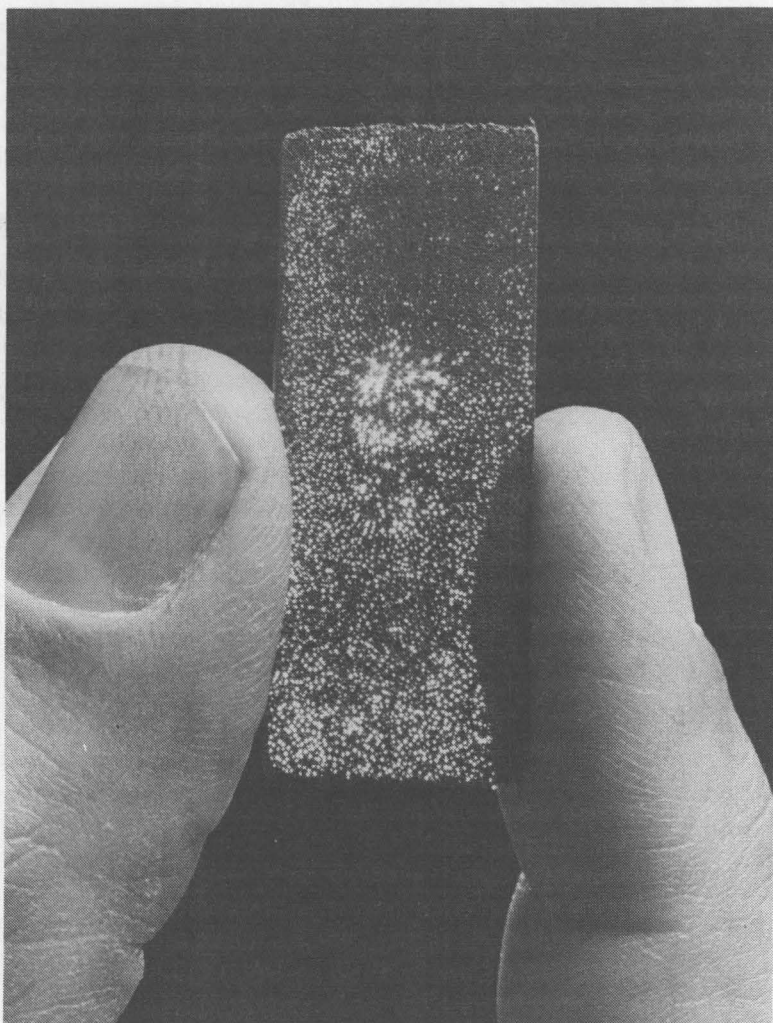


Labs to Scrutinize Tough, Light 'Gasar' Metals from Ukraine



PINPOINTS OF LIGHT gleam through the pores of a "gasar" sample. Sandia researchers will be investigating how US industry might adopt this Ukrainian material.

If upcoming tests at Sandia pan out, the cornerstone of the Russian rocket program during the Soviet era could become a building block for US industry.

Sandians and members of the US Specialty Metals Processing Consortium Inc. (SMPC) are investigating a group of porous, light-weight metals relatively unknown in this country but already in commercial use in the former Soviet Union. The metals could find uses as high-strength, high-performance materials for aerospace and other demanding applications.

Under the terms of a contract signed by DOE, the Dnepropetrovsk Metallurgical Institute in Ukraine, and its US representative DMK TEK Inc., Sandia will fabricate the porous metals and test their properties. The project will include constructing a furnace at Sandia/New Mexico.

"These light-weight, porous metals offer tremendous potential for applications in US industry," says Frank Zanner of Liquid Metal Processing Dept. 1833. "As a national laboratory, our job will be to validate the claims made about them and eliminate the risks to industry."

This role grows out of Sandia's association with SMPC, which the Labs helped organize in 1990. SMPC includes 10 of about 30 US compa-

nies that manufacture specialty metals for aircraft, satellites, nuclear power reactors, high-speed drills, and other products. The consortium brings together industry, universities, and DOE in an industrial partnership aimed at increasing US competitiveness in the world specialty-metals market.

Checking Out the Gasars

The porous metals — which Ukrainian metallurgists call "gasar" materials — are created through a casting process under high gas pressures. They are reported to have a high degree of structural integrity, which gives them more strength and rigidity than traditional porous materials.

"These metals have been the cornerstone of the Soviet rocket program," says Mike Maguire (1833), lead researcher for the project at Sandia. "One of our roles will be to evaluate the properties of the materials for US industry."

Ukrainian researchers have fabricated gasar materials from a wide variety of metals and from some ceramics and glasses, says Mike. The pore

"Our job will be to validate the claims made about [gasars] and eliminate the risks to industry."

size, orientation, and shape can be closely controlled by manipulating pressures and cooling processes. Pore sizes can vary from 5 microns (approximately the size of a bacterium) to 10 millimeters (0.4 inch). The materials' volume can be from 5 to 75 percent occupied by pores. The pores can be spherical, longitudinal (along the long dimension of the material), or radial (fanning out from the center-line like spokes of a wheel).

Conventional porous materials are fragile, but gasar metals can be formed, cut, welded, bent, and machined. In former Soviet Union countries, they're used commercially for chemical filters,

(Continued on Page Four)



LAB NEWS

VOL. 45, NO. 23

SANDIA NATIONAL LABORATORIES

NOVEMBER 12, 1993

Perceptions, Problems, and Priorities

Sandians Hear Frank Talk from Al Narath At Recent Employee Dialogue Sessions

Employees attending the quarterly dialogue sessions at the Labs with Al Narath late last month heard some frank talk from the Sandia President — talk about political and economic realities, about how Sandia and the other DOE labs may fare in coming years, and how the transition to new management and operating contractor Martin Marietta is going.

While saying that Sandia has plenty of work now and ample funding, Al said there may be "stormy waters ahead" in FY95 and '96 as Sandia and the other DOE weapon labs seek to redefine their roles in a shaky economic environment.

Although the national labs still have lots of support from some influential political, government, and industry leaders, Al said, others see the

"There isn't much support in Washington to maintain the national labs . . . at present levels."

labs as "dinosaurs," with no strong purpose now that the nation isn't building new nuclear weapons.

While making it clear he doesn't agree with everything the critics say, Al acknowledged they sometimes make powerful arguments. Pointing out

that the DOE labs have grown since 1980, he said, "Much of the [government] community sees the DOE labs as having been in a privileged situation for a long time. Look around the country. Look at the jobs being lost — not only within the federal government, but also in industry. What I'm really telling you is there isn't much support in Washington to maintain the national labs — even one as great as Sandia — at present levels."

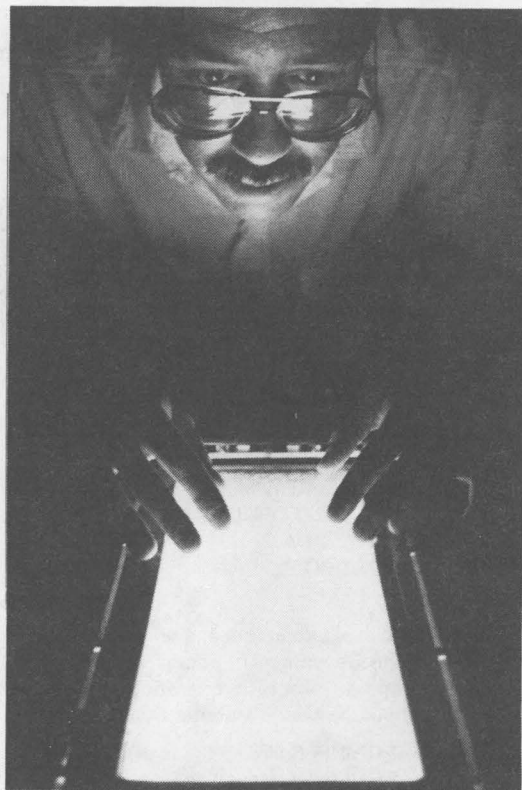
A Positive Side, Too

Partly in response to the criticism, Sandia, Lawrence Livermore, and Los Alamos national labs are starting to get serious about cooperating, said Al. "There is a growing consensus among the lab directors that we can't continue to live in the past — that we need to forge some new reasons for our existence. There's a strategy statement that we're all ready to sign. It's a little watered down from what I hoped we would do initially, but we're beginning to come together."

Al noted the labs have some good, powerful supporters in congress who know them well and who are willing to help them navigate the stormy waters. "Jeff Bingaman, Pete Domenici, Bennett Johnston, and other influential senators see the value of the DOE labs," he said, and are sponsoring

(Continued on Page Five)

Eye on the Environment



HOW'S IT FLOWING? Mike Nicholl, a post-doctoral researcher at the Labs, checks the progress of an experiment in which liquid flows through simulated rock fractures representing an underground environment. Mike works in Sandia's Flow Lab, which was set up to study questions such as how fast and how far contaminants travel under various conditions. See story on page four.

(Photo by Randy Montoya)

This & That

Drivers "Seeing Red" - Several Sandians have complained in the past month or so about the new traffic signal along Eubank leading into Kirtland AFB and the one just inside the gate. These employees lament how the signals slow the traffic flow. The decision to "signalize" inside the gate was made primarily because of traffic going to and from the Air Force's new building. The signal outside the gate was installed by the city to accommodate traffic going to and from several growing facilities nearby. See page eight for a Feedback inquiry and response about the situation.

I personally sympathize with folks who use the Eubank gate now. Several days ago, I drove in that way around 7:40 a.m. The signals may make the area safer, but two banana slugs (one injured), a baby tortoise, and a herd of ants passed me on the way in.

* * *

800 Numbers - Harriet Goodness (7900) dropped a note several weeks ago asking why so many Sandia/New Mexico buildings in Tech Area 1 are identified as 800 something - Building 800, Building 825, etc. "Why 800?" she asks. "Why aren't they numbered 100 something since this is the first Sandia? Then Livermore [Sandia/California] buildings could be 200 something?"

Frankly, I'd never thought to question why Tech Area 1 buildings mostly have 800 numbers, but we asked retired Sandia facilities director Ward Hunnicutt, and he says it's because we're located on a military base. The military has traditionally divided its reservations into squares and assigned numbers to those squares to (among other things) make it easier to direct emergency vehicles. Sandia is situated on land that was transferred from what was the Army to the old Atomic Energy Commission (now DOE). Tech Area 1 was in the 20800 segment, but we dropped the first two digits of the segment number and started using 800 numbers for our buildings.

* * *

Quickie Quiz - What is the world's largest defense electronics company? What firm built the first airplane to cross the Pacific Ocean? And what company developed the highly successful series of Titan missiles and space launch vehicles? Many of you know the correct answer to all three questions is Martin Marietta. This is just some of the info in the "Martin Marietta - Performance and Vision" publication sent to all employees recently. If you haven't already done so, I suggest you read through it and then save it for reference. It's a good way to learn a lot about our new management contractor quickly.

* * *

Urgent Need for Stamp Pad? - I may have created a problem for a few folks by explaining in the last issue that by pushing "2" for urgent delivery of a voicemail message that you are simply ensuring that your message plays before the "1's" (normal delivery messages). Mike Stark (1277) called to say he and some other employees who do a lot of work away from their desks have beepers set up to automatically page them when they have an urgent message. I understand that it could be a bit upsetting to respond to a page only to find out that your new stamp pad has arrived, so please don't push 2 after leaving a message unless it's truly urgent.

●LP

New Locations for Sandia's Weekly Blood Drives

Starting Dec. 7, United Blood Services' (UBS) weekly blood drive for New Mexico-based Sandia employees and contractors will move from its old location in MO168 to two new locations.

The new locations - the Bldg. 831 conference room (Medical Building) and the Bldg. 822 conference room - give donors from both sides of Tech Area 1 closer access to blood drives and more privacy for screening procedures, says Linda Stefoin (3544), Sandia's blood drive coordinator.

Because only one UBS collection unit is allocated to Sandia, the Sandia drives will alternate between the two new locations on Tuesday mornings. On Dec. 7, employees should go to Bldg. 822 to donate. On Dec. 14, donors should go to Bldg. 831, and so on.

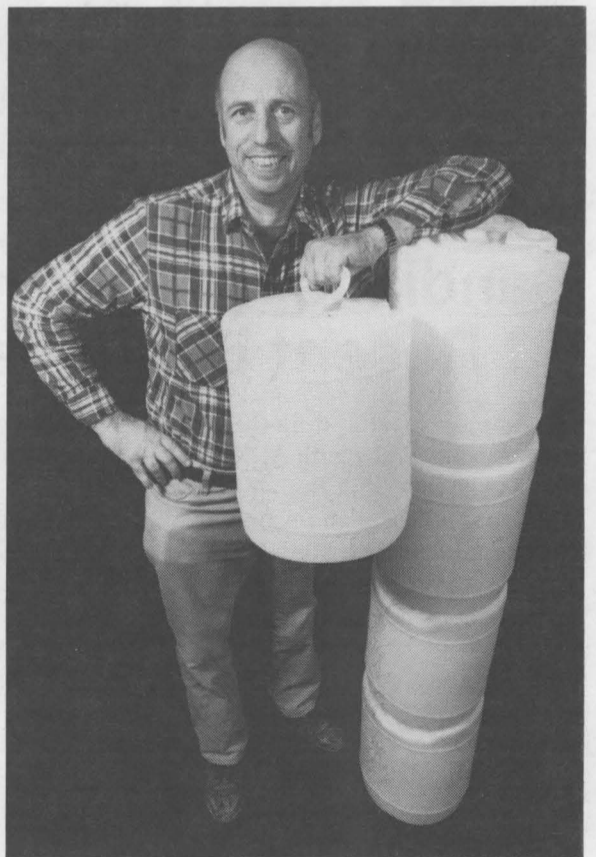
A mobile unit also will collect blood in Area 4 once a month. The *Weekly Bulletin* and bulletin board announcements will list times and locations.

Linda says the location changes and larger rooms are in response to cautious new Food and Drug Administration regulations that require donors to answer some very personal questions about their sexual and behavioral history before donating.

"For the safety of the blood supply, it's important that the UBS people get honest answers," says Linda. "The bigger rooms should keep potential blood donors out of earshot of each other while they are being screened."

The more spacious rooms also allow more donation stations, which should reduce waiting lines.

Linda thanks Sandians for their patience and urges them to donate during the next few months. "We've lost some donors during the last several months," she says. "Now that privacy concerns are solved, it's important that we do our part, especially during the holiday season when emergency blood is in greatest demand." ●JG



TOP BLOOD DONOR - According to United Blood Services records, Stuart Barth of Custodial Services Dept. 7615 has donated at least 162 pints of blood during his lifetime, more than any other on-roll Sandia employee. He says he's been donating regularly since he came to the Labs in 1980. In gallon terms, he's already filled up the four five-gallon jugs on the floor and he's working on his fifth. Only a few New Mexicans have reached the 25-gal. mark. Linda Stefoin (3544), Sandia blood drive coordinator, reminds employees and contractors that blood drives take place at Sandia every Tuesday morning. Watch the *Weekly Bulletin* for times and locations, and see story above.

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MARTIN MARIETTA

Next LAB NEWS Issue Is Dec. 3

The LAB NEWS will *not* be published on Nov. 26, which is energy conservation day (day after Thanksgiving). The next issue will be published Friday, Dec. 3, and the final 1993 issue will be published Friday, Dec. 17.

The first issue of 1994 will be published Jan. 7, at which time the normal fortnightly schedule will resume.

Take Note

The New Mexico Academy of Science Annual Meeting is scheduled for Saturday, Nov. 13, 9 a.m.-3 p.m., at BDM International (1801 Randolph Road SE). Presentations include "Computers, People, and Education: Three Views"; "Human Computer Interaction"; "Learning Community Between Teachers, Students, and Scientists"; "Biomechanics of the Hands"; "NM Supercomputing Challenge"; and "Introduction to Virtual Reality and Its Applications." The meeting includes computing demonstrations and Maui High Performance Computing Center video and College of Engineering display. Admission is free. For information, call Bill Snyder on 298-2923.

Praises Links with Industry**Martin Marietta CEO Urges California Sandians to Tackle Tough Jobs — Like Energy, Health Care, Transportation**

Sandia/California can flourish if Sandians apply their technological skills to "big problems," said Martin Marietta Board Chairman and Chief Executive Officer Norman Augustine last week during his first visit to the California site.

The visit on Nov. 2 was a whirlwind of briefings, tours, and a press conference. At an hour-long meeting with a packed auditorium of employees, Augustine spoke about Martin Marietta and answered questions.

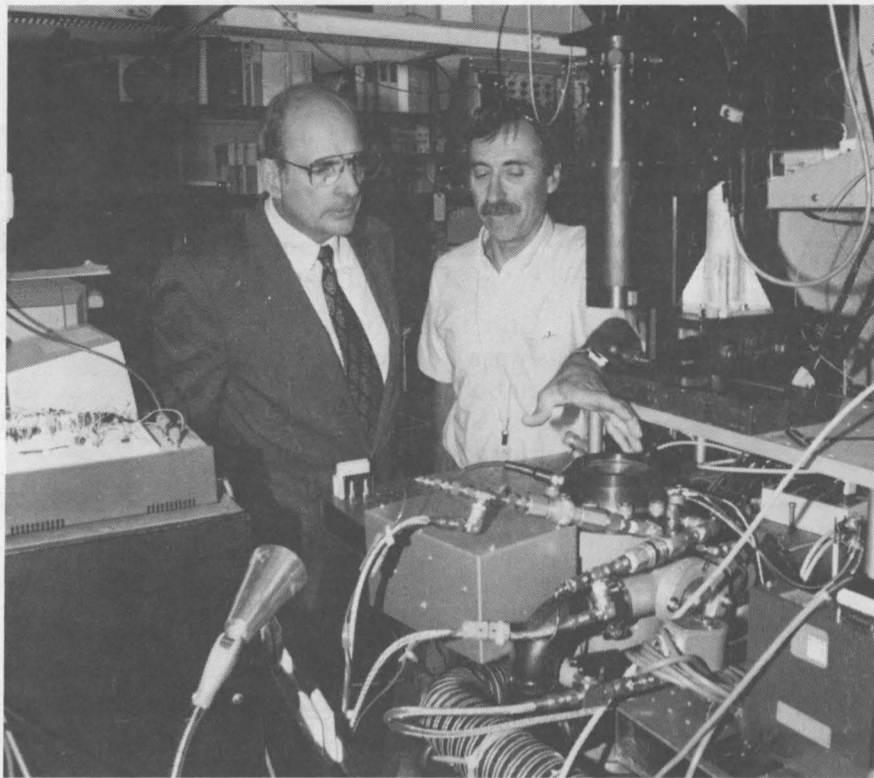
The CEO said, "There is a very compelling reason for a site here. Part of it is the defense work you do in relation to your neighbors [Lawrence Livermore National Lab]. But another part has to

"You have the good fortune of being . . . in probably the greatest hotbed of technology in the whole country, in fact the whole world."

do with the spinoff of technology for commercial work. You have the good fortune of being located physically in probably the greatest hotbed of technology in the whole country, in fact the whole world. And the notion that a high-tech company that is trying to help the commercial world by spinning off technology would want to leave California, particularly this part of California, is a non sequitur. Al [Narath] has said you're a window to this marketplace, and that makes a great deal of sense."

New Customers Demand Flexibility

In response to a question about "ensuring the survival of Sandia/California," he said, "Survival isn't the issue here . . . I think the question should be: 'How can Sandia make the biggest contribution?' The way to do that is to continue your defense business well, and get really serious about how you can help America get more competitive. How you can help solve the big problems in energy, health care, the environment, or transportation where you have particular skills to bring to bear." He added, "It's going to require a lot of flexibility on your part as you discover yourself working on new problems with new customers. But that comes with the world we're in."



CLOSE VIEW of Sandia research — Martin Marietta Chief Executive Officer Norman Augustine (left) looks at a two-stroke engine in the Combustion Research Facility as Bob Green (8362) explains the research program it's used for. Augustine made his first visit to Sandia/California earlier this month.



**SANDIA
CALIFORNIA NEWS**

He then mentioned the Labs' plans to develop ties to industry by opening a new Sandia office in the middle of Silicon Valley next to the Semiconductor Industries Association office. "That is one of the most important things you can do to build these ties. You have great technology, but if people out there don't know it and don't use it, it's of no value, and Congress will soon lose interest in investing in it. So you will be measured by how people in industry speak about your contribution."

Be Seen as Ally, Not Competitor

Asked how Sandia can avoid the appearance of competition with industry, Augustine replied, "There have been times when Sandia and other

national laboratories have been viewed as competitors with industry. That's not healthy for any of us. The thing to be done to preclude that is to convince American industry that Sandia can help them, that you can bring something they need to make them more competitive. I think when industry views us [Sandia] as an asset, an ally, and starts coming here for help, the competition issue will die overnight."

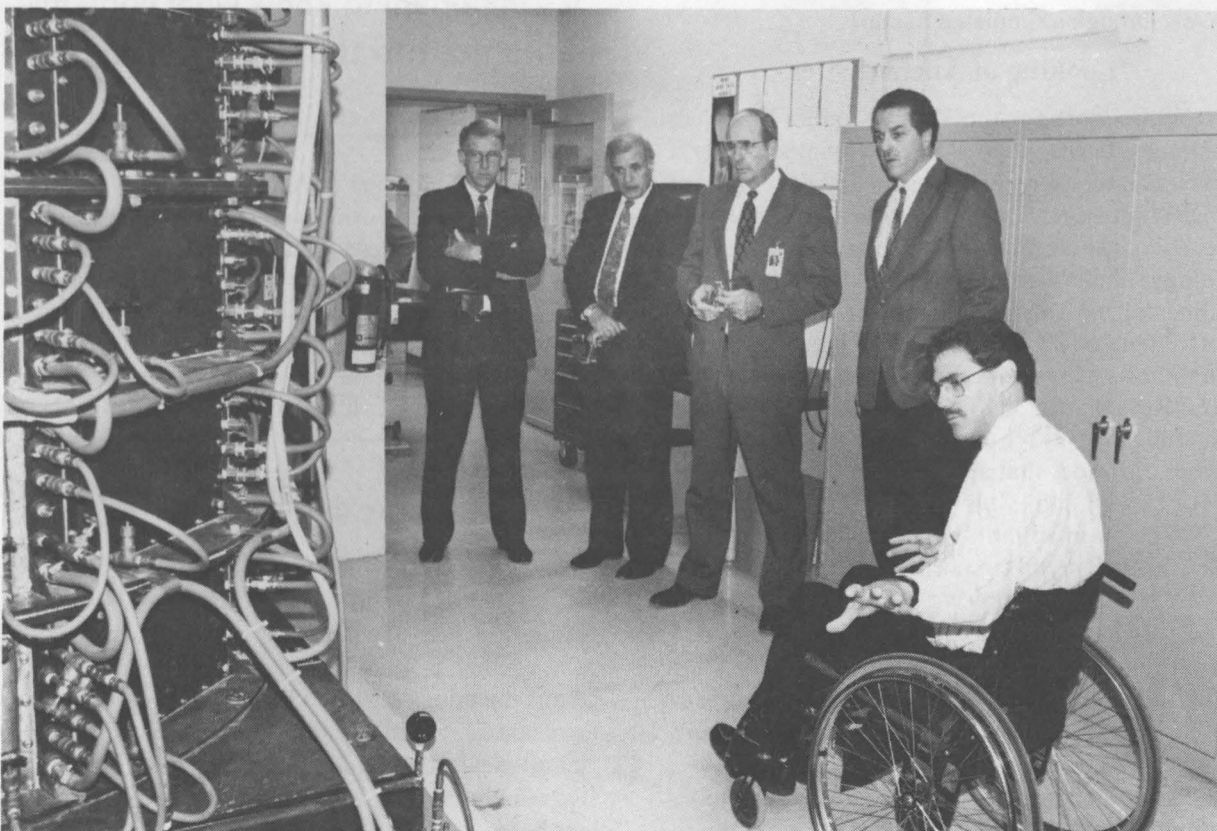
In response to a question about allowing transfer of employees between Sandia and other Martin Marietta locations, he said, "The answer is absolutely yes. I don't want to suggest there will be hordes of people going back and forth, but selectively there will be opportunities." He added, "We

"You will be measured by how people in industry speak about your contribution."

really want to do that, because it is the best way to bring an organization together. It will be done without anyone losing service time. We could especially do this in areas like finance, legal, human services, and technology."

Touring the site, Augustine saw the Burner Engineering Research Lab, Two-stroke Engine Lab, Optical Wave Mixing Lab, and Lidar testbed in the remote sensing lab, all in the Combustion Research Facility. He also visited the Advanced X-ray Lithography Lab in Bldg. 916, and the Integrated Manufacturing Technologies Laboratory complex, where he was briefed on advanced manufacturing initiatives, environmental technologies, telecommunications, advanced transportation initiatives, and education outreach programs.

Augustine's message to all employees as he concluded his visit was, "Thanks for what you are doing, not only for Martin Marietta, but for this country. You've done a great deal over many, many years." ●BLS



BURNER ENGINEERING Research Lab's industrial-size furnace is explained to (from left) VP-8000 John Crawford, Executive VP Jim Tegnella, Martin Marietta CEO Norman Augustine, and Bill McLean (8300). Neal Fornaciari (8362, right) is telling them about the lab's activities.



Sandia's Only 'Aggie' Engineer**PhD's 'Strange' Background Turned Out a Perfect Match**

Recruiting employees from "strange" backgrounds is something that Dennis Miyoshi, Director of Nuclear Systems Security Center 5800, once said he prided himself on. Five years after he hired Bob Glass (6115), Sandia's only agricultural engineer, it's easy to see why.

Since Bob arrived, his research into how water and contaminants move through the earth's subsurface has been in high demand for everything from petroleum recovery to the proposed Yucca Mountain (Nevada) nuclear waste disposal project. Not only that, the "flow visualization" laboratory he helped design and build is the only one of its kind in the world.

Flow visualization combines high-resolution optical and X-ray imaging with automated experimental set-ups and image analysis. Researchers can

Researchers can "see" every detail of how liquids or gases flow through both fractured and porous materials.

"see" every detail of how liquids or gases flow through both fractured and porous materials. As a result, they can then develop numerical and analytic models of flow/transport processes.

"Researchers have made a lot of assumptions in their models for multiphase flow, or the flow of combinations of air and water, or oil, water, and air," says Bob. "Some of these assumptions are not entirely correct. In cases of potential soil or water contamination, we need them to be correct."

Though an agricultural engineer might have seemed an unlikely candidate for a Sandia job, Bob, who received his MS and PhD in agricultural engineering from Cornell University, says there

(Continued from Page One)

Porous Metals

bearings, ceramic supports in rocket and jet engines, light-weight panels for space, and oxygenators in water purification.

"There's a lot of interest in these materials among American companies," says Mike. "But until they see somebody in the US make the materials and test them, there's also some uncertainty."

Porous but Tough

The agreement calls for the Dnepropetrovsk Institute to do research on three alloys. The results will be given to SMPC and Sandia in the form of phase diagrams, which describe pressures and mix-

The materials' volume can be from 5 to 75 percent occupied by pores.

tures of gas needed to achieve desired structures. "Gas pressures and compositions have to be maintained in a very narrow range," Mike explains.

Dnepropetrovsk scientists will also provide plans for a furnace to create the material. These plans will be compared with plans now under development at Sandia before the furnace is constructed.

The details of the \$60,000 contract — which also includes other metallurgical projects — took about a year to iron out, says Frank, who visited Ukrainian scientists last year. The contract calls for Sandia to provide lab equipment and funding to Ukrainian scientists, in addition to licensing fees for the metal-making process. DMK TEK, based in Ann Arbor, Mich., and owned jointly by US and Ukrainian partners, is the licensing agency.

•WKeener(12630)

was indeed a match.

"Agricultural engineers are interested in anything that goes into the ground that might affect the soil or the environment," says Bob. "It's important to know what contaminants go into the ground and how they travel. In that sense, our interests overlap."

Yucca Mountain and Dry Desert Dust

Still, that convergence of interests wasn't obvious to him at first. When Bob was first offered a job at Sandia/New Mexico, he hardly expected to take it. The Southwest seemed too dry to be of much research interest to him. A trip to Albuquerque and a briefing on his potential work — developing and validating theoretical models of liquid flow and solute transport through unsaturated fractured rock for the Yucca Mountain project — quickly changed that impression.

Driven by the need for specific data, Bob and a group of almost 20 graduate and undergraduate students from several universities designed and built Sandia's flow visualization lab in the basement of Bldg. 823. The lab allows researchers to study different types of liquid flow (in fractured and porous media) by systematically varying parameters such as liquid properties, angle of flow within the gravitational field, hydraulic pressure, and media properties.

"We try to take problems apart and understand the pieces separately," says Bob. "For Yucca Mountain, this means breaking the problem into fractures, matrix, and the interaction between them."

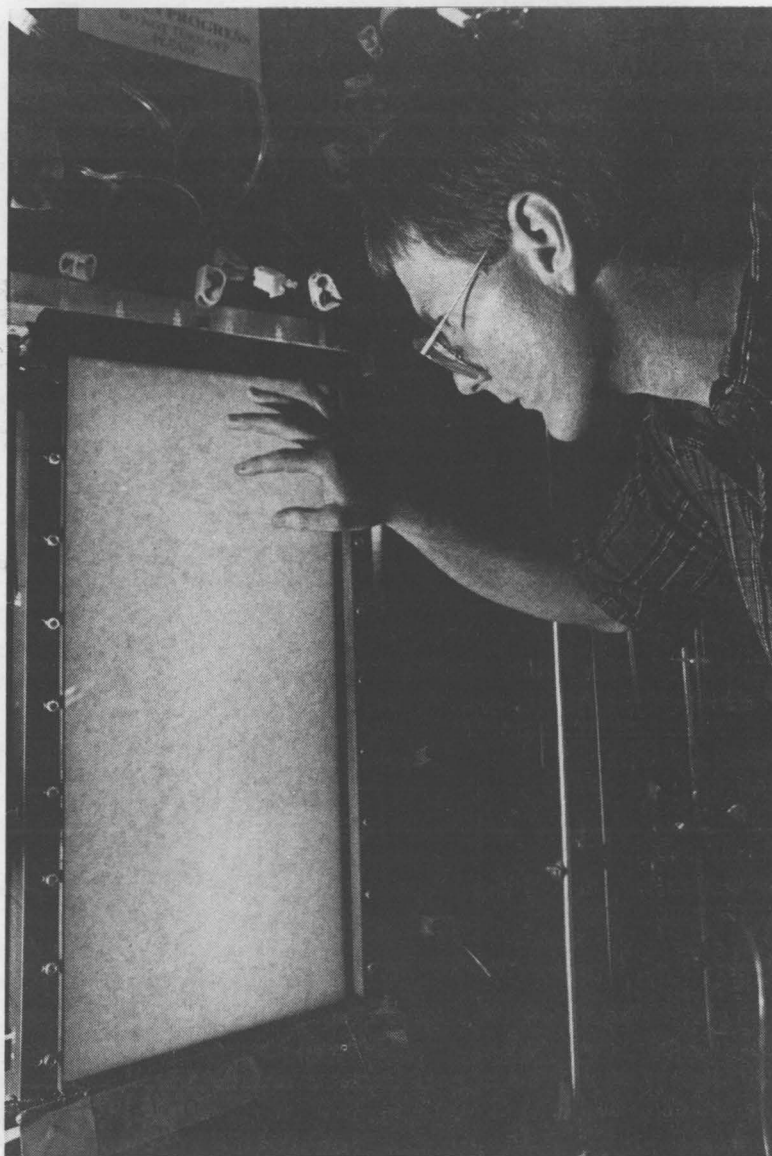
Once the separate studies are completed, the understanding acquired will be rolled into larger-scale application models. "The roll-up of understanding is critical for real-world applications," says Bob. "There's no way we can model Yucca Mountain based only on what occurs within a 6-by-12-inch fracture," he says, pointing to an experimental set-up that studies how a colored solute travels through a simulated fracture.

Looking at Ancient Sites

While work for the Yucca Mountain project continues, Bob's group will be working on several new laboratory-directed research and development (LDRD) projects. One of them involves studying archeological dig sites, a field known as archeohydrology. The project, led by Jim McCord of Environmental and Waste Management Technical Support Dept. 6622, will use the sites of ancient inhabitants as analogs for modern contaminated sites. Researchers involved in the project will be searching the soil for any material, most likely carbon or chloride, that appears to exist in amounts above background levels.

"The main advantage of archeological sites like Chaco Canyon [in northwest New Mexico]," says Bob, "is that they've been around for hundreds of years and can give us a time-integrated picture of how contaminants have traveled. By studying archeological sites, researchers hope to get an idea of how modern contaminants would move in desert climates."

In another area of promising research, Bob's group will use gamma- and X-ray tomography to study the inside of multiphase fluid reactors used for industrial processes such as coal liquefaction. This project, led by Tim O'Hern of Energetic



AQUIFER IN THE LAB — Bob Glass (6115) observes a setup in Sandia's flow visualization lab. Inside the window, liquid is traveling through material that represents a porous underground medium such as an aquifer formed by sand.

Materials and Fluid Mechanics Dept. 1512, focuses on understanding liquid flow structure and reactor dynamics to help engineers design better industrial-scale reactors.

Studies of a process for synthesizing hydrocarbons by the controlled reaction of hydrogen and carbon monoxide promise to improve coal liquefaction efficiency from 30 percent to 90 percent.

"It's important to know what contaminants go into the ground and how they travel."

The diagnostics being developed for these studies, says Bob, will also work with petroleum extraction and processing, liquid metal flows in solar energy receivers, and other areas of interest to Sandia, DOE, and industry.

"At Sandia I get all kinds of interesting problems and projects just walking in the door," says Bob. "That's really why I came." •DT

Fun & Games

Boating — Retiree John Shunny is organizing his 7th annual Grand Canyon boat trip down the Colorado River, from Lee's Ferry to Lake Mead, May 29-June 6, 1994. For groups, the outfitter discounts the price — \$1,285 for this nine-day trip vs. the usual \$1,400 to \$1,600. Great camping, hiking, and all meals are included. These trips fill rapidly. If you're interested, call John on 265-1620 (mornings best).



(Continued from Page One)

Some Frank Talk From Al Narath

a bill (S473) that would broaden the mission and scope of the labs. Its fate is far from secure at this point, he noted, but he expects "something like S473" to eventually become law.

The national labs also have other supporters, said Al. For example, Secretary of Energy Hazel O'Leary has been supportive of the labs in recent congressional testimony, and former Motorola Chief Executive Officer George Fisher — acting as head of the President's Council on Economic Competitiveness — has told Secretary O'Leary that the labs have potential to play "a very important role in support of industry." [It was recently announced that Fisher is moving to become CEO of Kodak.]

Al emphasized one point several times during his talk and in the response to employee questions following the talk: Sandia must strengthen its ties with private industry. As the defense budget

Sandia must strengthen its ties with private industry.

shrinks and fewer defense dollars are available to Sandia, the Labs will be working more to help make US business and industry stronger and better able to compete in the world market.

Extremely Smooth Transition

Al said Sandia's Oct. 1 transition from AT&T management to new management contractor Martin Marietta has gone much better than he expected. "A year ago, everyone I talked to said this will be a very traumatic experience for the Laboratories — 'You'll get through it, but it's going to be tough.' As far as I'm concerned, it hasn't been particularly tough, and we're beginning to see a lot of advantages and very few disadvantages to this new relationship.

"I've had a number of very constructive interactions with Martin Marietta. I've spent quite a bit of time with Norm Augustine [Chairman and Chief Executive Officer] and Tom Young [President and Chief Operating Officer], and I have had a chance to brief the Martin Marietta headquarters staff."

Al said he wanted to clear up several misunderstandings and misperceptions that keep popping up.

"I keep hearing in Washington that I'm personally unhappy with Martin Marietta, and I'm actively seeking other employment. I don't know how often I've told my friends and colleagues that there's no truth whatsoever to it, but that rumor still keeps moving. I want to tell all of you that there's no truth to it. I couldn't be any happier.

"The other rumor that's going around is that DOE is unhappy with Martin's progress in 'getting its arms around' the Laboratories," Al continued. "I've done a lot of checking. I've talked to Bruce Twining [DOE Albuquerque Operations Manager] among others, and he tells me he's delighted with Martin Marietta, believes that the transition has gone even more smoothly than he had ever expected, and has transmitted that to Tom Young.

"I met with Tom. I gave him my reassurances that as far as I know DOE is happy with what is happening here."

Company 'Sensitivities'

Al also talked about five Martin Marietta "sensitivities" — actually corporate priorities, areas of emphasis, and areas in which employees need to exercise care: (1) government relations, (2) conflicts of interest, (3) ethics, (4) diversity, and (5) unallowable costs.

"Martin Marietta is far more dependent than AT&T on government contracts. Martin values its relationships with the Congress, and we can't do anything that interferes with that."

The Sandia President noted that the company

had granted Sandia an exception from corporate policy: All other government relations functions in Martin Marietta are centralized — a headquarters function — but Sandia has been allowed its own government relations activity.

"The fact that Martin Marietta granted us that exception is a significant vote of confidence in our ability to manage that interface in a professional, ethical way, and I don't want to disappoint," he

"We're beginning to see a lot of advantages and very few disadvantages to this new relationship."

said. Al asked that all Sandians planning any type of interaction with the Congress first contact Sandia Executive Staff Director Virgil Dugan (12100), who is coordinating all government relations functions for the Labs. Virgil also coordinates these functions with DOE and with Martin Marietta's government relations office in Bethesda, Md.

Al noted that ethics gets a lot of attention within Martin Marietta. "We've done a good job with our own ethics program in the past, and this is something that will get additional attention at Sandia in the future. We are now committed to elevating the ethics function to director level. Among

other things, that director will have the Corporate and Personal Integrity Program and the Ombuds Program reporting to him or her."

Stressing DOE's increasing emphasis on employee diversity programs, Al said that Secretary O'Leary held up the award of the Sandia management and operating contract to Martin Marietta until she could communicate her commitment to make Sandia "a role model for all of DOE to follow in the diversity field."

Under the contract between DOE and Martin Marietta, there are certain unallowable costs that the company cannot recover from the government. These unallowable costs will be deducted from the fee Martin Marietta gets for managing the Labs, Al explained, so "we've got to be very careful that we follow the terms and conditions of the contract and not get into situations that will lead to costs that cannot be recovered."

Videotapes Available

Sandians who could not attend one of the employee dialogue sessions may check out videotapes of one or more sessions from the Sandia/New Mexico or Sandia/California libraries. The tapes include Al's talk, plus the question-and-answer sessions that followed. Albuquerque-based Sandians should call 844-2738, and Livermore-based Sandians should call 294-3034. ●LP

Where's the Sandia Labs Flag?

Answer Isn't Blowin' in the Wind

It was clear from a question at one of President Al Narath's employee dialogue sessions last month that some employees think the Sandia flag has been replaced with the new flag that was first raised in front of Building 800 and at Sandia/California on Oct. 1. Not so, says Al. The official Sandia flag — "Sandia blue" bold stripe on one side, and blue thunderbird on white background on the other side — remains the official Sandia National Laboratories flag and can still be seen at various places around the Labs.

The new flag that was raised on Oct. 1 includes a dark blue Martin Marietta logo beneath a dark blue thunderbird on a white background. This is the *Martin Marietta Sandia Corporation* flag. It was specially designed for Martin Marietta (which doesn't have a corporate flag) to fly in place of the departed AT&T flag, alongside the US and DOE flags near our main buildings. It does *not* replace the Sandia flag. Now — why dark blue for the Martin Marietta logo and thunderbird on this particular flag instead of Sandia blue? Don Wagdy (7155), who

designed the new flag, explains that this particular blue is Martin Marietta's "company color."



SECURITY POLICE OFFICER Louis Matthews (7435) displays *Martin Marietta's Sandia Corporation* flag. This flag does *not* replace the Sandia National Laboratories flag, which is still displayed at various places around the Labs.

Better Air Challenge

Time to Make Your Carpooling Count

Ride the bus or find out what it's like to use a carpool. Sandians are encouraged to join other alternate-transportation commuters during Ridepool's 6th annual Better Air Challenge 1993, Dec. 6-10. This city-wide event, in which Albuquerque commuters pledge to use alternative transportation to commute to work at least one day during the challenge, aims to raise awareness about automobiles' effects on air quality during the colder months when carbon monoxide accumulates in Albuquerque skies.

Those who pledge to participate are eligible for Ridepool prizes, including savings bonds, gift certificates, tram passes, dinners for two, weekend getaways, balloon rides, and more. Pledge cards were sent recently to all employees.

Linda Stefoin, Benefits Dept. 3544, says, "Send in the cards even if you're a regular user of alternate transportation. This is a chance for those of you who regularly drive to work in a carpool or vanpool and those who ride the bus to get some

recognition for doing so all along." If you are participating, be sure to get your pledge cards to Linda by the Nov. 19 deadline.

Linda serves on the Better Air Challenge Task Force that planned the event. "I'll send information about carpools, vanpools, and city buses to those who request it on the pledge card," says Linda. "But if you don't want that information, all you have to do is check the box at the bottom and drop the preaddressed card in company mail and you will be entered into the prize drawings. It's as easy as that."

The cards will be sent to Ridepool for counting. The company or organization with the most pledges wins the challenge. Sandia won the challenge for large employers last year.

One-time carpool or vanpool referrals and bus information are available from Linda on 844-7433.

Sandia is one of the sponsors of the Better Air Challenge, along with area businesses and governmental organizations. ●JC

Sandia News Briefs

Paul Brewer Will Move to Carlsbad, Manage Sandia's Carlsbad Operations

Paul Brewer, Director of Human Resources and Business Operations Center 8500 at Sandia/California, will soon assume a new senior management position in Carlsbad, N.M., as director of Sandia's Carlsbad operations. The new position was created to increase the Labs' emphasis on its Carlsbad operations and the Waste Isolation Pilot Plant (WIPP).

Sandia is responsible for oversight of all scientific research at the WIPP site and has been involved with WIPP since the 1970s. Paul will be responsible for Sandia's involvement in DOE-related community activities, managing the national transuranic waste liaison responsibility, and providing a senior management presence in Carlsbad. Wendell Weart, Manager of WIPP Project Dept. 6303, will continue to be project manager for the scientific program at WIPP.

1993 Enterprise Network Award of Excellence Given to Sandia

Sandia's pioneering work with Cisco Systems for the Supercomputer Consolidation Project and its testbed network gained the Labs a 1993 Enterprise Network Award of Excellence (ENNE). The international ENNE awards program recognizes and rewards achievements in networking that improve corporate efficiency or create a new business opportunity or application.

Network World, a news weekly that covers enterprise networking from the user's perspective, and *Networld*, an international networking and interconnectivity industry trade show, hosted this year's awards program in Dallas on Oct. 4. Sandia was nominated by Cisco Systems in the national user category. Steve Gossage and Bruce Whittet (both 1954) accepted the award on behalf of Sandia.

Quality New Mexico Directors to Meet at Sandia Nov. 23

Sandia will host the next Quality New Mexico Directors' meeting Tuesday, Nov. 23, at 10500 Research Park (outside the Eubank gate). Executive Director Julia Gabaldon (on loan from Sandia) says the group will discuss several quality award programs and community quality networks, and review the group's mission and vision statements and compare them with those of similar groups in other states.

A major project is the New Mexico Quality Award program to help organizations throughout the state assess their strengths and determine where they need improvement. Applications for this award are available at the Quality New Mexico office at 320 Gold SW in Albuquerque; application deadline is Dec. 30. For more information contact Julia or Mike Silva on 242-7903. Sandia's Quality Improvement Center Director Charles Tapp (12900) is one of the 21 Quality New Mexico Directors.

Send potential Sandia News Briefs to LAB NEWS, Dept. 12660, MS 0413.



TWO SANDIANS were on the team of experts who analyzed events comprising the 51-day siege of the Branch Davidian cult headquarters near Waco, Texas, that left four federal agents and 89 cult members dead. Wade "Ish" Ishimoto (left) of Facilities Customer Representative Dept. 7302 is an Army Special Forces retiree and charter member of the Delta Force, an elite military force trained to respond quickly to non-traditional military crises. He was one of six tactical experts who reviewed the planning, preparation, and execution of the Bureau of Alcohol, Tobacco, and Firearms (BATF) raid Feb. 28 that initiated the siege. Paul Cooper of Engineering Projects and Explosives Applications Dept. 9333 is an explosives expert. He was asked by the Treasury Department whether there was enough evidence of the cult's possession of explosives and illegal weapons before the abortive February raid to establish probable cause for the raid. Paul said his study concluded that the cult members did possess illegal weapons and explosives, and that the Treasury Department was justified in seeking to enter the compound for that reason. Ish determined, though, that the federal agents had lost the element of surprise and should have aborted the original raid. He said, however, that it wasn't clear whether the BATF leaders on the scene fully realized that the cult members knew the raid was coming. Both Sandians appeared at an Albuquerque news conference Sept. 30, the day the Treasury Department issued the report to which they contributed.

Variety of Exercise Options

Sandians, Retirees Can Join Health Clubs at a Discount

Sandia/New Mexico employees and retirees and their families are eligible for reduced-rate memberships in three Albuquerque health clubs, under terms of a new Martin Marietta corporate membership arrangement.

Charlie Emery, Vice President of Human Resources Div. 3000, says the just-signed agreement was sought as a way of expanding Sandians' physical fitness opportunities beyond what already is available through Labs fitness facilities, the Coronado Club, and Kirtland AFB facilities.

The three clubs are:

- Downtown Athletic Club, in the Galeria at First Plaza; with a variety of exercise equipment.
- Midtown Athletic Club, just off I-40 at Carlisle; basketball/volleyball courts, racquetball/squash courts, indoor/outdoor swimming pool, variety of exercise equipment, and child care.
- Highpoint Racquet & Swim Club, near Tramway and Montgomery; tennis courts, racquetball/squash courts, indoor/outdoor swimming pool, exercise equipment, and child care.

Stephanie Michnovicz, corporate accounts director for the clubs, says Sandians and Sandia retirees have only to show proof of their Sandia affiliation to join one or more of the clubs, and will have their start-up fees reduced by \$25 if they join before Nov. 29. She says Sandians who already are members can receive an appropriate discount by applying for it at a club.

For membership details, call the Downtown club on 242-1500, the Midtown club on 888-4811, or the Highpoint club on 293-5820.

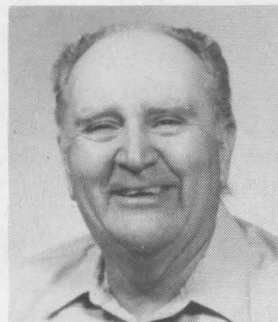
"We currently don't have any arrangement like this for Sandians at the California site, but we could pursue one, if there is interest there," says Charlie.

Recent Retirees



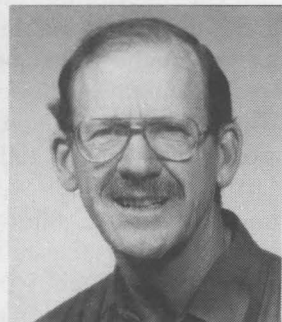
Dan Murphy
2254

35



Wendell Grimsley
1955

30



John Cawfield
5151

25

Congratulations

To Paula and Adam (1562) Slavin, a son, Jason Paul, Sept. 23.

Sympathy

To Mike Swanson (9212) on the death of his daughter, Ariel, in Albuquerque, Oct. 23.

To Lloyd Bonzon (2514) on the death of his father in Illinois, Oct. 25.

Take Note

The Project Management Institute (PMI) is a non-profit professional organization established to address the unique challenges of project managers. PMI Rio Grande Chapter meetings, generally held on the third Tuesday of each month, feature workshops and guest speakers on project management topics. The Rio Grande Chapter is interested in membership support and suggestions. The next meeting will be held Tuesday, Nov. 16, at 6 p.m. at the Fred Harvey Best Western Hotel, with dinner to follow at 7. For more information about this meeting and PMI in general, call Steve Goldstein (6305) on 848-0781 or Don Glidewell (7013) on 844-9261.

This year marks the 10th anniversary of the YWCA's Albuquerque Women on the Move program, which honors community women from many walks of life who have had an impact on the growth of others through demonstrated leadership and community involvement. Nominations for 1994 Women on the Move awards are now being accepted. Nomination forms are being distributed throughout the community and are available from the YWCA office at 7201 Paseo del Norte NE. Deadline to submit nominations is Dec. 15. For information, call the YWCA on 822-9922. Recipients will be announced at the Women on the Move banquet March 4 at the Hyatt Regency.

Retiree Deaths

Lora Dow (68)	.....5810.....	Sept. 1
Pauline Arnhart (76)	.....2632.....	Sept. 2
Lee Garner (72)	.....3151.....	Sept. 4
Betty McCoun (81)	.....3000.....	Sept. 15
William Roherty (65)	.....334.....	Sept. 22
Allen Hall (72)	.....7485.....	Sept. 27
Ernest Bernard (72)	.....2345.....	Sept. 28

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



UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS

Deadline: Friday noon before week of publication unless changed by holiday. Mail to Dept. 12660, MS 0413, or fax to 844-0645.

Ad Rules

1. Limit 20 words, including last name and home phone (the LAB NEWS will edit longer ads).
2. Include organization and full name with each ad submission.
3. Submit each ad in writing. No phone-ins.
4. Use 8 1/2" by 11-inch paper.
5. Use separate sheet for each ad category.
6. Type or print ads legibly; use only accepted abbreviations.
7. One ad per category per issue.
8. No more than two insertions of same "for sale" or "wanted" item.
9. No "for rent" ads except for employees on temporary assignment.
10. No commercial ads.
11. For active and retired Sandians and DOE employees.
12. Housing listed for sale is available for occupancy without regard to race, creed, color, or national origin.
13. "Work wanted" ads limited to student-aged children of employees.

MISCELLANEOUS

- WORD PROCESSOR, System III, w/Olympia ES105 printer and instructions, excellent condition, \$175. Sparks, 880-0324.
- GAME BOY, w/four games, \$60 for the set. Gauthier, 268-1215.
- WATERBED, queen-size, full-motion, w/six-drawer pedestal, \$100; Bronco II/Ranger nose bra, \$20 OBO; bird cage w/cover and stand, \$30 OBO. Burke, 266-2334.
- PLANTS: Madagascar palm, 29-in., \$25; assorted jades, \$7-\$15; large aloe, \$20; assorted cactus. Locher, 266-2021.
- MOTHERBOARD, 386/20, from Gateway, 8MB RAM, does not work w/Windows. Moore, 294-5646.
- BEDS, custom-built, hardwood, combo captain's trundle/twin-size, w/mattress, \$245. Weirick, 281-1462.
- PIANO, Steinway Grand Model M, mahogany, 40 years old, one owner, excellent condition. Purdue, 275-7503 afternoon, leave message.
- SHREDDER, small, Mantis ChipMate, electric, \$65. Breeding, 260-0820.
- LA-Z-BOY LOVESEAT RECLINER, brown tweed, great condition, \$90. Webb, 828-2271.
- DOUBLE STROLLER, removable washable seat covers, large storage area, excellent condition. Vogel, 275-0774.
- BABY ACCESSORIES: changing table, powder blue, \$60; Fisher Price diaper pail, \$10. Dobranich, 298-4547.
- CHANGING TABLE, oak, \$45. Jogi, 275-0610.
- RIFLE, Remington 30-06 Classic, variable power scope, and sling, mint condition, \$450. King, 899-1770.
- REFRIGERATOR, dorm-size, 1.7 cu. ft., \$50. Ludwick, 296-6447.
- STEPPER EXERCISER, Roadmaster, \$50; Mitsumi internal CD-ROM drive, interface card, and software, 350 MS seek, 175 KBS data transfer, \$135. Hale, 298-1545.

- SKATEBOARD, older but excellent, \$20; wooden cable spools, large, \$15/ea. Connor, 268-1682.
- CROSS-COUNTRY SKIS, adult, 215cm, w/bindings, \$35; child, 150cm, w/boots, poles, \$30; child's boots; ski bib, size 7, \$10/ea.; girl's ski suit, \$40. Zurzolo, 898-1175.
- MOVING SALE: sofa, glass dining table, queen-size bed, glass coffee table, mower, cabinets, portable CD player, typewriter, more. Valdez, 897-6399.
- WOODCARVING, relief carving of mountain lion, titled "Wanted Alive," framed, suitable for hanging, \$300 OBO. Whitlow, 281-4739.
- NOSE COVER, custom-made, for '90 Toyota Camry, like new, \$50. Eifert, 299-3847.
- DOT MATRIX PRINTER, 9-pin, IBM compatible, \$40; 28-210mm macro lens, Minolta mount, w/UV filter and polarizer, \$100. Horn, 821-6721.
- GOLF CLUBS, Golfsmith Tour Edition, 2-SW, like new, \$130; golf balls, all colors and brands, 4 for \$1. Dwyer, 271-1328.
- COMPUTER, AT&T 6300, w/printer, \$275; McCulloch chain saw, \$50; engine stand, \$40; tires, four, Goodyear Wrangler, P235/75R15, \$20. Hanson, 299-6421.

- RIFLE, Browning BLR, .243, w/Nikon 4x scope, \$550. Jimenez, 296-9256 after 7 p.m.
- BUNK BED SET: mattresses, comforters, w/shams, desk w/credenza, 4-drawer dresser, great condition, \$700. Dawes, 275-3036.
- CROSS-COUNTRY SKI BOOTS, men's size 10-1/2, Merrill "Touring Ranier," insulated, 3-pin style, new, \$50; Barreccrafter locking ski rack, \$50. Brammer, 266-5158.
- UPRIGHT FREEZER, 12 cu. ft., still runs but needs work, \$40; portable heater/evaporative cooler, like new, \$40. Dye, 897-0304.
- GE ELECTRIC RANGE, white, clean, good condition, best offer. Irwin, 299-4374.
- MAHOGANY BED, antique, w/dresser & vanity, best offer over \$2,000; Kimball piano, electric player, 35 rolls, excellent, best offer. Holmes, 292-0898.
- OAK ENTERTAINMENT CENTER, from American Furniture, 53" x 38", like new, excellent Christmas present, \$150. Banks, 291-1794.
- SOFA, large, pillowed, sand-color, excellent condition, \$250 OBO; rocker-recliner, earth tones, good condition, \$60 OBO. Benjamin, 294-3228.
- HORSE-DRAWN CARRIAGE, antique, restored, functional, original hardware/wood, must sacrifice, \$2,000 OBO; horse hay, \$3.50/bale. Wilson, 865-1406.
- SOFA SLEEPER, queen-size, earth-tone, \$125; La-Z-Boy recliner, tan, cloth, \$40. Both in good condition. Ratzel, 298-7167 after 6 p.m.
- BEDROOM SET, French provincial, antique-white, twin headboards, nightstand, chest drawers, lingerie chest, desk/hutch, excellent condition, \$425. Richardson, 877-2731.
- GAS LOG, for fireplace, large, \$135; electric bench grinder motor, 1/3-hp, \$25; heavy duty truck jack, \$10. Peterson, 256-7514.
- PLAY HOUSE, Little Tikes, plastic, new at Service Merchandise \$130; sell for \$40. Sheldahl, 299-4077.

- COMPUTER, AT&T PC 6300, w/66MB HD, keyboard, and color monitor, in good working condition, \$150. Burstein, 821-6688.
- CELLO, full-size, by H.P. Pffretzschner of Germany, Model R701, w/bow & case, made in 1980, excellent condition. Wagner, 823-9323.
- FIBERGLASS TOPPER, for long-bed small pickup, white w/blue stripes, good condition, \$100. Davis, 883-4867.
- SALE, Nov. 13, 1016 Dakota SE, two leather couches, captain's chairs, stuffed chair, end tables, small B&W TV, stereo. Arning, 256-9229.
- AKITA, male, neutered, 4-1/2 yrs. old, loves people, needs space, free to good home. Olson, 823-9119.
- CORNINGWARE RANGE, oven/microwave, Kenmore, \$125; GE portable dishwasher, \$75; refrigerator/freezer, Norge, apartment-size, \$50. Scholl, 823-9119.
- GARAGE SALE, Sat., Nov. 13, 5817 Broken Arrow NW, Taylor Ranch, weights, drums, computer, old records, receiver, more. Castillo, 897-4560.
- CAMERAS: Nikon FG, 50mm, f1.8, manual/automatic/program settings, \$175; Minolta X370, 50mm, f1.7, \$125. Heffelfinger, 281-1733.

Deadline Change

The next LAB NEWS will be published Dec. 3. Deadline for ads and other submissions is 4:30 p.m., Tuesday, Nov. 23.

- COMPUTER, Macintosh SE-30, 80MB HD, 5 MB RAM, extended keyboard. Black, 292-3564.
- ESTATE SALE, Sat., Nov. 20, 9 a.m.-3 p.m., 12305 Keywest NE, bedroom, dining room, living room, den, miscellaneous. Babb, 293-0736.
- REFRIGERATOR, side-by-side, 24 cu. ft., almond, ice maker, w/manuals, excellent condition, \$300. Rea, 296-4620.
- VERTICAL BLINDS, \$35; diaper wraps, \$1; wood couch frame, dishwasher, electric cook-top, \$25/ea.; room humidifier, \$15. Meisenheimer, 275-8193.
- RING, woman's cocktail oval sapphire beset in diamonds, 14K gold, appraised at \$695, asking \$350 OBO. Sobel, 275-8487.
- REFRIGERATOR, 18 cu. ft., over-under, Wards, 10 yrs. old, harvest gold, looks new, runs perfectly, \$250 OBO. Grieco, 271-9020.
- NIKKOR MIRROR LENS, 500mm f5, \$500; Nikkor 2x extender, TC-1, \$50, great for wildlife filming. Casper, 268-4464.
- PLAYPEN, Fisher Price, excellent condition, \$35; Sears radial arm saw, 10-in., like new, \$90; collie, female, 3 yrs. old, AKC-registered, all shots, \$125. Sturgeon, 281-9035.

TRANSPORTATION

- '73 FORD BRONCO, Ranger Edition, V8, AC, new tires and transmission, rebuilt motor, \$3,700 OBO. Gurule, 344-7619.
- '72 DODGE DIAMOND MOTORHOME, 73K actual miles, 20K miles on rebuilt engine and transmission, \$3,500 OBO. Kmatz, 299-5978.

- BICYCLE, 20-in., thorn-proof tubes, ChromeMoly frame & forks, like new, \$85. Connor, 268-1682.
- '90 SCHWINN MOUNTAIN BIKE, High Sierra, very low mileage, excellent condition. Jimenez, 296-9256.
- '84 CUTLASS, 4-dr., V8, AC, all-power, 84K miles, good condition, \$2,750. Smith, 823-2792.
- '86 SUBARU, 4WD, 4-cyl., 5-spd., AC, good tires, 131K highway miles, \$3,400. Weirick, 281-1462.
- '86 DOLPHIN MINI-MOTORHOME, Model 800, 75K miles, well kept, \$10,500. Randolph, 299-2057.
- '92 JEEP WRANGLER, hardtop, 18K miles, 4-cyl., 5-spd., PS, PB, bikini top, AM/FM cassette, take over payments. Montoya, 821-5189.
- '85 FORD CLUBWAGON, 8-passenger, rebuilt 6-cyl. engine, 117K miles, AT, dual AC, AM/FM cassette, excellent condition, \$4,500 OBO. Schuler, 821-8944.
- '80 PLYMOUTH CHAMP, low miles, stereo, sunroof, 4-spd. manual, new suspension, very reliable, good condition overall, \$1,100 OBO. Silva, 255-3723.
- '66 VW BEETLE, sunroof, 110K original miles, excellent condition, \$2,500. Lowrey, 281-9255.
- '80 CORVETTE, silver w/white interior, glass T-tops, many extras, very clean, \$10,500 OBO. Martinez, 255-5515 or 292-8770.
- MAN'S BICYCLE, Huffy, 10-spd., good Tech Area transportation, \$30. Zurzolo, 898-1175.
- '89 FORD BRONCO XLT, 308, V8, AT, overdrive, towing package, 4x4 on fly, low mileage, excellent condition. Bouchard, 265-8148.
- '76 TOYOTA CORONA, 4-dr., 4-spd., AC, loaded with quality, old but runs well, only \$600 for all this quality. Hanson, 299-6421.
- '88 HYUNDAI EXCEL, white, 4-dr. sedan, 57K miles, AM/FM cassette stereo, excellent condition, \$3,200 OBO. Rochau, 888-1501.
- '79 JAMBOREE RV, 24-ft., fully-equipped, 400 cu. in., 4-spd. auto, 19K miles, sleeps six, overload springs, generator, HW heater, \$11,000. Kitchell, 281-2126.
- '89 DODGE VAN, Ivory Coach conversion, 37K miles, all options, 4 captain's chairs, immaculate, below book at \$12,500. Loeber, 821-3674.
- '86 FORD MUSTANG 5.0, 5-spd., PW, PL, nice tint, great condition, must drive, \$4,800 OBO. Hole, 260-1304.
- '85 BUICK SKYHAWK, AC, AT, tilt steering, cruise, below book, \$1,500 OBO. Perez-Romo, 275-1192.
- '65 FORD TRACTOR, 9N, 961, new clutch, 12-volt wiring system, 7-ft. scraper, PTO, \$3,000. Greer, 281-4514.
- MOUNTAIN BIKE, Fisher HK-II, 20-in., white, \$250; bicycle, Canopus, Triathlon set-up, grip shift, time pedals, Scott DH bars \$500. Both excellent. Dwyer, 271-1328.
- CAR CADDY, Demco II, new tires, like new condition, excellent, \$950; bicycle, 10-spd., Puch, hardly used, new, \$175. Eifert, 299-3847.
- '90 LEBARON CONVERTIBLE, power top, AT, excellent condition, must sacrifice below book, \$9,500 OBO or trade for truck. Wilson, 865-1406.
- '85 VW GOLF, 2-dr., 5-spd., AC, white, AM/FM cassette stereo, Thule roof rack, \$2,700. Mauth, 821-5911.

- '83 TOYOTA SR5, 4WD, 5-spd., new tires, brakes, shocks, 157K miles, but well maintained, \$2,200. Doughty, 296-4142.
- '79 PORSCHE 928, crown jewel of Porsche's line, loaded, 5-spd., leather interior, pampered, \$9,900. Philbin, 828-2413.
- '87 CORVETTE, burnt red, 38K miles, two tops, all power, new tires, perfect condition. Ask for Rod. Brown, 294-9601.
- '88 ISUZU TROOPER II, 4-cyl., standard, 4-dr., PS, PB, white, stereo/cassette, 112K miles, \$5,300. Lobitz, 821-1509.
- '90 HONDA ACCORD EX, fully-loaded, white, 2-dr., 28K miles, excellent condition, \$13,000. Sobel, 275-8487.

REAL ESTATE

- 3-BDR. HOME, 10 min. to UNM, 1,500 sq. ft., 2-baths, den, garage, shop, beautifully landscaped & maintained. Clinch, 293-6273.
- 3.1-ACRES, 17 minutes from Albuquerque, all utilities, fenced, Moriarty schools, excellent roads and views, \$33,000. Whitlow, 281-4739.
- 3-BDR. HOME, 2-baths, fireplace, skylights, patio, landscaped, Taylor Ranch, Open House, Sat., Nov. 13, \$105,000. Castillo, 897-4560.
- 2-BDR. TOWNHOUSE, Copper/Tramway area, 2 baths, 2-car garage, security bars, fully landscaped, auto sprinklers, immaculate, \$93,500. Kramer, 294-0488.

WANTED

- JOGGING STROLLER, pre-school toys. Forster, 293-7231.
- HOME, for German Shepherd/Chow puppy, female, 8 months old, spayed, has shots. Duran, 897-2853.
- HARDY BOYS BOOKS, by Franklin Dixon; Happy Hollister books by Jerry West; Lincoln Logs. Torczynski, 292-7191.
- BICYCLE, for adult, "oldie but goodie," for riding across Tech Area. Ruby, 821-0982.
- AIRSTREAM TRAVEL TRAILER, 23-ft. to 25-ft., mid to late '70s, clean reasonable, will also consider 20-ft. MMH. Ludwick, 296-6447.
- GUITAR, old, cheap, looks are unimportant. Roeschke, 266-8988.
- HOUSESITTING POSITION, reliable, quiet, non-smoking, working UNM medical student, to take good care of your home. References upon request. Moore, 293-6273.
- BABYSITTER, infant twin girls, at our Corrales home, Tues.-Fri., 8 a.m.-6 p.m. Teague, 897-2496.
- VENDORS, for "Cherished Creations" Arts & Crafts Show, open house Thanksgiving, 6 p.m.-9 p.m., also Fri., Sat., Sun. Self, 296-4137.
- USED CROSS-COUNTRY SKIS, poles, boots, for 6-yr.-old, usable condition, reasonable priced. Coats, 255-9115.

LOST & FOUND

FOUND: Bicycle tools on Los Altos overpass, on Oct. 26. Graham, 844-7580.

Coronado Club Activities

B-I-N-G-O, Say the Youngsters

KIDS' BINGO TONIGHT — Bring the family tonight, Nov. 12, and enjoy a movie, a buffet, and kids' bingo. The movie and cartoons, along with the buffet, begin at 5 p.m. Every kid (12 and under) playing bingo gets a free hamburger and soft drink. Then the main event: Bingo starts at 7 p.m. and features prizes the youngsters will love.

CHAMPAGNE'S FLOWING — and there's also scrambled eggs, bacon, potatoes, crepes, waffles, roast beef, ham, and desserts. That's a typical Sunday brunch at the Club. Add a tea dance afterward, and you've got a day to remember. So come to the Club Nov. 21 and enjoy brunch (served 10 a.m.-2 p.m.) before dancing to the music of Bob Weiler and Los Gatos (1-4 p.m.). Reservations required for brunch — call 265-6791.

HOIST THE STRUM WARNINGS — The Isleta Poorboys ride into town Nov. 19 for another fine Friday at the Club. Dance to your heart's content, or just tap your toes as they play from 7 to 11 p.m. The menu will make your tummy content — filet mignon grilled to order (\$11.95), grilled halibut (\$10.95), or the all-you-can-eat buffet (\$6.95). Call 265-6791 for reservations.

THANKSGIVING'S COMING, so plan to enjoy the Club's traditional turkey dinner during the regular lunch period Tuesday, Nov. 23, 11 a.m.-1:30 p.m. The cost is \$4.25 per person (10-percent discount for members). Remember, the Club will be closed Thanksgiving Day and through the Thanksgiving weekend.

feed feedback

Q: Two new traffic lights — one on Eubank and one inside the Eubank Gate — have been operational since early October, and they're creating chaos with both incoming traffic and guards at the gate.

It now takes 5-10 minutes longer to get to work, due to the traffic lights stopping traffic. For example, on Eubank, one vehicle will trip the light to change, then turn north, stopping all traffic going south on Eubank. The light just inside the gate also causes problems, with the guards having to watch it constantly to see when it is going to change. Few cars really need the traffic lights in the morning, because most drivers are courteous and stop to let cars turn when needed.

Why couldn't these traffic lights be operative at the end of the work day, when they are needed the most? They could be an asset in exiting the base, but don't help getting on the base at the beginning of the day.

A: The traffic light outside the gate was installed by the city to provide an outlet for the mobile home park, the Eubank Research Park, and the new housing development. The city adjusted the timing to allow priority to Eubank. We will pass along our concerns about stopping traffic during peak periods. I personally noticed that the cycle is short (about 10 seconds is available to cars exiting the side street).

The light inside the gate services the new building and its 360 employees. We talk to the Air Force often and will pass on your concerns. Again, their timing cycle favors the through traffic.

The Sandia Traffic Committee, chaired by Wayne Burton (7308), will continue to monitor the situation. Wayne can be contacted by calling 883-3367. We will publish additional information as we hear from the city and Kirtland.

Jake Jacobs (7300)

Kids Need Shoes

Many Albuquerque children go to school without warm shoes and coats during the winter months. A group of Sandians got together 36 years ago and decided to skip sending each other season's greeting cards and, instead, help some of the local children who needed shoes for the cold months. That was the start of a holiday tradition, the annual Shoes for Kids program, sponsored again this year by employees in Surety Assessment Center 12300 and Defense Programs Div. 5000.

Shoes for Kids provides money to buy shoes for less-fortunate elementary-age students. Children most in need are selected by teachers and principals from several local elementary schools.

More Children Need Help This Year

"Last year, there were only two children in my class who needed new shoes," says Marge Zinger-Knorovski, wife of Gerry Knorovski (1831), who teaches kindergarten at Mission Avenue Elementary School. "This year there are a dozen. Last year, one little girl attended school without a coat throughout December until I found her one." She says teachers choose children to receive shoes based on how the children's clothes and shoes look and select the ones who obviously need new shoes.

Liz Scott-Patterson (5501) is now accepting donations for the Shoes for Kids campaign. Donations can be made in whatever amount you care to give, but \$26 will buy a needy child a sturdy pair of shoes that will last him or her about a year. Sandians who want to participate should make checks to Shoes for Kids and mail them to Liz Scott-Patterson (5501) before Dec. 10. Donations sent after that date will be applied toward next year's fund.

Following are some thank-you notes from children who received shoes last year:

"Dear Sandia Labs — I really like the shoes you gave me. You are the best person I've ever met. Thank you! Lizeth."

"Dear Sandians — Thank you for giving me the shoes. I wear them every Saturday and Sunday for church. Your friend, Juan."

"Thank you for making me happy. I love my new shoes. Robert."

"Dear Sandians — I like the shoes. I can jump real high. They're comfortable. They are the kind that I should have because my BKs hurt my feet. I can only wear hightops. Thanks a lot. You guys had great shoes. Richard." ●JC

Take Note

Holiday arts & crafts fairs are being held Saturday, Nov. 13, at Cleveland Middle School (Louisiana and Montgomery NE, 9 a.m.-4 p.m.) and at Chelwood Elementary School (Constitution and Chelwood NE, 9 a.m.-3 p.m.) to benefit the schools. For information, contact Madeline Edgar on 884-8567 (Cleveland) or Susan Kellogg (Chelwood) on 299-3737.

Welcome

Albuquerque — Daniel Dunbar (5901), Patricia Hubbard (6531), Wendy Johnson (6400), Belinda Paton (10504), Elissa Thompson (7001), James Tryon (7030). **Other New Mexico** — Carmella Atencio (9538), Kathleen Wierick (3333). **Elsewhere: California** — Tina Nenoff (6212); **Missouri** — Ken Chen (1511).



A NUCLEAR WEAPON PARTS shipping container is displayed and explained at a recent "media day" at DOE's Pantex nuclear weapon assembly/disassembly plant in Amarillo, Texas. These Pantex employees — (from left) Jerry Ithaca, Randy Twombly, and Gary Cockrell — demonstrated how the nearly indestructible container is checked to ensure that it is completely leak-tight before any parts go into it for shipping. DOE showed more than 30 print and broadcast people many parts of the Pantex plant that had never before been seen by the public. Sandia has offices and employees at Pantex and is working with the plant to help design weapon dismantlement technology that better ensures worker and environmental safety. The LAB NEWS will soon feature this work.

Retirement Open House

The Labs is holding an open house in honor of retiree **Daniel Murphy** (2254) in the Area 1 Cafeteria (Bldg. 861) on Tuesday, Nov. 16, 2-4 p.m. Refreshments will be served. Friends and acquaintances are invited.