

DOE, Labs Managers Discuss RFP Details for Labs Employees

The preproposal conference for organizations interested in proposing or submitting offers on the Sandia management and operating (M&O) contract is next week, Nov. 4-5. The request for proposals (RFP) was issued three weeks ago today, and proposals are due Jan. 4. To help Sandians understand what's in the RFP (each Sandia Director's office has one) and how they and Sandia may be affected, the LAB NEWS talked late last week with Sandia's Transition Executive Lee Bray and two DOE/Albuquerque officials who are involved in securing a new M&O contractor for Sandia — Dennis Krenz and Jim Hoyal. Krenz (a former Sandian) was Assistant Manager of DOE/AL's Office of Environment, Safety, and Health before taking the full-time assignment to chair the Source Evaluation Board (SEB) that will evaluate the proposals and submit its report to DOE headquarters to sup-

port the selection of a new Sandia M&O contractor. Hoyal is Director of DOE/AL's Contracts and Procurement Division and is one of five voting members on detail to the SEB.

The RFP was sent to 140 organizations. How many have registered to attend the Nov. 4-5 preproposal conference in Albuquerque?

Hoyal: By the end of the deadline day [Oct. 21], we had more than 150 individuals registered, and the fax machine was busy. We requested no more than five people per company, but Oct. 21 was not necessarily a hard, firm deadline. I would expect that up until the day of the preproposal conference we will be signing up people.

Bray: We have talked about possible numbers of 400 or 500 people at the preproposal conference, and I believe that came about by people

doing simple math of five times some number. As I looked at that list of 140, I took a view that probably not all on the list would actually bid and that they might send anywhere from three to five people each. So I guess that there'll be 200 or 250 people at the conference.

Proposals are due Jan. 4, 1993, but no award date has been set. How long do you expect it will take to select a new contractor?

Krenz: Working backwards, we know the contract expires here Sept.

30, 1993. We have indicated in the RFP that there will be a two-month transition period, which takes you back to Aug. 1, 1993. That means that by Aug. 1, we should have selected a new contractor and have a new contract negotiated. That's about as good a time as I can give you.

Is there anything that would likely change or move out the deadline for proposals, based on questions that necessitated amendments?

Hoyal: We hope we've written a good enough RFP to preclude that. We have more than 80 days now for response, which we think is appropriate. If something unexpected develops, there's always the opportunity to extend. We hope nothing like that happens, but if it affects competition, we would have to. And if something like that did happen, the length of the delay would be based upon the merits of the change.

Will Sandians get a chance to learn the names of the companies that submit proposals
(Continued on Page Four)



DENNIS KRENZ, Chairman, Source Evaluation Board

LAB NEWS

VOL. 44, NO. 22 SANDIA NATIONAL LABORATORIES OCTOBER 30, 1992

From 'Star Wars' to Agile Manufacturing

Mission of New California Lab: Bolster Defense and Civilian Industry

A new manufacturing laboratory was dedicated at Sandia/California on Oct. 16 in a ceremony attended by Secretary of Energy James Watkins. The Integrated Manufacturing Technologies Laboratory (IMTL) is a key facility in Sandia's Center for Advanced Manufacturing Technology, established earlier this year at both the New Mexico and California locations.

In a first visit to the California laboratory, Watkins toured the IMTL and viewed demonstra-

tions of interactive manufacturing technologies.

"What we're seeing here is a reflection of the incredible geopolitical changes that have taken place in the world," he said later in a speech outside the lab to more than 400 Sandia employees and visitors. Due to the ending of the Cold War, the mission of the four-building lab complex was changed from testing laser-pointing and tracking systems for the Strategic Defense Initiative to
(Continued on Page Three)



SECRETARY OF ENERGY James Watkins addresses more than 400 Sandians at the Integrated Manufacturing Technologies Laboratory dedication. On stage are (from left) California Laboratory VP John Crawford (8000), Lawrence Livermore National Lab Director John Nuckolls, VP Heinz Schmitt (2000), Sandia President Al Narath, and DOE/Kirtland Area Office Manager Kathy Carlson.

System Developed by Sandia

High Schoolers Cast Mock Votes With Real Phones

Just as paper ballots have widely given way to voting machines, it's possible that voting by telephone could become the next major change in the way citizens choose their representatives.

In response to a request from New Mexico officials, a Sandia team has started testing that idea. They took cellular phones to four Albuquerque and Santa Fe high schools this week — the week before Election Day — so that students could participate in a mock election for national and local offices.

"A telephone voting system has to have two levels, one that people see, and one they don't," says project leader Mary Green of Safeguards Technology Development Dept. 9543. "The

"What interests us is the design of a system that's secure from sophisticated fraud attempts."

process of pushing the buttons on the phone to cast a vote is visible. Not so obvious is what's done to make sure that the election process is protected from fraud. We're concerned with both aspects of a vote-by-phone system."

"Designing and building a capability to vote by telephone isn't difficult," adds Dennis Miyoshi, Director of Nuclear Systems Security Center 9500.

(Continued on Page Six)

This & That

FYI about the RFP — LAB NEWS writer Howard Kercheval's article about the request for proposals (RFP) for a new Sandia management and operating contractor (see page one) addresses many employee concerns. We hope it answers most of your questions about the RFP, the selection process, employee benefits, etc. Thanks to DOE officials Dennis Krenz and Jim Hoyal (members of the Source Evaluation Board to select the new contractor) and to Sandia Transition Executive Lee Bray (30) for talking with us late last week to shed some light on the RFP business. If you have other questions, please jot them down and send them to Employee Communications Dept. 7162 so we can cover them in future issues.

* * *

Goodbye Sandia, Albuquerque and Sandia, Livermore — Old habits do indeed die hard, so I'm sure lots of Sandians will slip more than once before getting accustomed to saying and writing Sandia/New Mexico and Sandia/California in place of Sandia, Albuquerque and Sandia, Livermore. But get used to the new names we must, because they're now official. We'll be using them in both the LAB NEWS and *Weekly Bulletin*, and all other Sandians are expected to use them.

The Sandia Management Council (SMC) decided to go with Sandia/New Mexico and Sandia/California several weeks ago. The primary reason, I understand, is that customers and other folks outside the Labs tended to confuse "Sandia, Livermore" with Lawrence Livermore National Lab.

Although Sandia National Laboratories/New Mexico and Sandia National Laboratories/California are the full names, it's OK in writing to use Sandia/New Mexico (or Sandia/NM) and Sandia/California (or Sandia/CA) as the short forms. In all cases, though, be sure to use a slash mark (not a comma) between Sandia and the state identifier. Using a comma instead of a slash could cause some people to think that Sandia is a city. When writing or speaking informally, it's also OK to talk about the California laboratory or the New Mexico laboratory. In fact, SMC changed the name of Division 8000 from "Livermore Programs" to "California Laboratory."

* * *

More Strange Streets — Examples of weird street names are still coming in. Liz Cox (8301) says that near Los Angeles there was a street named Rue de Vallé, for movie star Rudy Vallee. Susan Pickering (6303), who works at the Waste Isolation Pilot Plant, says there's a street in her Carlsbad neighborhood named Who Who Drive. Could there be owls nearby? And Ashley McConnell (157) says two friends of hers once tried to rent a house on Shades of Death Road in New Jersey. How appropriate, she adds, because they are both full-time horror writers.

* * *

Only One Issue Next Month — Although we normally publish every two weeks, we alter that schedule next month. We publish on Nov. 13 and skip Nov. 27 because of the Thanksgiving/Energy Conservation Day break Nov. 26-27. We'll then publish again on Dec. 4.

* * *

Get These Cows Outa My Office! — I hope the reporter in Livermore, Calif., who wrote the following in an Oct. 20 newspaper story gets the opportunity to have a long discussion with his editor about the need for accuracy in reporting: "Sandia's Albuquerque site, located in a mostly poor, rural area, is now involved in notably low-tech ventures, ranging from cattle ranching to cut-rate tombstone making." •LP

feed back

Q: There are persistent rumors that a retirement incentive package may be in the offing. I believe there are quite a few employees, like myself, who are ready to retire but are staying on just in case these rumors turn into an official announcement. If an incentive package is NOT being considered, why can't management issue an unambiguous pronouncement stating that no retirement incentive package will be offered for the next X number of months (6 to 12 preferably)? Then those of us who are considering retirement can schedule a date without fear of having just missed an incentive offer.

A: There have been persistent rumors that Sandia would offer an early retirement incentive in its pension plans since AT&T adopted a retirement enhancement in October 1989. Sandia operates in a different environment than AT&T, and to date the business and budgetary conditions that made the improvement a prudent and sound program for AT&T have not occurred at Sandia. Consequently, a retirement incentive similar to the AT&T program has not been offered and is not being considered for Sandia. Sandia's Human Resources Center is not currently examining any pension incentive options, and working from forecasts available at this time, we do not project any pension incentives through the end of FY93. By the way, the planning numbers for FY93 end-of-year on-roll targets have changed from 8,300 to 8,550 employees.

Ralph Bonner (7500)

Q: For self-defense purposes, I carry a small tear gas chemical defense weapon on my key chain. It's always in my purse except when I'm alone in a parking lot at night.

A: It occurred to me that I might not be allowed to carry it into the Tech Area (I work outside the area). Since I don't usually carry my purse when I go into a tech area, I hadn't given this any thought until I went to the courthouse downtown and had to check it at the guard gate there. They held it until I came out.

Q: What's Security policy about carrying a chemical self-defense weapon into tech areas?

A: DOE prohibits weapons from entering its facilities. Stun guns and chemical irritants such as tear gas are considered non-lethal, incapacitating defensive weapons and will not be allowed into SNL areas.

Tear gas is authorized and available for use by the protective force officers, provided they have received the proper training on deployment, characteristics, and associated hazards and demonstrate the proper first aid procedures for the irritant. To maintain the chemical agents, they must be placed in an approved storage facility and shall not be kept past the expiration date. Use of aerosol irritants or other tear gas by the protective force or anyone else (except in training applications) must be reported within 24 hours to DOE's Office of Safeguards and Security (DP-34).

As an added note, I am aware of one case in the San Francisco airport where police momentarily detained an individual because of a small mace canister on a key chain, discovered in a purse by the luggage scanner. The canister was confiscated (and the individual was appreciative that confiscation was the only action). I guess the bottom line is that such items are considered weapons, and carrying them may have some consequences.

Thank you for your inquiry.

Jim Martin (7400)

Attention Retirees

A special message regarding 1993 tax law changes for withdrawals and distributions from qualified pension, profit sharing, and 401(k) plans — including the AT&T long term savings plans and Employee Stock Ownership Plan (ESOP) — is being published in the Nov. 2 *Weekly Bulletin* for all Sandia employees.

As a retiree, if you are still a participant in one of the AT&T savings plans and would like a copy of the message, please call Sandia Line on 845-6789. As soon as Sandia Line answers, press 9 for quick dial, then press 1139 and the # sign. Leave your name and mailing address by answering the questions and following instructions. A copy of the notice will be mailed to you.

If you no longer have a balance in the savings plans, no action is required on your part.

Pension Fund, Pension and Insurance Plans, and Employee Services Dept. 7544

LAB NEWS

Published Fortnightly on Fridays by
Employee Communications Department 7162

SANDIA NATIONAL LABORATORIES

An Equal Opportunity Employer

ALBUQUERQUE, NEW MEXICO 87185-5800
LIVERMORE, CALIFORNIA 94550
TONOPAH, NEVADA
NEVADA TEST SITE
AMARILLO, TEXAS

Sandia National Laboratories, a prime contractor to the US Department of Energy, is operated by Sandia Corporation, a subsidiary of American Telephone and Telegraph Co.

LARRY PERRINE, Editor (505/844-1053)
CHARLES SHIRLEY, Managing Editor (844-6210)
JOHN GERMAN, Writer (844-5199)
HOWARD KERCHEVAL, Writer (844-7842)
RANDY MONTOYA, Head Photographer (844-5605)
MARK POULSEN, Photographer and
Production Coordinator (844-0421)
JANET CARPENTER, Editorial Assistant (844-7841)
LISA CHAVEZ, Assistant (844-7841)
LAB NEWS FAX, (505/844-0645)
BARRY SCHRADER, California Reporter
(510/294-2447)

Retiree Deaths

Carmen Gabriel (69)Sept. 4
Evaristo Gonzales (77)Sept. 7
Stephen Edwards (80)Sept. 11
Kenney Loughlin (78)Sept. 15
William Austin (63)Sept. 24
Emily Burkhalter (84)Sept. 25
Mark Gens (77)Sept. 27
Hovey Sealey (63)Sept. 28

(Continued from Page One)

New Materials Lab

developing advanced manufacturing technologies for defense and civilian industries.

Sandia President Al Narath said the opening of the IMTL represents another step toward moving DOE dual-use technologies into the private sector, an effort that began at Sandia in the mid 1970s with the opening of the Combustion Research Facility.

"We at Sandia some time ago recognized that manufacturing and the application of advanced manufacturing technologies is really key if you're going to create the sort of competitive society we need to become," Al said.

Bringing Agility to Manufacturing

The \$45 million, 90,000-square-foot IMTL will house activities in materials and process research and development, process simulation, engineering design, and manufacturing technology

"Manufacturing and the application of advanced manufacturing technologies is really key" to competitiveness.

support. Space will be dedicated to prototype fabrication research and a demonstration area for "agile" manufacturing, which means the ability to respond rapidly to changing customer requirements with low-cost, high-quality customized products.

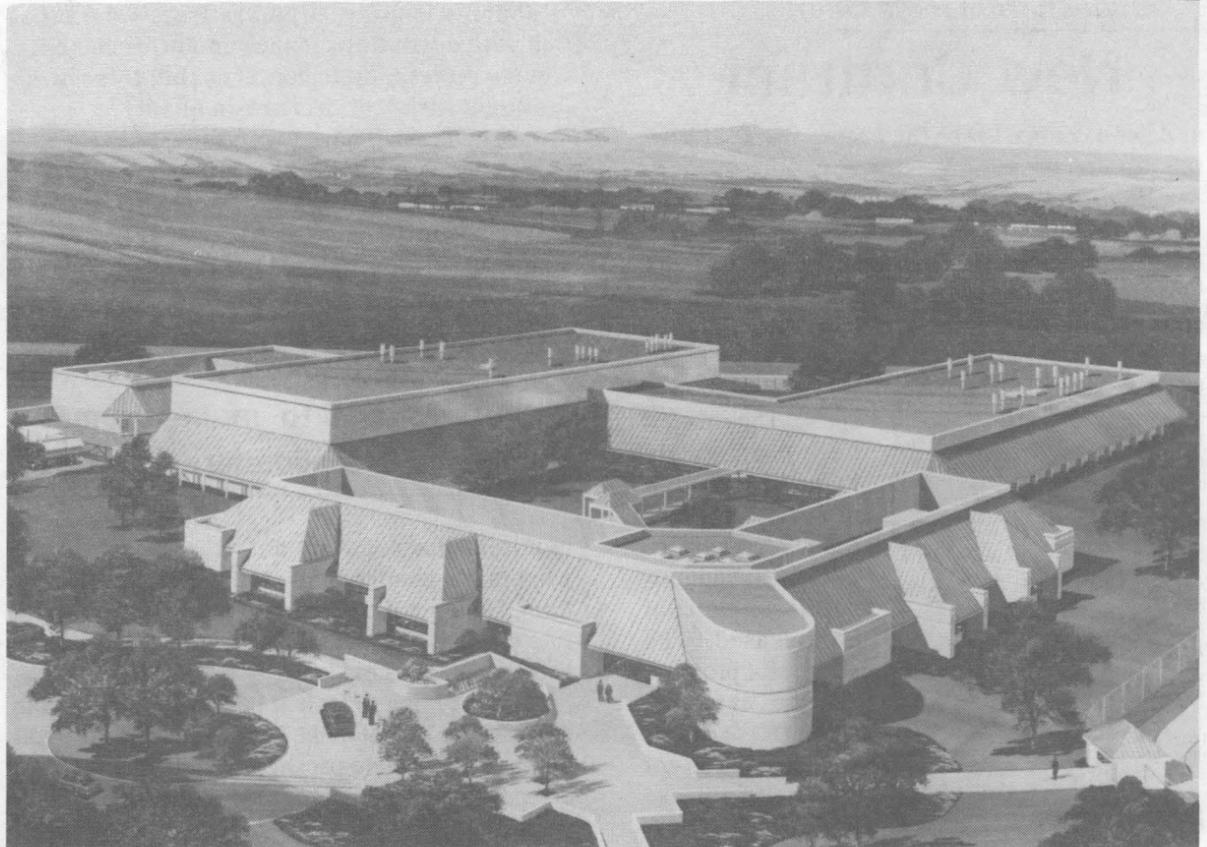
In addition to state-of-the-art environmental control systems, the lab's facilities will allow industry and DOE researchers to characterize fine features on material surfaces, conduct nondestructive chemical diagnostics, and evaluate the mechanical response of a wide range of metallic and organic materials.

John Crawford, VP of California Laboratory 8000, says, "We expect to work directly with many elements of the private sector as we address future manufacturing issues that are important to both the DOE and industry."

Plans are for the lab to be connected to the rest of Sandia, to DOE, and to manufacturing locations in other parts of the country via high-speed fiberoptic links and a digital phone system.

"Through our information network, we are integrating the entire California site as one unit of operation in which employees in areas such as ES&H, analytical chemistry, purchasing, and even education and training are all directly linked," says program development manager Ron Stoltz (8701). "This is all part of configuring Sandia as an agile enterprise that private industry can model."

Some of the links were demonstrated for



ARCHITECT'S RENDERING of the new Integrated Manufacturing Technologies Laboratory.



SANDIA CALIFORNIA NEWS

Watkins when Sandia/California employee Christine Yang (1952) worked with Chris Montoya (2858) at Sandia/New Mexico to make a design change on a prototype part. The system, which includes interactive concurrent engineering software, allows researchers at different locations to see and talk to one another, simultaneously view a computer image of the part, and alter the design using a keyboard and mouse.

Other demonstrations performed for Watkins included the use of multimedia technologies for project management and, in conjunction with on-line sensing and analysis, for a collaborative welding experiment.

CRADA Signed for Advanced Monitors

Al and Secretary Watkins signed a cooperative research and development agreement (CRADA) between Sandia and Ohio-based Photonics Imaging and the University of Toledo to develop next-generation models of flat-panel video monitors.

Under the agreement, Sandia will apply its expertise in scientific modeling of the interaction between materials and plasmas to improve the display efficiency and lifetime of color plasma display panels.

Watkins also signed an agreement with the California Environmental Protection Agency intended to foster cooperative research on environmental technologies.

Al presented Watkins with a plaque bearing the IMTL's logo made with a rapid-prototyping technique called stereolithography.

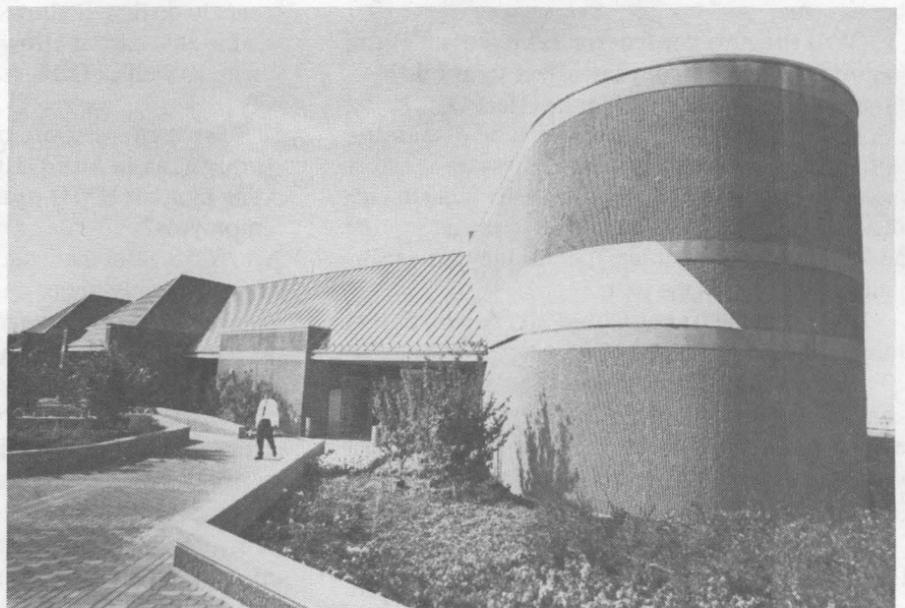
Work at the IMTL is expected to begin in December. When the lab is fully operational, it will house about 150 people. ●JClausen(7161)

Congratulations

To Debbie and Tim (8272) Sa, a daughter, Hayley Kathryn, Oct. 12.



DISCUSSING THE MISSION of the new IMTL are (from left) program development manager Ron Stoltz (8701), VP John Crawford (8000), DOE/San Francisco Manager Don Pearman, Secretary of Energy James Watkins, and Sandia President Al Narath.



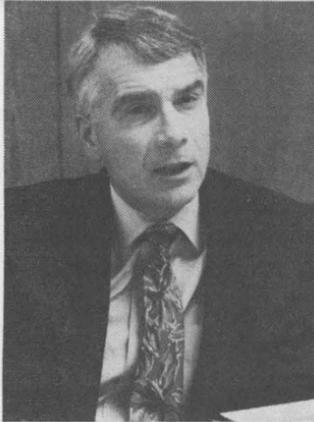
ENTRYWAY to the new Integrated Manufacturing Technologies Laboratory, which houses about 150 people. The IMTL is expected to open for business in December and become fully operational in about a year.

(Continued from Page One)

New Contract

and get a chance to see the proposals, or at least the winning proposal?

Hoyal: Officially, we will not release the names of the offerors. However, given the experience we've had in other locations, those offerors who are in the competitive range — we may get an array of proposals, and that means those who have a reasonable chance for an award — at other facilities have set up local offices, transition offices, so to



JIM HOYAL, Director, DOE/AL Contracts and Procurement Division

speak. Their names have been widely known, although not officially recognized. The proposals that are unsuccessful will not be released. The successful proposal can be available through several vehicles. We do not routinely release them for publication, although it is very likely that the winning offeror may want part of

that proposal available to members of the staff here at the Labs, especially the management plan. I'm sure that's going to be put into place. But DOE does not typically make those available.

Does the Source Evaluation Board solicit any outside assistance or advice from Sandia or anyone else?

Krenz: We have a series of special advisors supporting the board. The advisors we have now are all DOE employees. We have no plans now to seek anybody outside the Department.

Are there any guarantees that the new contractor won't trim the staff, even though everyone is retained initially?

Bray: It seems to me it's impossible to expect guarantees in today's environment. There is no guarantee that, if there were no transition, employment would remain constant. The best assurance of that is that we continue to be perceived as an outstanding organization that provides high value.

Krenz: One of the qualification criteria in the request for proposal is that all employees except those in the 13 executive positions are guaranteed a position and their salaries. As Lee said, there can be no guarantee down the road. We're dependent on Congress to approve a budget, and depending on that budget, we'll set what the programs are going to be here. Programs and funding dictate the personnel level to any organization. So whether it was AT&T staying on or a new contractor, the conditions would be the same.

Will the new contractor taking over at the beginning of the fiscal year affect salary adjustments, which traditionally take effect Oct. 1?

Bray: This is something we'll be discussing with DOE as part of the transition issue. We normally do our preparation for the salary adjustments that take place the first of October in the late spring and summer. I expect we'll continue that essentially as we have in the past.

Salary adjustment would already be determined, then?

Bray: I think it has to be. I don't think a new contractor will be in a position to do it. Merit salary adjustment is based on the performance of the past year, and a new contractor would not be in a position to make those judgments.

Krenz: There is certainly no intent to disrupt the ongoing process. As Lee said, the performance and salary increases will be based on the performance for the past year. I think the first time you would see the new manager involved would be a year from that point. I agree with Lee that that will be part of the transition planning.

Sandia employees and retirees seem satisfied with current insurance and other benefits. Could you respond to concerns that these benefits might shrink or decrease in quality?

Bray: I would have to repeat that there are no guarantees of any kind for the future. I don't read anything in the RFP that says there would be any change to retirees' benefits. Many of those benefits are reasonably assured through ERISA [Employee Retirement Income Security Act] or other federal

"The whole philosophy behind this activity is not to make dramatic changes to this laboratory."

requirements; some are not. It's difficult to tell what might change in the future, but generally I think DOE's not trying to diminish benefits. I'm sure that will play out as part of the proposals DOE gets from various bidders.

Krenz: I like to look at benefits in light of the guidance we've put in the RFP — that offerors will propose comparable packages. Comparability now extends to the total package, insurance, retirement, vacation plans, salaries — the whole package. There can be pluses and minuses in those, but the net basis should be: comparable.

Hoyal: One of the things we look for in organizations' benefits packages is uniformity and consistency between operating organizations. Just as Sandia now enjoys benefits that are generally comparable to other AT&T locations, whichever company is selected will bring in some of its own benefits packages so there will be some uniformity and consistency. We will look for comparability rather than major change.

The RFP's Personnel Appendix indicates it might be changed through negotiations. Does this apply only on contract award, or could changes be made within the contract term?

Hoyal: The Sandia contract, the way it is administered right now, is relatively unique. We have a contract that's normally in place for five years, with little significant, if any at all, administration of the contract throughout that five-year period. Since there is no fee, we do not have to negotiate what we call annual fee and scope negotiations. With all of our other M&O contracts, we have ongoing, active administration. So, throughout a five-year contract period, there would be administrative and funding modifications, revisions to personnel appendices, new laws, and other things that normally get refreshed on an annual basis. Management may have a new initiative for a different work-hour program — Pantex, for instance, has gone to an alternate work schedule; Mound has gone to an alternate work schedule. If those are good things to do, management has the initiative in that area; we don't want to wait five years to do that. It allows for active administration, and in this case it allows for contractor management, as well as DOE, to suggest changes to benefits packages.

Isn't there some precedent for that now, though, as in Sandia's adding, a little over a year ago, an HMO option for its Albuquerque employees?

Hoyal: But that entailed no change to the contract. The only major change to the contract that I can recall in recent years was the addition of the tech transfer mission. And of course that was beneficial both to the Laboratory and DOE.

It was announced recently that the new contractor will be required to adopt the existing retirement plan and fashion a new savings plan mirroring the current AT&T savings plans. How do you reconcile that with the RFP statement that either party may request revisions?

Bray: DOE has approved our establishing stand-alone Sandia savings plans that essentially mirror the existing AT&T savings plans. I suppose, then, that the new contractor needs to take that over, as opposed to establishing one.

Krenz: Supporting what you said on the savings plan, the words are "take over existing pension plans established specifically for the current contract and establish or take over savings plans at the same employer and employee contribution rates allowable under the AT&T savings plans," and those words are purposely put in there. If the existing one has been transferred, the new contractor will assume the existing one. If that transfer doesn't get done, then the contractor would obviously have to propose a comparable one.

Why will employees hired after the new contract takes effect earn less vacation, and vacation accrual be based on years of service?

Krenz: When Sandia was created, the AEC [Atomic Energy Commission] wanted enticements to attract qualified scientific people to this area. One of the enticements was quality of life. One way to capitalize on that was to offer a generous vacation, and 24 days a year certainly is that. That was from the first day an employee came on, and whether he or she was there for one year or 10 years. As Jim said, the intent and our continued effort is to have all programs in a comparable benefits arena. Certainly 24 days of vacation for a one-year employee is not comparable with industry or with the other laboratory institutions. So the idea here was not to hurt the present employees — there's no taking away of anything here. This is for new employees coming on board. The graduated scale suggested in Appendix A is certainly in keeping with other laboratories and industrial institutions. It's comparable across industry.

Bray: Another thing I would add is, remember that we came out of a university environment — the University of California — and our current vacation benefit is more consistent with a university.

(Editor's Note: The RFP lists a schedule according to which new employees joining Sandia after Sept. 30, 1993, accrue vacation based on years of service as follows: Less than 10 years, 15 days per year; 10 to 15 years, 18 days per year; 15 to 20 years, 21 days per year; 20 years or more, 24 days per year.)

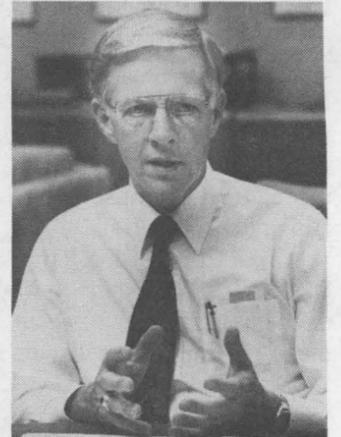
What has been the experience of other DOE organizations whose M&O contractor changed, particularly in key personnel and benefits?

Hoyal: The three with which we have the most recent experience would be Mound, Pantex, and Pinellas. At Pantex, essentially the incumbent was re-selected, but at Mound and at Pinellas, the number of key personnel changes was comparable. I'd say we were in the neighborhood of 10 senior people who would come in to reflect the character of a new company. With respect to personnel benefits, it's a little bit different at those facilities than here. Here we relied almost exclusively on AT&T benefits. In those other contracts we did have personnel appendices before, so there was a package of contractual benefits that was available for comparison. There were some modifications — minor — but generally the packages looked much more similar than what they look like here because AT&T has what you might say is a proprietary package, where before we had a contractual package.

So the package you presented here is more in line with Mound and Pinellas? They would look more alike than the AT&T package?

Hoyal: Yes, and we've looked very carefully at the differences between laboratories and plants. We recognize there's a different character of work force here, also.

What's the difference between "no fee" and
(Continued on Next Page)



LEE BRAY (30), Sandia Transition Executive

(Continued from Preceding Page)

“fixed fee,” and is a “performance award” or “management award” a part of either one?

Hoyal: There's a whole spectrum of contract types. Sandia currently is on one end of the spectrum, where there is no fee, no profit, and no loss. It's an atypical type of contract, but it's really a classic cost-reimbursement type: costs that are incurred, allowable costs, are reimbursed by the government. On the other end of the spectrum is a cost-plus-award fee contract like those typical at our production plants. That involves an award fee that the contractor earns through performance evaluated against pre-set criteria. A fixed-fee is somewhere in the middle between strictly cost reimbursement and earning the fee through performance. It is a certain dollar amount earned regardless of performance. We are suggesting in the RFP a cost-reimbursement type, which says that as the contractor incurs allowable costs, those will be paid, and the contractor can propose either a fixed-fee or a no-fee contract. That's a business decision that the contractor will have to make in terms of how it views operating the laboratory. But we clearly do not suggest an award-fee type. We do have the caveat, though, that we would be willing to negotiate something different than what we've suggested.

Sandia and other DOE labs are doing a lot more with industry today. As some DOE funding may be declining, is there anything in the RFP that encourages us or makes it easier for us to do this?

Krenz: Yes. In the RFP there is a scope of work, and one of the tasks included in it is to perform just that: technology transfer, and cooperation with state and local governments. Including that in the scope of work means the proposer has to come through with a management plan that shows how

“Sandia is a conscience of this country for the safety of nuclear weapons.”

they're going to perform that scope of work. Prospective contractors are certainly going to have to address that aspect. There's also reference to the National Competitiveness Technology Transfer Act of 1989 in a clause in the contract. So it's very explicit that offerors should pursue it, and they are encouraged to pursue it.

If we have an industrial partner that wants to put money into a Sandia project, does that affect our DOE allocation?

Krenz: Tech transfer and cooperative research and development agreements are to be cost-shared, which allows industry and DOE to jointly fund research and development projects. Money coming in becomes part of the operating budget here. I don't think there's any intent that, if there's money coming in, the Department's going to take money away from you. It's probably additional funding.

Would you explain your concern, stated in the RFP, over possible conflicts of interest that might arise from offerors already involved in nuclear weapons complex work?

Krenz: As we looked at the criteria in the RFP, members of the Source Evaluation Board became increasingly concerned about potential conflicts of interest that could exist with firms that are doing work at other sites, or are M&O contractors at other DOE installations. One of the key things in the RFP is stewardship of nuclear weapons. We want that stewardship to continue, because Sandia is a conscience of this country for the safety of nuclear weapons. For example, if a company managing Sandia has the responsibility, and an award fee at another installation, and perhaps a problem it solves based on its analysis here at this laboratory was related to a production operation at another site that was being performed on award-fee, we think there's a potential for a conflict of interest. So we will require that any such contractors show us how they can minimize or eliminate that potential for a conflict of interest.

DOE is proud of the Laboratories, proud of the accomplishments, certainly proud of the people, proud of the record here. The whole philosophy behind this activity is not to make dramatic changes to this laboratory. As you read through the RFP, you'll constantly see the words “What can you as an offeror provide to enhance the management of this laboratory?” Enhance is the key word; not change — enhance. Admiral Watkins has called the national laboratories the country's crown jewels. That term may be a little overworked at this point, but I think it pretty adequately describes the feeling of the Department for our laboratories such as Sandia. So as you look at this RFP, keep in mind that we're not asking for dramatic changes, we're not asking for revolutionary overturns here. We're looking for enhancements to make this laboratory ever better. In the theme of your own Quality program: continuous improvement.

Do you expect the outcome of the presidential election to have any effect at all on this process of selecting a new contractor?

Krenz: I think I would be naive to speculate on that. The whole country can be changed, depending on the outcome of the election, and our activities in the Department, as well as this specific activity, are certainly not exceptions. But I don't want to speculate on that.

Hoyal: We attempt to make every one of our government procurement actions apolitical. They need to be based upon business decisions and what's best in terms of the public need. Granted, there are some political aspects — in terms of budget — that run through programs, and things like that influence what we do. But the board [SEB] being local, rather than a Washington board, tends, I think, to send a message that this is not a political process.

You brought up the board. Who is on the board? Any former Sandians? What types of folks are these?

Krenz: It is a five-member voting board, with two non-voting members, for a total of seven people. We have been assigned full-time to that since July 6 and will continue being assigned full-time until we have provided to the Source Selection Official an evaluation of the proposals, and he or she has made a decision. The individual members, five voting members first, are:

I am chairman of the board. I was an employee of Sandia for 12 years, from 1958 until 1971. Since then, I've enjoyed a career first with the Atomic Energy Commission, and since with the Department of Energy. I've had numerous assignments there, working on both the weapons side and the non-weapons or energy side. I think I have a pretty good feel for Sandia, having worked here, and also working with Sandia in my various assignments with the Atomic Energy Commission and the Department of Energy.

Preproposal Conference Offers Glimpse of Sandia

Representatives of organizations considering bidding on the management and operating (M&O) contract for Sandia will spend Nov. 4-5 in Albuquerque, hearing briefings by DOE and Labs managers on Sandia and its work.

The preproposal conference (PC) will be held at the Albuquerque Convention Center and will include a drive-by bus tour of Sandia for bidders and media representatives on the afternoon of Nov. 5.

The PC will be open to the public, but non-participant seating will be limited. Sandians not on the program may attend, but must do so on vacation or other personal time.

No mechanical, electronic, or verbatim recording of sessions will be allowed.

Any employee who has questions about the PC should contact Sandia's Transition Office on 845-9523.

Jim Hoyal is Director of our Contracts and Procurement Division. He is a senior and experienced man in the field of procurement.

Jim Morley is the Manager of the Dayton Area Office. Prior to that assignment, Jim had been director of our Energy Technology Division here in the Albuquerque Field Office. He's had continual interface with the energy side of the house here at Sandia. Working in the Dayton Area Office, managing the Mound plant, he's certainly had interfaces on the weapons side of the program.

Doug Denham is the Deputy Director of the Technology Transfer and Commercialization Staff. As such, he's interfaced a lot with your Work for

“Enhance is the key word; not change — enhance.”

Others sector. He's very knowledgeable and is certainly a senior member of our staff in the reimbursable programs.

Jerry Grayson is Director of the Nuclear Explosives Safety Division. He has had a career at AL extending from Branch Chief in the Pinellas Area Office, working on the weapons programs and the energy programs at AL, and serving as program manager in some of the major weapons systems. Jerry brings a good knowledge of the nuclear weapons program and the stewardship role that this laboratory plays for the country.

We have a non-voting member, who is one of the senior members of the chief counsel's office, Steve Porter; and the other non-voting member is our executive secretary, Mike Fietze, who's one of our senior procurement officials. Karen Hart, from our Industrial Relations Branch, is our primary advisor for the human resources management area.

We have a very senior board here. As chairman of the board, it's a pleasure for me to work with them. They bring a knowledge and a breadth of experience and understanding that I think, as we put out this RFP, has made it a quality product.

The RFP says there will be no determination of contract costs overall. How can the business management criteria be evaluated if the contract costs aren't considered?

Hoyal: The proposed budget goes to the Office of Management and Budget two years before the actual budget is appropriated by Congress. What we're saying to any of the offerors is, “Manage this budget that the Department, Sandia, and Congress have already helped us decide is appropriate.” For a new contractor to come in and try to develop a budget for a laboratory of this size — approximately \$1.4 billion for next fiscal year — would take a year, probably, to understand how the laboratory works and how the costs are collected. It is not an effort that lends itself to what we would call normal contract pricing. What we're concerned about and what we'll evaluate is not what the costs are, but their management approach, their internal controls, and how they will manage and control budgets, costs, programs, projects. That's the business practice we're going to look at. What's their history in managing projects or facilities or contracts of a similar size, magnitude, scope, and complexity? That's what we're looking at — not what the costs are, because we're basically giving the cost to the contractor.

Sandians can hear a special interview with Dennis Krenz, Jim Hoyal, and Lee Bray dealing with this same subject. The program is airing today, Oct. 30, on Radio Sandia, 1610 AM, and will be available on Sandia Line all next week.

•HK/LP

Congratulations

To Annette and Matt (7435) Torres, a daughter, Sarah Nicole, Aug. 6.

To Tammie (155) and Ruben (2000) Muniz, a son, Nicolo Gregorio Blas, Oct. 18.

(Continued from Page One)

Voting by Phone

"What interests us is the design of a system that's secure from sophisticated fraud attempts. DOE has sponsored this type of work at Sandia for the past 30 years to protect sensitive facilities, information, and materials. That same technology paid for by DOE can now be applied to solving everyday security problems for US citizens."

But before the security measures are developed and applied, there's the question of how well the process would work at a human level.

Being tested at the four schools — Capital High School in Santa Fe and West Mesa High School, Albuquerque Academy, and Menaul School in Albuquerque — is a method that starts with marking a paper ballot, then keying in sequences of numbers that record the voter's identification number and choices.

"We believe that voters wouldn't want to listen to long menus of candidates and party affiliations," explains Mary, "so we came up with the idea of this ballot, which you might think of as a worksheet for preparing your vote. In a real election, the ballot could be printed in newspapers or mailed to registered voters."

Spread-Out Electorate

It's real registered voters — such as the high-schoolers will soon become — that New Mexico officials such as Secretary of State Stephanie Gonzales and Director of Elections Hoyt Clifton are ultimately interested in.

"New Mexico faces some unique problems during elections," says Clifton. "We have a sparse and spread-out population. There are areas in this state where citizens must drive many miles, sometimes in bad weather, to get to the polls. Phone voting could offer a reasonable alternative to these folks, as well as to shut-ins."

Clifton also notes that phone voting could help people who have over-full schedules.

For the mock elections, Mary and a few other Sandians took cellular phones, supplied by AT&T and US West Cellular, to the schools. "Our idea was to see how well students could go through the process," she says, "without coaching them on each step. That would be the most realistic test of how well people would do at home without assistance. We'll soon be assessing how the mock elections went from that point of view."

Other members of the team, besides Mary and Dennis, are Dave Skogmo (9543), Gary Shepherd, Betty Straba (both 7327), John Matter (9543), Tom Barger (5931), Craig Stegman, Bob Foster, and Chuck Morzos (all contractors). In addition, says Mary, the project has been given valuable support — both the loan of hardware and help in integrating the voting system — by OCTEL, a company that produces phone messaging systems of the type used at Sandia.

The team expects the mock elections to show that voting by phone is not more cumbersome, difficult, or expensive than conventional methods. In addition, it could uncover glitches that the team didn't think of. For example, Mary mentions that when some Sandians were asked to try a preliminary version of the process, one misinterpreted "enter your voter identification number" as meaning to speak it into the phone. Such misunderstandings — hard for designers to foresee, but important to avoid in a widely used system — are one target of the mock elections.

Computers Will Vote, Too

Another aspect of the mock elections as a test is simply to make sure that the system tallies votes accurately. In addition to students casting their votes, says Mary, Dave Skogmo programmed three personal computers to dial the system and call in votes. The team can check whether the system recorded those votes correctly.

That computer test is possible in this case



GETTING READY — Menaul School senior Rachel Daughtrey gets training from Betty Straba (7327) in how to fill out a specially designed ballot and use it to call in a vote during a mock election. Another Menaul student watches. To make the election as realistic as possible, each student had to complete a registration form to become a registered voter and go to an assigned "precinct" in the school to cast a vote by cellular phone. Students were trained by Sandians to conduct the mock elections at four area high schools as a way of testing a vote-by-phone system being explored by the Labs and the New Mexico state government.

because anonymity isn't an issue — in the records of the mock election, it will be possible to link voters (specifically the computers) with their votes. Obviously that would be an unacceptable situation for a real election.

If the mock-election test leads to a full-scale project, the Sandia team will go on to deal with fundamental issues such as guaranteeing the anonymity of voters and the security of the system.

Just what techniques might be used can't be discussed, Mary points out — that would give clues to a would-be intruder. But some of the general approaches include tamper-resistant hardware for the main phone lines coming into computers

that record votes, and encryption techniques that keep votes from being examined by anyone who shouldn't. The major concern isn't the possibility of fraud on a small scale — elections have always been vulnerable to someone claiming to be someone else and casting a vote — but large-scale alteration of voting patterns by someone penetrating the system.

After the demonstration project, an arrangement could be forged among Sandia, the New Mexico Secretary of State's office, and some private firm (yet to be identified) that would be interested in developing a commercial version of a secure phone-voting system. ●CS

Favorite Old Photo



WHEN THEY NEEDED food, cloth, and other goods, many citizens of Northfork, W. Va., stopped by the general store owned by my grandfather, C.W. Hale, during the early 1900s. My father, who worked at the store for many years, says the store had a pickle barrel and sold baby chickens. This photo of my grandfather (left), my great-aunt Dane, and a business associate was taken in front of the store in 1911. The store went out of business in the 1930s competing with new chain grocery stores such as A&P and Kroger's, and a few years later, the building burned down. Incidentally, C.W.'s grandfather Dudley was a nephew of Nathan Hale, the patriot hanged by the British for spying during the American Revolution. — Bill Hale (9249)

By Training for New Sandia Jobs

Program Aims at Keeping 'Surplus' Employees Working at Labs

As the arrival of tractors drove harness makers from their benches early this century, the Cold War's collapse at the end of it is reducing and in some cases even eliminating the need for some skills developed and honed during the nuclear face-off between the US and the former Soviet Union. This is true not only at Sandia, but at all other DOE weapons labs and production facilities.

Sandia is addressing the problem with a program to retrain represented "surplus" employees, who, because of the changing nature of Sandia's work, have been left without jobs to fit their skills. A workshop for surplus represented employees addressing career transition issues was held in September, and a program to address some related training needs is scheduled to begin Monday, Nov. 2.

"The kind of employer Sandia makes it incumbent on us to make every reasonable attempt to find ways to help these people continue productive careers at Sandia," says Julian Sanchez, Manager of Labor Relations Dept. 7560. "We want a better situation, but we're still not there, although we're working hard to get there."

Working Toward Agreement

Conrado Otero, President of the Metal Trades Council (MTC), which represents many of the surplus employees, agrees. "We're working hard together to work this out," he says. "We'll come to an agreement." (Most of the surplus employees worked previously in labs and shops that have been scaled back in Manufacturing Technologies Center 2400.)

Both Julian and Conrado agree on the goal: to work hard at keeping Sandians employed and fully contributing. Still undecided, however, is the precise route to the goal.

Ralph Bonner, Director of Human Resources Center 7500, alluded indirectly to the situation in a February Radio Sandia interview dealing with benefits and assumed entitlements.

"Each and every one of us is going to have to give up some of the comfort we've had, some of the certainty we've had in the past, and learn to accept the fact that life is changing and it's going to be different," he said. "It's going to be a new way for each one of us to look at the world."

No Longer a Paternalistic Approach

Explaining further, Ralph said, "Our parent company, AT&T, had a paternalistic attitude toward employees: 'If you come to work for us and do a good job, we'll take care of you.' At Sandia, our long-term mission in the nuclear

"We want a better situation . . . we're working hard to get there."

weapons program gave us very much the same attitude. But the same thing happened here as happened at AT&T: Our world has changed, just as theirs has."

Ralph said then that the solution would lie in empowerment and personal ownership, in initiative by individual Sandians to make themselves "marketable" within the Labs and within the skill areas required by its changed role and mission.

Eight months later, Julian offers the same analysis and solution.

"Responsibility," he says, "is beginning to shift away from what might be termed a paternalistic view and more to individual employees to keep themselves valuable. I think that is consistent with the corporate value of empowerment."

"One of the best ways to do that is through training, and I think the challenge to management is to provide employees with the opportunities to keep themselves fully trained and able to contribute," he adds. "It is also the responsibility of

line managers, though, to keep employees apprised of future needs, changes in the business, and skill requirements for meeting those needs."

Sticking points remain, however, including that of concern over income levels and retirement benefits.

Job Classification Concerns

"I think the company is doing a great job in offering this training, and we are encouraging our surplus people to take advantage of any training opportunities that come up, but we don't want to see them lose anything in the process," says Conrado.



JULIAN SANCHEZ (7560): "The challenge to management is to provide employees with the opportunities to keep themselves fully trained and able to contribute."

Referring to re-assignment of some surplus workers as custodians, Conrado said in a recent MTC letter to Julian, "Our members who have been placed on surplus believe their seniority, training, and grade level should have afforded SNL a more appropriate use and benefit of skill than is represented by custodial work assignments."

He added that the MTC is "amenable to placing surplus Council-represented employees in clerical positions" if their concerns over pay and retirement benefits can be satisfied.

Meanwhile, Yolanda Padilla-Vigil (7560) and Diane Nakos of Individual and Management Development Dept. 7521 designed the first skills-based training session that begins on Monday. The 16-week course is designed to prepare surplus employees to pass the business battery test and the

typing test, prerequisites for most clerical jobs.

"We decided on this course and others we will be offering after surveying managers to see what skills they believe will be most important to their work in the future," says Yolanda.

The Needs Assessment Survey was conducted in July by Diane. Its results are based on 150 responses from managers questioned about Sandia's current and future skill needs.

"More than one-third of the Sandia managers who responded believe they will need employees

"The need for some old skills is declining, but new needs are materializing."

with either new skills or different skills in the years ahead," Yolanda says. "While people to fill these jobs probably could be found outside the Labs without too much trouble, our goal with this program is to keep Sandians working at Sandia."

Continuing Technical Education and Training Dept. 7522 supported the initial workshop for surplus employees. Char Seyfer (7522) says, "We understand the frustration of people who have developed skills in a job, only to find the job has been eliminated. But that's simply today's workplace. The need for some old skills is declining, but new needs are materializing, and anyone who's going to work has to have the needed skills."

The survey showed that 32 percent of the managers who responded rated communication skills high on their list of anticipated needs. Typing skills ranked next, supported by 20 percent of respondents, and computer skills was ranked third, supported by 17 percent of the managers.

Yolanda and Char emphasize that although the current program is designed for surplus represented employees, it is anticipated that as the mission and other programs at Sandia change, employees in other classifications also will require retraining and redeployment within the Labs.

"This is already being discussed at higher levels of management," Yolanda says. "The obvious areas are in defense programs, and there is potential for the same thing occurring in other areas." ●HK

Take Note

The American Lung Association of New Mexico is sponsoring a seven-week "Freedom from Smoking" clinic from 7 to 9 p.m. on Thursdays beginning Nov. 5. Enrollment is limited and reservations are required. Cost is \$50. For information, call the Lung Association on 265-0732.

The American Lung Association of New Mexico and UNM's Pediatric Pulmonary Division are offering a free seminar and workshop for asthmatic children ages 6 to 11, their parents, and their caregivers on Saturday, Nov. 7, at the Lovelace Educational Building. Call the Lung Association on 265-0732 for information and reservations.

A Holiday Harvest Feast to benefit Barrett House Emergency Shelter for Women and Children and Presentation House Transitional Living Program (for older homeless women) will be held Thursday, Nov. 12, from 5:30 to 8:30 p.m. at the old airport (2920 Yale Blvd. SE). Tickets are \$20 per person. Events include a silent auction beginning at 5:30 p.m., dinner (traditional holiday feast of turkey and fixings) and a short program at 7 p.m., a live auction at 8 p.m., and musical entertainment. For information about volunteering to help with the event, ordering tickets, or donating an item for the auction, call Presentation House on 883-8870.

Welcome

Albuquerque — Donna Bauer (154), Theresa Griego (21), Bryan Guernsey (7813), Jeanette Orona (154).

Elsewhere: California — Thomas Vandenberg (210); *Michigan* — Elizabeth Holm (1831), Gary McGovney (2337).

Sympathy

To Tom Cabe (2615) on the death of his mother in Poteau, Okla., Sept. 4.

Employee Death



DON BICKELMAN

Henry (Don) Bickelman of Weapon Training and Evaluation Dept. 5513 died Oct. 12 after a long illness.

He was 68 years old. Don had worked at Sandia since 1967 and was a department manager.

He is survived by his wife, son, and two daughters.

Tapp Talks Turkey

How Is Sandia Doing with Continuous Improvement?

Editor's Note: Mentioning the "Q" word — Quality — at Sandia elicits various responses, ranging from "ho-hum" to enthusiasm. But nearly everyone agrees that continuous improvement is the key to a successful Sandia future — our future — and that's what the Labs' Quality Program is about. Keeping this in mind, the LAB NEWS recently visited with Quality Improvement Director Charles Tapp (4300) about Sandia's progress in this area and where we're headed. Here's what Charles had to say about several subjects:

Need for more employee involvement in continuous improvement programs:

I don't think front-line Sandians are involved enough yet. President Al Narath recently invited a number of Sandians to have breakfast with him and talk about quality. Some said they didn't want to come and talk about quality because they didn't know enough about it. Our top management is deeply committed to improving our processes and is working hard at it. We need to find ways to get other employees more involved, and we are working on that.

How employees can get involved:

There are many aspects to continuous improvement programs and even many definitions of quality. Our corporate plan is aimed at changing the way we do business to increase our focus on customers and on employee satisfaction. To help bring this all about, employees can increase their

"You can't have customer satisfaction long term without having strong employee satisfaction."

understanding of how their work fits into Sandia's strategic vision. This means more involvement — stating your goals and understanding how they tie into your department's goals, your center's goals, your division's goals, and our laboratory's goals. I think this cascading of our vision and goals from the top of Sandia down through all levels and extending out to our customers will bring all Sandians big benefits.

Satisfied employees making satisfied customers:

Employees tend to treat customers the way employees perceive that they're treated by management, so if the management wants customers treated well they have to treat employees well. You can't have customer satisfaction long term without having strong employee satisfaction. When I speak to groups about quality, that idea gets more reaction from the audience than any other point I make. This isn't a fad — it's not "this month's flavor." Today's problems require everyone's ideas to solve. No longer can any company afford to use only employees' hands instead of their heads.

How good we really need to be:

For a national lab, no standard below world class is acceptable. We can't be the best physics laboratory in south Albuquerque. That won't cut it.

How Sandia is faring in the AT&T Chairman's Quality Award competition:

Last year, we scored about 180 out of 1,000 possible points. A Sandia team gathered lots of data and submitted a new application to AT&T this June. We weren't sure what score we would get, but we recently were informed that we scored 429. Our goal was to improve our score to 300 this time. There were four sections in which we scored more than 60 percent, which is a world class level. We're excited about that.

Why Sandia continues to participate in the AT&T Chairman's competition since AT&T will no longer manage Sandia after Sept. 30, 1993:

The Malcolm Baldrige quality evaluation process is a structured way to assess how you stand in respect to world-class companies and their ability to satisfy customers. The process is used by AT&T. Our participation is a convenient way for us to understand how well we "compete" with world-class companies. We're committed to continue to assess ourselves and improve, and this is a great way to do that.

The Malcolm Baldrige quality process and how it ties into today's thinking:

The Government Accounting Office (GAO) studied 20 companies that had done Malcolm Baldrige applications. On average, the 20 companies improved on every parameter measured after going through the process. Consumers and other customers are becoming more critical, more expectant. They want things more quickly, they want them cheaper, they want them more reliable. Quality ties into things like agile manufacturing — people want things



CHARLES TAPP (4300)

made exactly the way they want them, and they want them when they want them. For example, there's talk that someday soon you'll be able to go into a car dealership, pick the features of the car that you want, and call the order into the factory, and the car will be made for you and delivered exactly the way that you want it in a day or so. Increasingly, people look for organizations that are focused on meeting our wants and needs instead of selling us what they happen to have. And that's what we need to focus on at Sandia.

Total Quality Management (TQM):

I don't even like to use the phrase Total Quality Management, because it conveys a formal, paper-oriented structure. The term TQM will

probably go away because we need something better. I prefer terms such as customer focus and continuous improvement. Let me tell you how I approach it. The old paradigm involved developing a product or service and selling it to the customer. The paradigm is now inverted: we now go to our customers and discover their requirements — their needs — and then we develop products or services to meet them.

A forgotten lesson:

The American ethic is to go for the "big one" — the hole-in-one, the slam-dunk, the Nobel Prize. The Japanese have a different approach — taking small steps — making improvements on everything all the time. Instead of looking for the giant improvement, they try to continuously improve

"For a national lab, no standard below world class is acceptable."

everything in small steps. As kids, nearly all of us learned the story about the tortoise and the hare, but we forgot to apply it to business. The Japanese didn't, and their society has profited immensely.

Customer feedback:

Kathy Carlson, head of DOE/Albuquerque's Kirtland Area Office, is one of our most important customers, and she is very supportive of our growing customer focus and our use of the Baldrige criteria to help us improve. She and her staff are taking Baldrige training. Maury Katz of DOE headquarters, who heads up the DOE appraisal process for all DOE institutions, has come to Albuquerque and taken the Malcolm Baldrige training and is enthusiastic about what we're doing. And there are dozens of other customers who provide funds to this institution who are delighted with our increasing focus on their requirements and on continuous improvement. We can't tell all of their stories here, but we're gathering them to in preparation for our next Malcolm Baldrige assessment.

Quality Month ends tomorrow, but Sandia's Quality Program is just getting into high gear. In an upcoming issue, the LAB NEWS will focus on some specific activities that are going on and being planned to encourage continuous improvement.

●LP/CS

Take Note

The 1992 annual meeting of the New Mexico Academy of Science will be Saturday, Nov. 14, at BDM Sandia Vista Building (2301 Buena Vista SE), beginning with the business meeting at 12:45 p.m. The plenary session of invited papers begins at 1:45 p.m. Speakers and their topics include: keynote speaker Harrison Schmitt (Apollo 17 astronaut), "The US Space Exploration Initiative"; Stanley Morain (UNM Dept. of Geography), "Managing Earth-Observing Technology"; Nebojsa Duric (UNM Dept. of Physics and Astronomy), "Astronomical Observatories on the Moon"; and Jerry Thomson (Chief Scientist, Aerojet Propulsion Division), "A View of International Space Propulsion." Art Guenther (4100) is the after-dinner speaker. He will talk about "Space New Mexico" at 7:30 p.m. Dinner is at 6:30 p.m. and requires prepaid reservations (\$19, deadline Nov. 9). Exhibits from Sandia, the Space Center at Alamogordo, Los Alamos National Laboratory, Phillips Laboratory, and White Sands Missile Range will be open from 1 to 7 p.m. Fees are \$10 for New Mexico Academy of Science members, \$20 for non-members, \$30 for new members (\$10 registration, \$20 annual member-

ship), \$2 for each additional family member, and \$2 for teachers (primary and secondary) and students. Contact Bill Snyder (ret.) on 292-6357 for more information.

Technical papers are being solicited for the 15th annual Ideas in Science and Electronics Exposition and Symposium, to be held May 11 to 13 at the Albuquerque Convention Center. Topics in the ISE '93 Call for Papers include artificial intelligence and neural networks, communications (high-speed digital networking), computer graphics (virtual reality and scientific visualization), data and signal processing, environmental technology (environmentally conscious manufacturing, hazardous materials, measuring and monitoring, treatment/storage/disposal), instrumentation and testing, medical/biomedical instrumentation (diagnostic and treatment equipment), optics, optoelectronics and electro-optics (fiber optics), and radio frequency, microwave, and electromagnetic environmental effects. Send one-page abstracts (Dec. 31 deadline) to Technical Program, ISE Inc., 8100 Mountain Road NE, #109, Albuquerque, NM 87110-7827 (phone 262-1023, fax 265-1143).

Sandia News Briefs

William Tedeschi Gets DNA Kudos for Orbital Debris Breakup Study

William Tedeschi of Defense Programs Washington Liaison Office 5609 recently received the Director's Award for Meritorious Public Service from the Defense Nuclear Agency (DNA). His award is based on two years' work as technical advisor to the Orbital Debris Breakup Program while assigned to the DNA's Shock Physics Directorate.

As part of this assignment, he initiated and executed a research program to explore the material and structural response of space objects subjected to collisions with hypervelocity particles, the debris generated by such collisions, and its dispersal in space. The results may help prevent satellite losses due to collisions with orbital debris and may ultimately protect the lives of space station astronauts.

Two Labs Researchers Named Distinguished AWU Lecturers

Two Sandia/California researchers have been named Laboratory Distinguished Lecturers for 1993 by DOE and the Associated Western Universities (AWU). The researchers, Celeste Rohlfing of Theoretical Dept. 8341 and James Miller of Combustion Chemistry Dept. 8353, join five other selectees from five other DOE laboratories.

AWU, a consortium of 44 universities and colleges, manages a variety of DOE-sponsored science education programs with the goal of developing a new generation of scientists and engineers to meet national needs in energy R&D. During the academic year, distinguished lecturers visit several AWU-member schools to present seminars, describe laboratory research opportunities, and explore collaborative R&D possibilities with university scientists and engineers.

Ed Gullick Commended for New Campus Recruiting Program

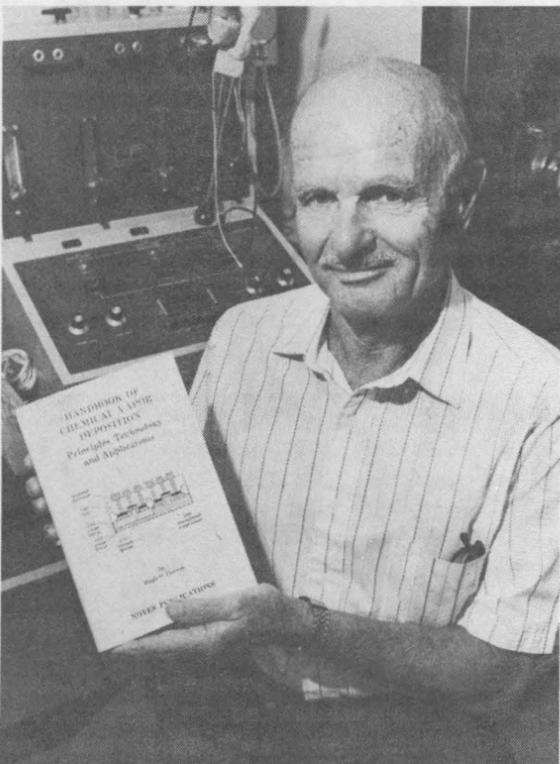
Ed Gullick of Staff Employment and Personnel Policy Dept. 7531 was presented a Human Resources Professionalism award recently by AT&T's Senior VP of Human Resources. The award commends Ed for his part in creating a new AT&T program that helps recruit new employees from college campuses. The new interview and selection process is now used by all Sandia BS/MS campus recruiters.

Cliff Renschler, Colleagues Co-Edit Carbon Book

Cliff Renschler, Manager of Properties of Organic Materials Dept. 1812, and two colleagues (John Pouch of NASA's Lewis Research Center and Donald Cox of Exxon's Research and Engineering Company) have their names on the cover of a new book published by the Materials Research Society (MRS).

The 521-page book, titled *Novel Forms of Carbon*, documents a symposium held at the 1992 MRS Spring Meeting. It includes papers on foams and aerogels; surfaces, alloys, mixed phases, and composites; fullerenes, fullerides, and fulleroids; and diamond and diamond-like carbon. Copies of the book are available for \$62 (MRS members, \$54) from the MRS Publications Dept., 9800 McKnight Road, Pittsburgh, PA 15237.

Send potential Sandia News Briefs to Editor, Dept. 7162.



WORK OF A LIFETIME — Retiree Hugh Pierson is author of a new *Handbook of Chemical Vapor Deposition*, a 436-page comprehensive overview of the principles, technology, and application of chemical vapor deposition (CVD). The versatile process can be used to manufacture coatings, powders, fibers, and monolithic components. According to the handbook publisher, the market for CVD is predicted to reach \$3 billion in the US by next year. Hugh, who retired in 1982 after 24 years at Sandia, headed the CVD lab at Sandia for about 15 years before retiring. He says it took him about a year and a half to write the book but his entire lifetime to prepare for writing it.



Recent Patents To Sandians

Cliff Mendel and Mark Savage (both 1263): Electron Launching Voltage Monitor.

Douglas Drumheller (6111): Acoustic Data Transmission Through a Drillstring.

Thomas Brennan, Gene Hammons (both 1311), David Myers (1303), and Gregory Vawter (1322): Method of Making an Ion-Implanted Planar-Buried-Heterostructure Diode Laser.

Timothy Drummond (1311) and David Ginley (former Sandian): Direct Write with Microelectronic Circuit Fabrication.

Jonathan Weiss (9312): Fiber-Optic Strain Gauge with Attached Ends and Unattached Microbend Section.

Carol Ashley (1846), Jeffrey Brinker (1846), Scott Reed (2476), and Robert Walko (2231): Solid-State Radiation-Emitting Compositions and Devices.

Frank Conrad (9548): Hand Held Explosives Detection System.

Take Note

Albuquerque Academy (6400 Wyoming Blvd. NE) will hold an open house Sunday, Nov. 15, to provide an opportunity for parents, prospective students, and other interested persons to tour the campus and meet faculty and students. Albuquerque Academy is a nondenominational, coeducational college preparatory day school for grades six through twelve. Entrance tests for next fall's sixth graders and other incoming students will be given in November, December, and January. Information about testing dates for next year, financial aid, and other aspects of the admission process is available by calling 828-3208.

this month in the past...



40 years ago . . . Hollywood actress Penny Singleton, who played "Blondie" in the movies, helped kick off Sandia's Red Feather Drive, forerunner of today's Employee Contribution Plan (ECP). The Coronado Club announced a new policy: that each of its four bowling lanes (now long gone) would be tended by an individual pinboy on league bowling nights. Previously one pinboy had to service two alleys, slowing the games considerably. Admiral George Kraker, Deputy Manager of the Santa Fe Operations Office of the Atomic Energy Commission, said the still-young Sandia Laboratory would probably have a permanent part in the nation's future. "I cannot see ahead to the time when any development would remove the nation's requirements for the scientific and engineering equipment facilities developed at these two installations [Sandia and Los Alamos]," he said. Sandia had about 5,000 employees then.

30 years ago . . . The Labs' new mach 7.5 wind tunnel was declared fully operational after initial tests on a model rocket the previous month. Among the "bargains" in the Oct. 26, 1962 LAB NEWS: a Sears cigarette-rolling machine that even rolled filter tips, a '57 Renault Dauphine for \$285, a natural ranch mink coat for cash only [?], and a working model of a Napoleon 12-pounder cannon that "would shoot beer cans if you're short of cannon balls."

20 years ago . . . If you think those colorful balloons at Albuquerque's International Balloon Fiesta are big, consider the scientific balloon launched from White Sands Missile Range 20 years ago. Carrying scientific instruments (including some from Sandia), the balloon was filled with 45,000 cubic feet of helium, but expanded to an incredible 38 million cubic feet when it reached an altitude of 159,000 feet (about 30 miles). Sandia/California became the first institution in the Atomic Energy Commission's San Francisco Operations Office complex to have female security guards (three), but the LAB NEWS wasn't yet into non-sexist language. The photo caption about the three new guards said, "Employment qualification requirements for the *gals* are identical to those for male security guards."

10 years ago . . . Retired Sandia Public Relations Manager Ted Sherwin wrote a LAB NEWS article observing the differences between working and being retired. One quote: "Everything grows better and bigger when you give it more water, fertilizer, and loving care. But there is a limit to the amount of zucchini and tomatoes you can unload on your friends."

Fun & Games

Skiing — The Sandia Peak Ski Patrol's 26th annual Ski Swap will be held this weekend, Oct. 30 through Nov. 1, at the New Mexico State Fairgrounds. The Swap offers downhill and cross-country ski equipment (skis, boots, and clothing). Equipment is checked for consignment today, Oct. 30, from 11 a.m. to 7 p.m. The sale runs Saturday from 9 a.m. to 4 p.m. and Sunday from 2 to 4 p.m. Ski patrollers will be on hand to help customers make selections.

MILEPOSTS

LAB NEWS

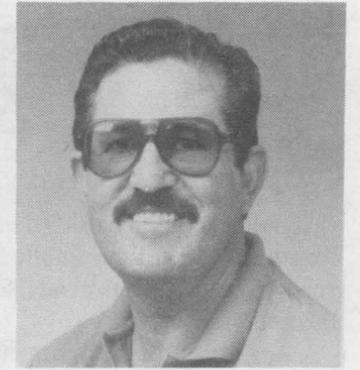
October 1992



Joseph Curzi
2513 30



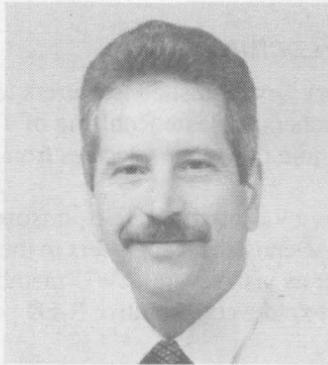
Dorothy Brockman
7023 15



Daniel Sanchez
2514 20



Jan Willis
7560 30



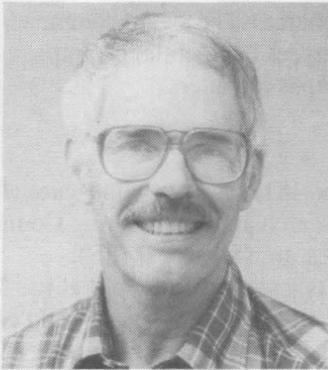
James Wilder
2574 15



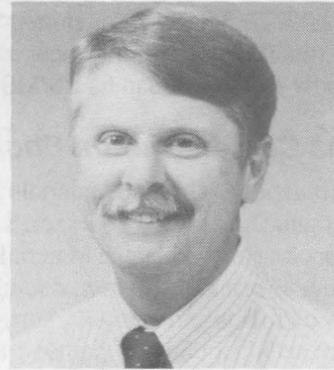
Ed Cassidy
7550 30



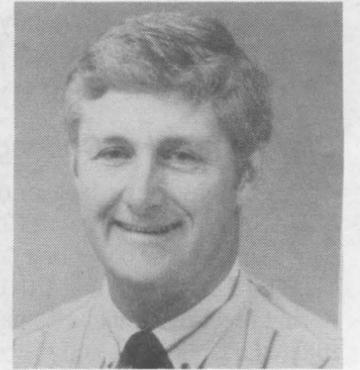
Allen Camp
6412 15



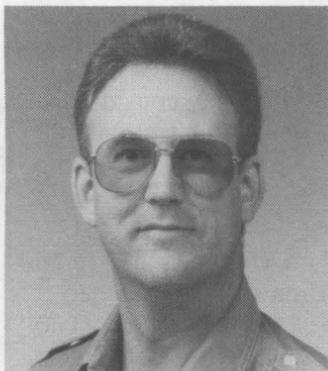
Herman Watts
2273 25



Donald Cook
1202 15



Martin Stevenson
2574 20



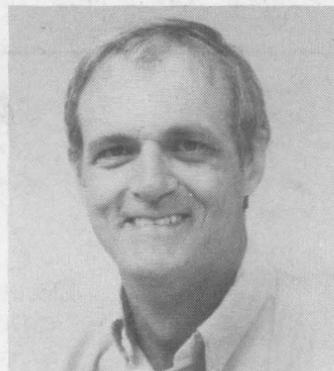
William Vansalous
2481 15



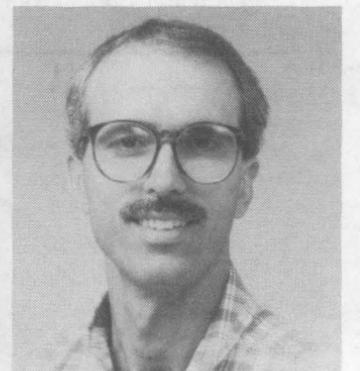
Bill McCulloch
6515 25



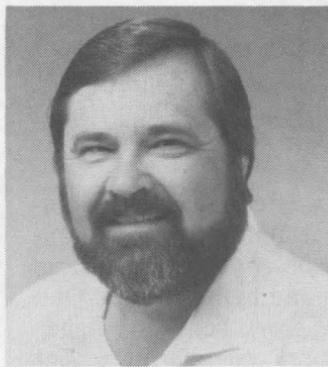
Willie Doyeto
7812 15



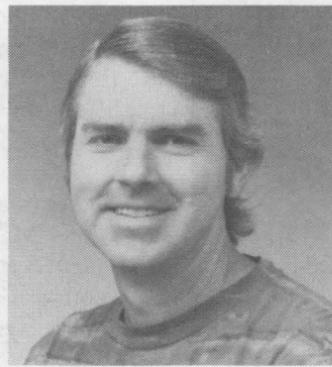
Bill Sullivan
9722 20



Richard Graham
2833 15



Kenneth Varga
2643 25



Marvin Nicholson
7811 15



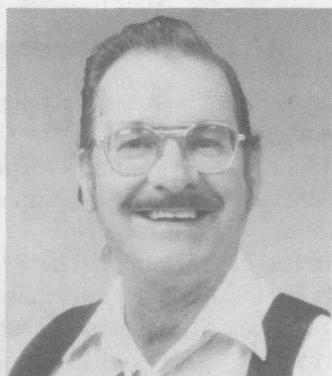
Roger Edwards
2253 25



Dave Braudaway
4343 35



Charles Dusing
7813 15



Horatio McKinney
7612 15



Larry Smith
7817 15

UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS

Deadline: Friday noon before week of publication unless changed by holiday. Mail to Dept. 7162.

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

SOFA, \$250; sofa/love seat, \$550; king-size bed w/beddings, \$475; 1983 Yazzi painting, \$250; dinette set, \$225. Lindsay, 881-0709.

MAGNAVOX CONSOLE COLOR TV, 25 in., remote control, cable ready, 2 yrs. old, \$325. Record, 243-5103.

"PRECIOUS MOMENTS" FIGURINE, "You Can't Run Away From God," \$80. Sjaardema, 299-8042.

AIR COMPRESSOR, 1/2-hp, 14" x 30" tank on roller skid, 160-lb. dial gauge, pressure reg., 50-ft. hose, \$175. Schuster, 296-9334.

MACINTOSH SE/30 COMPUTER, w/math co-processor & travel case, 5 RAM/40 HD, \$1,900 OBO. Lium, 265-6580, leave message.

STORAGE COMPARTMENT, for motor home, \$60; camper shell for Isuzu Pup Pickup, like new, paid \$800, sell for \$450. Sanchez, 831-4906.

COUCH, 8-ft., tan & beige striped; 2 brown vinyl lounge chairs, w/ottoman; 2 matching lamps; Ammana microwave, 750-watt. Meyer, 296-9066.

ROSSIGNOL SKIS, new, 185 cm, \$50; lida banjo, \$100; Garrard turntable, \$10. Seager, 281-5045.

BARRECRATER SKI RACK SR-84, fits all vans, mini-vans, & suburbans, locking, easy slide loading, used twice, \$75. McMullen, 298-2801.

RCA VIDEO CAMERA/VCR, 8:1 zoom, auto focus, excellent condition, carrying case, film/slide adapter, extra battery, \$700. Ballard, 344-8751.

WARDS BAND SAW, 10-in., 1/3-hp motor, metal stand, needs adjustment, \$60; biscuit cutter attachment for Sears router, \$25. Markowitz, 294-0332.

BAR RAIL, brass, 80-in. long, including decorative tips, 2-in. diameter, 3 mounting brackets, \$50. Kaiser, 828-1660.

ALTIMA LAPTOP COMPUTER 286, 16-MHz, 1.44 floppy, 20-meg. hard drive, modem, \$675. Shamblin, 293-2568.

POMERANIAN, AKC-registered, wolf sable, female, all shots, house trained, 6 mos. old, \$200, see after Nov. 1. Sutton, 298-0001.

OAK BUNK BEDS (or 2 single beds) w/drawers, good condition, mattresses like new, originally more than \$750, asking \$350. Kellogg, 299-3737.

'89 CASITA TRAVEL TRAILER, 16-ft., king bed, AC, kitchen, refrigerator, microwave, toilet/shower, water heater, stereo, canopy, \$6,950. Cunningham, 892-0436.

EUREKA VACUUM CLEANER, 5.5-amp., 4 yrs. old, excellent condition, \$60. Meeks, 828-9825.

WATERBED, queen-size, dark wood, \$75. Wichhart, 898-9711.

CELSIUS HUMIDIFIER/EVAPORATIVE AIR (SWAMP) COOLER, portable, new, paid \$150 in July, will sell for \$100 OBO. Davis, 255-2084.

APRICA LABELLE STROLLER, \$100; Cosco mesh bed rail, \$7; Tykes 4' x 4' sandbox, \$50. Korbin, 821-8461.

MODERN MAID DOUBLE OVEN, black, new \$724.95, sell for \$350; Kitchen-Aid 30-in. drop-in stove top, new \$315, sell for \$150. Abeyta, 298-4276.

COUCH, blue-brown floral, \$125; woman's dress boots, size 8, \$10; built-in range, \$10; built-in ovens, \$20. Wymer, 294-0605.

LA-Z-BOY RECLINER, gold, \$75; RCA color TV, 19-in., \$50; clothes closet, portable, wooden, \$50. Romero, 1-864-9756.

BUNK BED, solid, dark-stained pine, can be used as single or set, in parallel or at 90-degree angle. Cocain, 275-9505.

TREADMILLS: one 0-4-mph, 1-hp DC, and one 0-3.5-mph, 3/4-hp AC, good condition, \$50 ea. Hall, 299-0009.

20MB HARD DRIVE w/ MFM controller card, \$80. Woodruff, 828-0073.

TEKTRONIC 4014-1 MONITOR & 4632 hard copy, pick up at my home, no use for them, free. Chavez, 842-6374.

.22-CAL. RIFLE, Marlin mod. 99, w/Monte Carlo stock, semi-automatic, \$80. Marchi, 291-9681.

DOUBLE BED & HEADBOARD, includes frame, box spring, & mattress, good condition, \$125. Hurley, 899-0303.

ITHACA SHOTGUN, 20-gauge, side-by-side, restocked, case hardened, excellent condition, \$400. Petersen, 275-7467.

TRIMLINE PHONE, white, dial, wall/desk, \$10; gallon-size ice cream freezer, electric, \$15. Hines, 821-8592.

ENTERTAINMENT CENTER, oak, one-of-a-kind, 9-ft., 3-piece, locking units, smoked glass, recessed lighting, \$1,400. Pena, 883-8847.

HEADBOARD & FOOT CORNERS, solid brass, on king-size waterbed pedestal, 6 drawers & ski stow, \$500 OBO. Lemen, 293-3487.

THOMASVILLE CHINA CABINET, \$1,200; 5-1/2' x 8-1/2' area rug; wicker love seat; cream-colored leather couch; Queen Anne end table. Griffin, 271-0515.

ANTIQUE ENGLISH PINE DRESSER w/ mirror, \$200; twin mattress w/ box spring, \$50. Davis, 828-1465.

YAMAHA EVERETT PIANO, console, bought new, used 7 yrs., attractive case compatible w/SW decor, \$1,000. Hooper, 299-5593.

MOTORCYCLE HELMETS (2), black, medium-sized, full face shields, like new, paid \$140 ea., sell for \$100 ea. Haines, 296-0478.

STEREO RACK SYSTEM, 100w Onkyo, digital tuner, turntable, dual-drive double cassette deck, CD, tower & shelf speakers. Adams, 299-6943.

WHIRLPOOL REFRIGERATOR, w/ice maker, 15.6 cu. ft., new condition, \$250; 8-ft. davenport, \$100; 8-ft. dining set, \$100, must sell. Hanes, 292-6512.

WEIGHT EQUIPMENT: 225 lbs., plus bars and collars, bench w/ incline & leg attachment, \$100. Woodall, 822-0060.

SKI & TRAM SEASON PASS, Sandia Peak, tram valid through June '93, \$300/both. Dyer, 291-1600 days or 821-5158 evenings.

MATTEL INTELLIVISION control unit, w/5 video games, \$45. Lane, 299-7925.

DECORATOR MIRROR, oval, \$12; brass wall plaque, large, \$8, old fashioned meat grinder, \$10; Japanese print, \$8; American flag, free. Krahling, 268-8126.

BUNDY FLUTE, by Selmer, excellent condition, \$135. Aragon, 888-3473.

SMITH & WESSON PISTOL, 9mm, stainless steel; Nikon 10x50 binoculars. Jimenez, 296-9256.

SOFA, 8-ft., \$150; matching love seat, \$125; both comfortable, excellent condition, see to appreciate, \$225/both. Morgan, 271-8489.

COLOR TV, 13-in., good condition, excellent for use w/ Nintendo or any video game set, \$30 OBO. Vigil, 899-0046.

KENMORE WASHING MACHINE, large-capacity, white, can deliver if necessary. Heald, 281-7885.

HANDGUN SAFE, Pistol Pal "Nightstand", 3" x 8" x 11", 13 lbs. of 14-gauge steel, quick-access push-button lock, \$115. Mooney, 281-2612.

ANTIQUE QUILT, circa 1880s, wedding ring design, 77-in. square, excellent condition, \$425 OBO. Hole, 255-1444.

MOVING SALE: Sofa/love seat, recliner, chairs, lawn mower, more, Oct. 31, 8 a.m.-2 p.m., 6412 Annapolis Dr. NE. Landa, 821-3210.

WATERBED, queen-size, dark wood, headboard, clothes drawers underneath, asking \$200 OBO. Atencio, 247-8738.

DRY-ERASE BOARD, 2' x 3', great for kid's room, \$20; twin-size comforter, drapes, sham, floral w/beige background, \$20. Newcom, 293-5180.

ROPER DISHWASHER, built-in, needs work, possibly new pump, free. Langkopf, 293-4076.

SEARS WORKBENCH, portable, \$50. Etheridge, 888-2633.

REEL-TO-REEL TAPE DECK, tapes, \$60; rowing machine, \$25; movie camera, editor, supplies, \$50. McGovern, 293-3829.

Feeling Rejected? Please Follow the Rules

Some "unclassified ads" are rejected because they do not meet requirements. LAB NEWS staff members do not have time to call people who submit ads, so non-qualifying ads are rejected *without notice*. The most common reason for rejected ads is that Sandians do not list their full names and organization numbers; this information is not printed, but it is necessary to verify that the ad was submitted by a Sandian. The rules are printed at the top of this page in each issue, and Sandians are encouraged to clip and save a copy.

SWIVEL ROCKER, blue, excellent condition, \$100. Trembl, 888-3917.

SEARS HUMIDIFIER, rocking chair. Laderach, 888-0712.

SOFA, 3-cushion, beige & white, Hercules, good condition, \$175; green Spanish mirror, \$40. Henderson, 299-6083.

EXTENSION LADDER, 20-ft., free; 20' x 25' industrial-strength black plastic, \$3; hen & chicks groundcover, drought-resistant, 5¢ ea. Kerschen, 821-2848.

ROPER ELECTRIC RANGE TOP, w/griddle, excellent condition, lists for \$260, asking \$85. Jogi, 275-0610.

WHEELBARROW, great for garden & yard work, good condition, lots of useful life left, \$15 OBO. Freyermuth, 299-2053.

DOUBLE BED, mattress, box spring, frame, Serta brand, \$50; Litton microwave oven, large-capacity, \$25. Sturgis, 299-5470.

SOFA SLEEPER, queen-size, 2-piece sectional, L-shape, \$125; Rogers drum set, \$425; classical guitar, \$425; violin, \$175. Garcia, 857-9171.

TRANSPORTATION

'88 SUZUKI SAMURAI, 42K miles, excellent condition, pull-out stereo, full-top, half-top, \$4,500 OBO. Mora, 831-0917.

GRANDMA & GRANDPA CARS: '72 Dodge Demon, 3-spd.; '73 Plymouth Scamp, AT, AC; both 6-cyl., extra clean & reliable, your choice, \$1,500. Torres, 294-7273.

'83 FORD RANGER, EFI V6, 5-spd., AC, PS, PB, dual tanks, AM/FM cassette, 60/40 seat, tinted windows, \$2,200. Darnold, 821-5180.

'90 NISSAN 300 ZX, 5-spd., electronic pkg., base stereo, dark blue, 7K miles, under warranty, \$18,800. Bainbridge, 298-3423.

'84 PACE ARROW MOTORHOME, 34-ft., twins, microwave, AES refrigerator, vacuum, awning, 20K miles, 6.5K generator, new radial tires, more. Courtin, 291-0544.

MAN'S BICYCLE, 20-in., 15-spd., Shogun Alpine GT, rode less than 20 miles, excellent condition, \$100 OBO. Davis, 255-2084.

'70 CADILLAC ELDORADO, 8.2-liter, extensive mechanical restoration, recent paint & vinyl top, no rust, 115K miles, \$2,900. Cunningham, 892-0436.

MAN'S ROAD BICYCLE, aluminum frame, excellent condition, used very little, \$250. Woodruff, 828-0073.

'78 CADILLAC SEVILLE, 66K miles, loaded, great condition, \$5,000. Young, 255-8193.

'83 HONDA ACCORD, 4-dr., AM/FM, cruise, 5-spd., AC, new clutch, struts, and front tires, needs work, \$700. Norwood, 266-2717.

'73 AUDI 100LS, 4-spd., 4-dr., 6 wheels, w/2 snow tires, one owner, \$500 OBO. Matter, 281-1277.

'89 FORD BRONCO, full-size, 4x4, AT, AC, PS, PB, fuel-injected 302, AM/FM, excellent condition, book \$8,500, asking \$7,800 OBO. Mitchell, 275-1788.

'79 DATSUN KINGCAB w/custom cab, 68K miles, AC, one owner. Kelly, 255-7226.

'82 HONDA CIVIC, 4-dr. sedan, AC, AM/FM cassette, cruise, 64K miles, perfect condition, \$3,000. Bauer, 299-0640.

'81 LINCOLN TOWNCAR SIGNATURE, clean, fully loaded, runs well, have all records, good buy, \$2,495 OBO. Borrowdale, 296-8582.

'85 TOYOTA CELICA, AC, AT, 80K miles, asking \$4,500. Adams, 823-1845.

'85 MAZDA GLC, hatchback, AT, AM/FM cassette, one owner, 69K miles, excellent condition, \$2,200. Hanes, 292-6512.

'23 "T" BUCKET HOT ROD, '37 Corvette engine, AT, Ford rear end w/ 456 gears, blue w/tan interior, \$8,000 OBO. Marchi, 291-9681.

'83 CAPRI RS, 5.0, PS, AC, standard, red, tape, nice condition. Fetzer, 281-5706.

BICYCLES: boy's Schwinn, 27-in., 5-spd., w/baskets, generator, mirror, \$40; girls 26-in. 3-spd., w/light, horn, \$22. Lane, 299-7925.

'86 FORD RANGER PICKUP, 5-spd. overdrive, 23K miles. Jimenez, 296-9256.

'71 FORD GRANADA, 4-dr, 1-6, AT, AC, PS, new tires, needs body work, good basic transportation, \$500. Yip, 294-8124.

'80 PONTIAC PHOENIX, 5-dr., hatchback, yellow, AT, PS, AC, V-6, 84K miles, one owner, very good condition, \$1,795. Pitts, 293-5481.

'72 FORD BRONCO SPORT, 4-WD, 302 V-8 engine, no modifications, original equipment, good shape. Kavaschetz, 293-4710.

'85 POP-UP CAMPER, Sunlite Eagle, propane stove, sink, 10-gal. water tank, ice box, sleeps 3-4. Lukens, 299-1271.

'84 FORD T-BIRD ELAN, loaded, \$2,500 firm. Graham, 836-2752.

GIRL'S BICYCLE, 30-in., 10-spd., \$70. McGovern, 293-3829.

'86 CHEVROLET S-10 BLAZER, 4-WD, low mileage on rebuilt engine, new clutch, tires, battery, excellent condition. Beck, 299-4786.

'87 MAZDA 626 GT TURBO, 39K miles, 5-spd., one owner, excellent condition, AC, sunroof, alloy wheels, \$7,200 OBO. Jogi, 275-0610.

'75 TRI-HULL, 15-ft., 70-hp Johnson, trolling plate, LCR depth finder, front Minnkota trolling motor, set up for fishing, \$2,500. Luikens, 271-0019.

MAN'S 10-SPD. BIKE, Columbia ATB, 26-in. chrome wheels, new, never ridden, attractive red color, \$150 value, \$100. Freyermuth, 299-2053.

'84 TOYOTA CELICA SUPRA, fully loaded, AT, AC, power sunroof, metallic blue, \$4,500. Thompson, 281-0924.

REAL ESTATE

3-BDR. HOME, 1-3/4 baths, 1,300 sq. ft., plus 900-sq.-ft. workshop/garage, 1/4-acre, city utilities, security iron, \$64,500. Roth, 344-7060.

VACANT LAND, Volcano Cliff area that will soon be developed, sale by owner. Tenorio, 821-8967.

VACANT LAND, Meadow Lakes, nice, fast-growing community, school, lake, & clubhouse in area. Tenorio, 836-4081.

3-BDR. HOME, NE Heights, 1,467 sq. ft., solar hot water/heat, family room, fireplace w/woodstove, 2-car garage, new paint, Menaul-Chelwood, \$93,500. Ripple, 293-4718.

WANTED

FILE CABINET, 2- or 3-drawer, wood or metal, in good condition, moderately priced. Gamba, 764-8212.

GAS ENGINE, horizontal shaft, 2- to 4-hp, for mini-bike. Martin, 265-2721.

LEAF SHREDDER/MULCHER, gas-powered. Greer, 281-4688.

VENDORS for arts & crafts fair, Saturday, Nov. 14, fundraiser for Chelwood Elementary, call for booth information. Kellogg, 299-3737.

HOMES FOR PUPPIES: 3 terrier-cross females, 3-1/2 mos. old; 1 Shepherd-cross female, 4 mos. old; 1 Dobie/Lab-cross female, 3 mos. old; 1 American Eskimo female, 5 mos. old. Rex, 764-9655.

SPINNET PIANO, prefer Baldwin, Acrosonic, or Kohler & Campbell, will consider others. Epperson, 268-0036.

LINCOLN LOGS or Legos. Korbin, 821-8461.

SNUG TOP OR SUPER SHELL for '89 Mitsubishi Mighty Max King Cab pickup. Montoya, 272-8150 (home) or 857-1737 (pager).

MOTORCYCLE COVER for Honda 185cc Twinstar (small); steam-cleaner attachment for Rainbow vacuum. McKeever, 888-3367.

SKI BOOTS, children's sizes 2 & 11; 1 set children's skis, short, for child 40 in. tall; boy's 20-in. mountain bike or BMX dirt bike. Jennings, 268-8789.

VIOLIN, used, for "wanna be" fiddle player. Johnson, 897-3546.

CAR: '80-'86 Honda, Toyota, Subaru, or Mazda, prefer 3-dr. hatchback; firewood, 1-2 cords. McConahy, 884-5071.

ROOM TO RENT OR HOUSESITTING, Jan. 3 through March 31, Sandia co-op student. Rohwer, 1-325-7274 (call collect after 5 p.m.).

DESK, complementary with traditional furniture. Trembl, 888-3917.

VIDEOTAPE, VHS format, Disney animated "Cinderella," in good condition. Brooks, 265-8612.

KIRTLAND and Sandia employees and retirees to help form a Lions Club for service to the community. Kavaschetz, 293-4710.

LOST AND FOUND

FOUND: Silver earring in parking lot south of Tech Transfer Center (Bldg. 825). Hesch, 844-9370.

LOST: man's gold ring w/ruby stone & Masonic emblem in center, large, lost near Bldg. 887, reward offered. Miller, 281-3959.



Coronado Club Activities**It's a Good Time to Become a C-Club Member**

BRING 'EM IN ALIVE — If you're not a Coronado Club member, the next couple of weeks are a great time to join. If you sign up for a year during the Nov. 2-13 membership drive, you'll be eligible for a drawing that could bring you \$300, \$200, or \$100. Members get the same chance if they bring in a new member who joins for a year. Also, both new members and current members bringing in new members will receive a \$10 discount coupon toward any meal at the Club. (The current member must be present when the new member signs up. A new member is defined as a person who has never been a member before, or a former member whose membership has been inactive for at least a year.) Come in from 8 a.m. to 4 p.m. Monday-Friday to sign up. Questions? Call 265-6791.

WHY BE A MEMBER? Here are a few reasons: Discount movie tickets for General Cinema and United Artist theaters. Free notary service. Sandia Peak Tramway passes, \$5 each. Discounts on bingo packages. Discounts on lunch. Good deal!

CANTINA TONIGHT — The Cantina opens today (Oct. 30) at 4 p.m., for an evening of good times with mucho munchies and dazzling drink specials. (No dinner or dance is scheduled.) What won't the Cantina have tonight? Football — that's on Monday nights. It's Minnesota at Chicago on Nov. 2, San Francisco at Atlanta on Nov. 9, and Buffalo at Miami on Nov. 16. The action is great on a giant-screen TV!

DART LEAGUE signup is going on now at the Club — deadline for rosters is Nov. 2, and play begins Nov. 3. Teams are six persons. For more information, contact Marlon Long at the Club (265-6791).

POORBOYS NEXT WEEK — Yes, it's gonna be the Isleta Poorboys, those Club favorites, playing for your listening and dancing pleasure next Friday, Nov. 6, from 7 to 11 p.m. The menu's sure to be a favorite, too: shrimp scampi (\$9.95), filet mignon (\$10.95), steak neptune (\$11.95), or the all-you-can-eat buffet, featuring baron of beef and

baked scrod (\$6.95). Dinner is served 6-9 p.m. Reservations available: 265-6791.

T-BIRDS DEAL — The Thunderbird Card Players are still having a great time at their Thursday sessions. Come on and join them! Dates for the rest of 1992 are Nov. 12, Nov. 19, Dec. 3, and the traditional Christmas party on Dec. 17. The fun starts at 10 a.m.

ROLL THE WAGONS! The Roadrunners RV Club is movin' out to Desert Cove Campground at Elephant Butte State Park, Nov. 16-19. For info, call President Tex Vandt (293-1249) or Wagonmaster John Smelser (256-3108).

WELCOME AND CONGRATULATIONS to the new Board of Directors members: Brian Behling (2801), Linda Benavides (1601), Dale Buchanan (ret.), Paul Graham (1400A), Jann Levin (7543), Eric Moss (7329), and Mary Nation (4302).

Events Calendar

Events Calendar items are gathered from various sources. Readers should confirm times and dates of interest whenever possible.

Oct. 30-Nov. 1 — "Pilgrims of the Night," Southwest premiere of Obie-award-winning Len Jenkin play, seven strangers converge at a ferry crossing only to learn the boat has left; 8 p.m., Rodey Theatre, 277-4402.

Oct. 30-Nov. 7 — "Arsenic and Old Lace," two disarmingly charming homicidal characters, the Brewster sisters, "populate" their basement with some of Brooklyn's most unsuspecting male boarders; 8 p.m. Thurs.-Sat., 2 p.m. Sun.; Albuquerque Little Theatre, 242-4750.

Oct. 30-Nov. 8 — "Pump Boys and Dinettes," set at the Double Cupp Diner, the Cupp sisters and the Pump Boys from the gas station across the road serve up a vivid musical account of their lives in a small southern town on Highway 57; 8 p.m. Tues.-Sat., 7 p.m. selected Sundays, 2 p.m. Sat. & Sun. matinees; KiMo Theatre, 764-1700.

Oct. 30 — Radio Theatre: "War of the Worlds," based on the Orson Welles original adaptation almost 50 years ago, with a new twist: the Martians land in Roswell, presented by the Silver Bear Radio Players; 8 p.m., Silver Bear (6921 Montgomery NE), 881-6203.

Oct. 31 — Monthly Arts and Crafts Demonstration, "Day of the Dead" Mexican folk art; 11 a.m.-3 p.m., free, Maxwell Museum of Anthropology, 277-5963.

Oct. 31 — Día de los Muertos Celebration, South Broadway Cultural Center presentation, altar set up by Mexicanos Unidos, festivities include hot chocolate and Día de los Muertos bread, dances, music, poetry, and theatrical representation of Frida Khalo by Carolyn Daze'afhe, bring photo of your favorite deceased person and come dressed as your favorite deceased person; 11 a.m. (all day event), Main Library (5th & Copper NW, lower level), 848-1320.

Oct. 31 — Zoo Boo Four: annual Halloween happening with a haunted house, Tot Spot, costume contest, apple bobbing, clowns, jugglers, magicians, face painting, pumpkin coloring, storytelling, pre-carved pumpkin contest, and many booths giving away candy and other treats; noon-4 p.m. (haunted house 12:30-2:30 p.m.), Rio Grande Zoo, kids in costume free with an adult (maximum four kids), 843-7413.

Oct. 31 — Halloween Special, New Mexico Symphony Orchestra, spooky classics for the whole family; 11 a.m., Popejoy Hall, 843-7657.

Oct. 31 — "A Salute to Andrew Lloyd Webber," New Mexico Symphony Orchestra performing music from "Phantom of the Opera" and other Webber hits, performance also includes music by Gershwin, Jerome Kern, and Lionel Ritchie; 8:15 p.m., Popejoy Hall, 277-3121.

Oct. 31 — Exhibit opening, "The Night Shift: A Closer Look at Bats," spectacular high-speed photography of renowned bat researcher Scott Altenbach (UNM), exhibit details the important role bats play in the natural world, including insect control and pollination, with interactive story book including tales about bats ranging

from cultural myths to Biblical references, enhanced audio track of bat noises, taxidermically prepared bat, a bat skeleton, and a "bat cart" attended by a docent; exhibit continues through Feb. 14, 9 a.m.-5 p.m., New Mexico Museum of Natural History, 841-8837.

Oct. 31-Nov. 1 — Halloween Sparktacular: wizard Carl Noggle and his band of merry pranksters present a real "hair-raising" celebration — a show that demonstrates in eerie fashion basic principles of science with a generous helping of imagination, puppet show, children's activities, storytelling, Halloween costume contest; wizardry shows at 10 and 11:30 a.m. and 1:30, 3, and 4:30 p.m. both days; puppet show at 11 a.m. Sat.; children's activities (including crystal, mask, and T-shirt making, bring a white T-shirt) from 10 a.m.-4 p.m. both days; spooky tales told at 2 p.m. both days; costume judging (children & adult) at 2:15 p.m. Sat.; New Mexico Museum of Natural History, 841-8837.

Nov. 1 — "A Chile Afternoon," Paul Bosland, NMSU horticulture professor, talks about breeding and growing chile, includes chile-based hors d'oeuvres tasting; 1:30-5 p.m., Albuquerque Garden Center (10120 Lomas NE), free, 268-7738.

Nov. 1 — Centennial Lecture: Susan Faludi, feminist and author; 7:30 p.m., Popejoy Hall, 277-3121.

Nov. 5 — "The Traditional Japanese Art of Ikebana," floral design workshop sponsored by the Albuquerque Chapter of Ikebana International, featuring Haruko Crawford, Master of the Ichiyo School; 10 a.m.-noon, limited enrollment, register in advance, Albuquerque Garden Center (10120 Lomas NE), 296-6020.

Nov. 5 — "Culture Change in Northern India's Classical Music; Adaptation of Non-Indigenous Instruments," lecture by East Indian guitarist Barun Pal; 7:30 p.m., Maxwell Museum of Anthropology, 277-5963.

Nov. 6-7 — New Mexico Quilters Bazaar, quilts and quilt-related crafts for sale; 10 a.m.-6 p.m., Albuquerque Garden Center (10120 Lomas NE), free, 296-6020.

Nov. 7 — Zia Marching Band Fiesta, New Mexico's state championship competition for high school marching bands, sponsored by UNM Music Department; 8 a.m.-10 p.m., University Stadium, 277-4402.

Nov. 7 — Pops Concert, Crystal Gale with the New Mexico Symphony Orchestra, the Orchestra will also present a salute to George M. Cohan, music by Offenbach and Bagley, and American folk tunes; 8 p.m., UNM Pit, 842-8565.

Nov. 7-8 — Second Annual Wreaths and Roses Arts and Crafts Fair, sponsored by the Peppertree/Royal Oak Residents Association, part of proceeds benefit elementary school; 10 a.m.-4 p.m. Sat., noon-4 p.m. Sun.; Georgia O'Keeffe Elementary School (11701 San Victorio Ave. NE).

Nov. 7-8 — Doll and Miniature Show, all types of dolls, miniatures, toys, and accessories; 9 a.m.-5 p.m. Sat., 10 a.m.-5 p.m. Sun.; Creative Arts Building, NM State Fairgrounds, 883-6986.

Nov. 8 & 15 — Concert, Albuquerque Philhar-

monic Orchestra, guest artists Douglas and Ellen Campbell perform on French horn; 2 p.m., UNM Continuing Education Building Nov. 8, B'Nai Israel Ballroom Nov. 15, free, 296-5020.

Nov. 10 — Centennial Lecture, biologist and paleontologist Stephen Gould; 7:30 p.m., Popejoy Hall, 277-3121.

Nov. 11 — Tribute to Native American Veterans, 1 p.m., Indian Pueblo Cultural Center, 843-7270.

Nov. 13-14 — Classics Series: New Mexico Symphony Orchestra and Chorus, guest conductor Kenneth Jean, music includes Haydn's "Symphony No. 85" and "Carmina Burana" by Carl Orff; 8:15 p.m., Popejoy Hall, 842-8565.

Nov. 13-15 — Southwest Arts and Crafts Festival, more than 200 entrants from across the US, juried show; 10 a.m.-9 p.m. Fri., 10 a.m.-6 p.m. Sun.; Manuel Lujan Exhibit Hall, NM State Fairgrounds, 262-2448.



TUB O' JUNQUE — Mail Services Team Leader Carl Hadley (3913) shows some of the many catalogs and sale fliers that muck up the mail room, slowing delivery of important mail. Sandians are reminded to contact companies sending non-work-related material to them at the Labs and ask them to remove their names from mailing lists or send such material to their home addresses. Special cards for this are available from the Just-in-Time Service as form SA 7150-C. California Laboratory employees should request form 8524-2A from the Mail Distribution Team office.