICKER CHEST, natural color; wicker chair, dusty pink, w/cushion, 2 pillows; wooden Southwestern hanging shelf. Clausen, 856-4018.
- ELECTRIC RANGE, w/built-in microwave, almond, \$250. Hobbs, 856-9630.
- TRI-MAX WORKOUT MACHINE, w/instructional video, you pick up, \$50. Worden, 299-4915.
- '69 GULBRANSEN PIANO, estimated value \$1,500, asking \$900; wooden office desk, \$40. Barnes, 265-2836.
- NORDICTRACK WALKFIT TREADMILL, w/workout computer, new condition, \$325; Hotpoint electric range, \$150. Baca, 299-4875.
- HIDE-A-BED COUCH, queen, excellent condition, \$200 OBO; refrigerator, top freezer, ivory, excellent condition, \$175 OBO. Chavez, 275-0490.
- BROTHER ELECTRONIC TYPEWRITER, \$50; 2 bar stools, \$15 ea.; legal-size 5-drawer file cabinet, \$50. Sraider, 899-2403.
- MAGNAVOX STEREO TV, 25-in., beautiful wood console (swivel), w/remote, cable-ready, 3 years old, \$175. Klein, 797-2407.
- SOFA SLEEPER & matching chair, \$100; Southwestern teal & mauve; perfect for college student(s) or roommates. Maxey, 831-2228.
- CHROME ALLOY RIMS & TIRES, off '94 GMC Sierra (Road Huggers 275x60x15), 6K miles, \$600 OBO. Romero, 823-2335.
- TABLE SAW, 3/4-hp Craftsman, 8-in. blade, w/rip fence & cross-cut miter, \$45. Levin, 299-0891.
- OVER/UNDER SHOTGUN, 12-gauge, SKB Model 505, excellent condition, 4 chokes (skeet, IC, M, F), 3-in. chamber, made for steel shot. Evans, 299-6888.
- TI-92 CALCULATOR, bought new in Feb., original packaging, symbolic calculus/trigonometry, 3-D graphics, \$150. Miranda, 293-8644.
- RECORD COLLECTION, 200 albums, rock, classical, country; dual 1229 turntable; Akai 600 DBX 10-in. tape recorder. Draper, 281-2663.
- WILSON STEPPER, AM/FM radio/headphones, \$45; 5-piece dinette set, 41-1/2" x 41-1/2", w/glass top, \$35; 3-shelf microwave/utility cart, \$10. Stuhlmann, 839-7079.
- STEP II, adjustable, w/training video, \$35 OBO; Smith-Corona Memory-writer, w/case, owner's manual, \$80 OBO. Blaisdell, 875-0719.
- FILE CABINET, \$20; chair/bed, TV/VCR cart, \$15 ea.; table lamp, lounge chairs, bean bag, \$10 ea.; household items, best offer. Tadios, 299-6874.
- ANTIQUES: oak sideboard w/deep carving, original hardware, \$500; china cabinet w/carved doors & original glass, \$450. Adams, 823-1845.
- OAK TABLE, 30-in. diameter, 38-in. high (bar height), \$60. Williams, 294-4742.
- SHARP SEMI-DESKTOP CALCULATOR, Model VX-2126H, new in original box, retails for \$55, asking \$20. Wagner, 823-9323.
- CAMERAS: 35mm Minolta SRT101, w/flesh & case, \$90; Mamiya (Seiksha), w/case, \$25 OBO. Reed, 884-4505.
- TUNTURI E603 AIRCYCLE, for upper & lower body, workout w/electronics modules for mileage/calories, \$200 OBO. Armijo, 839-0223.
- TRACE ELLIOTT BASS CABINET, w/15-in. cone, \$240. Warner, 294-1381.
- SENTRY HOME SAFE, on casters; 4 folding chairs; 3-shelf unit, black wrought iron; clear vinyl chairmat. Kesti, 821-9208.
- MINOLTA CAMERA, & lens, Owen lens, Vivitar extension tubes; book: *History of Architecture*. Conway, 342-2405.
- FASTRACK INDOOR WALKING MACHINE, \$175 OBO; Reebok Step, w/4 risers, \$60 OBO. Zarick, 898-8840.
- AKC ROTTWEILER PUPPIES, born Aug. 25, 2 males, 4 females, tails, dew claws, first shot & dewormer done. Trujillo, 864-1347.
- DINING SET; Hotpoint gas dryer; 4 bar stools (mauve). Gallegos, 293-8885.
- LAPTOP COMPUTER, Toshiba T1950, 486-DX2, 40MHz, 4MB RAM, 200MB HD, monochrome monitor, 6.5 lbs., \$750. Nakos, 299-3569.
- GARAGE DOORS, new, noninsulated, white raised panel, 8x7, \$275; & 8 x 10, \$450. Stewart, 281-7906.
- PANASONIC CAMCORDER, \$200; Fisher-Price airplane bouncer, \$15; diaper pail, \$5; Hoover vacuum cleaner, \$35. Williams, 344-9276.
- TWO LARGE WINDOWS, 28" x 7' 8-1/4" (92-1/4"), double pane, \$50 ea.; sliding shower enclosure, 64" x 50", \$35; one interior door, 80" x 24". Record, 243-5103.
- SET OF FOUR WHEELS, fit Ford or Dodge pickups, 15x6, \$30. Pre-vender, 296-8586.
- 486DX33 COMPUTER, 8MB, 340 HD, more, \$500; king waterbed, beautiful, waveless, \$150; '47 Dodge Club Coupe, \$850. Smith, 828-3904.
- DOLLY TRAILER, car towing, like new, one trip, \$825. Tarbox, 255-2866.
- NATIONAL GEOGRAPHICS, '50s-'90s, w/maps, all like new, some still in wrappers, \$65 OBO. Hayes, 299-1200.
- GLASS, safety tempered, 27" x 31" & 27" x 27", you haul, free. Dietzel, 294-4702.
- COFFEE TABLE & end table, matching, thick glass tops w/shelf below, \$115/all. Rockett, 298-2589.
- HOLIDAY ARTS/CRAFTS BAZAAR, Cleveland Middle School, 6910 Natalie NE (Louisiana/Montgomery area), Nov. 9, 9 a.m.-4 p.m., 100 booths. Edgar, 884-8567.
- STAIR STEPPER, Precor, \$60; oak table, 42-in. round, \$75; girl's white desk, \$40; cabinet, 31" x 34", \$25. Frederickson, 292-8284.
- CRAFTSMAN 40-PIECE TOOL SET, w/tool box, \$50; 5-in. vise, \$12; ratchet set, \$10; misc. tools. Eaves, 268-0461.
- BROWN DINETTE TABLE, 3-1/2 ft. x 5 ft., w/leaf & 4 swivel arm chairs on casters, seat cushion upholstery is cracked but usable, \$150. Martinez, 856-6210.
- MAN'S SKI BOOTS, size 10-1/2 (345) Salamon SX-82, \$60; Blackburn bicycle wind trainer, \$40. Harding, 254-9515.
- PENNSYLVANIA HOUSE CHERRY bedroom set, queen-size bed, triple dresser w/mirror, night stand, \$3,000 OBO. Jones, 244-1259.
- DRYER, heavy-duty, electric, almond, White-Westinghouse, top-of-the-line, multicycle, autodyr, rarely used, \$125. Murphy, 294-1778.
- NORDICTRACK EASY-SKI, excellent condition, only 350km, must sell, doctor's orders, \$350. Langwell, 293-2728.
- RASCAL 230 3-WHEELED SCOOTER, battery operated, for disabled person, good condition, \$1,000. Servis, 865-7629.
- KARATE GEAR. Herrera, 298-8439 after 6:00 p.m.
- SINGER SEWING MACHINE, wood cabinet, \$200; computer credenza, \$35; queen mattress set, frame, \$200; microwave, \$50. Letz, 293-4525.
- WASHER/DRYER, \$125; living room chair, \$35; executive wood/nau-gahyde swivel-chair \$35; loveseat, \$45, teak cabinet, \$40. Owyong, 294-1884.
- SUPER SINGLE WATERBED, complete w/bookshelf, headboard, & padded rails, good condition, \$75. Russell, 294-0229.

DEADLINE: Friday noon before week of publication unless changed by holiday. MAIL to Dept. 12640, MS 0165, FAX to 844-0645, or bring to Bldg. 811 lobby. You may also send ads by e-mail to Nancy Campanozzi (nrcampa@sandia.gov). Questions? Call Nancy at 844-7522. 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. No phone-ins.
4. Use 8 1/2" by 11-inch paper.
5. Type or print ad; use accepted abbreviations.
6. One ad per issue.
7. We will not run the same ad more than twice.
8. No "for rent" ads except for employees on temporary assignment.
9. No commercial ads.
10. For active and retired Sandians and DOE employees.
11. Housing listed for sale is available without regard to race, creed, color, or national origin.
12. "Work Wanted" ads limited to student-aged children of employees.

WHEELS & TIRES, prime 5-spoke polished aluminum, 5 x 100mm pattern, 16 x 7, w/Goodyear GT+4 tires, P215/70R16, \$650 OBO. Baldonado, 765-1961.

AT&T ANSWER MACHINE, \$15; GTE 20-number speaker phone, \$25; both like new, w/original boxes & manuals. Everts, 822-1767.

FIRESTAR, .40-cal. compact pistol, +3 mags, \$375; king-size waterbed, \$200; dog, blue heeler mix, all shots, neutered, \$20. Alberts, 299-6706.

HORSE ALFALFA HAY, 10 bales left, \$4.50/bale. Sisneros, 345-4836.

WASHBURN SIX STRING, 2 yrs. old, great condition & sound, w/pickup & case, \$345. Adams, 281-6767.

PORTABLE NATURAL GAS GRILL (barbecue), cast iron, 14" x 25", \$25. Torres, 265-7194.

CARPET, beige, 30+ sq. yds., good condition, \$50. Berg, 296-2695.

CLAVINOVA, Yamaha's electronic piano, new \$10,800, used 3 months, ideal for student or professional & apartment dwellers, asking \$6,500. Williams, 856-5722.

TRANSPORTATION

'89 CHEV. CORSICA, AT, AC, PW, AM/FM, new tires, \$3,800. Guerin, 877-2726.

'84 HONDA V65 MAGNA, excellent condition, 1100cc, 19K miles, \$3,500. Ortiz, 877-7293 or 831-6000.

'94 PLYMOUTH VOYAGER, tan, 6-cyl., 43K miles, AC, cruise, great shape, must sell, \$12,500 OBO. Webb, 899-9156.

'88 FORD BRONCO XLT, full-size, push button 4WD, V8, AT, AC, cruise, phone, alarm, hitch, \$6,900. Spires, 275-3655.

'86 PONTIAC 6000LE station wagon, 29,500 miles, 2.8L V6, PW, PL, AT, AC, AM/FM stereo-radio w/cassette, \$6,000. Mitchell, 298-5883 or 299-5144, after 4 p.m.

'88 NISSAN 300ZX, all options, new tires, low miles, perfect condition, must sell, below NADA at \$6,900 OBO. Giersch, 836-2560.

'82 CHEV. S-10, w/camper, blue/white, great condition, \$1,900 OBO. Atencio, 284-3522 days or 867-3786 evenings.

'83 FORD RANGER PICKUP, 4-spd., short bed, \$1,750. Chason, 286-2034.

'85 VW JETTA, 4-dr. diesel, sunroof, high miles, low maintenance, good commuter, \$1,800. Chambers, 286-8367.

'89 TOYOTA TERCEL, 3-dr., light metallic blue, manual transmission, radio, excellent condition, \$3,000. Case, 293-5466.

'92 NISSAN PATHFINDER XE, 4x4, 5-spd., AC, luggage rack, tow bar, 56K miles, excellent condition, \$14,500. Carroll, 292-5436.

'93 NISSAN SENTRA E, 4-dr., AT, AC, new tires, 50K miles, \$7,500 (below book). Brown, 298-8447.

'75 JEEP CHEROKEE, 360-V8, Quadra-track (full-time 4x4), lock-out capability, body rough but incredible 4x4, \$1,500. Heffelfinger, 281-1733.

'89 DODGE COLT VISTA WAGON, 92K miles, blue, 8 passenger, \$3,000. Young, 299-6019.

'79 CORVETTE, 33K original miles, excellent condition, L-82, 4-spd. transmission, newly tuned, \$17,500. Clavey, 292-7667.

'70 INTERNATIONAL SCOUT, 4x4, new brakes, springs, tires, shocks (Ranchero R5500), hitch, removable hardtop, \$2,200 OBO. Baca, 243-1064.

'85 FORD BRONCO II, 4WD, excellent condition body upholstery, new tires, battery, original owner, all records, \$3,400. Chirigos, 298-3837.

'81 MAZDA RX7, runs well, new rims, need to sell, \$1,500 OBO. Alexander, 291-8028.

'87 FORD BRONCO II, 67K miles, \$1,000 worth of engine work done in May, has warranty, excellent condition. Barbera, 275-2562.

'86 JEEP LAREDO, 2.5L, fuel-injection, 5-spd., 83K miles, new tires, excellent condition. Blaine, 299-1036.

'91 FORD EXPLORER, white exterior/red interior, AT, AC, cruise, PW, PL, ABS, 4.0L EFI, AM/FM cassette, \$11,600 OBO. Gonzales, 873-5879 or pager 247-7949.

'93 FORD TAURUS GL WAGON, ABS, airbags, 3rd seat, cruise, PW, PL, looks/runs great, \$7,250. Hart, 292-5110 or 235-8476.

'87 NISSAN PATHFINDER SE, V6, 5-spd., CD stereo, new tires, 1 owner, \$7,500. Esch, 298-8914.

'60 INTERNATIONAL PICKUP, racks, toolbox, rebuilt engine, good work truck, \$1,000. Lowrey, 281-9255.

'65 TRIUMPH TR4A BRG, wire wheels, 76K miles, looks good, needs top & mechanical work, \$2,250. Echeverria, 293-6198.

'92 CHEV. S10 PICKUP, 43K miles, V6, 2.8L, 5-spd., cruise, AC, PS, PB, 7-1/2 ft. bed, matching shell, Tahoe trim, \$8,150 OBO. Branscombe, 881-4589.

'93 DODGE DAKOTA LE, 4x4, long bed, V6, AT, AC, 1 owner, 19K miles, 3-yr. warranty, below book, \$13,800. Jones, 843-3500, leave message.

'89 BMW 535i, bronze, leather, 10-speaker stereo, AT, power everything, new floor mats, \$14,900. Slettom, 232-0567.

'82 VOLVO DL SEDAN, AT, original owner, maintenance records, shop manuals, runs great, excellent body, needs paint, electrical work, \$1,750 OBO. Macha, 856-7427.

'81 CHEV. C30 PICKUP, needs repairs to be serviceable, bids through 10/30/96, right to refuse bids, subject to prior sale, as is. SLFCU, 237-7384.

'93 CHEV. SUBURBAN 1500, 4-wheel drive, loaded, 31K miles, \$24,995. Williams, 856-5722.

RECREATIONAL

'84 KAWASAKI 900 NINJA, 11K miles, new Dunlop tires, new windshield, performance exhaust, superb condition, \$2,000. Lemon, 896-0388.

'96 LAYTON TRAVEL TRAILER, 23-1/2 ft., dual doors, loaded, green Southwest interior, used only 5 times. Montoya, 866-1349.

'91 SPRINTER MOTORHOME, by Mal-lard, Econoline Ford chassis, 27-ft., loaded, 7,104 miles, many extras. Alexander, 884-4930.

TIMESHARE, beautiful houseboat on Lake Powell, every year, entire week that includes Memorial Day, \$3,000. Owens, 836-7802.

GIRL'S MOUNTAIN BICYCLE, 26-in., 21-spd., \$150. Ortiz, 242-8692, after 5:30 p.m.

CAMPER, full-size, fits Ford/Chev./Dodge long-wheel base, great condition, refrigerator, heater & bathroom, \$800 OBO. Gonzales, 344-5582.

MOTOBECANE, 10-spd. adult bike, excellent condition, \$75. Webb, 828-2271.

'95 FORD F-250, Supercab PowerStroke diesel, XLT pkg., 4x4, 5th wheel hitch, \$25,500. Haley, 281-2989.

'91 RAM 150 CAMPER, PS, PB, Michelin tires, 1 owner, 59K miles, \$6,500. Hatcher, 266-0932.

TIMESHARE, luxury resort condo, Angel Fire, over 1,800 sq. ft., sleeps 6, fireplace & washer/dryer, available Dec. 8-14, 1996, \$700/wk. Castillo, 294-8250.

'93 HARLEY-DAVIDSON FXRS, convertible, black, many chrome & stainless steel accessories, excellent condition, 9K miles. Season, 293-5006.

REAL ESTATE

3-BDR. HOME, NE Heights by Juan Tabo & Montgomery, large backyard, mountain view, walking distance to good schools, \$134,900. Stromberg, 299-8591.

4-BDR. DOUBLE-WIDE, on permanent foundation, El Cerro Mission, Los Lunas, 2,128 sq. ft., 3 baths, \$89,900. Pecos, 220-3682.

3-BDR. DOUBLE-WIDE MOBILE HOME, walking distance to KAFB, 1,344 sq. ft., 2 baths, fireplace, skylight, appliances, price reduced. Harris, 298-4756.

3-BDR. HOME, 2 story, Sandia Park, 2,300 sq. ft., 2-1/2 baths, 2-car garage, porches, 2 yrs. old, fireplace, fenced backyard, 2-1/4 acres, \$205,950. Salazar, 281-0560.

2-BDR. MOBILE HOME, Edgewood location, permanent foundation, 1 bath, 2.3 acres, 2 large additions. Montoya, 286-2948.

WANTED

CHIHUAHUA PUPPY, reasonably priced; prefer short-haired female. Southward, 281-7858.

HOUSEMATE, single/couple, Sandia Park area, \$375/\$425 + share of utilities. Shapnek, 281-5913.

HOUSEMATE, 1 yr old, 3-bdr., minutes from Kirtland, garage access, nonsmoker, utilities paid, \$500. Kinney, 293-3256.

SPINET PIANO, working order, tuned. Kercheval, 864-6549.

GRAVEL/ROCKS/STONES, free or reasonably priced, any size/color. DeNinno, 284-2456.

HOUSEMATE, 4-bdr., near Tramway & Copper, \$400 + half utilities, pet, child considered, female preferred. Cunningham, 293-9463.

JOGGING STROLLER, large-wheeled. Curzi, 296-5386.

BICYCLE, 16-in., prefer girls but will take boys. Townsend, 275-8913.

WILTON CAKE DECORATING BOOKS, '90 or newer, reasonably priced. Kallenbach, 869-5237, leave message.

HOUSEMATE, nonsmoker, nice residential area, mountain views, bedroom, bath, kitchen privileges, \$350/month. Smith, 298-7365 or 292-1976.

TENNIS BALLS, for school project, any used tennis balls you would like to donate to a worthy cause, call Brigham, 293-6914.

EXHIBITORS for Canterbury Craft Fair, Sat., Nov. 16, St. Thomas of Canterbury Episcopal Church, 425 University Blvd. Hughes, 296-8940.

CHILD CARE/NANNY NEEDED in home for infant twins, Bosque Farms, must have own transportation & references, nonsmoker. Phelan, 869-6094.

LOST & FOUND

LOST: Man's rose/orange jacket, taken from cafeteria chair on 10/3/96, please return to cafeteria, no questions asked. Kelly, 299-3527.

LOST: Gold necklace, w/large diamond-heart pendant, by Bldg. 878, reward to person who finds it. Carrillo, 839-7351.



Sandia News Briefs

Larry Bertholf accepts recognition award from Gov. Gary Johnson

Larry Bertholf, Director of Corporate Planning and Strategic Business Development Center 4500, has accepted a certificate of appreciation from Gov. Gary Johnson for his service on the state's Commission on Information and Communications Management. The certificate expresses appreciation for the role Larry has played "in helping shape the future technology in information systems for the State of New Mexico." Commission Chairman Steven Beffort said Larry's contributions to the commission's work "will help ensure that the State of New Mexico has a place in the technology of the future."

Late Cretaceous alligatoroid fossil named for Sandian

A new species of Late Cretaceous alligatoroid has been named in honor of the Sandian who discovered its remains in the San Juan Basin in northwestern New Mexico. In a paper in the Sept. 19 issue of the authoritative *Journal of Vertebrate Paleontology*, New Mexico Museum of Natural History paleontologist Thomas Williamson described the alligatoroid, which he has proposed be named *Brachychampsia sealeyi*, "in recognition of Paul L. Sealey for discovery of the holotype and for his many contributions to New Mexico paleontology." Paul is with Storage, Transportation, and Distribution Dept. 7618. An adjunct naturalist for the NM Museum of Natural History, Paul says he thinks it is "pretty neat" to see his find described in such detail in the world's leading paleontology journal. The *Lab News* previously reported on some of Paul's fossil finds in the Dec. 21, 1990, issue. In his paper, Williamson noted that Late Cretaceous alligatoroids are extremely rare; the *B. sealeyi* specimen is the oldest of only four documented Late Cretaceous alligatoroid skulls. In addition, the specimen is the first to be documented from the southern Rocky Mountain region.

Around the corporation **LOCKHEED MARTIN**

Hungarian defense officials briefed; Prague, Warsaw stops next

Lockheed Martin representatives spent two days recently talking with Hungarian officials about defense acquisition strategies associated with modernizing the Hungarian Home Defense Forces. Gordon Bowen, corporate director of Requirements & Analysis, said databases and processes developed for the defense contractor's work with US military planners helped greatly in the two-day conference in Budapest. Lockheed Martin will hold flight demonstrations of F-16 capabilities for Hungarian officials later this year. Defense planning seminars are planned next in the Czech Republic and Poland.

'Heartbeat detector' in trials at Tennessee prison

A prototype of the Enclosed Space Detection System developed by Oak Ridge National Laboratory and Y-12 has been installed for a trial run at the Riverbend Maximum Security Correctional Facility near Nashville, Tenn. The device can detect the heartbeats of individuals hiding inside vehicles or other enclosed spaces. The trial period is a joint initiative of state government and the Oak Ridge Center for Applied Science and Technology for Law Enforcement.

Flu shots available for employees, retirees, dependents, and contractors

A reminder: The Sandia/New Mexico Medical Clinic will again provide influenza immunizations (flu shots) free of charge to Sandia employees at the following times and locations:

- Oct. 28-Nov. 1, Bldg. 956, 7:30 a.m.-3:30 p.m.
- Nov. 4-8, Bldg. 831 (Medical), 1-3 p.m.
- Nov. 11-15, Bldg. 831 (Medical), 1-3:30 p.m.

Nurses from the Lovelace Health Plan (HMO) will provide influenza immunizations to dependents of employees, retirees and their dependents, and Sandia contractors and their dependents on Nov. 12, 8 a.m.-noon, and Nov. 13, 1-5 p.m., in the Fiesta Room of the Coronado Club. Note: You must be 18 years of age or older. These

immunizations will be provided free of charge to dependents of employees and to retirees and their dependents who are enrolled in either the Lovelace HMO, the Lovelace Senior Plan, or the Triple Option Plan. To receive the free immunization, Lovelace requires that each recipient present his or her individual Lovelace or TOP ID Card. Sandia contractors and their dependents will be charged \$10 per immunization (unless they are covered under the Lovelace HMO and can present a Lovelace ID Card).

Call Pat DeVivi (3333) at 844-8945 or the Medical Clinic at 845-8159 for more information.

Sandia recycling — new and improved

Sandia/New Mexico's Pollution Prevention and Solid Waste programs have teamed up to create new and improved recycling programs for the Labs. "These programs are user-friendly, convenient, and revenue-generating," says Kylene Molley, Pollution Prevention Task Leader in Dept. 7526.

The first phase of the new recycling program will be initiated in December with new paper and cardboard recycling processes. All of the paper and cardboard cages will be replaced with designated recycling containers centrally located within most buildings at Sandia/New Mexico, such as near copiers, printers, exits, or common areas. Instead of collecting paper in offices in boxes and taping the boxes when full, you'll be able to simply deposit paper in the collection container whenever convenient, says Kylene.

Also, the types of paper that can be recycled will expand beyond white ledger and computer paper to include such things as colored paper and Post-it notes. Cardboard can be deposited either in designated cardboard recycling dumpsters or in any trash dumpster. The cardboard will be separated out at the solid-waste transfer facility and recycled.

It is expected that the improved process will increase recovery of paper and cardboard for recycling from 27 percent to 80 percent, will decrease labor costs from 0.5 FTE to 0.15 FTE, and will increase recovered cost from \$36,000 a year to at least \$100,000 a year. "Because paper and cardboard make up 50 percent of Sandia/New Mexico's sanitary waste, this effort alone will exceed Energy Secretary Hazel O'Leary's pollution prevention goal of recycling 33 percent of sanitary waste," Kylene says.

Coronado Club

Oct. 24, 31 — Thursday bingo night. Card sales and buffet start at 5 p.m., early birds' bingo at 6:45 p.m.

Oct. 27 — Kids' Haunted House. 6-9 p.m. Cost: Members, one canned good; guests, \$1.50.

Nov. 1 — "Western Night" dinner/dance. \$8.95 prime rib or shrimp dinner, 6-9 p.m. Music by Isleta Poorboys, 7-11 p.m.

Nov. 3 — Sunday brunch buffet, 10 a.m.-2 p.m. \$6.95 all-you-can-eat buffet. Kids 3-12, \$1, under 3 free. Music by Starlighter, 1-4 p.m.

Nov. 7, 14, 21 — Thursday bingo night. Card sales and buffet start at 5 p.m., early birds' bingo at 6:45 p.m.

Nov. 17 — Sunday brunch buffet, 10 a.m.-2 p.m. \$6.95 all-you-can-eat buffet. Kids 3-12, \$1, under 3 free. Music by Bob Weiler, 1-4 p.m.

Nov. 22 — "Western Night" dinner/dance. \$8.95 steak or shrimp dinner, 6-9 p.m. Music by Bobby Buttram, 7-11 p.m.

Fun & Games

Tennis — Here are the results of the Coronado Tennis Club tournament played Sept. 13-15 at the Coronado Club. Ed Pimental defeated Eliot Schwartz 6-3, 6-2 in the men's 3.0-3.5 singles. Jeff Urie defeated Larry Johnson 6-1, 6-3 in the men's 4.0-4.5 singles. David Wenger (1277) and Jim Van Nest defeated Fred Cericola (ret.) and David Sealey (7437) 6-3, 6-1 in the men's 3.0-3.5 doubles. Larry Johnson and Gerald Landry defeated Wendel Archer (2251) and Ernie Melo 6-3, 2-6, 6-0 in the men's 4.0-4.5 doubles. Andrea Schunk defeated Linda Slutz 7-5, 6-1 in the women's 2.5-3.0 singles. Andrea Schunk and Kathy Smith defeated Ruth Tillerson and Julie See 6-2, 6-1 in the women's 2.5-3.0 doubles. David Sealey and Glenna Hickman defeated Jim Solbert (9753) and Anita Solberg 6-2, 6-3 in mixed 7.0 doubles.



BEVY OF BOOKWORMS — Sandians were so enthusiastic about the Employee Contribution Plan/United Way 1996 Kickoff Book Fair that they spent nearly \$42,000 on books offered by Reading's Fun Ltd. the week of Oct. 14-18 in the Bldg. 800 Lobby, the Area 1 Cafeteria, and the Technology Transfer Center. "Ten percent of the profits from the sale will be donated to United Way agencies in the form of books — one book to be donated for every 10 sold," says Juanita Sanchez, ECP Executive Secretary. If you haven't called in your donation, the ECP donation line, 845-0070, will remain open through the end of October. For information about the campaign, call Juanita at 844-1307.