

Woodard, Hunter, Eagan, Riser named new Sandia VPs; key Sandia divisions reorganized

Yonas, Hartley gain new responsibilities

Just a month after they took over Sandia's leadership, Laboratory Director C. Paul Robinson and Deputy Director John Crawford last week named four new vice presidents and announced the first elements of a reorganization that will reach into every corner of the Labs' operation.

The bottom line is to create a more vital and more agile "New Sandia," to strengthen the process by which research efforts are developed into new technologies, and to increase the ability to meet rapidly changing customer demands.

The new appointments will become effective Oct. 1, but the designees will be in an "acting" status until formal approval by DOE.

As announced in a Sept. 20 *Sandia Bulletin* to all employees, the new vice presidents and their assignments will be:

- Joan Woodard, VP of Energy

and Environment Div. 6000. Now Director of Energy Components Center 2500, Joan will replace current Energy and Environment VP Dan Hartley, who will become VP of Laboratory Development 4000. That position was formerly held by Paul Robinson before he became Sandia's president and laboratory director Aug. 15.

- Tom Hunter, VP of California Laboratory 8000. Now Director of Energy and Environment Sector Center 6900, Tom succeeds John Crawford, who had headed the California division since 1987.

- Bob Eagan, VP of the new Materials, Electronics, and Component Research Div. 1000. He is currently Director of Defense Programs Research and Development Coordination Center 5600. The new Division 1000 will incorporate some centers now in Component Development and

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Robinson: Six principles guided the restructuring

"It's a work in progress," Paul Robinson says of the flurry of executive appointments and organizational restructuring announced last week. More changes will follow, but he says the initial big push to get functional changes to the Sandia divisions (vice presidencies) decided and established, and the VP slots filled, has now been completed.

Some additional changes at the center level and numerous other organizational issues were to be discussed at management's Fall Leadership Conference this week (we will report on those in the next issue), but at least the basic top-level structure for Sandia's new administration is now in place.

"Things are moving pretty fast," Paul acknowledged in a *Lab News* interview the day after the new appointments and changes were announced. He used the occasion to explain some of the

reasons and background for the wide-ranging decisions.

It had been just barely a month since Paul took office as Sandia's eleventh president and laboratory director. He and John Crawford, new executive vice president and deputy director, say the decisions came only after extensive discussions with their Sandia management team, and also with their predecessors, Al Narath and Jim Tegnalia.

"Having three slots open provided an opportunity," says Paul. "We had to decide whether to fill those slots as is or first make some changes to the organization." They decided on the latter. "It's a lot easier to make changes when you don't have all the boxes filled. There are always opportunities for improvement."

In these discussions six basic principles were established that

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Sandia National Laboratories

Labs 'atom tracker' sensor rides atoms to improve circuits, deter corrosion

By Neal Singer

Media and Employee Communications Dept. 12620



SUPER RADAR — Because of their ability to "see" through cloud cover and darkness, airborne Synthetic Aperture Radar (SAR) systems have been developed and used primarily for military applications — target acquisition, battlefield assessment, intelligence gathering for nonproliferation work, etc. But thanks to a new remote sensing program out of DOE's Office of Nonproliferation and National Security, SAR technology developed at Sandia is being put to a surprisingly different use — environmental monitoring and assessment. A Navy crew recently mounted this Labs SAR pod under the wing of a Navy research plane in preparation for a four-day environmental mission over south Florida. See story on page 8.

Saddle me my atom, please. For several years, scientists have been able to observe atoms at rest on a crystalline lattice — an invasion of their privacy, perhaps, but important in examining the structure and reliability of materials.

Now Sandia physicist Brian Swartzentruber of Surface & Interface Science Dept. 1114 can observe an atom as it hops about its business, by programming the needlelike sensor of a scanning tunneling microscope (STM) to ride the atom's high point, no matter where it moves.

Understanding an atom's travels at different temperatures, as well as its ultimate incorporation into surfaces, will be crucial in making smaller, faster, smarter electronic structures of the future, where the omission or misalignment of even a few atoms can wreck a circuit.

Understanding an atom's travels at different temperatures will be crucial in making smaller, faster, smarter electronic structures.

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This & That

New leaders for a new year — Most of you, I'm sure, heard or read the announcements last week that we'll have four new vice presidents when the new fiscal year starts next week: Bob Eagan (1000), Tom Hunter (8000), Gary Riser (10000), and Joan Woodard (6000). Dan Hartley (now VP-6000) is moving to become VP of Div. 4000, and several other VPs are taking on new assignments. Considering all this and the fact that President Paul Robinson and Executive VP John Crawford have been in their new positions for less than two months, altogether this is probably the biggest change of leadership in the Labs' history.

The changes for all of us, however, will go much beyond the new leaders themselves. Acting *Lab News* Editor Ken Frazier and I had the opportunity to chat with Paul Robinson last week as he was preparing for the annual Fall Leadership Forum that winds up today near Taos. Paul had some interesting things to say about the changes in leadership and how Sandia will do business in the future. Read all about it in Ken's story beginning on page one. Look for a report about the Fall Leadership Forum in our next issue.

* * *

A bit-o-budget news — It appeared at press time that federally funded groups will enter FY96 without a firm budget and may be required to operate on a continuing budget resolution for a while. But that's nothing new. Marijo Myers (10403) sent me a newsletter article pointing out that there have been 59 continuing resolutions since FY76. She also provided a chart showing that, if a continuing resolution were not passed, Sandia could continue operating for well over a month on available unencumbered funds. Bottom line: No need for panic.

The financial crystal ball is still foggy, but current indications are that Sandia will fare pretty well in FY96. After that, however, budgets could get tighter than the parking spaces in a new shopping mall. We'll keep in touch with the Sandia financial wizards and will report any real news as soon as possible.

* * *

Unusual use for Sandia yellow tape — *Lab News* photographer and production coordinator Mark Poulsen says he noticed on a recent visit to a technical site that Sandia's "screaming yellow" duct tape was being used for an unusual purpose: to seal the joints on some air ducts. Wow! I thought it was for taping up boxes when moving from one office to another — something many of us are quite experienced at. By the way, I'm betting there's a logical reason Sandia buys yellow duct tape (it's used at Sandia/California, too), but I don't know what it is. I hope someone will enlighten me and tell me whether this tape is manufactured just for Sandia, because I've never seen it elsewhere.

* * *

We're much faster than that! — Long ago, we decided not to use SNL normally as a short form for Sandia National Laboratories in the *Lab News*. For one reason only: SNL stands for Saturday Night Live, and we don't want to invite any comparisons. Several months ago, Tommie Gillespie (7258) sent me a document that causes me to further question the wisdom of using SNL. It was a copy of a letter from a federal official who got a little confused or distracted and referred to us several times as SNAIL. — Larry Perrine (845-8511, MS 0129)

White House endorses future, 'vitality' of the three nuclear weapons national labs

The White House Monday released the results of an Administration review of federal laboratories that provides strong support for the future of the three DOE nuclear weapons national labs — Lawrence Livermore, Los Alamos, and Sandia.

The President directed the review on May 4, 1994, and Monday announced an initial set of decisions based on it.

President Clinton's statement said the review determined that "the continued vitality of all three DOE nuclear weapons laboratories will be essential" for assuring confidence in the safety and reliability of the nuclear stockpile.

"I have concluded that these laboratories provide essential services to the nation in fundamental science, national security, environmental protection and cleanup, and industrial competitiveness," the President's statement said. He added that they have research equipment "among the finest in the world" and "extraordinary, and in many cases irreplaceable, talent."

"The three national weapons labs have been determined by the President to be essential — I repeat essential — to our national security mission," Energy Secretary Hazel O'Leary said in a press briefing about the President's statement. "For DOE this news finally sets to rest the question of the future of the three major weapons laboratories," O'Leary said. She noted that to some people the labs' necessity had been in question once the Cold War ended.

"I am very pleased," says Sandia President C. Paul Robinson, who listened to O'Leary's briefing by live audio feed. "It's good to get this down in black and white."

O'Leary said President Clinton's statement "puts down a marker regarding this Administration's support of the DOE laboratory system. . . . The President has provided a powerful validation of the importance of the DOE national laboratories to the future security, prosperity, and well-being of the nation. He has given me clear guidance on how the Department's laboratories should be managed to ensure delivery of the maximum benefits for future generations. We are acting on that guidance. . . ."

The White House statement took note of efforts to cut back the federal laboratory system and said that course would be resisted. "While it would be easy to destroy premier federal laboratories through severe budget cuts or senseless closures, that is not a path that this Administration will follow."

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LOCKHEED MARTIN

★ Congratulations

To Doug (2314) and Vicki Weiss, a son, Micaiah Michael, July 9.

To Elizabeth Holm (1831) and Gary McGovney (2314), a daughter, Margaret Carol, July 28.

To Wendy (8400) and Ed Dolstra (8642), a daughter, Cassidy Christine, July 31.

To Vicki (1517) and Dan (5121) Porter, a daughter, Alexandra Marie, Aug. 18.

To Laurie and Dennis (2752) Roach, a daughter, Taylor Kathryn, Sept. 4.

🏆 Fun & Games

Tennis — Results of the Post-USTA League Tennis Tournament played Sept. 8-10 at the Coronado Club tennis courts: Men's singles — Fred Zutavern (1248) defeated Frank Garcia, 6-2 and 6-3; Men's doubles — Ernie Melo and Wendell Archer (2251) defeated Alex Pimentel (1824) and Mike Sanchez, 6-4 and 7-6; Mixed doubles — Mike and Jill Sanchez defeated Terry Martinez (5900) and Bill Candelaria, 6-3 and 6-2.

For the record

Stephen Rosenthal (1241) should have been included as a recipient of the DOE Weapons Recognition of Excellence Award on page 7 of the Sept. 15 *Lab News*. Stephen's team was recognized for its contributions to "magnetically insulated transmission of high-power electromagnetic pulses technology."

Mark Rosenthal (5167) was mistakenly included with this team. Mark did receive an award, however — "for exceptional performance as a project leader in nuclear weapons system design."

Frank Bacon, who continues to work diligently for Dept. 2561, was inadvertently listed as retired. Frank's team was recognized "for outstanding support of the DOE Nuclear Weapon Complex Reconfiguration Planning Activity."

LEAP campaign keeps filling community needs

By Nancy Garcia

California Reporter

Cheryl Stevenson (8631) knows she makes a difference. Not long ago, she visited the home of three small children she'd watched over the weekend as a volunteer respite provider for the LEAP (Livermore Employees Assistance Plan) agency Parental Stress Services.

"I was astonished to see what home was for them," Cheryl recalls. "Their mother had recently moved from a homeless shelter to a motel. Home was one room, not much bigger than the average office here, with three very active children, no toys, no transportation, no telephone, nowhere nearby to let the children play, and no kitchen facilities to feed them — they relied mostly on local fast food within walking distance."

Although she works full time and attends college at night, Cheryl became trained and certified to provide respite care after visiting the Parental Stress Services in 1992 while serving on the LEAP agency selection committee.

In addition to her weekly monetary donation to LEAP, she uses her volunteer time to give parents who are struggling to keep their families together up to 48 hours of quiet relaxation, while providing the children a comfortable, calm, and stable setting.

'It can make a difference'

"If ever I wondered if my contributions to LEAP every week even mattered, I have since learned from this exposure that they do," she says. "It can make a difference, and I do."

Ron Brown (8272) also found that charitable activities through Sandia's Black Outreach Committee led to a volunteer commitment at a LEAP agency keyed to helping children. He now sits on the board of the Black Adoption Placement and Research Center, helping raise money for the agency to purchase a home of its own.

"I love it," he says. "I love working with the people and I love working with the chil-

Sandia California News

dren and trying to find ways to bring more money into the agency."

Longtime LEAP volunteer Cindy English (8007) also knows the time she donates to the Rape Crisis Team of the Tri-Valley Haven for Women fills a need. "Every three minutes, a woman becomes a victim of rape," Cindy says, adding, "One out of three women and one out of seven men will be the victim of some form of sexual abuse at some time in their lives — that's scary."

Five agencies added this year

Denise Koker (8209) also volunteers for a LEAP agency as well as serving on a LEAP committee. The agency that she was particularly motivated to participate in, Jobs for Tomorrow, has helped youth and low-income adults become self-supporting by providing practical guidance, encouragement, education, training and internships, and assistance with childcare and job hunting.

Both this agency and the Black Adoption Placement and Research Center are among five new agencies added to the LEAP campaign this year. The other three new agencies are:

- Awakening, which provides spiritual counsel to people coping with grief;
- Child Abuse Prevention Council, which coordinates agencies dealing with child abuse and community education; and

- Project Heritage, a facility for frail elderly.

The LEAP campaign runs Oct. 2-13, and has been an annual tradition of charitable giving at Sandia/California since 1969. It features a total of 33 agencies in the greater Bay Area in addition to three United Way chapters, the Tri-Valley Community Fund, and the Combined Health Appeal.

The 33 local agencies fall into seven broad categories within a portfolio that the committee has tried to make well-balanced, says LEAP chair Jane Ann Lamph (12120). (See "Here are the LEAP agencies for 1995.") Undesignated funds are not allocated to agencies whose budgets exceeded \$1 million. These larger LEAP agencies are still on the pledge card for employees to choose to designate to as an option, however.

To be considered for LEAP funding, the "local" agencies cannot be supported by an umbrella organization or parent agency.

Says Jane Ann, "All the agencies the LEAP committee considers are so deserving that part of our selection process is trying to look at how much of an impact Sandia contributions can make."

Keep the doors from closing

Adds co-chair Johnny Ellison (8615), "When you sit across the table and hear how much they do, how they manage their money, you want to reach for your wallet." Johnny was recently reminded of the need for individual charitable donations when he read in his local paper about state cuts to agencies that serve the developmentally disabled. The 10 percent cut in funding may force some of the smaller service providers to close their doors.

During the LEAP campaign, employees will receive information packets from department representatives who will contact everyone in their organizations. Employees may contribute to any combination of agencies. Each department also has a LEAP binder that contains information about each agency and describes the undesignated fund allocations. It also includes filled-in example pledge cards and other general information about the LEAP campaign.

A special LEAP bulletin board has also been established on cc:Mail where the most frequently asked questions about the campaign are answered and general information provided. There is also a LEAP telephone hotline (4-SHAR) to call to obtain information.

Working on LEAP this year with Jane Ann and Johnny are Karen Anderson (5300) and John Hinton (8112), agency evaluation co-chairs; Karinne Gordon (8535), communication/education chair; Bonnie Grant (8523) and Linda Helmick (8523), finance co-chairs; Joan Bersie (8800), community involvement chair; and Arlene Franke (8502), public affairs liaison. Others are Steve Ehle (5301), Cindy English (8007), Tim Berg (8111), Dick Isler (8271), Ron Brown (8272), Jeanne Michael (8305), Evelyn Bryson (8302), Edie Foster (8411), Karadene Jarzyna (8417), Glenda Mohrman (8417), Cec Phillips (8500), Mary O'Shea (8523), Cheryl



LEAP CO-CHAIR Johnny Ellison (8615) comforts a Heritage House client. Heritage House is a LEAP agency.

Stevenson (8631), Linda Troen (8641), Donna Davis (8641), Karen Lee (8713), Paul Nielan (8742), Fran Rupley (8745), John Trotten (8746), Diane Gomes (8910), and Christine Yang (8920).

Here are the LEAP agencies for 1995

The following local agencies have been chosen by the LEAP committee for support this year. They fall into the seven broad categories listed. The percentages indicate how much of the undesignated funds each agency will receive. Information on each organization is available by calling (510) 294-SHAR.

Homeless and Needy (29.5 percent)

Children's Emergency Council of Dublin, Family Crisis Center, Love Thy Neighbor, St. Mary's Interfaith Dining Room.

Family Counseling (19 percent)

Anthropos Foundation, Awakening, Black Adoption Placement and Research Center, Child Abuse Prevention Council, Hope Hospice, Parental Stress Service, Widows/Widowers Network.

Disabled Services (18.5 percent)

All Seasons Riding Academy for the Handicapped, Canine Companions for Independence, Guide Dogs for the Blind, Kaleidoscope Center, Tri-Cities Children's Center/Early Intervention Services, Twin Valley Learning Center, Valley Support Services.

Youth Education (17.5 percent)

American Indian Center, Boy Scouts of America-Mt. Diablo Council, Boy Scouts of America-S.F.B.A. Council, LAGATS (Livermore Association for Guiding and Teaching Students), Nursery School Scholarship Fund, Tri-Cities Children's Center/Pepper Tree School, School-Age Mothers, Student Education Loan Fund, Jobs for Tomorrow.

Troubled Youth (10.5 percent)

Buenas Vidas Youth Ranch, Horizons Youth and Family Services, M-2 Sponsors, Inc.

Elderly (4 percent)

Project Heritage, Friendship Center/Livermore Adult Day Support Center.

Other (1 percent)

Valley Humane Society.

Reorganization

(Continued from page 1)

Engineering Support Div. 2000 with parts of the current Research and Exploratory Technology Div. 1000. Current Div. 1000 VP Bert Westwood will have a special assignment involving Sandia's interactions with universities until his retirement in early 1996.

• Gary Riser, VP of Business Management and Chief Financial Officer Div. 10000. Now Deputy Chief Financial Officer, Gary succeeds

Paul Stanford, who will assume a new vice presidential position as Special Financial Adviser. Paul's new duties will include oversight of pension and savings plan investments and the Independent Audit function. He has also been requested to assist in the organization of Lockheed Martin's new Albuquerque-based Energy & Environment Sector, and he will work with DOE in helping implement best business practices involving its interface with Sandia and the other national laboratories.

Two other significant changes were also announced:

Gerry Yonas, currently VP of Systems Applications Div. 9000 and the Work for Others (WFO) sector, will become Vice President of a new Information Research and Technology Div. 9000.

Laboratory Development Div. 4000, to be headed by Dan Hartley, will assume a permanent role in Sandia's reengineering effort. Selected organizations throughout the Labs will be attached temporarily to Div. 4000 while they are undergoing reengineering. Chief Financial Officer Div. 10000 will be the first group attached to 4000 for that purpose, beginning

(Continued on page 6)

Biographies of new Sandia VPs Woodard, Hunter, Eagan, and Riser

Joan Woodard, new VP of Energy and Environment Division 6000, has been with Sandia since 1974, holding a number of increasingly responsible positions at both the New Mexico and California sites. Most recently, Joan was Director of Energy Components Center 2500, with responsibility for the development and test capabilities for neutron generators, switch tubes, explosive components, and batteries.

Joan served from 1990-95 as Director of Environmental Program Center 6600 and as Program Manager for Environmental Programs, which included both technology development and Sandia environmental operations. Previously, she was Manager of the Materials Characterization Department, Supervisor of the Materials and Processes Division, and Supervisor of the Solar Systems Analysis Division.

Joan earned a PhD in mechanical engineering from the University of California in Berkeley. She also holds an MS in engineering economic systems from Stanford University and a BS in applied math and computer science from the University of Missouri-Rolla.

She serves as Vice Chairman of the Board of Directors of The Lovelace Institutes and is a member of the Engineering Advisory Board at Oklahoma Christian University. She co-chaired the DOE Annual Review of Laboratory Programs for Women held in Albuquerque in 1994. Joan has authored more than 30 publications and invited presentations.



JOAN WOODARD

Tom Hunter, new VP of California Laboratory 8000, began his career with Sandia in 1967 as a Member of the Technical Staff working in advanced weapons system concepts. Most recently, he served since 1992 as Director of Energy and Environment Program Center 6900, where he had responsibility for coordination of sector programs across Sandia. He



TOM HUNTER

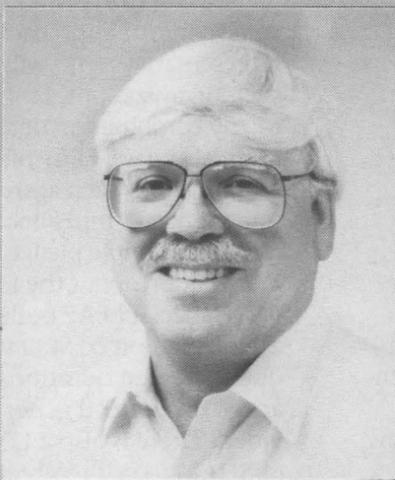
was Director of the Nuclear Waste Management and Transportation Department and Manager of the Nevada Nuclear Waste Storage Investigation Projects Department. He was also Supervisor of the Experimental Programs Division. In 1980 and 1983 Tom completed special assignments working with DOE on nuclear waste management issues.

Tom earned his PhD and MS degree in nuclear engineering at the University of Wisconsin. He also holds an MS degree in mechanical engineering from the University of New Mexico and a BS in ME from the University of Florida. Tom is the author of more than 60 symposium presentations, journal articles, and technical publications on nuclear-related issues.

Among his current professional involvements, he is Co-Chairman of the Industrial Partnership Program (IPP) for the Former Soviet Union and is a member of the Strategic Laboratory Council for DOE Environmental Restoration/Waste Management. He serves on the National Academy of Sciences/National Research Council Panel on Separations Technology and Transmutation. He is a lecturer at the MIT Reactor Safety summer program.

Bob Eagan, VP of the new Materials, Electronics, and Components Research Division 1000, assumes his new role after a brief period as Director of Defense Programs Research and Development Coordination Center 5600, a program management organization responsible for a broad spectrum of basic and applied research activities supporting the DOE Office of Defense Programs. The center works with DOE representatives to ensure the alignment of Sandia's research programs with the Science Based Stockpile Stewardship Program. Previously, Bob was Director of Physics, Chemistry, and Metrology Center 1100 and Director of Engineered Materials and Processes Core Competency. From 1993 through 1995, he chaired the Sandia Corporate Diversity Team. Bob served for four years beginning in 1988 as Director of the Materials and Process Sciences Directorate.

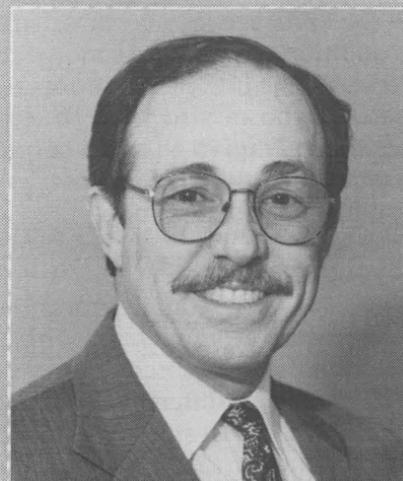
Bob earned a PhD and MS degree in ceramic engineering from the University of Illinois and a BS from the College of Ceramics, Alfred University, in Alfred, New York. He is a member of the National Materials



BOB EAGAN

Advisory Board and advisory panels for the materials program of Los Alamos National Laboratory and the NSF Minority Research Center of Excellence at UTEP. He was President of the American Ceramic Society and is a member of Keramos, an honorary fraternity of ceramic engineers.

Gary Riser, new VP of Business Management and Chief Financial Officer 10000, came to Sandia in 1993 as Deputy Chief Financial Officer 10000D. In that capacity, he had direct responsibility for assisting in the smooth integration of Sandians



GARY RISER

into all aspects of the Martin Marietta (Lockheed Martin) financial team. He is responsible for the indirect cost-reduction program, which has saved Sandia more than \$30 million and is projected to save more than \$60 million per year by 1998. Gary began his career as a marketing representative in IBM's Data Processing Division before moving to the Union Carbide Corp. Nuclear Division in Oak Ridge, Tenn. (now Martin Marietta Energy Systems, Inc.) as a development engineer. In 1971, Gary assumed the first of a number of increasingly responsible accounting positions with Union Carbide's Oak Ridge operations, eventually serving as Accounting Manager for several large departments. From 1984 through 1993, Gary served as Assistant Treasurer for Martin Marietta Energy Systems' Oak Ridge operations.

Gary has been a Certified Public Accountant since 1972 and earned his Certified Employee Benefits Specialist certification from the Wharton School, University of Pennsylvania. He holds a BS degree in industrial engineering from Penn State University and an MBA from Ohio State University. He is a member of the Financial Executives Institute and a member of the Society of Certified Employee Benefits Specialists.

Six principles

(Continued from page 1)

governed the restructuring decisions. Every Sandia technical division, Paul says, should have each of these six ingredients:

- Some program leadership responsibilities.
- Some business development responsibilities and accountabilities. Paul says when he was in industry he observed that about 80 percent of managers' time was spent on marketing — getting new business. "If we could get up to 30 percent at Sandia — getting the right work — we might really guarantee a strong future."

- Have some line responsibilities for performing technical work. Paul says program responsibilities can be aligned with skills within the same organization, and that might help push research to applications a little faster. "But we expect that the matrixing of work between our organizations across the Labs will still be our predominant work form. As I said in my first letter to employees [in the Aug. 18 *Lab News*], our real job is 'knitting together the technical wizards,' and that will be accomplished through much, much greater teaming between divisions."

- Some pioneering research and development work that they can "absolutely take the greatest pride in and feel it is world class in every way."

- Some interactions with industry. "This theme has just aligned too well for us to give it up now," Paul says. "Our future in the weapons program depends on being able to get 90 percent of components in the future from industrial suppliers." Paul says the recent House subcommittee hearings John and Al testified at (see Sept. 15 *Lab News*) was somewhat encouraging in getting across the view that "there is something very fundamental the US as a nation needs to do with its government research to have some tie to its industrial, commercial activities."

- A shared commitment to develop solutions to corporate problems. "This one was added only recently," Paul says. "Every division shares an ownership of corporate problems."

"Those are the factors that have been really high on the screen for us in trying to do this reorganization," Paul says.

A variety of other considerations also influenced the decisions, Paul says.

Combining simulation and testing

Sandia is making a shift to do extensive computer simulations before testing. "There is a real revolution about simulation versus testing that is independent of nuclear testing, where it has gotten the most attention," Paul says. He notes that Sandia has long pioneered in testing all kinds of systems and in the past decade it has brought parallel processing and other advanced computational simulation methods to the forefront. Now tests will be used increasingly to benchmark computer codes.

As a result of the increasingly intimate relationship between simulation and testing, Paul says, it was decided to move Sandia's testing organizations and its advanced computational capabilities for simulations into a single division — Gerry Yonas's new Information Research and Technology Division. This will, says Paul, "couple indelibly simulation and tests. I think that's going to be a very powerful relationship."

Gerry's new division will likewise include Sandia's research capabilities for "information warfare," both offensive and defensive. The emphasis will be applications not just on the battlefield but in protecting information networks, both defense and civilian, such as banking.

Speeding applications from research

Bob Eagan's new Materials, Electronics, and Components Div. 1000 is likewise a result of an effort to bring closer together two related

The reengineering 'auto repair garage'

Paul Robinson recalls that in his open letter to Sandians upon being named Sandia's new President, published in the Aug. 18 *Lab News*, he said he had "never witnessed internal processes as complex, unwieldy, or as taxing as ours."

He reiterated that criticism in an interview last week. "We've built in a lot of complicated processes. I am really concerned about this whole area. We have got to simplify. We have to make some major changes."

As a result Paul is excited by what he calls the "best idea" — certainly the most dramatic one — to come out so far in the reorganization discussions.

Laboratory Development Div. 4000, to be headed by Dan Hartley, will be the focus for Sandia's urgent efforts to reengineer overly complicated bureaucratic processes. Paul reminds us that Sandia's original commitment to reengineering, in the spring of 1994, was made to simplify Sandia's business practices before automating them on the new information network.

Here's how it will be done:

Organizations will temporarily become part of Div. 4000 to undergo reengineering, then leave after they have completed the process. The process will make sure, for example, that the organization has instituted greatly simplified business practices, and that these practices can be effectively used in the Labs' information system. The division's organization chart will periodically

change as different groups move in for reengineering.

John Cummings of Lab Development likens the process to driving an ailing auto into a garage, putting it on the hoist and leaving it there until technicians have figured out how best to fix it, and then driving it out again.

As Paul says, "We'll bring the car in, hand everybody in it a wrench, and have them, along with the reengineering staff, work on it until it hums. Then we'll move it out and move another in."

By mutual decision, the first organization to undergo this new process will be Business Management and Chief Financial Officer Div. 10000. Gary Riser, the division's new VP, has agreed to have his organization be the first to try out this new reengineering process, so it will soon move into Div. 4000.

"Massive changes are needed to simplify our financial management functions, including the elimination of individual sets of books in line organizations," Paul says. "To do this we need someone who is committed to these changes and who will ensure their continued effectiveness for many years to come. Gary has had direct experience in the distributed, customer-responsive CFO function that we seek to achieve. He has a fresh perspective and has already proven himself capable of taking on these major responsibilities."

areas — in this case, two of Sandia's main research thrusts, materials and electronics — with one of the most important areas of applications, components. This is seen as an opportunity to push research into applications much faster. There is a remarkable vision behind it: "We want to be able to do applications and research contemporaneously," says Paul, "so if we have a breakthrough, it gets applied the same week."

He says in the past two years of succession planning, "Bob Eagan was high on the list for a vice presidency, and he was seen as an ideal match for the task of bringing materials, microelectronics, and components research together."

A core weapons team

Another major change is in the weapons program. "Roger Hagenruber has tremendous responsibilities," says Paul. The concept of teaming in the weapons program is not new, Paul notes, but the new structure creates a Core Weapons Team in which Roger's Defense Programs Div. 5000, Heinz Schmidt's Weapons Systems Div. 2000, and Gary Beeler's Production Div. 14000 will be tightly coupled, with Heinz and Gary reporting programmatically to Roger while having full responsibilities for their own divisions.

Going one-on-one with customers

Still another change distributes Sandia's Work for Others responsibilities, until now formally a sector overseen by Gerry Yonas, across the labs. The goal here, Paul says, is to dramatically increase Sandia's focus on each customer's needs.

"Essentially all VPs will have a lead role for customers from agencies other than DOE," says Paul. "We intend to extend this customer focus to one-on-one coverage," he says. "We will have a list of all our customers with a Sandian assigned by name to each one. That individual Sandian will focus on

that customer and have an obligation of making frequent contacts and listening to that customer — that's your customer! And when you talk to that customer, you will speak for all of Sandia."

Energy and Environment

Energy and Environment Div. 6000 is "functioning very well," says Paul, but it is facing challenges in funding. With Dan Hartley's departure to take over Div. 4000, "we needed someone very skilled and experienced who could step into that position and not miss a beat," Paul says. "Joan Woodard is that person. Joan's credentials and experience make her ideal for this role," says Paul. "She has consistently shown up as a likely successor [to Dan] in the past two years of succession planning."

The California site

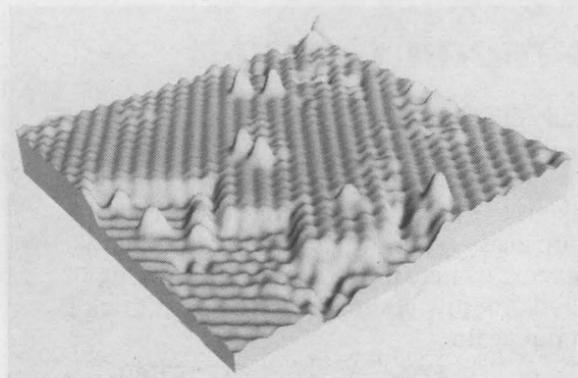
California Laboratory Div. 8000, Sandia's portal to the high-tech resources on the West Coast, "is very special to us," Paul says.

"It has some inevitable isolation [from Sandia headquarters in New Mexico], and so it needs a very strong leader. Its head must be conversant with both the weapons program and the energy and environment program. We also need someone who is a very effective marketer. Tom Hunter is just the person for that."

"Tom has a diversity of experienced, balanced leadership skills, and strong marketing skills," says Paul. "He is considered to be among the best teaming managers at Sandia, possibly in the entire weapons complex. He has been consistently ranked as a VP successor for several Sandia jobs during the succession planning process."

"Tom and Joan [Woodard] currently work together as directors in the Energy and Environment Sector, and I expect this teamwork to continue at the vice presidential level as they continue to develop our emerging emphasis on environmental science and technology."

— Ken Frazier



MICROVIEW — Scanning tunneling microscope view of atoms in a silicon lattice, 100 angstroms on a side. Bumps on surface are deposited atoms.

Atom tracker

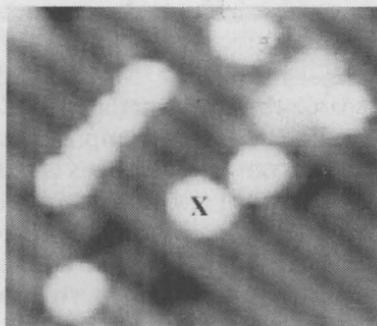
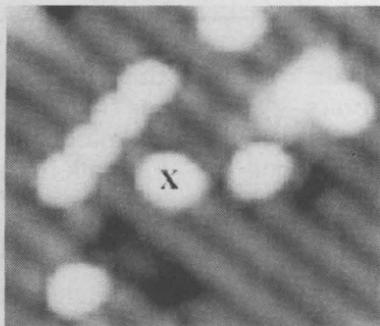
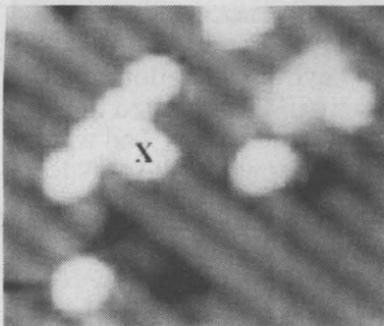
(Continued from page 1)

cuit and ruin a chip.

Brian's electronic technique uses lateral feedback from a surface's atomic topography to supplement the vertical feedback ordinarily provided by a scanning tunneling microscope. The additional information tells the perched sensor if it's sliding down the sloping sides of a moving atom and provides directional guidance as to which way for the sensor to move to regain the high ground.

Behavior of restless atoms

The technique is sensitive enough to see a pair of bonded atoms change their configuration at a single lattice point — a motion Brian describes as "a kind of twitch."



SANDIA ATOM TRACKER can lock on to a silicon dimer — two joined atoms — as it moves along a crystalline row of in-place silicon atoms. (Moving dimer is marked with an "X" in this sequence of images.)

The technique also should permit researchers interested in electrochemical processes to watch how corrosion takes place — an atom at a time.

"It will enable people to measure how often atoms attach to and detach from different parts of a surface at various temperatures — how much energy it takes to pull an atom off or stick it on," Brian says. "We'll be better able to create conditions so that an atom attaches to a desirable place on the surface rather than just clumping to another added-on atom. We'll also be able to quantify conditions in which an atom is more reluctant to leave a surface on which we want it to remain."

How scanner gets its speed

Brian's scanner achieves its speed — about a thousand times faster than the usual STM imaging time interval — by declining to scan the entire image field. Instead, it sticks to a selected atom. In a short video sequence, a moving dot of red light demonstrates the path taken by an atom as it hops along over a background STM image. The background, completely scanned, shows white, bump-like atoms in their originally observed locations on the surface.

The technique can work at elevated temperatures where some materials just begin to become unstable, and thus potentially can be used to watch corrosion and crystal growth — the leave-taking or adding of an atom — as it occurs.

Earlier attempts at using an STM to image moving atoms were successful only when the atoms were moving much more slowly, or on a time scale where the atoms took several hops between measurement. The resultant images



WATCHING THEM MOVE — Brian Swartzentruber (1114) at the scanning tunneling microscope he modified to track individual atoms in rapid motion.

were similar to time-sequenced slides.

Should an already-embedded atom be displaced by the moving atom to wander in its stead, the sensor switches "horses" and follows the evicted atom. "Whether by hopping or by exchanging positions, mass still is moved from one place to another," Brian says. (The phenomenon of atom exchange on smooth surfaces was first demonstrated by Sandia researchers Gary Kellogg and Peter Feibelman, both also in Dept. 1114, in 1991.)

Welcome

New Mexico — Patrick Benavidez (2522), Felicia Duran (6332), Lucinda Lindsey (9432), Salvador Rodriguez (6421), Peggy Underwood (12111), Steven Yazzie (2276)

New Jersey — Julia Phillips (1800)

Reorganization

(Continued from page 4)

Oct. 1.

In the realm of Defense Programs, a "Core Weapons Team" will be created, headed by Roger Hagengruber, Vice President, Defense Programs 5000, and also including Heinz Schmitt, Vice President of Component Development and Engineering Support Div. 2000, and Gary Beeler, Vice President of Production Div. 14000.

New organizational changes will leave Sandia with two major business sectors—Defense, and Energy and Environment. The Work for Others sector will be disbanded, and its functions will be spread across all Sandia divisions. Dissolution of the WFO organization is expected to increase Sandia's customer focus by contributing to what Paul Robinson calls "person to person coverage," in which a single individual will focus on each customer.

In still one more personnel change, Ron Detry, Director of Center for Engineering Services 8200 in California, will return to New Mexico in November to become Director of Executive Staff 12100, succeeding Virgil Dugan, who is becoming Director of the new Laboratory Effectiveness Program Management Center 4300. But first Ron will head for a

short time a newly organized Integrated Manufacturing Systems Center 8200, a new entity focused on manufacturing technologies.

The new Information Research and Technology Div. 9000, to be headed by Gerry Yonas, will incorporate two Sandia core competencies — Information and Computation, and Engineering Analysis — and will also take in distributed simulation and test functions, the Accelerated Super Computing Initiative, subsystem and system validation and certification, advanced information warfare systems, and information surety.

It is expected to include the following centers: Engineering Analysis (Paul Hommert), Advanced Computing (Ed Barsis), Information Systems Engineering (Sam Varnado), Information-Driven Machines (Pat Eicker), Simulation and Effects (Jim Powell), Environmental Test and Simulation (Kathleen McCaughey), System Analysis and Simulation (Joe Polito), and Pulsed Power (Don Cook).

The new Materials, Electronics, and Components Research Div. 1000, under Bob Eagan, will also incorporate two of Sandia's core competencies — Materials Science and Microelectronics — as well as Department of Defense research assignments and two "backbone" areas of Defense Programs that Roger and Bob are currently developing. Six current organizations will be in the group: Physical Chemistry Sciences (Peter Mattern), Materials

and Processes (Al Romig), Microelectronics (Paul Peercy's successor), Manufacturing Technologies (Jim Searcy), Electronic Components (Ray Bair), and Weapons Components and Explosives (Joan Woodard's successor).

Additional organizational changes at the director level and below are expected as the process continues. They were expected to be discussed at the Fall Leadership Forum.

— Nigel Hey, Larry Perrine (both 12620), and Ken Frazier (12622) collaborated on this article.

Winter weather work delay? Here's how to find out

Sandia/New Mexico seldom shuts down or alters its normal work schedule because of snow or other bad weather. Employees should not assume that Sandia work hours have been altered just because they hear other groups have done so, including Kirtland Air Force Base.

If Sandia officials decide to alter normal work hours, a Labs spokesperson will notify primary Albuquerque radio and television stations as early as possible. Employees may also dial Sandia Line on 845-6789, punch 9 for the quick dial code, then enter 9999#. If work hours are altered, there will be a message to that effect.

Sandia workforce realignment plan approved

Employee briefings start next week in California and New Mexico

By Kathy Kuhlmann

Media Relations Dept. 12621

As Sandia's mission changes, the skill mixes required in many organizations throughout the Labs are changing, and Sandia now has a plan to ensure a continuing balance between employee skills and available work.

Several years in the making, the workforce realignment plan will be explained to Sandia/New Mexico employees in a series of two-hour meetings; the first is next Friday, Oct. 6, 9-11 a.m. in the Technology Transfer Center (Bldg. 825). See box for other scheduled meetings. The new plan will be discussed with Sandia/California employees in dialogue sessions beginning Tuesday, Oct. 3, and employees there have been notified of their scheduled sessions.

Not a 'layoff plan'

Employees should not view the realignment plan as a layoff plan, says Don Blanton, Director of Human Resources Customer Service Center 3500. "The realignment process that was developed acknowledges that, as a company, our mission is changing," he says. "Realignment doesn't necessarily mean downsizing but, rather, directs our focus to the skills needed for our future mission and the skills surplus we may have, and then gives us a systematic way to realign them. It attempts to utilize employees' skills to their fullest by placing employees where those skills are most needed."

As noted in several other stories in this issue (see page one), several Labs divisions are getting new vice presidents and are being restructured to gain efficiencies and to better serve customers. This restructuring reinforces the need for the new realignment plan, according to Sandia President and Labs Director C. Paul Robinson. "Our challenge today is to leverage the world-class expertise that resides in our people, while at the same time becoming more efficient in our operations."

Although it isn't a layoff plan, the realignment plan reiterates that Sandia has a policy for terminating surplus employees if the need arises (Sandia Laboratories Policy 4004, "Termination of Employment").

As discussed in previous *Lab News* articles, Sandia has established a goal of reducing the number of full-time equivalent (FTE) employees to 8,200 by the end of FY96. These employee levels were set based on anticipated affordability, with the expectation that they could be reached through attrition.

How the new process works

The workforce realignment policy received final approval last month, after each Sandia vice president approved it. Employees who want to review it can do so by accessing Sandia's Internal Web. It can be found in the "SNL Policy" category, under Corporate Policies, Sandia Laboratories Policies (SLP), 4000 Series. It is SLP 4100, *Workforce Realignment*. The following summarizes the process:

Division staffing plans and analyses done by Human Resources Div. 3000 provide initial data for moving toward the desired workforce by identifying skills needs (staffing requisitions as well as skills surpluses; more about this in a future issue).

This data assists in identifying both realignment and hiring opportunities at the Labs. Division staffing plans also include profiles of current contractor work.

Before submitting their staffing plans, each division addresses and attempts to resolve any workforce disparities. Attempts are made to match surplus job skills with an area having need for those skills.

Realignment Board — Formal notice. All skills identified as no longer required (impacted) in the division staffing plans will go on a list to a Realignment Board. Membership of this board

Employee meetings scheduled

Human Resources staff will be providing additional information to Sandia/New Mexico employees on the realignment process and will discuss the Labs' new requisition-based approach to staffing at the following sessions:

Oct. 6	9-11 a.m.	Technology Transfer Center
Oct. 11	9-11 a.m.	Coronado Club, Zia Room
	1-3 p.m.	Coronado Club, Zia Room
Oct. 12	8-10 a.m.	Bldg. 962 auditorium (Area 4)
	1-3 p.m.	Bldg. 962 auditorium (Area 4)

The California site is holding discussion sessions for employees beginning Tuesday, Oct. 3. The schedule has been announced to employees there in the site's daily newsletter.

will consist of executive management and those vice presidents with work pertinent to the areas being reviewed. Human Resources VP Charlie Emery (3000) will chair the board.

"The board has authority and responsibility to work to resolve any workforce imbalances brought before it," says Charlie, "and by our composition, we will be able to work across division lines to identify potential opportunities where surplus skills might be utilized. The board also would be able to consider any other strategies for resolving the issues, based upon the nature and size of the imbalance."

"The basic tenet of this plan is that nowhere in the whole process is it solely the responsibility of one party or one division to remedy a situation. Employees and the Sandia organization must both work to resolve any disparate situations."

Voluntary Action Period. At some point following convening of the Realignment Board (assuming the board has authorized proceeding through the process), managers with staffing surpluses in their departments will notify all employees in impacted peer groups. A 60-day voluntary action period then starts, during which employees can bid on other jobs, consider work elsewhere, or elect to remain in that department.

If the staffing level is not reduced by the required number at the end of the 60 days, specific individuals will be informed that they are "surplus." Managers will make this determination based on a number of criteria such as job knowledge, performance, and transferability of skills. A defined process is being developed by Human Resources to assist managers in these decisions.

Review Board. The manager then will bring a final list of names before a Review Board, chaired by Don Blanton and composed of director-level members. Don says the purpose of this board is to "ensure fairness and consistency and that the right approaches have been taken in terms of placing people. This is a checkpoint to make certain that the process has worked according to policy."

Involuntary Action. Once the names of surplus employees have been reviewed by the Review Board, a 60-day period of involuntary action begins, during which specific individuals will be identified as surplus. If no work is available or if the employee has not accepted work by the end of this period, the employee's name is placed on a list that is reviewed by the Realignment Board prior to final action. This action could include termination.

The three reviews built into the realignment process are to make certain that it is administered fairly and equitably, Don says.

The *Lab News* will have more about the new plan, including answers to some employee questions, in an upcoming issue.



CSU OPEN HOUSE — Building 802 Customer Service Unit (CSU) staff member Alan Malmberg (13421) demonstrates software to Dick Rogers (10504) and Julia Calderon (10506) standing behind him. About 250 visitors attended a four-day Building 802 CSU Open House. "CSUs provide all types of desktop support," says Kathy Marder (13421), 802 CSU Project Leader. "They update software and take care of problems from 'desktop to wall.'" Sandia/New Mexico has ten CSUs and Sandia/California has one. To locate your own CSU, call either the Corporate Computing Help Desk on 845-2243 or select from the Internal Web home page: Services, Customer Service Unit, and your area and building number. For more information, call CSU department managers George Connor (13421) on 845-8003, Bill Swartz (13411) on 844-2237, or Pete Warner (13422) on 845-8736.

Airborne sensor pods may help monitor battlefields, image erosion, map marshlands, and more

Sandia SAR pod reveals ground details through cloud cover, darkness

By John German

Lab News Staff

The "S" in SAR doesn't stand for "Super," but it could.

Synthetic Aperture Radar can't leap tall buildings, nor is it more powerful than a locomotive. But it does, on occasion, lance through the sky scanning the terrain with its X-ray vision. You might even say it's made a career of helping fight bad guys.

Typically those bad guys are enemies of the US military, or they are foreign leaders believed

to be concealing clandestine weapons programs within their borders. The US pitted SAR against one such "villain" during the Persian Gulf War, using it for targeting and battlefield assessment. Because of SAR's ability to see through cloud cover or darkness, the technology has been used for years to gather nuclear-proliferation intelligence over Libya, Iraq, and other wanna-be nuclear nations as well.

"Most of the effective fighting and intelligence gathering during Desert Storm was done at night," says Bob Huelskamp (9127). "If you have SAR and the enemy doesn't, you can see him and he can't see you."

Although SAR wasn't invented at Sandia, SAR systems developed here are helping the US and its allies keep a wary eye on such countries and their militaries, and are helping verify that nations involved in arms control treaties are complying with those bargains. Labs SAR systems are being developed for use in Open Skies Treaty verification work, for instance, to help reduce regional tensions in Europe and the former Soviet Union (*Lab News*, Feb. 5, 1993).

Electronic snapshots

Recently a Sandia SAR system was put to an astonishingly different use — it went to south Florida on a four-day mission that included 70 passes over some 40 "targets." Most of the targets weren't targets in the military sense of the word, but points of *environmental* interest to five federal and state agencies supporting the mission.

The mission's objective was to snap hundreds of images of coastlines, wetlands, coral reefs, sandbars, and other terrain features in southern Florida and off the Florida coast. (See "The AMPS mission over Florida" below.) The Sandia SAR system was one of two electronic bundles sent aloft during the mission under the wings of a Navy P-3 Orion patrol aircraft supplied by the Naval Research Laboratory.

The two gleaming-white sensor



HERE'S LOOKING AT YOU — Sam Bolin of Optical Systems and Image Processing Dept. 9136 adjusts system components inside Sandia's Synthetic Aperture Radar (SAR) pod in a New Mexico lab prior to the recent Florida mission. Pod One, as the 16-ft-long SAR pod is called, contains the radar equipment, video camera, timing and navigation devices, and all necessary data processing, data storage, and power supply equipment.

The AMPS mission over Florida

The recent AMPS mission over Florida included 70 passes over 40 "targets" identified by six customers. Roughly two dozen of the passes involved use of Sandia's Synthetic Aperture Radar (SAR) pod, and the remaining passes involved the Remote Sensing Lab's Multi-Sensor Imaging (MSI) Pod. Here is a rundown of the customers and their interests:

National Oceanographic and Atmospheric Administration, Florida Department of the Environment, and Florida Keys Marine Sanctuary — This interagency group is responsible for monitoring the health of a variety of marine sanctuaries throughout the Florida keys. The AMPS team imaged numerous coral reefs, beaches, marshes, and wildlife sanctuaries to help the group better understand changes within and around these sanctuaries.

US Army Corps of Engineers — Along with the Florida Department of the Environment and other agencies, the Corps is involved in monitoring and maintaining wetland areas in Florida. The AMPS team conducted overflights of selected areas in the Everglades to help the Corps analyze the impact of farming and industrial and urban growth on the area.

Naval Research Laboratory — NRL is interested in whether AMPS sensors can be used for amphibious assault applications.

Office of Naval Research — ONR is interested in three-dimensional mapping, also for amphibious assault applications, and asked the AMPS team to image a test area on the Florida coastline. The team used multiple passes with the SAR pod to generate slightly different images of the area. The images will be combined to generate the desired 3-D images.

How SAR works

SAR-type radar emits pulses of short-wavelength (but longer-than-visible-wavelength) electromagnetic (EM) energy that, unlike conventional radar wavelengths, can penetrate cloud cover, precipitation, and in some cases a few inches of soil.

SAR then reads successive EM echoes, or backscattering, reflected by ground features. Because SAR doesn't rely on visible light (like most radars it self-illuminates the target area), it can collect image data even in darkness.

SAR produces very high resolution images by taking advantage of an aircraft's forward motion. In much the same way as a larger lens or aperture on a telescope or camera collects and focuses more light (and thus produces a more detailed image), a larger antenna on a radar will produce more data and thus a better image.

But to achieve such high resolutions, you'd need an antenna so large it wouldn't be practical for flight, particularly over a battlefield, says Bob Huelskamp (9127). By taking millions of readings over a great distance, and by correlating those readings into a single image, SAR can simulate an antenna several hundred meters long.

packages — each a 16-ft-long Navy-standard, wing-mounted cargo "pod" modified to carry various imaging sensors and data-processors — are part of a DOE research effort to develop better ground-surveying technologies for defense and nonproliferation work, and to study ways to process and correlate data gathered by a menagerie of electronic devices.

Called the Airborne Multisensor Pod System (AMPS) program, it is funded through DOE's Office of Nonproliferation and National Security.

Altogether the AMPS remote sensing arsenal includes three pods, each with its own family of ground-imaging sensors: the Sandia SAR pod, the Multi-Sensor Imaging (MSI) pod developed at DOE's Remote Sensing Laboratory, and the Effluent Species Identification (ESI) pod now being developed at Lawrence Livermore National Lab. (See "The AMPS airborne sensor arsenal" on next page.)

High-resolution radar

Sandia's primary contribution to the program, "Pod One" as the SAR pod is called, can provide high-resolution ground images "even during a rainstorm or in the middle of the night," says Bob, Sandia's AMPS project leader.

SAR-type radar takes advantage of an aircraft's forward motion to "synthesize" a large antenna array, resulting in very high resolution ground images compared to those provided by conventional radar. It also uses short-wavelength electromagnetic signals to see through clouds and precipitation. (See "How SAR works" above.)

Each image produced by SAR is a mosaic of millions of data points indexed precisely to times and locations of readings. In addition to the radar equipment, Pod One houses a Global

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Positioning System timing and navigation device and all necessary data-processing, data-storage, and power-supply equipment. On-board motion compensation software also helps correct errant data resulting from unexpected motion of the plane, a process not unlike "focusing" the images, he says.

SAR images can be formed in-flight and used immediately. With each image taking from 1 to 20 megabytes of data space, and the SAR sometimes shooting a thousand image pixels a second, "you can imagine the data processing that requires," he says.

A multilab team is investigating ways to make the AMPS pods work together to filter out unneeded data, which would reduce the amount of in-flight data processing. For example, sensors in the imaging pod might be taught to recognize a potential target area; then the SAR pod could be used to scan the area more closely. "That allows us to spend our data processing resources on the important targets," he says.

After a mission, data from the pods can also be integrated, or "fused," to provide a wealth of new information.

Ultimately, the program's goal is to use combinations of remote sensors to glean enough information to instantly select a military target, assess battlefield damage, confirm treaty compliance, or accurately survey terrain features for any number of nonmilitary applications, all from an airborne "platform."

Although Sandia's primary contribution to AMPS is developing and operating the SAR pod and processing SAR images, the Labs also coordinates flight plans for AMPS missions, provides computerized pilot-guidance systems, and develops the motion-compensation algorithms.

Helping the average farmer

Bob says six previous AMPS test missions to date, including the latest one over Florida, are revealing an abundance of promising civilian applications for a technology developed primarily for military use.

As in missions past, he says, raw data and images from the mission were made available to a host of researchers throughout the DOE complex and elsewhere.

"We use our home page on the Internet [<http://www.amps.gov/>] to get the word out to researchers internationally," he says. "Although

"We're looking at numerous applications outside the Pentagon now."

The AMPS airborne sensor arsenal

In addition to the Sandia SAR pod, the AMPS remote-sensing arsenal comprises two other multisensor pods, each with its own family of sensors.

Pod Two, called the Multi-Sensor Imaging (MSI) Pod, houses a suite of off-the-shelf imagers. Developed at DOE's Remote Sensing Lab in Las Vegas, Nev., Pod Two also participated in the recent Florida flights.

A third AMPS pod, the Effluent Species Identification Pod (developed at Lawrence Livermore National Laboratory with the help of Pacific Northwest Laboratory and the Savannah River Technology Center), is now being flight certified.

Sandia News Briefs

Sandia conducts science and math conference for 500 teachers

More than 500 New Mexico teachers of grades K-8 participated last week in the third annual Fall Teaching Event sponsored by Sandia's K-12 Education Outreach Dept. 3613. The two-day event gave teachers a chance to learn new and better ways to present science and math subjects in the classroom. Participants were able to enroll in up to six workshops from a total of 92 being offered over the two days. The majority of workshops were presented by teachers who have participated in Sandia's SCIAD (Science Adviser), TOPS (Teacher Opportunities to Promote Science), or GANAS (Gaining Access to Natural Abilities in Science) institutes or programs. Workshops were also presented by suppliers of hands-on science and math curriculum materials and by other science-oriented organizations, including the Albuquerque Children's Museum, the Lovelace Inhalation Toxicology and Research Institute, and the Las Cruces Museum of Natural History.

John Taylor authors new book about New Mexico Civil War battle

University of New Mexico Press has issued *Bloody Valverde: A Civil War Battle on the Rio Grande*, a new 200-page book penned by John Taylor, Manager of National Security Policy and Planning Dept. 5006. John, a self-described amateur historian who was featured in the Dec. 16, 1994, *Lab News* for his work researching the history of the century-old Catholic church in Peralta, N.M., says he believes *Bloody Valverde* is the most complete documentation of the Battle of Valverde, one of two significant Civil War battles to take place in New Mexico. Dave Cunnington, a contractor in Center Business Dept. 9299, provided the unique battle graphics for the hardback edition (\$29.95). John will participate in a book signing at Bookstar (2201 Louisiana Blvd. NE) on Saturday, Oct. 7, 2-3 p.m.

Two Sandians earn blue ribbons in New Mexico State Fair photo competition

Two Sandia/New Mexico employees won top honors in this year's New Mexico State Fair photo competition. Diana Helgesen of Technical Support and Remote Ranges Dept. 2732 earned a first place ribbon in the Commercial/Industrial category for professional photographers for her photo titled "Ghost Rider." The photo is of a scale-model stealth fighter in a cloud-like swirl, with shades of purple, blue, red, and green. To get the "swirl effect," Diana says she placed the model on a bench top inside a plastic tube, rotated the tube, and lighted the scene with alternating colored gels while taking a long exposure. Another of Diana's photos, a black and white mountain scene titled "Seclusion," also won an honorable mention in the Professional/Scenics category.

Glenn Hohnstreiter, Manager of Transportation Systems Dept. 6642, won a first place ribbon in the Professional/Scenics category for his photo of a shadowed sand dune in black, brown, and orange. Titled "Dunes at Dawn," that photo also won best of show in the overall Professional category. Another of his shots, a colorful sunset-over-dunes scene titled "Twilight Dunes," earned him an honorable mention. He also won best of show for professionals in last year's State Fair contest.

Retiree Vincent Cordova recognized by Disabled American Veterans

Vincent Cordova, who retired from Sandia in 1985, was recently recognized by the Disabled American Veterans (DAV) National Service and Legislative Headquarters for attaining "more than 4,000 DAV Transportation Network miles while driving disabled veterans to VA medical facilities for needed care." Vincent has been a VA volunteer for 10 years and received a DAV lapel pin for his work.

Send potential Sandia News Briefs to Lab News, Dept. 12622, MS 0413, fax 844-0645.

mission six is only three weeks old, I'm getting calls from industry, the Department of Agriculture, the US Geological Survey, and others."

Agriculture already has used SAR images of ground moisture to determine the health of crops and foliage and in understanding moisture patterns and erosion in soil. "Because of its frequency range, the AMPS SAR is good at imaging moisture content," he says. "Agriculture is interested in using SAR to help the average farmer."

The Environmental Protection Agency also wants to use remote sensing data for wetland

maintenance and land-development activities. A variety of agencies are interested in three-dimensional mapping as well.

Sandia's AMPS team is working on a new double-antenna configuration, called Interferometric SAR (IFSAR), that takes advantage of a few inches of antenna separation to produce high-resolution three-dimensional contour maps. IFSAR is expected to revolutionize SAR imaging capabilities and may lead to a host of new civilian applications.

"We're looking at numerous applications outside the Pentagon now," says Bob. "We think airborne remote sensing and SAR can help in land-use planning, wetlands analysis, coastal erosion studies, and more, as far as our imaginations and our needs carry us."

"... you can imagine the data processing that requires."

Sandia's AMPS team

The Airborne Multisensor Pod System (AMPS) program has, over the life of the program, involved more than 50 Sandians, primarily from the following organizations: Electronic Fuzing and Sensors Dept. 9127; Optical Systems and Image Processing Dept. 9136; Aided Navigation and Remote Sensing Systems Dept. 9131; Radar Analysis Dept. 2344; Instrumentation Development Dept. 2663; SARs Dept. 2345; Guidance and Control Dept. I 2334; and Power Electronics and Custom Controllers Dept. 2314.

Employee death

Donald Ellis of Business Management and Chief Financial Officer Div. 10000 died Sept. 17 after a long illness.

He was 63 years old.

Don was an administrative assistant and had been at Sandia since 1988.

He is survived by his wife, Jo Ellis (2674).

Sympathy

To Steve (5807) and Marcie (6641) Jordan on the death of his father and her father-in-law in Blackfoot, Idaho, Aug. 30.

Disability Awareness Committee offers Sandians 'a new perspective'

Mobility, communications, and building evacuation challenges issued to able-bodied Sandians

Sandia's Disability Awareness Committee (DAC) is challenging able-bodied Sandians to participate in "A Day of Challenge," Tuesday, Oct. 3, to experience — for just a few hours — the difficulties that disabled Sandians encounter every day.

"October is National Disability Awareness Month, and DAC has planned activities



throughout the month to let disabled employees know what's available at Sandia to make them more effective contributors and to allow able-bodied Sandians

to get a new perspective on obstacles routinely faced by their co-workers," says Disability Awareness Committee co-chair Debbie Faculjak of Command & Control Software Dept. 2615.

A Day of Challenge will be the Disability Awareness Committee's kickoff event. The day will begin at 8:30 a.m. with a rally at the Technical Library (Bldg. 804) courtyard. Two Sandia vice presidents — Charles Emery (3000) and Bert Westwood (1000) — will give opening comments. At about 9:25, Sandia Director C. Paul Robinson will receive a call from the Bldg. 804 courtyard via Relay New Mexico, a service that helps people with hearing and speech disabilities make telephone calls.

"Three major challenges will be issued throughout the day, intended for able-bodied people to understand the challenges facing persons with disabilities," says Day of Challenge coordinator Steve Yesner (7734). First, Steve encourages center directors, managers, and team supervisors to participate in a set of mobility challenges. During this event, 15 to 20 wheelchairs will be used by the participants at their work sites for one-hour shifts or on a scavenger hunt in the Technical Library. All challenges will be held at, or originate from, the Tech Library courtyard.

A second set of challenges focuses on communications abilities. From 12-1:30 p.m., Judith Tripp (2663) will lead a hand sign spelling group activity, and Rose Ann Schultz (3533) will teach Sandians to read from braille flash cards. These activities, says Steve, "increase awareness — we're trying to spread goodwill and understanding."

A final challenge is directed toward Sandia fire team evacuation squad members who work in multistory buildings. Led by Sandia Emergency Medical Services paramedic Dale Claycomb (3333) and a Kirtland Fire Department team, Sandia fire team members will be taught a technique for lifting disabled persons in wheelchairs, starting at 2 p.m. Sandia has no universal, official building evacuation policy for disabled individuals, says Steve, and he hopes the hands-on demonstration will move Sandians toward developing a policy.

For more information, call Steve on 844-3806.

Disability Awareness champions

Two Sandia vice presidents are champions of Sandia's Disability Awareness Committee — Bert Westwood, VP of Research & Exploratory Technology Division 1000, and Gerry Yonas, VP of Systems Applications Division 9000.

"I am delighted to be a champion of Sandia's Disability Awareness Committee," Bert says, "for I have experienced through my own family the problems that people with disabili-

ties face in their daily lives through the lack of sensitivity of otherwise well-meaning people.

"Most people with disabilities have to work harder than the rest of us, just to keep up," he says. "They worry about embarrassing themselves and us. The people I know with disabilities are fighters — they have to be to survive in our insensitive world. Too often we are unaware of the handicaps we have placed on them through our lack of awareness of their special needs — needs that ask for no more than to be permitted to bring their intellectual capabilities to the working environment the rest of us take for granted."

Comments Gerry, "My view of the meaning of 'diversity' is basically that all Sandians, whether disabled or not, should be given the opportunity to live up to their potential. We all have limitations of one kind or another. Some may need accommodations or flexibility in their environment or job assignments.

"But mostly it [diversity] means to me that we treat each other with mutual respect and understanding.

"Another aspect of this subject of disabilities is the impact on the country in the loss of productivity or extra cost of health care because of technology shortfalls. Here's where Sandia can play a role. We have highly trained people in science and technology who incidentally have disabilities — they are especially well-suited to understand the needs of the disabled and to develop potential solutions. Our problem is to find funding sources for this kind of R&D."

Other Disability Awareness events

DOE's Disability Awareness Day — A nine-person panel will discuss "Developing the disabled child," and keynote speaker Corrine Weynick will talk about Albuquerque services for persons with disabilities, Wednesday, Oct. 11, 9-11:30 a.m., in the DOE Conference Center (Bldg. 381).

Comedian — Ray Rivera, a local physically challenged stand-up comedian, will shed a humorous light on disabilities Wednesday, Oct. 18, 12-1 p.m. at the Technology Transfer Center (TTC, Bldg. 825). Disabled Albuquerque Public School students will be attending, and visitors from the community are welcome. For more information, call Vicky Gonzales (7582) on 284-2564.

Speakers — Two speakers will be featured Tuesday, Oct. 24, starting at 12:30 p.m. at the TTC. Andy Winniger, from the New Mexico Technology Assistance Program (part of the State Department of Human Services) will talk about assistive equipment available for the disabled.

Sidney Fels, a senior research scientist from Virtual Technologies Inc., Palo Alto, Calif., will discuss how neural networks are used to build adaptive interfaces for persons with disabilities. Fels' talk, at 1 p.m., will cover "smart equipment adapting to a person, rather than a person adapting to the equipment," says Keith Miller (9818).

A Disability Awareness Month Expo, coinciding with the Oct. 24 speakers' presentations, will run 1-3 p.m. in the TTC lobby. The Expo will feature companies from the Albuquerque/Santa Fe area that prescribe, assess, and procure funding for assistive equipment for disabled persons. DAC will also unveil its World Wide Web homepage, which describes the Disability Awareness Committee and identifies databases for support groups and sources for equipment funding.

Cookie social — A get-together for all Sandia, DOE, and Kirtland employees interested in learning more about the Disability Awareness Committee will be held Tuesday, Oct. 31, 2:30-4:30 p.m., at the Sandia cafeteria (Bldg. 861). Project coordinator Shirley Baker (12840) is asking interested employees to RSVP by Friday, Oct. 20, via cc:mail or to send their names, organization numbers, and mail stops to her at MS0125.

What is the DAC?

The 18-member Disability Awareness Committee is a "proactive group of able-bodied and disabled Sandia employees who have a commitment to making a difference on disability issues," says DAC Chair Sandra Hinton of Diversity Leadership & Education Outreach Dept. 3611.

DAC was reactivated in October 1994 and members became involved in a number of projects to promote DAC goals: to raise awareness at Sandia of disability issues; provide a central point of disabilities information and education; establish a relationship between community leaders and Sandia for disability advocacy; seek and identify qualified persons with disabilities as employment candidates; and serve as a liaison between Sandia and employees, contractors, and visitors with disabilities.

The DAC meets the first Tuesday of each month, 10 a.m.-12 p.m., Bldg. 891, Rm. 1031E.

The Sandia committee also meets with DOE's Committee for Persons with Challenged Abilities to work on similar issues. DOE's committee, chaired by Sam Rogers, meets the third Wednesday of each month, 1:30 p.m., at DOE Bldg. 383.

Year-round DAC projects

Disability Awareness Committee members are active year-round in a variety of activities to promote DAC goals, says Debbie.

- **Building assistance evacuation.** DAC says building evacuation problems are one of the greatest safety concerns of Sandians and visitors with disabilities. DAC is partnering disabled individuals with the Kirtland Fire Department, Emergency Operations Center Alliance, Emergency Medical Services, Sandia fire teams, building coordinators, and facilities groups to address these issues.

- **Recruiting.** DAC, partnering with Ed Gullick of Staffing Dept. 3535, ensures that high schools and universities with large populations of disabled students are included with those targeted for recruiting.

- **Database.** Assistive equipment and accommodations information is maintained in the Equal Employment Opportunity & Affirmative Action Office Dept. 3611 and on the DAC World Wide Web home page. For more information, call Keith Miller (9818) on 845-8812 or Sandra Hinton on 845-9911.

- **Parking.** DAC is developing a written policy and uniform plan for re-marking inconsistently marked handicap/medical parking slots, says Regina Hunter (6600). Once Sandia's parking slots are correctly marked, the Air Force may start ticketing unauthorized vehicles.

- **Wheelchair accessible van.** Sandia's Transportation Team (7612-2) maintains a wheelchair-accessible van. Any Sandian or DOE employee who needs this van should contact Transportation on 844-8048 at least 24 hours in advance.

- **Welcome wagon.** DAC has formed a

(Continued on next page)

Accidents happen, but what if nukes were involved?

Labs' Accident Response Group responds to a mock mishap in 'Operation Display Select'

By John German

Lab News Staff

"Broken Arrow."

It's probably the most alarming phrase in the US nuclear weapons complex. If it's spoken in earnest (and it's rarely uttered in jest), it means something has gone wrong — and that a US nuclear weapon is involved.

Since World War II the code phrase has been invoked 32 times to signify real accidents involving US nuclear weapons. Perhaps the most remarkable of those incidents occurred in January 1966, when a US B-52 collided with a KC-135 tanker 30,500 feet over Palomares, Spain, dropping three US nuclear weapons on the countryside and parachuting one out to sea. Following a three-month search and recovery operation that pushed the limits of Sandia's computer modeling capabilities of the time, all four of the Palomares bombs eventually were returned to American soil. (Watch for future *Lab News* 30th anniversary coverage of the Palomares incident.)

As unlikely as such a disaster seems today, especially with modern regimens for nuclear weapons safety and protection, DOE and its laboratories still must prepare for a wide range of weapons-related accidents, according to Stan Spray, Manager of System Studies Dept. 12331.

"We'd be irresponsible if we didn't," he says.

A serious mission

Stan is project manager for Sandia's portion of DOE's Nuclear Weapon Accident Response Group (ARG). In the event of an accident involving a US nuclear weapon anywhere in the world, the ARG would rush to the scene to provide a technical advisory role to the Department of Energy, which in turn would advise the on-scene Defense Department commander.

The ARG is staffed by 67 volunteer experts in various weapons-related topics critical during any nuclear weapon recovery operation. ARG members are drawn from five DOE facilities, each providing its own technical specialties: Sandia (weapons design and nuclear safety), Lawrence Livermore and Los Alamos national labs (physics package design), the Pantex plant (weapon packaging), and EG&G (logistics).

Sandia coordinates ARG technical planning for DOE's Albuquerque Operations Office, which has the lead accident response role within the nuclear weapons complex. (See "Sandia ARG team rated 'exceptional.'")

The ARG is capable of deploying to an accident scene within two hours plus flying time to the site. Once there, the Sandia team's primary responsibilities are to advise DOE on proper

"render safe" procedures during the weapon recovery operation and to help develop a contingency plan. It also provides and operates technical equipment, including an integrated camera-and-monitor system that allows participants to watch the recovery operation from a remote location.

ARG-member facilities might also be called upon to provide radiation safety and public relations support to DOE during an operation.

Mock accidents test response

This week some 30 Sandians returned home after participating in an eight-day exercise at the Naval Weapons Station at Yorktown, Va., meant to test the US military's ability to respond to such an accident and to identify areas for improvement in the nation's "Broken Arrow" response mechanism.

In all more than 1,600 people from DoD, DOE, the Federal Emergency Management Agency, and other federal, state, and local agencies participated in the exercise Sept. 18-27, dubbed "Operation Display Select '95" and sponsored by the Defense Nuclear Agency.

As in most emergency exercises, participants (called players) responded to events drawn from a mock accident scenario scripted before the exercise. Controllers monitored the flow of the exercise, kept it on track, and assessed actions taken by players in response to the scenario. Sandians participated as both players and controllers.

Crash and explosion

The Display Select scenario went like this: At 8 a.m., Sept. 18, a civilian aircraft experienced engine trouble, crashed into a Naval Weapons Station loading pier on the York River, and exploded. The pier contained several nuclear weapons, all of which were damaged. One dispersed plutonium over a large area. One conventional weapon also on the pier exploded; another could not be located and was believed to be submerged in the river. (All events were simulated; training weapons with actual damage were used.)

The ARG team arrived on the scene, set up recovery equipment, and took X-rays of the weapons. It helped develop a weapon recovery plan and had it approved by the on-scene commander. The mock weapons were successfully recovered, packaged, and removed from the site.

"In both planning and implementation, Display Select exceeded our expectations with respect to evaluation and training," says 5200 Center Director Gene Ives, who is director of the Sandia ARG program and participated as an evaluator.

The Sandia ARG participates in similar exercises at least once every two years. Each exercise requires months, often years, to prepare. Selected scenarios must present a challenge to the players and require cooperation among the agencies and nations involved.

The most recent previous exercise in 1993, for instance, "Operation Diver Mist," was an international exercise involving some 1,400 participants from the US and United Kingdom. Stan says that scenario, in which a small private plane collided with an Air Force cargo plane carrying four nuclear weapons, was two years in the making.

First around-the-clock exercise

Last week's exercise was the first 24-hour-a-day exercise the ARG has participated in, adds Stan. Two Sandia directors, Bill Nickell of New Mexico Weapon Development Center 5100 (day shift) and Jim Wright of California Weapon Development Center 5300 (night shift), served as senior technical advisors to the on-scene senior DOE official, Kirtland Area Office Manager Kathy Carlson.

John Hoffman (12331) was the lead Sandia planner for the exercise. Sandia ARG program manager Don Bohrer (5303) participated as a controller. Jeff Stickney (DOE/AL) was the DOE exercise director for Display Select.

The last time ARG weapon recovery skills were applied to a real accident, says Stan, was in 1980, when a Titan rocket motor exploded inside a silo near Damascus, Arkansas. He says the on-scene advice provided by the ARG during that incident resulted in the timely and safe treatment of the damaged warhead.

"The honing of ARG skills is serious business," he says. "While we hope accidents won't happen, they have in the past, and that gives a real sense of purpose to ARG members."

Sandia ARG team rated 'exceptional'

In July, DOE's Office of Emergency Response, Defense Programs conducted an "Emergency Deployment Readiness Evaluation" (EDRE) of Sandia's portion of the Nuclear Weapon Accident Response Group (ARG).

Altogether the EDRE identified most components of Sandia's ARG program as "exceptional," suggesting only minor improvements. Following is an excerpt from a letter to 5200 Director Gene Ives from EDRE team leader Cmdr. William T. Rogerson:

"In view of your strong support and interest in the ARG program, I wanted to express to you personally how impressed the [evaluation] team was with the SNL ARG program. Mr. Stan Spray's [12331] group continues to perform as the premier organization in the ARG community. It is superior in all respects and sets the standard for other ARG components to emulate."

The letter went on to discuss several successful areas in Sandia's ARG program, particularly its personnel and training records, drill and exercise program, and database support systems.

(Continued from preceding page)

"welcome wagon" to assist physically challenged new hires. For more information, call Tonya Wichhart (1801) on 844-7632.

- **Self identification.** Sandia maintains employees' disabilities information in its Human Resource Database. Disabled Sandians can elect to identify themselves via a Human Resources affirmative action form, available from personnel representatives or from Sandra Hinton on 845-9911.

- **New Mexico State University (NMSU) engineering for students with disabilities.** Vicky Gonzales (7582) participated in a NMSU retreat in June as a laboratory participant in the Regional Alliance for Science, Engineering, and Mathematics (RASEM) for Students with Disabilities. The Alliance's mission is to increase numbers of disabled students in science, engineering,

and math careers.

- **Accommodations.** Vin Davis (7905) determines accessibility requirements for Sandia work places and public areas and identifies and initiates projects to remove architectural and communication barriers at these locations.

- **Relay New Mexico.** This confidential service, which helps people with hearing and speech disabilities make telephone calls, is available year-round, 24 hours a day. Local calls are free; long distance is substantially discounted. For more information, call Henri Grau on 889-0420 or 800-889-8353.

- **Outreach program.** To promote disability awareness at Albuquerque Public Schools (APS), Debbie Faculjak presents diversity talks to students. Blase Gaude (5931) discusses spinal cord injury prevention with APS students.



1995 ECP campaign kicks off Oct. 5 on Hardin Field

Community: People united, caring for one another

Last year, motorcycles; this year, tricycles. Big bikes or little trikes, Sandia volunteers use these fun gimmicks to bring your attention to the Sandia Employee Contribution Plan (ECP) campaign.

This year's ECP campaign kicks off Oct. 5 on Hardin Field with trike races featuring Sandia executives, a car show, four-hole miniature golf, entertainment by Jim Buttz (5121) and his band, an Albuquerque Mountain Rescue Council demo booth, exhibits, and food. Everyone is invited to watch Sandia executives get quizzed about United Way as they race their tricycles around a course to win a T-shirt. If participants can't answer the question, they will be required to donate a dollar to United Way. All trike-race participants will receive water bottles. Water bottles and T-shirts will also be available as prizes at the miniature golf course.

The emphasis is on fun, but it's all for a good cause — the Sandia community uniting to help our larger community of Central New Mexico.

Even when we aren't directly involved, it seems we all know someone affected by problems. As a community we are all connected to an organization that does something about these problems. United Way agencies work with each other to address urgent needs.

"Living in a world of mistrust, we are creating children who are mistrustful," says Lydia Succi, United Way of Central New Mexico President. "How do you put together programs to address this? We need to help children succeed, provide support systems to parents and other adults who need it. Children are our future. We need to help children be functional, happy, and satisfied with who they are."

As the ECP campaign approaches, Sandians once again are asked to look at the community of which they're a part. Giving to United Way through ECP is an efficient way to provide help, to be a part of the larger community.

"We can come together in a feeling of community by helping each other," says Lydia. "We can show a vision of what can be if we pull together." She says volunteering time and money to United Way is an opportunity for us to get outside ourselves and learn to help each other. To build a sense of community we need successful children, healthy families, and independent adults. United Way of Central New Mexico works to ensure that all segments of our community are involved in making it better.

Communities are united by volunteers

Volunteers drive the ECP. United Way of Central New Mexico is governed by a diverse local board of more than 30 volunteers, including Sandia's Redd Torres Eakin (12671), B.J. Jones (3000), Jerry Langheim (former Director of Sandia's Public Relations and Communications Center and now Lockheed Martin's Energy and Environment Sector VP for Communications), and Sherman McCorkle (President of Lockheed Martin's Technology Ventures Corp.). Deborah Payne (12670) is serving on the 1995 United Way Campaign Cabinet. Jim Tegnalia, former Sandia Executive Vice President and currently Lockheed Martin's Energy and Environment Sector Vice President for Business Development, is Deputy Campaign Chairman. Norma Hibbs (9207) and Carol Michaels (6352) have been serving as loaned executives for six weeks to help with the United Way campaign.

Members of the Sandia ECP Executive Committee, which works most of the year to plan the annual campaign at the Labs, include Dorothy Rarick (13911), chair; Phil Montoya (9138), solicitations; Dianne Knippel (12610),



SERIOUS FUN FOR A SERIOUS CAUSE — Employee Contribution Plan (ECP) campaign volunteers gathered recently at the Coronado Club to prepare for the 1995 ECP Campaign to raise money for United Way agencies in Central New Mexico. ECP Publicity Chair Dianne Knippel (12610) demonstrates the tricycle race scheduled for the campaign kickoff event on Oct. 5.

publicity; Laura Loudermilk (10502), treasurer; Janet Carpenter (12622), *Lab News* representative; Kay Lang (12616) and Tom Salazar (12616), tech art representatives; Juanita Sanchez (12671), executive secretary; Sharon Ortiz (3533), new hires representative; and Shannon Letourneau (7818), Metal Trades Council representative. Many others are involved, volunteering not just during the annual campaign, but also throughout the year at United Way agencies.

As a strictly local organization,



United Way of Central New Mexico has served Bernalillo, Sandoval, Torrance, and Valencia counties for 60 years. The organization was founded as the Community Chest in 1934. United Way provides several in-house community service programs, including Ask United Way, a comprehensive telephone information and referral service for the public; the Volunteer Connection, which matches people with organizations needing volunteers; Gifts-in-Kind, a way for individuals and businesses throughout New Mexico to donate merchandise and excess inventory to health and human-service organizations; and the Toner Donor program, a way for the community to recycle toner cartridges while raising funds for United Way programs.

Of every dollar given, 99.5 cents stays in Central New Mexico. The 1/2 cent of each dollar that goes to United Way of America comes back into the community in the form of volunteer and staff training programs, networking, and advertising. Of every dollar given, 86.7 cents goes directly to programs. Only 13.3 cents per dollar goes to administrative and overhead costs, much lower than many other nonprofit groups.

United Way of Central New Mexico encourages and supports its 45 partner agencies, offering more than 80 programs, in working together to provide a broad range of services.

To receive funding, each agency must go through a stringent allocations process requiring quantifiable results, accurate financial information, and clear direction for the organization. Each agency report is reviewed by a panel of community volunteers and United Way staff.

Paperless campaign

This year ECP is running an essentially "paperless" campaign. Employees will call a special phone line to enter their choices; however, as always, donor option choices must be selected with a paper form. Instructions, including the phone number to call, will be distributed by ECP representatives during the campaign. More information will be available at center meetings and from center representatives.

— Janet Carpenter

ECP reps provide important information

ECP representatives make up the front line in the ECP campaign. Sandians know ECP reps as the folks who call for meetings and ask for contributions. But they're also sources of information about what the United Way agencies do with those contributions and about the community needs that are not being met for lack of UW funding. If you need more information about these matters, contact your center representative from this list:

Al Iacoletti (1007), Bernadette Fulton (1100), Scott Mitchell (1400), Gregory Homicz (1500), Ruth Varga (1800), Wendy Bechdel and Berta Armijo (both 2000), Rich Robison (2100), Nancy Dytzel (2300), Christine Fleming and Abenicio Sanchez (both 2700), Sharla Brantley (2900), Cindy Gregory (3000), Kathleen Weirick (3300), Yolanda Miller (3500), Kate Sauer (3600), Debbie Koeck (4100), Doris Swiney (4200), Denise Blaisdell (4500), Kristy Savage (4700), Mary Cocco (5000/13000), Kip Stanley (5800), Joanne Fredrich (6100), Loula Killian (6200), Richard Aguilar (6300), Diana

Suina and Judy Jones (both 6400), Barbara Meloche (6900), Linda Gonzales (7000), Connie Vanderburg (7200), Donna Mitchell (7300), Pete Duran (7400), Linda Dailleboust and Tony Roybal (both 7500), Irene Gonzales, Cheryl Mason, and Melissa Armijo (all 7600), Shannon Letorneau and Bonnie Buck (both 7800), Brett Locke (7900), Sam Bolin (9100), Doug Nordquist (9200), Bernice Lucero (9300), Yvonne Batchelor (9400), Don Wichhart and Jerri Dye (both 9600), Yolanda Padilla-Vigil (9900), Pauline Duran (10000), Rachel Lucero (10000D), Gina Terrazas (10100), Connie Martinez (10200), Michelle Seamon (10220), Valerie Garcia and Rick Calvert (both 10400), Ray Shaum (10500), Linda Jaramillo (10600), Carol Amedeo (11000), Gloria Zamora (12100), Norm Grandjean (12300), Bernadette Montano (12400), Juanita Sanchez (12600), Clare Stanopiewicz and Cheryn Lingerfelt (both 12800), Eva Wilcox (14000), and Jennifer Powell (14600).

'Cost-per-copy' program to replace about 230 copiers

First-year savings projected at nearly a half-million dollars

Logistics Management Center 7600 will be replacing most of Sandia/New Mexico's copy machines starting next month. About 230 copiers will eventually be phased out and replaced with Konica copiers, resulting in a planned savings of about \$463,000 during the first year of the new "cost-per-copy" program.

The cost-per-copy service is not a leasing program, says Eva Wallace of Logistics Program Management Office Dept. 7601 and project manager for the cost-per-copy program. Sandia will not be buying or leasing copiers. Instead, Konica will be placing new copiers around Sandia, and Sandia will be paying Konica 1.29 cents per copy. All costs will be paid by indirect funds from the Administrative Management Committee Program Support Dept. 10407.

Konica will own, maintain, and move the machines. Sandians can expect Konica to replace 175 machines throughout FY96 at the rate of 25 to 30 each month, Eva says. Rented Xerox copiers will be the first to go, then older model Kodaks, then Canon copiers that were purchased through 1993. Next, Canon copiers purchased in 1994 will be replaced.

The new program does not apply to desk-top copiers or color copiers.

Sandia/California has already established a cost-per-copy contract, but with Kodak. Starting in FY97, Sandia/California will enter into Sandia/New Mexico's five-year contract with Konica.

Working with Education Outreach K-12 Dept. 3613, the Logistics Management Center will offer Sandia's replaced copiers to New Mexico public schools at no charge. A list of available copiers will be distributed to the schools monthly.

Sandia was able to benefit by a competitive



COMING SOON — Konica's new copiers will start appearing around Sandia/New Mexico next month, replacing most existing copiers at a rate of 25 to 30 each month. Eventually, about 230 copiers will be replaced as part of the Logistics Program Management Office's "cost-per-copy" program. Diane Larkin, Konica copier representative, standing in front of the copier, demonstrates the new equipment at the Coronado Club Sept. 18. Learning to run the new machine is Eva Wallace (7601), left, and to Diane's left are Aida Garcia (2602), Pat Rosario (2600), and Dianna Trujillo (2611).

What to expect from Konica

All Konica copiers will provide the "standard" features — double-sided, colated, and stapled copies.

Three types of copiers will be distributed: low-, medium-, and high-volume copiers. Sandia will mainly be using the medium-volume copiers. Low-volume copiers are for groups making fewer than 10,000 copies per month. Medium-volume copiers handle 10,000 to 50,000 copies per month. (The average Sandia copier prints 20,000 to 30,000 copies each month.) High-volume copiers produce more than 50,000 copies each month.

However, groups producing more than 50,000 copies per month won't automatically receive a high-volume copier. Enough room must be available to accommodate this copier, says Eva, since it's quite a bit larger than the other styles. A special plug outlet configuration is also required for high-volume copiers. Konica will assess the needs of each group using a copier and fit the copier to meet the group's needs.

Low-volume copiers produce 28 copies per minute; medium-volume machines, 45 per minute; and high-volume copiers, 90 per minute.

For more information on the cost-per-copy program, call Eva Wallace on 844-5328.

selection conducted over a 10-month period by Martin Marietta (now Lockheed Martin). The company asked major copier vendors to compete, then judged them on speed, features, price, service, product reliability, and supplier flexibility. Konica came out on top, Eva says.

Sandia is following the trend of other large corporations. "Most larger companies are using either leases or cost-per-copy arrangements," says Eva. Sandia opted for the cost-per-copy arrangement because "DOE does not approve of long-range leases — they're not cost-effective."

"Don Doak, former Director of the Technical and Operations Support Center, was instrumental in developing the cost-per-copy program," says Eva.

Gary Riser, VP of Business Management and Chief Financial Officer 10000, has been the corporate sponsor since Don retired. Gary has reviewed the Copier Management Guidelines, which define the program, and is obtaining concurrence from Sandia/New Mexico vice presidents. These guidelines contain provisions for an "exceptions team" to review Sandia groups' requests for copiers, when the groups don't meet the volume requirements. (See "What to expect from Konica.")

Benefits of the cost-per-copy program

Eva says Sandia will see many benefits to replacing its "aging fleet of copiers." Besides the estimated first-year savings of almost a half million dollars, savings will continue as more Sandians join the cost-per-copy program. Cost savings will be realized because the system is flexible, says Nicky Whelan (7601): "If a large number of Sandians move from one department, the number of copies the department will make decreases, so Sandia only pays for what it uses."

Sandia copy machines will become standardized, allowing employees to easily move from copier to copier. "In recent years, Sandians have purchased their own copiers, leading to a variety of models and manufacturers," says Eva. "We're now trying to manage a program

that makes sense for all of Sandia."

The machines will all be new, reducing downtime. Maintenance charges will be eliminated, and there will be no costs to the line organizations. Konica service technicians will remain on-site at Sandia and will respond to all service calls within four hours. They will eventually be L-cleared, which will make their jobs easier. Service technicians' phone numbers will be posted on all new machines.

The process for ordering copy paper through Just-in-Time will remain the same.

No department will be forced to give up its current copier, says Eva. The Logistics Management Center will continue to maintain old Canon copiers throughout FY96; but starting in FY97, Canon owners have the choice of keeping their Canons and funding their own maintenance from program funds, or joining the cost-per-copy program by replacing their copier with a Konica.

Retiree deaths

Walter Smith (81).....	4551	Aug. 4
George Blea (68)	1230	Aug. 5
Hans Birnbaum (77).....	8443	Aug. 8
Ernest Gurule (44)	7809	Aug. 10
Billy West (77)	9334	Aug. 15
Reuben Minter (73)	7633	Aug. 18
Jacob Young (71)	3646	Aug. 18
Joseph Connell (77)	7261	Aug. 22
Donald Goodrich (84).....	7451	Aug. 25
Roy Ewing (80)	7655	Aug. 26

Sympathy

To Frank Ortiz (10508) on the death of his son, Dr. Michael Ortiz, in St. Louis, July 26.

To Don Rigali (9800) on the death of his son, Paul Rigali, in Sacramento, Calif., Aug. 23.

To Nancy Vermillion (10402) on the death of her sister, Catherine Burch, in Albuquerque, Aug. 26.

Mileposts

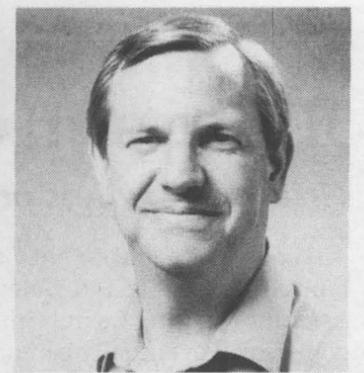
September 1995



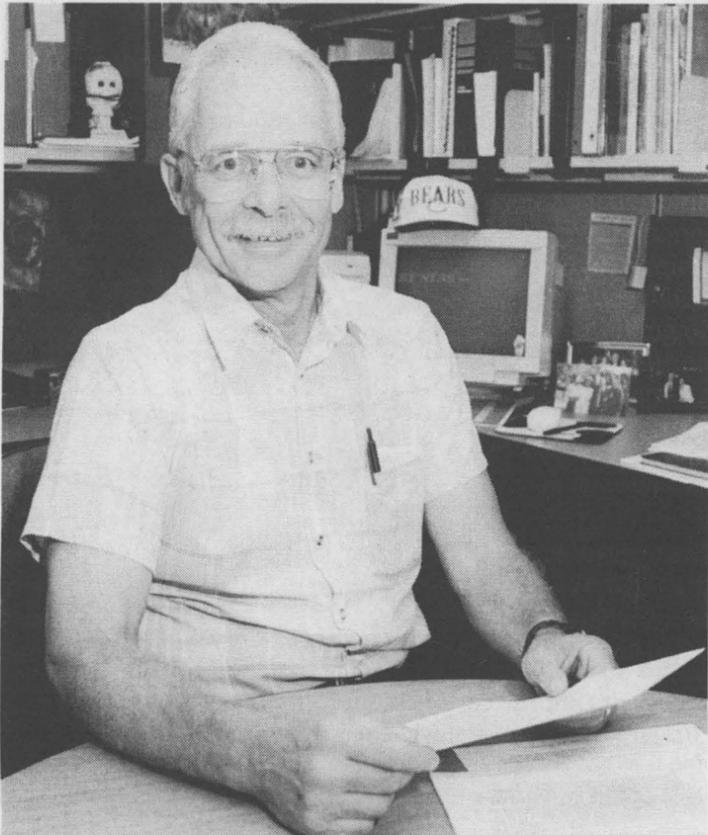
Barbara Roberts 15
5600



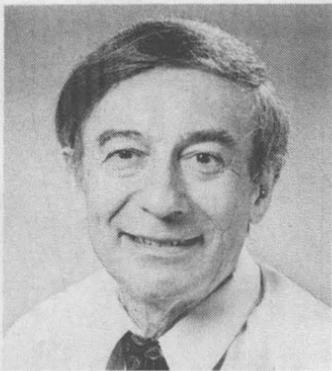
Donna Archuleta 30
3522



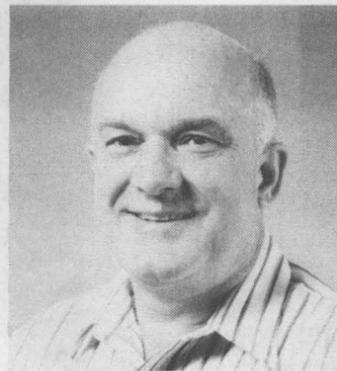
Bill Morgan 20
2411



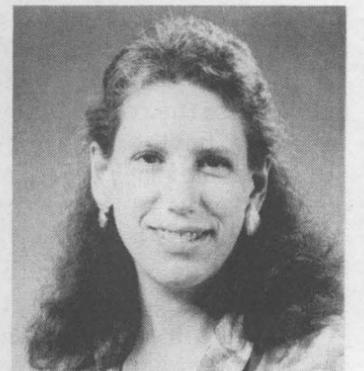
Donald Davis 30
12336



Robert Kestenbaum 35
11000



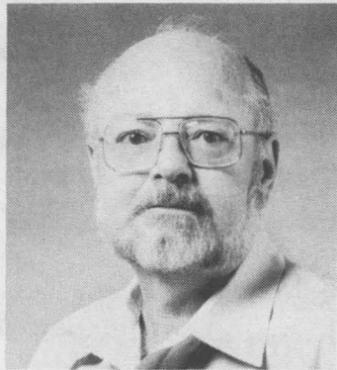
Dick Caudell 15
2615



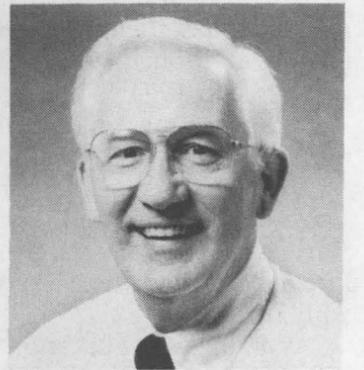
Kathy Branagan 20
2251



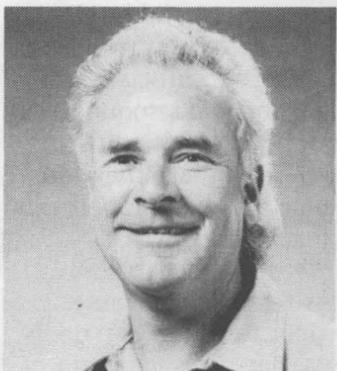
Tom Sanchez 25
7914



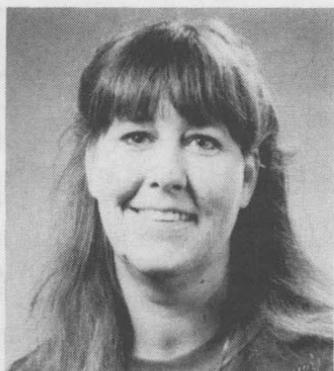
Larry Choate 20
5151



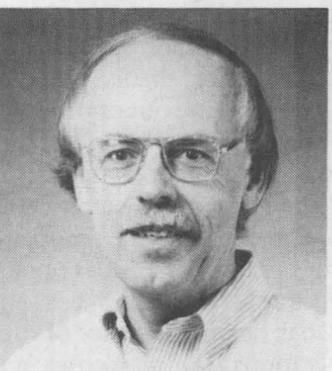
Jim Baremore 30
7200



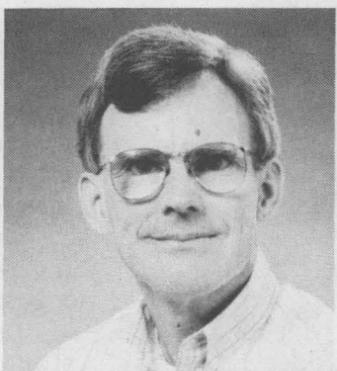
Norberto Garcia 20
7818



Dyan Clements 15
12363



Craig Olson 25
1186



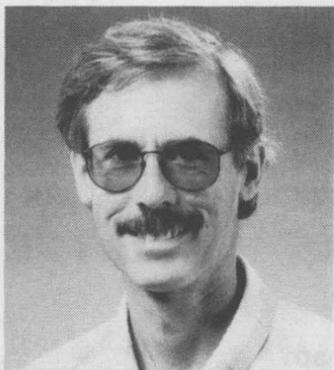
Drayton Boozer 20
12400



Yvonne Vallejos 15
6651



Levi Anaya 25
7809



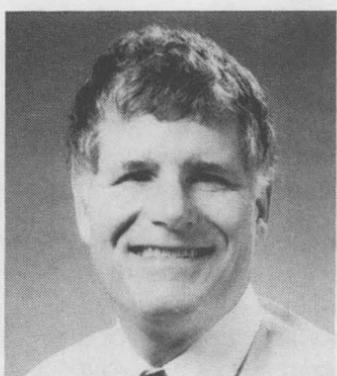
Larry Kovacic 20
2476



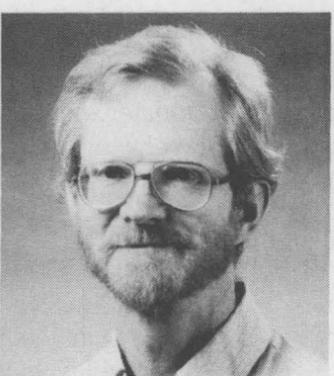
Paul Gabaldon 20
5101



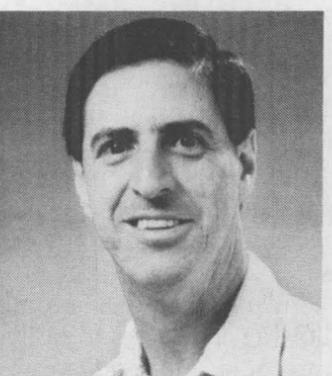
Philip Thacher 30
1141



Jeffrey Quintenz 20
1202



Lawrence Koenig 15
2171



Luis Martinez 20
13216

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

MISCELLANEOUS

ANTIQUE MECHANICAL SIREN, Harley-Davidson, \$100; go-cart body (Jeep), \$50; 15-in. racing hubcaps, \$30; Sears exercycle, \$40. Greer, 281-4688.

STEEL GRILL GUARD, heavy-duty, for older-model pickup, \$10. Horton, 883-7504.

CHEST of drawers, Bassett 4-drawer unit, 42" H x 34" W x 17-1/2" D, \$40; broadcast garden spreader, brand new, \$15. Rockett, 298-2589.

GARAGE SALE, Sept. 29-30, 6836 Kelly Ann NE (north of Academy, near Truchas); small freezer, \$30. Tripp, 822-8117.

REFRIGERATOR, dorm-size, \$75; microcassette recorder, \$35. Sierra, 344-6804.

AUTOMOTIVE METER, \$120; cooling system analyzer (air), \$165; vacuum & brake pump kit, \$60; style puller set, \$40. Mays, 844-2546, ask for Sandra or Don.

BEDSPREAD, king, Southwestern pattern, sienna, rust, blue, green, \$40; electric blanket, queen, Fieldcrest, cream, \$30. Moya, 856-1245.

PICKUP SPARE TIRE, for '94 Nissan, \$10; rear glass for '94 Nissan, \$20. Estill, 883-1531.

ALTO SAXOPHONE, w/case, hardly used, needs new pads, \$400. Knowles, 856-5987.

FISH TANK, 10-gallon, w/all supplies, \$35; ski rack, \$20; frame backpack, \$20. Ramey, 275-1059.

MAN'S COWBOY BOOTS, size 8, black design, paid \$35, worn twice, \$20; boy's jeans, 16 regular, gray, new, paid \$30, asking \$15. Bauck, 856-5472.

CHOICE BURIAL PLOTS, Sunset & M. Gardens, tandem or single, bargain prices. Babcock, 299-3121, leave message.

SINGLE PLATFORM BED, w/3 drawers in base, good condition, \$75 OBO. Peters, 293-6356.

MAC COLOR PRINTER, StyleWriter Pro, great color & gray scale, 2 ppm (gray scale), 0.5 ppm (color), new, \$445. Griego, 899-2324.

BUNKBEDS, black, metal frame, twin top, full bottom, mattresses still wrapped w/plastic, \$250. Delgado, 344-2971.

WOODPLAY SWINGSET PLAYHOUSE, sturdy redwood construction, paid more than \$1,000, will sell for \$300. Lee, 294-3483.

RUNNING BOARDS, aluminum diamond plate, fits '87-'95 full-size Ford Bronco, original price \$200, 1 yr. old, \$75. Stirbis, 299-8442.

MILLING MACHINE, Bridgeport, w/tools; Troyce rotary table, w/attachments. Marker, 298-3985.

CONVECTION OVEN, \$75; Formica kitchen table, w/4 high-back chairs, \$60; Cougar golf clubs, w/bag, \$299; humidifier, \$10. Banos, 298-0634.

TV, Curtis-Mathes, 19-in., needs high-voltage transformer, \$25. Krauss, 292-7784.

PLUG'N POWER X-10 MODULES, Radio Shack, \$8 ea.; 110-volt ISO transformers, \$25; Perm-a-tron wireless house alarm system, \$60. Norton, 266-3417.

VIDEO GAMES, Sega Genesis, Crusader of Century, others, \$45. Carr, 281-1632.

OVEN, Frigidaire Custom Imperial, like new, must see, paid \$600, take \$200. Rael, 884-4778.

LANDSCAPE RED ROCK, free, you haul; queen sofa sleeper, \$150; twin bed, w/mattresses, \$75; push mower, \$60. Rochester, 296-1350.

DECORATIVE ENTRY DOOR, w/safety window, 36" x 79" x 1-3/4", \$80; aluminum-glass storm door, w/screen, \$40. Montoya, 881-6898.

WHEELCHAIR, medium-size, good condition, \$150. Adams, 299-0855, after 7:30 p.m. weekdays, all day weekends.

PIANO, Kimball console, oak finish, 3 yrs., \$2,400; hand-tooled leather golf bag, \$50. Klavetter, 299-4299.

MUSIC STAND, "Conservarte", mint condition, \$10. Wagner, 823-9323.

LAWN FERTILIZER SPREADER, drop-style, \$15. Smith, 299-6873.

BUNK BEDS, sturdy wood frame, w/mattresses, \$100. Penn, 883-4195.

BABY FURNITURE, 2 Jenny Lind cribs, \$60 ea., changing table, \$10; portable playpen, \$25. Baldwin, 897-8289.

COUCH, recliners, table/chairs, microwave, entertainment center, TV stand. Bellino, 344-2924.

WOODBURNING STOVE, thick-gauge iron, glass doors, used one winter, excellent condition, \$395. Locher, 266-2021.

INTERIOR PAINT, 2 unopened 5-gallon containers, off-white, semi-gloss, \$100 OBO. Jones, 899-0642.

PENTAX 35MM CAMERA ME, 50mm & 2X converter lens, case, flash attachment, good condition, \$100. Giachino, 821-6351.

PENTAX P3N CAMERA, Tokina 28-70mm zoom lens, \$185. Selleck, 254-9345.

DRAFTING TABLE, lamp, straightedge, electric eraser, other stuff. Lambert, 293-8825.

TWIN BED, 4-drawer dresser; 5-pc. patio set, w/cushions; toaster oven; glass-top coffee table, w/matching end table; recliner chair. Thorpe, 828-0617, evenings.

REFRIGERATOR, Amana-18, top freezer/ice maker, looks/runs great, harvest gold, \$175. Barnum, 856-5602.

APPLE POWERBOOK, 145B, w/carrying case, 4M RAM/80M HD, 18 months old, used very little, \$850 OBO. Raymond, 272-7131.

'94 ELECTRIC GUITAR, beginning Fender, w/amp & gigbag, like new, \$300. Nowotny, 292-1571.

HUGE GARAGE SALE, Barstow & Paseo Del Norte, 8301 Manuel Cia Ct. NE, Sat./Sun., 8 a.m.-1 p.m. Roberts, 822-9125.

SUPER NINTENDO PUNCHOUT, arcade-style, \$300 OBO. Ortega, 293-5662, leave message.

MATTRESS, twin-size, foam, \$10. Filter, 823-1232.

QUEEN-SIZE WATERBED, headboard, frame, mattress, liner, heater, everything included, free. Kuhlman, 271-5870.

MOVING BOXES, 3/5/15-cu. ft.; picture boxes; model engine fuel; tires 13/14/15-in., wire wheel covers, 15-in.; transfluid; mats. Foster, 299-6240.

KING-SIZE BED FRAME, mattress set, wood headboard, \$200; contemporary, heavy glass, custom-made coffee table, \$500 OBO. Anspach, 296-8712.

MOVING SALE, Sat., Sept. 30, 7A-1P, furniture, microwave, lots of miscellaneous, 2605 Lakeview SW. Everett, 873-6132.

IBM 386 COMPUTER, 2M RAM, 60 MB HD, VGA monitor, DOS 6.22, WPS.1, Windows 3.1, \$400. Conejo, 299-2315.

DOUBLE BED FRAME, light maple wood, good condition, \$45. Koch, 856-1362.

UTILITY TRAILER, 4x8, removable stake bed, 1,000-lb. capacity, tilt, like new, \$450. Savage, 837-2692.

BIKE ROLLERS, Tacx, excellent condition, perfect for off-season training, paid new \$105; \$40 firm. Filuk, 281-0078.

GERBIL PEN, \$20; gerbil equipment, \$20; girl's 20-in. bicycle, \$20; small drafting table, \$15; office chairs, \$10 ea. McGee, 857-0661.

RCA COLOR TV, 27-in., wood cabinet, remote control, like new, \$200. Valentine, 299-8649.

WOODSTOVE INSERT, Grizzly, two blowers, heats well, \$500. Upchurch, 296-8591.

GLASSTITE PICKUP SHELL, cab-high, light-cream color, fits long-bed truck, mint condition, \$975. Sheward, 298-9321.

TWO CHAIRS, off-white, classic wingbacks, excellent condition, \$65 ea., one w/ottoman, \$20. Trump, 299-5162.

MAPLE-FRAME DAVENPORT, \$95; maple-frame rocking chair, \$35; recliner chair, \$50; fireplace tools, \$10. Meyer, 256-9038.

SANDSTONE LANDSCAPING BOULDERS, free; girl's 16-in. bike, \$30; wooden high chair, \$25; Compaq enhanced keyboard, \$10. Hartwig, 298-5048.

QUEEN SLEEPER SOFAS: off-white, 6-in. mattress, \$265; beige, 4-in. mattress, \$65. Hall, 298-6856.

GARAGE SALE, Saturday, Sept. 30, 9 a.m., 11113 Arvada Ave NE, Juan Tabo & Indian School area. Shelton, 298-1006.

SPARE TIRE & RIM, travel trailer, brand new, P215/75R15, steel-belted radial, 5-hole rim, 3-1/8-in. diameter hub hole, \$75. Luikens, 881-1382.

CONTEMPORARY DINETTE SET, beige upholstery, very good condition, \$250. Chorley, 296-1454.

POWER ADAPTOR, new U.L.-listed, 120-volt AC to 12-volt DC, 1.7 amps, continuous duty, 4 at \$5 ea. Stamm, 255-2640.

HOBART WELDER, Cyberwave 300S, Welding Power Supply, \$1,800. Cresap, 864-3053.

GARAGE SALE, Oct. 7-8, 8:30 a.m.-3 p.m., 13228 Indian School NE, furniture, household items, baby items, carseat, clothes, more. Outka, 298-5707.

SECTIONAL SOFA SLEEPER, Benchcraft, neutral-brown tone, \$300. Yamanaka, 275-3109.

SCHWINN AIREDYNE, \$350 OBO; Tandy DWPII printer, make offer. Tucker, 281-8342.

MOVING SALE, everything must go, furniture, clothes, gas BBQ grill, sports equipment. Johnson, 884-7764.

CRIB N' BED, Childcraft, honey oak, matching 5-drawer chest, \$650; Graco walker, \$16. Pregent, 281-1414.

SWAG LAMP, amber & white stained glass, like new, \$75. Harrington, 294-6368.

DEADLINE: Friday noon before week of publication unless changed by holiday. MAIL to Dept. 12622, MS 0413, or FAX to 844-0645. You may also send ads by e-mail to Nancy Campanozzi (nrcampa@sandia.gov). Questions? Call Nancy on 844-7522.

Note: The number of ads received is increasing; our space is not. We now limit ads to one per issue. We will also enforce the 18 word limit. Please keep your ads as short as possible.

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.

GUN CASE, aluminum, \$70; compound bow, accessories, arrows, \$90; quiver, \$7.50; hardbow case, \$25; Thunderhead broadheads, \$14. Klett, 884-8354.

HO TRAIN SET, large, excellent condition, many engines, cars, accessories, two transformers, new \$680, sell for \$380. Rogulich, 298-5261.

UTILITY TRAILER, approx. 5' x 9', metal bed, needs paint, \$275. Roeske, 255-6188.

UTILITY TRAILER, 4' x 8', holds 1,180 lbs, w/14-in. cargo box, 1-7/8-in. trailer hitch, removable tailgate, \$150. Narath, 821-4939.

RIFLE, Weatherby Mark V, 270 magnum, w/Burris 3x9x42 fullfield scope, USA-made, excellent condition. Chadwick, 275-2368.

BABY STROLLERS, Graco Stroll-a-Bed, \$25; J. Mason umbrella, \$10. Cross, 891-0964.

HUMMELS: Happy Traveler, Searching Angel, Guiding Angel; Bosson heads; Hooked on Phonics, \$100. Johnson, 298-1729.

BOX SPRING for twin bed, new, \$20 OBO; girls 20-in. bike, \$25 OBO. Spears, 266-9782.

LA-Z-BOY rocker and recliner, excellent condition, \$100. Garcia, 899-2707.

DAYBED, Ethan Allen, antiqued pine frame, sleeps two, \$175. Schaedla, 898-9210.

TWO LEYLAND CYPRESS TREES, 6-ft. tall, very healthy, free. Meeks, 828-9825.

TRANSPORTATION

'89 PONTIAC BONNEVILLE SE, original owner, trailer hitch, loaded w/extras, beautiful condition, 77K miles, \$8,500. Lawrence, 296-3058.

'82 NISSAN STANZA, hatchback, 60K original miles, 1 owner, well-maintained, runs well. Sozanski, 268-1208.

'70 FORD TORINO, new 302 V8 last Nov., 4-spd OD, good mechanical condition, \$1,000. Miranda, 293-8644.

'94 CHEV. CORSICA, 4-dr. sedan, AC, AT, cassette/stereo, V6, 24K miles, \$11,600 OBO. Splichal, 256-4996, ask for Shirley.

'76 INTERNATIONAL SCOUT, 4x4, 4-spd., PS, heavy-duty clutch & cooling, original owner, extras, \$3,500. Sivinski, 296-0301.

'93 MITSUBISHI DIAMANTE ES, fully loaded, w/CD changer, 36K miles, \$14,000. Le, 298-0703.

'86 OLDS 88 ROYAL, 2-dr., V6, loaded, PS, PB, PW, cruise, AM/FM cassette, great mileage. Kinney, 275-3494.

'90 JEEP CHEROKEE, 4x4, V6, heavy-duty engine/tow package, 140K miles, excellent condition, below loan value, \$9,100. Johnson, 884-7764.

'92 JEEP CHEROKEE, 6-cyl., fully-loaded Laredo, 4-dr., excellent condition, 1 owner, \$16,200. Martin, 296-8154.

'91 FORD CONVERSION VAN, AT, AC, PS, AC, captain's chairs, tow package, 302, \$11,900. Beazley, 837-4749.

'94 GEO PRIZM LSI, 1.8-liter, full power, cruise, AC, alloy wheels, 17K miles, like new, \$12,800. Alvarez, 831-3978.

'84 PLYMOUTH TOURISMO, many repairs including new clutch, catalytic converter & muffler, good transportation or student car, \$1,200 OBO. Salas, 294-5863.

'88 SUZUKI SAMURAI, 62K miles, 4x4, 5-spd., 1 owner, maintenance records, w/snow tires, \$4,225. Mora, 281-9815.

'83 CUTLASS CIERA ES, V6, 109K miles, good condition, many new parts, \$2,000 OBO. Bukaty, 345-4691.

'82 BMW 320i, silver/tan, AC, AT, excellent condition, many extras, \$3,500. McDonald, 299-0314.

'75 SUBURBAN, 454, AC, AT, PS, new transmission, runs great, good for kids & road, \$2,150. Beckmann, 296-1829.

'89 SIDEKICK, 4x4, \$5,000. Carroll, 281-6209.

'86 TOYOTA, 4x4, SR5 extra-cab, AC, PS, stereo, bedliner, shell, good tires, 127K miles, original owner, \$6,900. Mooney, 281-2612.

'91 GEO METRO, 5-spd., 25K miles, excellent condition, \$4,575. Wagoner, 867-2085.

'57 THUNDERBIRD, red/red/white, both w/tops, rebuilt 312, AT, PB, PS, T&C radio, near perfect, \$29,500. Lachenmeyer, 268-7818.

'90 HONDA PRELUDE Si, 60K miles, black, spoiler, 5-spd., ABS, CD, alarm, moonroof, excellent condition, \$11,500. Henderson, 237-9845.

'91 PONTIAC GRAND PRIX, 46K miles, V6, AT, AC, cruise, great gas mileage, 4-dr., excellent condition, \$7,950. Payne, 291-0124.

'95 OLDS CUTLASS SUPREME, convertible, AT, PS, ABS, dual air bags, many extras, 3,200 miles, \$23,500. Lohr, 821-1043.

'88 FORD TEMPO GL, 5-spd., AC, PL, AM/FM cassette, tilt, cruise, excellent condition, 1 owner, 58K miles, \$3,800. Atkins, 821-7989.

'80 DODGE D-50, (Mitsubishi) truck, long bed, AT, ladder rack, good body, needs timing chain, \$875. Snelling, 294-5751.

'89 PLYMOUTH COLT E, 5-spd. AT, no air/radio, needs some work, \$2,000 OBO. Drummond, 281-7664.

'86 HONDA CRX, 5-spd., AC, AM/FM, 36 mpg city, 88K miles, carefully maintained, one owner, \$3,225. Krumm, 856-1221.

'89 DODGE RAIDER, 4x4, 6-cyl., 5-spd., 2-dr., one owner, Mitsubishi engine, Alpine stereo, blue book \$5,500. Douglas, 281-9843.

'93 FORD MUSTANG, 5.0 liter, 5-spd., all power, AM/FM CD, 38K miles, book \$14,700, will negotiate. Konkel, 866-0304.

'72 CHEV. 1/2-ton pickup, PS, PB, AT, AC, LWB, 111K miles, one owner, \$2,750 OBO. Cunico, 892-8365.

'89 ISUZU IMARK hatchback, 5-spd., body excellent condition, runs great, reliable, economical, \$4,000 OBO. Roybal, 296-8493.

'74 PORSCHE 914, 2 liter, excellent mechanical condition, tires and paint good, \$3,600. Brooks, 255-7551.

'84 CHEV. CAPRICE CLASSIC, cruise, powerseat/lock, \$1,900. Rector, 286-1217.

'91 NISSAN 4x4, 68K, 3-in. lift, 31x10.50, 15x10 rims, tinted windows, snugtop, carpetkit, excellent condition, \$9,975 OBO. Chavez, 861-0712, ask for Kevin.

RECREATIONAL

26-IN. BAJA BIKE, 10-spd., balloon tires, chrome moly frame, saddle baskets, needs TLC, \$25. Stephens, 822-8584.

ROAD BIKE, Peugeot, 23-in. lugless frame, 12-spd., like new, \$175. Barlow, (505) 820-6845.

SAILBOAT, '72 O'Day, 22-ft. shoal keel, 3 jibs, head, galley, water system, lots of fun, \$3,500. Whittet, 281-2216.

AIRCRAFT PARTNERSHIP, for three compatible individuals for shares in a Cessna 182, private pilot license required, \$12,000 ea. Burns, 822-1977.

'95-'96 UNM LOBO BASKETBALL TICKETS, 2 premium chairbacks, full season pass, \$579. Romero, 821-3113.

'82 FIBREFORM RIVIERA, 26-ft., 350 Volvo engine, 280-hp Penta outdrive, galley, sleeps 6, \$15,000 OBO. Gillespie, 832-6756.

SAILBOAT, 22-ft., 7.5-hp engine, trailer, travel cover, depth finder, electrical system w/battery, \$4,500 OBO. Deller, 298-5705.

'91 MOUNTAIN BIKE, 16-ft. Fisher Montare, elevated chainstays, Shimano Deore parts, Blackburn rack, red, \$350. Shollenberger, 237-2677.

SAILBOAT, Catalina 25-ft., fixed keel, w/trailer, 10-hp Johnson Sailmaster, marine head, 2 headsails, instruments, sleeps 5, extras. Karpen, 828-2942.

'78 ITASCA, 27-ft., 454 V8, generator, new awnings, microwave, rear queen or doubles, \$8,800. Yingst, 505-835-0749.

MAN'S BICYCLE, 18-1/2-in. frame, 12-spd., Univega, very good condition, \$90. Bennett, 298-1142.

10-SPEEDS x 3, \$25-\$30 ea.; children's bike, \$10; Lane coffee table, \$35; exercise cycle, \$5. Southward, 281-7858.

'96 HARLEY-DAVIDSON, Dyna Wideglide, red/violet, brand new, never ridden, trailored home from dealer, \$19,000. Sabisch, 298-8350.

REAL ESTATE

3-BDR. HOME, 2 baths, 2-car garage, NE Heights, everything new, cabinets, flooring, plumbing, stucco, doors, paint, 1,480 sq. ft., \$117,500. Torres, 294-7273.

2-BDR. TOWNHOUSE, on quiet NE cul-de-sac, w/many upgrades, 2 full baths, 1-car garage. Myers, 299-0897.

3-BDR. HOME, 1,250 sq. ft., excellent condition, big corner lot, numerous trees, West Side, must see, \$91,000. Harrison, 833-1161.

2-BDR. HOME, 1,200 sq. ft., 6 yrs. old, 1 bath, livingroom overlooking Bluewater Lake, outside deck, 5 acres, electricity/water, \$75,000. Duffy, 873-8147.

4-BDR. HOME, 3 baths, 2-yrs. old, large lot, 1,800 sq. ft., near UNM Valencia campus, \$109,900. Phillips, 250-7568, ask for Helen.

WOODED LOT, almost 1 acre, near Regina, 13 miles from Cuba, NM, water & power hookups, \$2,900. Mora, 281-9815.

FURNISHED DOUBLE MOBILE, Jade Park, on large lot, w/outbuilding & paved parking for 7 cars, \$72,000. Morgan, 299-4082.

3-BDR. BRICK HOME, 1-3/4 baths, buff color, family room, hardwood floors, w/house in rear, many amenities. Montoya, 883-9115.

3-BDR. HOME, La Cueva school district, secluded, corner lot, 1,784 sq. ft., 2-1/2 baths, landscaped, fruit trees. Seamster, 275-2644.

4-BDR. HOME, 2-1/2 baths, 2-1/2 yrs., large lot, great neighborhood, 2,236 sq. ft., vaulted ceilings, extra storage, \$265,000. Houser, 510-373-7054.

3-BDR. TOWNHOUSE, 2-1/2 baths, 2-car garage, many upgrades, \$115,600. Stefanov, 298-2259.

4-BDR. HOME, brick, tri-level, 2-3/4 baths, 2,300+ sq. ft., many upgrades, near Tramway/Menaul, \$159,000. Tipton, 298-1944.

HOME AVAILABLE, Oct./Nov., for 1-yr. lease, Four Hills, 2,200 sq. ft., no smokers/pets, negotiable terms. Ross, 299-3023.

3-BDR. MOBILE HOME, 2 baths, affordable, luxurious model, double-wide, textured walls, cathedral ceilings. Miller, 831-4541.

4-BDR. BRICK HOME, 2,310 sq. ft., desirable Heritage East, best schools, quiet cul-de-sac, many upgrades, FSBO, \$199,900. Righter, 822-1927.

4-PLEX, all units: 2-bdr., 1-bath, 780 sq. ft., good NE neighborhood, income exceeds expenses, \$169,900. Miner, 828-1558.

WANTED

MOUNTAIN BIKE, 18-spd., rapid-fire shifting, any extras would be great. Roybal, 296-8493.

LARGE GLASS AQUARIUM to hold iguana, need not be water tight. Figiel, 856-0042.

ONE ACRE OF VACANT LAND, Bosque Farms, preferably w/utilities to property. Hertz, 265-4729.

HOUSEKEEPER, responsible, reasonable, to do light housecleaning, twice monthly, for charming elderly couple, SE Heights. Cook, 266-2088.

STREET HOCKEY PLAYERS, on Wednesdays at lunch behind the new Commissary, no contact, needn't be Gretzky. Gunckel, 831-6719.

CAMPER SHELL, or inexpensive slide-in camper, for long-wide bed pickup. Wilde, 281-7027.

POOL TABLE. Granger, 869-2079.

ROOMMATE, large 3-bdr. mobile home, near I-25 & San Antonio, swimming pool, hot tub, billiard & weight rooms. Crosby, 858-3128.

(Continued on next page)

Feedback

Q: I recently ran into a problem that surely is not unique to me. My semi-ancient PC recently reappeared on my desktop, thanks to some anonymous person. After leaving it elsewhere over a year ago, and expecting it to go to Reclamation as directed, I was informed that it was not acceptable. The reason was that it has an R-number, indicating that it was purchased with Reimbursable funds, and requires the funding agency's permission before it can be recycled. After making a few phone calls, I learned that this could take up to two years. In my case, it could take even longer, since the funding agency (Strategic Defense Initiative Office) no longer exists.

Surely I am not the only staff member with a piece of obsolete equipment purchased with funds from an obsolete or disinterested agency. Also, we may be looking at a large staff-time-and-effort expenditure to get rid of it all. A centralized accumulation, management, and disposal effort would seem to make a lot of sense, both by off-loading the chore from staff and getting some action from old program offices. The equipment itself is getting neither younger nor more capable.

In the meantime, every time I stub my toe on it, I will be reminded that a convenient accident would save me a lot of headache.

A: While we empathize with the writer, there are complicating factors. Other government agencies, such as the Air Force, initiate contracts with Sandia obligating Sandia to perform specific functions. As part of such contracts, the other agency furnishes property to Sandia. This equipment is identified by a property number with an "R" prefix label. At the end of the contract, the disposition of the property is determined by the funding agency. Sandia is required to be a good steward of this property, and as such, has a responsibility to contact the sponsoring organization to determine if the equipment should be returned at the termination of the contract.

However, we realize that sometimes the funding agency no longer exists or cannot be located. Therefore, we have initiated a new procedure, highlights of which are listed below.

If the sponsoring organization cannot be located:

- The owner of the equipment should attempt to locate the case number for the project.
- Identify the case manager and request that he or she declare the property "abandoned in place."
- Prepare a memo to Capital Accounting Services Dept. 10503, referencing the property

numbers of the equipment and detailing the attempts made to locate the funding agency, and state that the attempts were unsuccessful. Declare the items "abandoned in place" and request Capital Accounting to change the investment flag from "R" (Reimbursable) to "S" or "B" (Capital or Expense). If the case manager cannot be identified, the responsible department manager can sign this memo.

- Send the memo to Dept. 10503, MS0153.
- When the investment flag has been changed, initiate a transfer to Reapplication (Dept. 7617).

Your property coordinator can help you with the request and the transfer. If you need assistance with identifying your property coordinator, call Don Gatto on 844-2546.

Dolores Hoffman (7600)

Help us recognize Sandians

The *Lab News* wants to recognize Sandia employees and retirees who receive honors and awards. Call Bill Murphy on 845-0845 or send him a note with a few details to Dept. 12622, MS 0413. In Livermore, contact Barry Schrader (8522) on 294-2447, MS 9111.

Coronado Club

Sept. 29 — Friday night dinner/dance. \$7.95 all-you-can-eat buffet, 6-9 p.m. Music by Nite Rider, 7-11 p.m.

Oct. 5, 12, 19, 26 — Thursday bingo nights. Card sales and buffet start at 5 p.m., early birds' bingo at 6:45 p.m.

Oct. 6 (Friday) — Octoberfest dinner/dance. \$7.95 all-you-can-eat buffet will include Bavarian-style food, 6-9 p.m. Die Polka Schlingels will perform Bavarian music for dancing, 7-11 p.m. Reservations required, call 265-6791.

Oct. 8 — Sunday brunch buffet, 10 a.m.-2 p.m. \$7.95 adult members, \$8.95 guests, \$2.95 for children 4 to 12, free for children 3 and under. Music for buffet by So Rare, 1-4 p.m.

Oct. 13 — Friday night dinner/dance. \$7.95 all-you-can-eat buffet, 6-9 p.m. Music by Isleta Poorboys, 7-11 p.m.

Oct. 20 (Friday) — Kids' bingo night. Buffet, 5 p.m., with cartoons and movies. Bingo starts at 7 p.m. Free hot dog and soft drink for all kids playing bingo.

Oct. 22 — Sunday brunch buffet, 10 a.m.-2 p.m. \$7.95 adult members, \$8.95 guests, \$2.95 for children 4 to 12, free for children 3 and under. Music for buffet by Bob Weiler and Los Gatos, 1-4 p.m.

Gloria Toland goes for the gold

Sixty-three-year-old Gloria Toland, of Maintenance Operations Material Control Team Dept. 7815-1, has a gift for table tennis — she's won five gold medals in the last two years at the New Mexico Senior Olympics.

Gloria, who has been working at Sandia for more than 37 years, says she's played ping-pong "forever." She hung up her paddle a few years ago, but co-workers encouraged her to get involved with the sport again. About one-and-a-half years ago, she got back into the game and has been competing ever since.

Last year, after winning a local competition, Gloria advanced to the state Senior Olympics in Las Vegas, N.M., and took first place honors for her age bracket in the Women's Singles and

Women's Doubles categories.

This year, Gloria won three more gold medals at the state championship in Las Cruces: she finished first in Women's Singles and her teams won gold medals in Women's Doubles and Mixed Doubles. "It just comes naturally to me," says Gloria.

Gloria plans to keep playing and says, "I'm going to try to compete in the [1997] Nationals."

"Gloria is a real go-getter with lots of energy," says Judy Jewell (7815-1), Gloria's supervisor. "Nothing gets the best of her for long."

Besides the Senior Olympic Board of Directors, the state competitions are sponsored by the New Mexico State Agency on Aging.

Take Note

Retiring and not seen in *Lab News* pictures: Daniel Miko (9812), 34 years; Kenneth Hessel (5933), 26 years; Adelicio Herrera (7615), 10 years.

Sandia Classified Ads

(Continued from preceding page)

GARAGE DOOR OPENER, operational or not. Bailar, 865-1518. SIX DINETTE CHAIRS, & treadmill, good condition. Gamboa, 764-8212.

BABY JOGGER STROLLER, for 2 children, canopy preferred. Kane, 291-8576.

LOST & FOUND

LOST: Earring, pinkish-gray oval stone, w/bead work, parking lot near TTC, has great sentimental value. Chavez, 844-7086.
LOST: Gold woman's Seiko watch, 9/13, parking lot between Credit Union & 806, reward offered. Hickman, 844-4038 or 891-4847.
LOST: Gold diamond tennis bracelet, on Sept. 7, great sentimental value, reward offered. Harris, 298-4756.
FOUND: Neck chain, parking lot south of 825 TTC. Sessions, 844-4338.



"GOOD REFLEXES" are the secret to her success, says 63-year-old table tennis champion Gloria Toland (7815-1). Gloria, who started playing more than 50 years ago, has won five Senior Olympics gold medals in competitions.