

New Training Aids Laboratory Assists Military Technicians in the Field

For want of a nail,
the shoe was lost;
For want of the shoe,
the horse was lost;
For want of the horse,
the rider was lost;
For want of the rider,
the battle was lost;
For want of the battle,
the kingdom was lost.

The Real Mother Goose (1916)

Don Rohr, supervisor of Weapon Procedures and Logistic Support Div. 7212, uses the old nursery rhyme as an analogy to describe the importance of a new Military Liaison Dept. 7210 facility — the Bldg. 892 Training Aids Laboratory (TAL). The TAL will be used to produce weapon-related videotapes to train members of the armed services.

"A stockpiled nuclear weapon may be meticulously designed, and have outstanding safety and quality features," Don says. "But proper maintenance has to be performed to ensure complete reliability if it's ever needed. Without that maintenance, the weapon could become nothing more than a heavy falling object dropped from a plane."

Key to Stockpile Readiness

"Attention to weapon maintenance details is the key to stockpile readiness — and to our national security and deterrence policies," Don continues. "Attention to those details is the TAL's reason for being."

Sandia — and more specifically, Dept. 7210, headed by Bob Sonnenberg — is chartered by DOE to act as an interface between the entire DOE nuclear weapons complex (NWC) and the military services on matters related to stockpiled nuclear weapons.

"It's important to recognize that DOE never relinquishes *ownership* of weapons; it only relinquishes *custody* of weapons [to the military]," Bob points out. "The military custodian-technicians out there in the field are key people — no question about it. They need up-to-date information on maintenance procedures, troubleshooting techniques, and overall weapon operation to do the job that's been entrusted to them. And that's where we come into the picture."

"Under our MOUs [Memoranda of Understanding] with the Army, Navy, and Air Force, we provide training data in a variety of ways: detailed manuals for each weapon and — as adjuncts — both training sessions and audio-visual aids. The new TAL, with its state-of-the-art equipment for producing videotapes related to weapon maintenance and operating procedures, will contribute significantly to those efforts."

Facing the Facts

The videotape need became apparent several years ago, according to Judith Mead. Her division, Weapon Training and Evaluation Div. 7213, has responsibility — among other activities — for annually training some 1500 representatives of the US military services at both in-house Labs sessions and classes in the field. Trainees include military instructors and unit crew leaders, "running the gamut from sergeants to full colonels or Navy captains — and every so often, a general or two," says Judith. DOE employees and other civilians are also trained on request.

"For years, we used 16mm films — and later, slide presentations — for weapon training, both here at Sandia and in the field," says Judith. "Then, a few years ago, we faced some facts: Films and slides, though useful, just weren't filling the bill. Updating films became increasingly difficult — especially on a fast turn-around basis. Often, users in the field didn't have the right kind of projector readily avail-

(Continued on Page Five)



WRITER/DIRECTOR KENT CHRISTENSEN (7212) mans a camera as three Air Force "actors," (from left) John Hammons, John McGuire, and Jeffrey Mertz, perform maintenance operations on the B57 during a TAL videotaping session.



LAB NEWS

VOL. 40, NO. 19

SANDIA NATIONAL LABORATORIES

SEPTEMBER 23, 1988

Good-bye, Plant Engineering

Facilities 7800: New Name, New Face

Beginning Monday, Oct. 3, the old Plant Engineering organization will have a new name and a new face. The new name is Facilities Directorate 7800.

The new face is really eight faces. In the newly created position of Facility Customer Representative, eight experienced facility engineers will each become the point of contact between 7800 and other Sandia organizations.

The FCRs are the most visible part of an organizational change intended to improve 7800's ability to serve its Sandia clients. They will consult on plans

Changing Times

What Sandia has known as Plant Engineering since at least October 1950 is becoming the Facilities Directorate. This change in organizational title highlights the significance of organizational changes planned to begin in October.

for construction work, (see "The 7800 Changes — and You"), help initiate requests, and manage construction or modification projects from start to finish.

This new service will smooth the way for Sandians needing work by the Facilities Directorate, whether it's constructing a new building or just moving a door or installing a writing board. Ward Hunicutt, 7800 Director, says that the FCRs are "the focal point, the front door to 7800 for the rest of Sandia."

Their position is an outcome of 7800's "October" project. Gerry Barr, manager of Planning and Services Dept. 7860, was assigned to head that project, which began in late 1987. The name "October" reflects both an acronym (Organizational Change Transition — OCT) and an objective, set by Ward and 7000 VP Bob Peurifoy — to produce substantive improvements in 7800's service to Sandia by October 1988.

Teams of Two

A team of two FCRs will be assigned to Sandia's Albuquerque vice-presidencies. They are Jerry Hands and Jan Williams for 1000; Wayne Shirley and David Trujillo for 2000; Wayne Burton and Paula Painter for 3000, 5000, and 9000; and Mike Irwin and Pat Miller for 4000, 6000, and 7000. All come from engineering divisions throughout 7800. They will be transferred from their present divisions to Project Management Div. 7866. Jim Furaus, 7866 supervisor, says, "I'm really pleased with this group. There were lots of applicants, and we were able to pick an outstanding team."

Although individual FCRs will be responsible for different projects, the two in each team will work together closely. Each will know the status of the other's projects and will be able to back up his or her partner during vacations or other absences.

As a result, every Sandian will normally deal

(Continued on Page Six)

Antojitos

LAB NEWS Interviews an Expert:

MR: Hello, this is Mark Russell.

BH: This is Bruce Hawkinson, editor of the LAB NEWS at Sandia National Labs in Albuquerque. You are, I assume, aware of why I'm calling you today. [I'd mailed him some background material earlier.]

MR: Yes indeed. . . . What laboratory?

BH: Sandia. . . . S-A-N-D-I-A. We're a government-funded Dept. of Energy R&D lab, operated by AT&T.

MR: Right. . . . What I'm doing today is a few interviews in connection with my appearance there [Albuquerque] next month, and I'm a little vague on how that involves you.

It was not an auspicious beginning for a phone interview with the political humorist, a 30-year veteran of the trade. But we soon reached some areas of agreement.

For example, it's tough to find humor in science and engineering. Contrary to common belief in the "outside world," it's not that scientists and engineers don't have a sense of humor; it's that, as Mark put it, "you have to start with any audience on their wavelength, but it's awfully difficult to do that with a highly scientific group."

I'd signed up to interview him, hoping I'd get some professional-quality witticisms applicable to Sandia -- an Antojitos column-full, say -- in exchange for mentioning his upcoming personal appearance to benefit public TV station KNME-TV at the Albuquerque Convention Center on Sept. 26 (\$50/person; call 277-2121).

Mark's comment two paragraphs back grew out of his long experience as a stand-up comic in Washington's Shoreham Hotel: "I'd been used to the American Bar Association, the American Medical Association, and so on. Then here comes a big semiconductor convention. I thought they were people who collected tickets on trains in a sort of halfway [not his precise word] fashion. It was very, very difficult to make them laugh without access to their inside jokes -- and, of course, I'm an outsider."

Mark and I agreed that America overvalues its athletes and entertainers and almost ignores its scientists and engineers. He did try to change that once: "When Arno Penzias won the Nobel Prize in 1978, I set out to make Arno a folk hero. I made up T-shirts that said WE LOVE YOU, ARNO PENZIAS and created Arno Penzias sneakers. I even wrote a song about him, to the tune 'You've Got to Be a Football Hero.'"

"Well, my little campaign obviously didn't work -- most folks still don't recognize the name. But it did prove that scientists have a sense of humor -- Arno wrote me to ask for a copy of the song."

(Okay, okay. Arno is the Bell Labs physicist who, with Robert Wilson, advanced the argument supporting the "Big Bang" theory of the origin of the universe -- the theory I call "the Blast from the Past.")

* * *

Rex Says (As in Excess) -- Asked by fellow celebrants of his 20th service anniversary what award he had chosen, Mike Rex (3521) replied, "I chose the Nambé pacemaker."

* * *

Ah, a Bit of Good News, for a Change -- Eubank and Southern is getting a traffic light. By January maybe. Till then, be careful. ●BH

* * *

¡Pobrecitos los feos si no hubiera malos gustos! (Pity the ugly -- if it weren't for bad taste!)

Supervisory Appointment

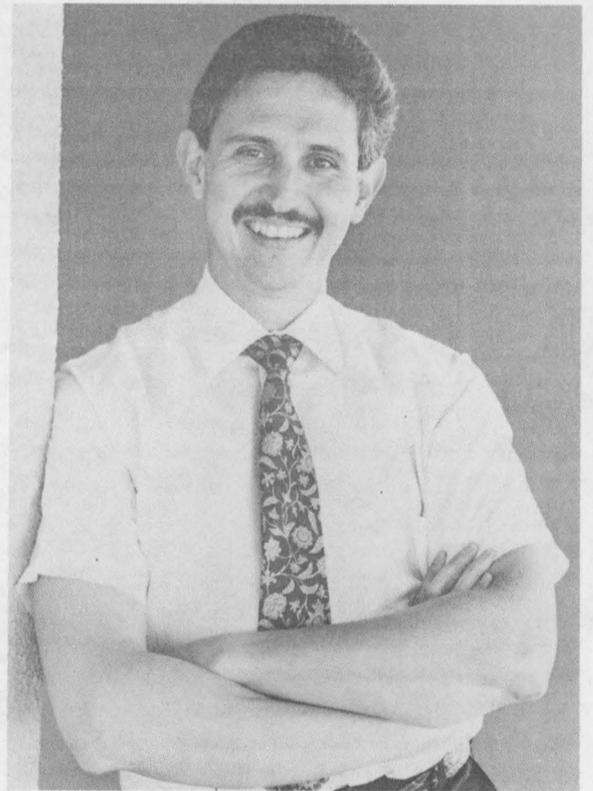
ROBERT SANDOVAL to supervisor of NNWSI Project Engineering Div. 6316, effective Aug. 16.

Bob joined the Labs in July 1975 as a member of the Quantum Electronics Research Division, where he worked in laser fusion systems research and development. In 1979, he transferred to Risk Assessment and Transportation System Planning Division, where his work involved research on safe transportation of radioactive waste.

He has a BS in physics from NM State University, an MS in the same field from the University of Maryland, and a PhD in quantum physics from NMSU. He's a member of the American Physical Society and the American Assn. for Aerosol Research.

Bob's spare-time activities include skiing, backpacking, mountain climbing, and piano playing.

He and his wife Margaret have two children. They live in Sandia Heights.



BOB SANDOVAL (6316)

Congratulations

To Carol and Vicente (1513) Romero, a daughter, Carli, Sept. 7.

To Linda and Roy (1513) Hogan, a son, David Edward, Sept. 8.

Sympathy

To Ves Harker (5219) on the death of his mother in St. Louis, Aug. 29.

To Don Davis (2131) on the death of his father-in-law in Columet, Ill., Sept. 7.

Attention, Artists

At the LAB NEWS office, it's beginning to look a lot like Christmas -- only because the staff is thinking about the cover for the Dec. 23 Christmas issue.

As in the past, we're asking artist-readers out there to submit original paintings -- appropriate for the season -- in any medium, that could be reproduced for the Christmas cover. Entry deadline is Oct. 31, so we can start the selection process at that time.

Please bring your potential cover to the LAB NEWS office, Bldg. 814. All art submitted for consideration will be returned to owners, though we'll need to retain the winning entry until the Christmas issue is published.

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Take Note

"Beginning Experience" is a weekend of self-encounter for divorced and widowed persons that could help them close the door on the past and open one to the future. Workshops include opportunities for personal reflection and group participation. Program leaders are divorced or widowed and are specially trained as facilitators. The next workshop will be Oct. 7-9 at Hummingbird Music Camp in the Jemez Mountains. Registration deadline is Sept. 30. For more information, call Jim Pepper on 892-5616 or Patricia Martin (3722) on 298-7035.

* * *

Jeff Bingaman, Bill Valentine, Tom Udall, and Steve Schiff will speak at "Legislative Forum '88," sponsored by Duke City Business & Professional Women, on Sept. 25 at the Ramada Classic. Registration begins at 12:15 p.m., lunch at 12:45. Cost is \$9.50. For information and tickets, call Mary Ann Dew (4000) on 6-4870 or Marcella Florez (9110) on 4-7403.

Livermore Sandians Share Washington Experiences

Two Livermore Sandians are on assignment in Washington this year, working in program offices of the Department of Defense (DoD) and the Strategic Defense Initiative Organization (SDIO).

Former 8130 Department Manager Jay Gilson is serving as scientific adviser to the Assistant Secretary for Atomic Energy, Robert Barker. Larry Brandt (formerly Div. 8478) is heading one of the groups working on Phase I engineering for SDIO.

"Secretary Barker wears three hats," says Jay. "As Assistant to the Secretary of Defense for Atomic Energy, he's responsible for the safety, security, survivability, and use-control aspects of all the DoD's nuclear and chemical weapons. He's executive secretary of the new Nuclear Weapons Council, an organization that replaced the Military Liaison Committee to oversee stockpile and DoD/DOE warhead-acquisition matters. And he's chairman of the working body [standing committee] of that Council."

Jay is a resource person in the nuclear weapons field, providing the office with the expertise gained in his 33 years with Sandia's weapon programs. It's a taxing job: "Just understanding the differences between the Labs' operations and the Pentagon's is vitally important — our [Sandia's] future is intimately linked with the DoD, either directly through the nuclear weapons that DOE provides the military or indirectly through reimbursable support," says Jay.

"There's a lot of anxiety, you're on the spot, and long hours are routine. But the reward — the satisfaction of making a solid contribution to the overall effort — is worth it."

He works with some 16 professional and technical people, mostly career military officers, but also people from the National Security Agency and the other DOE weapon labs. Jay's assignment has just been extended another year.

No More Coast-to-Coast Commuting

Larry moved to Washington in February after commuting coast-to-coast since November. He represents Sandia in a consortium of not-for-profit institutions involved in SDIO efforts. The list includes Aerospace Corporation, MITRE, Draper Labs, Institute for Defense Analysis, Johns Hopkins Applied Physics Lab, Lincoln Labs, and the Army's Strategic Defense Command. The consortium's offices are in Crystal City — just across the parking lot from the Pentagon.

The SDIO Phase I engineering team was put together in October 1987 and assigned the task of doing the initial integration of SDI Phase I systems.

"We have a number of functional units operating within the team," says Larry. "Mine is the Threat Working Group. Our role is to describe a set of scenarios and elements that characterize future Soviet response to the Strategic Defense System. We identify the Soviet threat with which SDI must contend."

About a dozen people are working on this phase of the program; their efforts will culminate later this fall with the completion of a document titled "Phase I Threat Specification."

Larry mentions contributions made by a number of other Sandians from both Livermore and Albuquerque: Bill Cordwell and Kent Biringer of Strategic Defense Studies Div. II 9015 work closely with Larry; Jennifer Eckwert and Paul Merillat of Control Systems Dept. 5250 are working in Command and Control. And Larry's own division, Systems Research 8478, has been a part of the support effort from Livermore. He will return to SNLL sometime in November.

Washington's Worthwhile

Both Jay and Larry enjoy living in the nation's capital, with its scenic beauty, historical attractions (including the museums), and cultural events. "I'm particularly fascinated with the quantity and quality of chamber and small-ensemble music here," says Jay. "I'm also impressed at the large number of lectures at all knowledge levels on a myriad of subjects — they're endless."

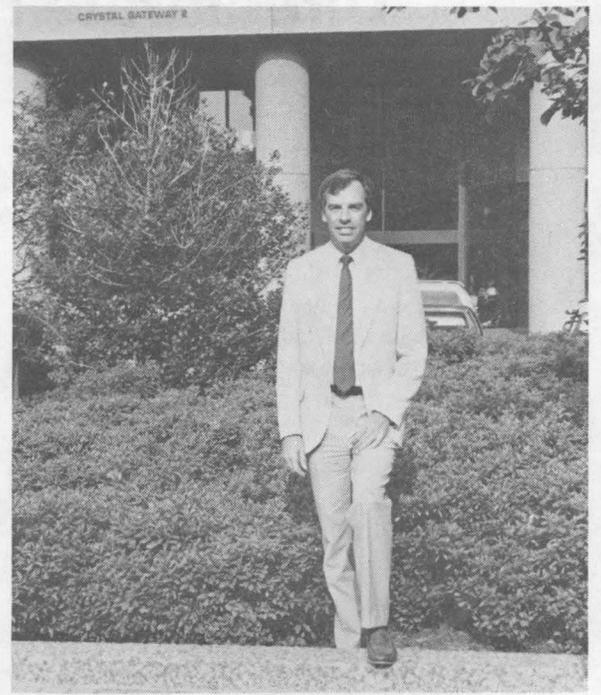
His wife, Barbara, has begun volunteering in



JAY GILSON outside the Pentagon, where he reports for work each day.

the office of Congressman Pete Stark (9th District, Calif.), and Barbara and Jay love the view from their Arlington (Va.) living room, which looks out over the Mall toward the Capitol dome.

Larry has an apartment in the District of Columbia near the Lincoln Memorial and jogs regularly



STANDING OUTSIDE 1225 Crystal Gateway, where he has a third-floor office, is Larry Brandt.

on the Mall. "This has been my first opportunity to live downtown in a major city," he notes. "The diversity of Washington and the opportunity to make a significant contribution at SDIO have made it a very worthwhile experience."



SANDIA LIVERMORE NEWS

VOL. 40, NO. 19 SANDIA NATIONAL LABORATORIES SEPTEMBER 23, 1988

July Earnings Factors

Earnings Factors

Savings Plan for Salaried Employees (SPSE)

AT&T Shares	.9955
Government Obligations	1.0086
Equity Portfolio	.9917
Guaranteed Interest Fund	1.0073
South Africa Restricted Fund	1.0056
Diversified Telephone Portfolio	
Unrealized Appreciation	.9877
Realized Appreciation	.0065*

Savings and Security Plan — Non-Salaried Employees (SSP)

AT&T Shares	.9954
Guaranteed Interest Fund	1.0073
South Africa Restricted Fund	1.0059
Diversified Telephone Portfolio	
Unrealized Appreciation	.9876
Realized Appreciation	.0065*

*The 1 has been removed from the earnings factor. Current month's DTP earnings may be calculated directly: Earnings Factor x DTP Current Worth = Current Month's Earnings.

Johnny Mac Can Simmer Down

Thanks to a sensor-equipped device from [Philadelphia-based] Pennwalt Corp., John McEnroe may not have as much reason to throw tantrums on the court. Pennwalt is developing a pressure-sensitive device to embed in tennis court foul lines. Unlike the optical sensors now used in some tournaments to detect when a serve is long, the pressure-sensitive foul lines would operate throughout the match to sound off whenever hit by a tennis ball.

Laurie Kretchmar, *Wall Street Journal*

Congratulations

To Bea (8274) and Everett Wheelock, a son, Collin Daniel, Sept. 9.

Take Note

Ten employees of Advance Security Inc., contract security force at Sandia Livermore, recently brought home several team and individual awards from the annual DOE Small-Arms Tournament at Kirtland Air Force Base, Albuquerque. Some 227 representatives from 28 sites throughout DOE's nationwide complex competed.

ASI participants included Don Gross, Dennis Steinhagen (team captain), Mark Lindstrom, Thomas Cheney, Byron Lee, Tim Johnson, Robert Allen, Stan Elijah, Carl Feighner, and Jerry Weber. Jerry was also ASI's entry in the Security-Inspector-of-the-Year competition. He competed in five phases of performance: tactics, decision-making, physical conditioning, firearms skills, and knowledge of policies and procedures.

These Fish Are Squeaky-Clean

"A dishwasher is a perfect place to cook a salmon," says Donald Seamans of Marblehead, Mass. [And] it's also good for cooking potatoes and green peas, he adds. Mr. Seamans didn't have a steamer big enough for a whole salmon when he and his wife decided to invite some friends in for a traditional New England 4th of July dinner several years ago.

Enter the dishwasher . . . Mr. Seamans could lay the entire salmon — 18 to 20 inches long — on the top rack, turn the dishwasher on for one cycle and — if the fish wasn't done — put it back for a second rinse. Potatoes, he found, took about the same amount of time. The peas did nicely with just a few minutes of the second rinse.

Some finer points to the process: The fish cavity is stuffed with fresh dill and doused with white wine and lemon juice before being wrapped in cheesecloth and placed on a dish towel. "If you just put the fish in by itself, the water would beat it to death," Seamans says.

Though dishwasher distributors and culinary experts don't think the idea will catch on, Mr. Seamans is undaunted. "You could do a clambake, too," he says, "but I haven't quite figured that out."

Clare Ansberry, *Wall Street Journal*

Directorate Reps: Front Line of ECP Campaign

Last year, Sandians pledged more than a million dollars — \$1,210,553 — to United Way. It takes people-power to raise that kind of money — even at Sandia.

Yes, Sandians are known for their generosity to their community. But that generosity has to be tapped — prospective givers need education, encouragement, and an easy way to help United Way agencies help those who need help.

The generosity-tappers — and the front line in the ECP (Employee Contribution Plan) campaign — are the directorate representatives. “They serve at the request of their directors,” says Joe Laval (3163), ECP executive secretary. “But even though they don’t formally volunteer for the task, they invariably give the campaign their time, their talent, and their enthusiasm.”

They’ve Been There

Other Sandians know the directorate reps as conductors of solicitation meetings, distributors and collectors of pledge and donor-option cards — in short, the folks who ask for contributions.

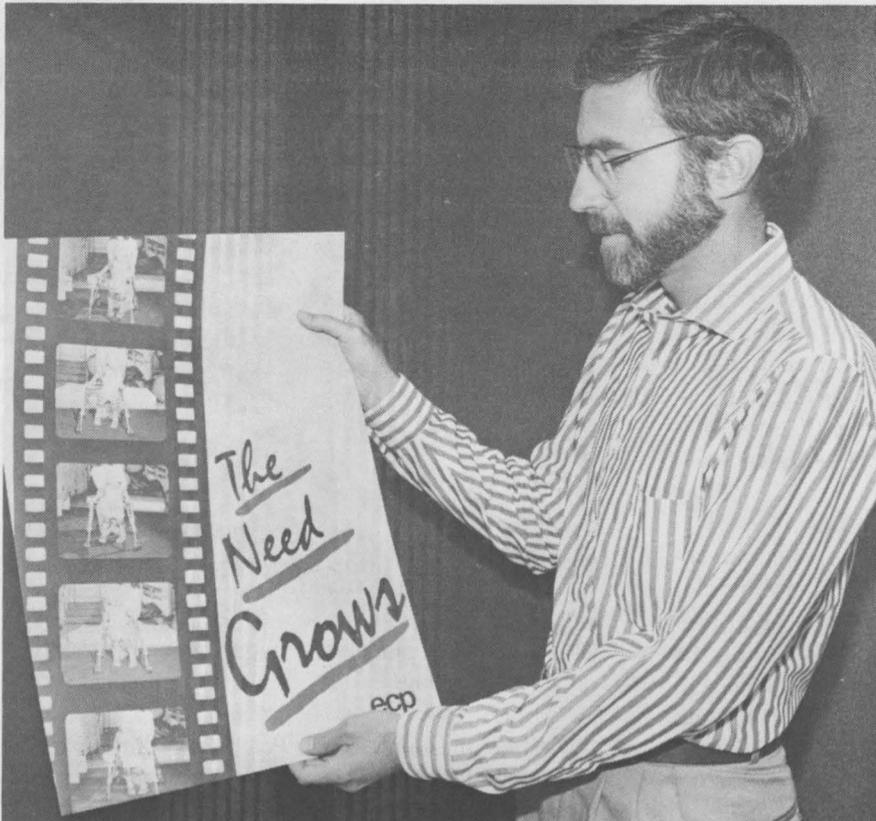
But they’re also sources of information about what the United Way agencies do with those contributions, and about what community needs are not being met for lack of United Way funding.

This year’s crew of directorate reps is especially knowledgeable about St. Martin’s Hospitality Center, Hogares, Youth Development Inc., the Rehabilitation Center, and a few others. “They’ve been there,” says Joe. “These agencies represent a cross-section of agencies where the needs are especially great. So those were the sites of our annual agency tours this year.”

“It was certainly impressive to see what the agencies are doing,” says directorate rep Dan Alpert (6226). “It’s easy to be sold on their programs when you see them in action. I plan to ask the head of one agency to speak at the presentation for my directorate.”

“Before I visited the agencies, ECP didn’t mean much to me,” says Anthony Baca (7831), another directorate rep. “Now I’m much more aware of the kinds of helping agencies in our community, what they need, and why the ECP is vital to their efforts.”

Sandia’s ECP campaign begins Oct. 10. The front line is ready. ●JW



DIRECTORATE REP DAN ALPERT (6226) admires this year’s ECP poster, designed by Fay Ganzerla (3155). Photos for the poster were taken by Walt Dickenman (3154).

1988 ECP Committee Members

Dennis Miyoshi (5240)	Chairman	Paul Justice (3435)	IGUA Representative
Dick Shepardson (3550)	Solicitation Chairman	Anna Marie Carroll (7135)	OPEIU Representative
Don Cook (1260)	Publicity Chairman	Helen Richardson (3533)	New Hire Coordinator
Chief Schwyzer (152)	Treasurer	Fay Ganzerla (3155)	Tech Art Coordinator
Joe Laval (3162)	Executive Secretary	Janet Walerow (3162)	LAB NEWS Coordinator

1988 ECP Directorate Representatives

100/300/400	Philip Montoya (155)	3700	John Zepper (3734)
1100	James Knapp (1111)	4000	Barbara Hawkins (4030)
1200	Regan Stinnett (1264)	5100	Don Schroeder (5164)
1400	David Womble (1422)	5200	Daniel Pritchard (5238)
1500	Ron Akau (1513)	6200	Dan Alpert (6226)
1800	Laura Gilliom (1811)	6300	Leo Klamerus (6316)
2100/2700/2900	Margaret Jacobs (2140)	6400	John Lambright (6447)
2300	Maria-Elena Chino (2335)	5600	Wil Gauster (6510)
2500	James Harris (2566)	7011	Allen Church (7132)
2600	Leora Walton (2614)	7200	James Wadell (7212)
2800	Shirley Perea (2851)	7400	Mathew Donnelly (7484)
3100	Bruce Fetzer (3154)	7500	Keri Sobolik (7537)
3300	Carolyn Beeler (3322)	7800	Anthony Baca (7831)
3400	Robert Eldredge (3412)	9100	Caroline Tozzi (9110)
3500	Patricia Salisbury (3510)	9200	Edward Garcia (9213)

eCP



ECP DIRECTORATE REPS and campaign workers toured the Rehabilitation Center. From left: Ross Burchard (2814), Margie Whipple (7832), Anna Marie Carroll (7135), and Ron Akau (1513). The Center helps more than 200 disabled children and adults daily. (Photo by Walt Dickenman, 3154)



DON SCHROEDER (5164) AND LEO KLAMERUS (6316) sharpened their presentation skills at a class conducted for ECP directorate reps this year by Jack Hueter (3523). Participants are videotaped and then view the tape to see how they look. “It shows you the twitches you don’t know you have,” says Don.

TAL

able. And slides, certainly, couldn't provide those special insights into problems that only spoken information can.

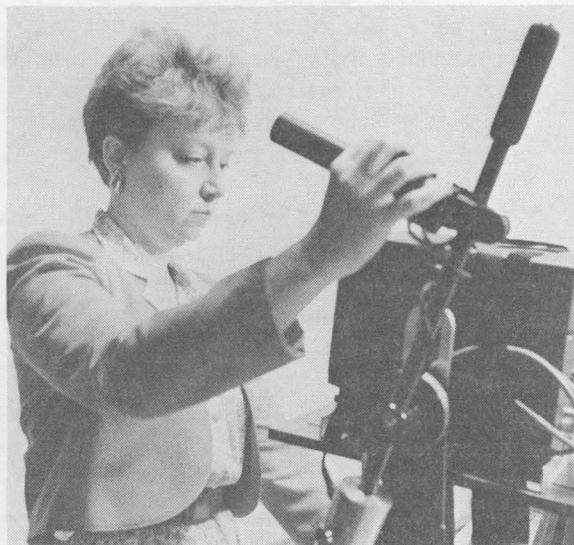
"Clearly, a videotape production facility was needed. Bill Atkins [7213] took on engineering design responsibility for the TAL, and we feel his year-long effort has really paid off."

TAL videotapes — on topics such as weapon operation overviews, weapon maintenance, troubleshooting techniques for specific repairs, and EOD (Explosive Ordnance Disposal) procedures — use military "actors." That's something appreciated by Don Rohr, who spent some time in the military as a weapon-maintenance and EOD officer.

White Coats and Thunderbirds

"The old Labs training films often showed a Sandian — dressed in a white lab coat sporting a thunderbird — explaining a maintenance procedure or a repair technique," recalls Don. "The unfamiliar setting was distracting for the military technician, and made it more difficult to relate to what was on the screen."

In contrast, military people in the field — and at Sandia training sessions — have reacted positive-



CAMERA OPERATOR Sandra Barnes (7212), who's TAL video coordinator, lines up the next shot during a studio videotaping session.



BETWEEN SCENES during a taping session, technical consultant Jim Wolcott (7213) explains what needs to be shown next to (from left) Airman First Class Mertz, Tech. Sgt. Hammons, and Airman First Class McGuire.

ly to the TAL videotapes produced since the facility became operational last spring, notes Judith. "They identify with their own people — in uniform — using military techniques to carry out a procedure," she says. "And, though many TAL tapes are filmed here in a studio setting, some are shot in the field; that adds to the realism for viewers."

TAL tape productions represent a real team effort. A person from Don's division who specializes in the subject weapon serves as the script writer and director. Video coordinator Sandra Barnes (also 7212) is responsible for overall production management — including scheduling. Field engineers (also specialists on the subject weapon) from Judith's division act as technical consultants during script preparation and filming, as do Sandia designers and military people. Videographer/producer Jud Blickley, on full-time loan from Video Production and Film Processing Div. 3153, handles tape editing, using TAL's completely computerized editing system.

Part of Weapons Publications System

TAL videotapes will be cataloged in the military's Joint Nuclear Weapons Publication System (JNWPS) — a collection of manuals on each of the

weapons now in stockpile. Don's division, whose primary responsibility is the development of weapon manuals, provides data for an index that's prepared every two months by Field Command, Defense Nuclear Agency. This index lists the current JNWPS manuals that support the stockpile. And, starting with the September 1988 issue, the index will include cross-referenced data on available TAL videotapes.

"Those manuals — and the index updates — are more or less the bible for custodian-technicians at the unit level in the field," says Don. "Those unit field people are experts; they're selected only after acquiring an appropriate educational background, successfully completing military technical training, and undergoing an extensive security check."

"However, it's important to remember that our stockpile readiness program, in large part, is only as good as our instructions for people in the field. Furthermore, from our perspective, videotapes make it possible to provide training in the very latest techniques in a timely and cost-effective manner."

"We hope TAL videos — as an extension of the Labs' program for high-quality technical support to users in the field — will enhance the instruction process." ●PW

Fun & Games

Golf — SWGA members teed up for a Kickers Fun Golf Tournament in Belen Aug. 6. Winners were: A Flight — Virginia Lathrop (7526), first low net; Lana Lachenmeyer (2520), second low net; Dottie Pinchase (guest), third low net; and Ree Gerchow (122), longest drive. B Flight — Nina Coe (3718), first low net; Wanita Kirkman (guest), second low net; Ruth Wright (ret.), third low net; and Peggy Burrell (3543), longest drive. C Flight — Diane Campo (3720), first low net and longest drive; Georgianne Huff (7842), second low net; and Suzette Beck (155), third low net.

* * *

More Golf — SGA held a "Rancho Promenade" Golf Tournament on Aug. 26 at the Rio Rancho Golf Club. Format was a two-man team, modified Stableford. The following six teams won prizes: 1st place — Frank Arellano (6422) and John Garcia (7531); 2nd place — Joe Gonzales (2631) and Ted Garcia (2632); 3rd place — Mike Gray (9121) and Mark Grohman (9127); 4th place — Dennis Gutierrez (7535) and Joe Gutierrez (3425); 5th place — Dan Williams (7841) and Mike Quinlan (7833); and 6th place — Jay Tidmore (3722) and Mark Calvin (2631). The longest drive award went to Joe Gonzales.

* * *

Tennis — Sandia Tennis Association (STA) and Coronado Tennis Club (CTC) members held court Labor Day at the annual Labor Day Tennis Tournament at the Coronado Club. Results in the final match



VIDEOGRAPHER/PRODUCER Jud Blickley — on full-time loan from Div. 3153 to the Training Aids Laboratory — handles tape editing of video productions. Here, he's using a state-of-the-art computerized editing system in the TAL control room.

of each event were: Mixed Doubles — Joe Ruggles (2629) and Charlene Schaldach (2645) defeated Ken Hanks (7866) and Peggy Walsh (1812); Women's Singles — Judy Hansen (3730) over Peggy Walsh; Men's A Singles — Tim Draelos (9242) beat Kevin Maloney (6412); Men's B Singles — Dick Schlimme (DOE) defeated David Sealey (154); Women's Doubles — Judy Hansen and Evangeline Sanchez over Terry Martinez (1250) and Helen Wilson; Men's A Doubles — Tim Draelos and Kevin Maloney beat Ken Hanks and Mark Tucker (5246); and Men's B Doubles — David Sealey and Mike Torneby (3426) defeated Pat Fleming (9243) and Roy Palmer (2635). The next tournament will be held Oct. 15 and 16. For more information, call Mark Tucker on 4-2346.

Welcome

- Albuquerque*
 - Bonnie Apodaca (141)
 - Jeanne Barrera (1812)
 - Thomas Templeton (3320)
- Colorado*
 - Curtis Knittle (5268)
- New York*
 - Charles Hanley (5261)
- Oklahoma*
 - Steven Harris (2513)
- Pennsylvania*
 - Patrick Muir (1411)

More Than a Face-Lift

Form Follows Function

Facilities Directorate 7800 plans other changes as well — among them, an allocation system for certain work. With the start of FY89 in October, some of the Sandia budget that would otherwise have gone to 7800 will be allocated to other Sandia organizations supported by indirect funds. That money will be used to pay for construction needed by those organizations — “client-specific” work, in other words. Organizations supported by direct funds will continue to pay for construction that supports their special program needs.

The Facilities Directorate will continue to provide resources — people and funds, for example — necessary for engineering design, administration, and other functions required to plan and carry out construction. But 7800 has set aside within its own budget a portion for doing the work requested from each Sandia vice-presidency. In the past, there was no limit to the requests that could be made. The allocation for client-specific work will let 7800 plan more effectively and honor the commitments that are made to Sandia requesters.

Reorganization Secondary

All these operational changes will be accompanied by reorganization of the 7800 structure. The reorganization itself, however, was not the goal. The goal of the October project was to identify improvements that would serve Sandia and to incorporate them into 7800. “The new organizational structure is really a by-product,” notes Gerry. “Once these improved ways of working were identified, the structure was changed to compartmentalize and simplify operation. Form followed function.”

The new 7800 will have four departments: Operation and Maintenance, Engineering, Construction, and Management. This structure consolidates all engineering design into a single department (formerly there were two engineering departments), adds a department responsible for construction, and places overall project and business management within a single department.

The changes in structure and work methods are the culmination of a series of efforts to respond to a fast-changing environment. Sandia’s facilities have expanded rapidly in the past decade or so. A study in 1984 showed that, during the ten preceding years, the square footage of buildings had increased by more than 50 percent. Further, the job of providing, operating, and maintaining facilities had become more complex because of their more advanced technologies — special requirements for microelectronics, laminar-flow clean rooms, and pulsed power, for example.

Since then, still more square footage has been added and still more complex facilities technology has been introduced — for example, computer-based control systems for controlling and monitoring heating, ventilation, air-conditioning, and fire and security alarm systems.

Like many Sandia organizations, however, 7800 has been carrying out its responsibilities with only a few more employees than in the past. Increased use of contract services has provided some relief, but not enough. The same can be said for periods of overtime work, for the introduction of some automation, and for earlier attempts at changing the work flow.

The improvements developed by the October project are more fundamental than previous changes. The most obvious difference will be in the new face — or faces — that 7800 presents to the rest of Sandia. Behind the new faces, other changes will be less visible but equally important. It adds up to much more than a face-lift.



AT A RECENT PLANNING SESSION, eight new Facility Customer Representatives (FCRs) and one Construction Management Engineer (CME) discussed their new responsibilities, which grow out of a new customer-centered approach by Plant Engineering 7800. Come Oct. 1, the directorate will be renamed Facilities 7800, and the FCRs will be part of Div. 7866. From left: Mike Irwin (7831), Paula Painter (7864), CME Gerry Lipka (7833), Wayne Burton (7864), Pat Miller (7842), Jan Williams (7833), Wayne Shirley (7864), David Trujillo (7862), and Jerry Hands (7866).

(Continued from Page One)

Facilities

with only one or two people from Facilities. “What we want to do,” says Gerry Barr, “is to give the customer a specific contact in 7800.”

A Strong Partnership

One other person will be part of the new arrangement. Each vice-president has been asked to designate one or more Organizational Facility Coordinators. Requests for facility work will be submitted through the OFC, who can ensure that requests fit organizational plans and priorities.

Among the goals of the changes is to form a strong partnership between 7800 and its clients. The FCRs represent 7800’s half of the partnership; the OFCs represent the client’s. Because it’s a partnership, both sides will have responsibilities. The FCRs will act as facility consultants and project managers, provide cost and schedule estimates, present status briefings and reports, and participate in the acceptance of the product.

The responsibilities of the client organization are to consult the FCR before making programmatic commitments that depend on facility construction, set priorities and authorize funds for facilities, negotiate schedules with the FCR, provide input to design criteria, review engineering designs, and participate in final acceptance.

The responsibilities on both sides are intended to let the eventual recipient of a new or modified facility be an active, informed member of the project team. That way, organizational needs will be accurately reflected in the facility design and construction.

The FCRs will be available for consultation before requests are made. They can discuss possible approaches to meeting needs for laboratories, offices, and other facilities. During construction or modification projects, they will supply regular status reports. Between reports, they can informally answer questions about progress.

As project managers, the FCRs will not abandon work requests to an impersonal “system.” Instead, for a job of any complexity, they will form project teams to carry out the work and will themselves monitor progress through techniques that grow out of the new science of project management. When there are conflicts for resources — time, money, or people — they will help negotiate solutions.

More Responsibility for Sandia

Although the FCRs will be the most visible result of the reorganization, there is another new position: Construction Management Engineer. This position is necessary because Sandia has acquired a major

responsibility from the Department of Energy — managing the construction of all new Sandia facilities, both large and small. (Previously, DOE managed construction projects large enough to appear as line items in the federal budget. Sandia’s part began when the building shell was ready for occupancy construction — partitions and final wiring, for example.)

Because Sandia is now managing both large and small projects from the outset, the Construction Management Engineers are needed as specialists on project teams. Although an FCR will be the project manager responsible for the whole job from start to finish, the CMEs will be key team members working in the field with construction contractors and inspectors. Their job will, in part, be to spot and remedy problems before the problems are — literally — cast in concrete. One CME has been named so far: Gerry Lipka, currently of Construction Inspection Div. 7833. ●CS/Shirley (3151)

The 7800 Changes — and You

From the point of view of the average Albuquerque Sandian, LAB NEWS asked Gerry Barr (7860) a few questions about 7800’s new approach:

LN: *Do the changes in 7800 affect all of us directly?*

GB: No, but if you ever need an office or lab modified, or a building built, the changes affect you. Routine operation and maintenance of Sandia facilities will continue essentially as in the past. But the process of requesting minor or major modifications or construction is being drastically changed.

The most visible part of the change is that you will have someone, the 7800 Facility Customer Representative/Project Manager, to help you make requests for services of the Facilities Directorate.

LN: *How do I request facility services?*

GB: Your vice-president is being asked to name Organizational Facility Coordinators who will handle all construction or modification requests within each directorate and/or the vice-presidency. You should initiate requests through your OFC. For general consulting on facility matters, however, you may talk with one of 7800’s FCRs assigned to your directorate. The FCR can give you information on feasibility or alternatives before you make your request. If it is a request for maintenance service, not modification or construction, you can give it directly to the FCR.

LN: *How do I find a Facility Customer Representative?*

GB: We have already assigned FCRs to vice-presidencies [see main story]. Their locations and phone numbers will be published in

The Superglue Solution

Heat, Acetone Free Jammed Locks

As soon as superglues became available in 1976, vandals recognized their superior lock-jamming capabilities.

Any accessible keyed lock belonging to any person, group, or place that the vandal finds annoying is subject to a sneaky squirt of superglue. The result is displeasure, delay, and, too often, damage.

Now, a simple and easy method for releasing a superglued lock has been developed by chemist Paul Cahill, Chemistry of Organic Materials Div. 1811.

The method dissolves the glue with hot acetone channeled into the lock on a tiny (1-mm-diam., less than 1/16 in.) probe that’s heated for an inch at the pointed end. It takes only about 4 ounces of solvent (“a quarter’s worth,” says Paul), requires only about 15 watts of electrical power, and takes 10 minutes for most locks — 20 minutes maximum.

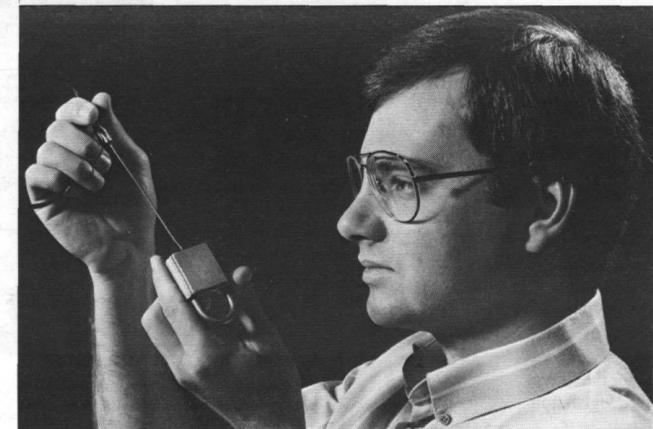
Superglues, the generic name for cyanoacrylate adhesives, form quick and extremely strong bonds between smooth surfaces. They have many legitimate functions ranging from household repairs to the surgical bonding of artificial joints. Vandals and some demonstrators prefer the glue’s illegitimate uses — disabling locks in buildings, at padlocked gates, and in employees’ car doors.

“The padlock problem is common but not that difficult to deal with,” says Ron Newby, manager of Plant Protection at Rocky Flats. “We just get out the bolt cutter, remove the jammed lock, and replace it with a new one.”

“But the building door locks and the car door locks jammed up by some of our demonstrators are a headache. We’re pleased to hear you’re coming up with a quick and easy solution.”

Destructive Methods Often Required

As Ron’s comment suggests, opening a glued lock requires mechanical — and often destructive — methods. Some door locks can be removed by drilling out their mounting bolts. And opening a glued



LOOKS LIKE A WIRE, but it’s really a heated probe that allows Paul Cahill (1811) to use hot acetone to open locks jammed with superglue.

car door and still having a door left means getting inside the car somehow, taking apart the door, and removing the lock. High-security locks require even more destructive and time-consuming methods.

Paul’s charter was clear — find a nondestructive chemical means to open glued locks fast.

“It turns out that there hasn’t been much published in the somewhat esoteric field of superglue removal,” says Paul. “I did learn that removing a lock, then soaking it for a day or so in a solvent is the common approach.”

(That, incidentally, is the method used by UNM, which numbers a disgruntled student or two among its enrollment. The maintenance people keep on hand a few door locks from which the glue has been soaked out. When a trouble call comes, they remove the jammed one, install a cleaned one, and then soak the jammed one so it’s ready to replace the next one.)

Solvents do dissolve linear polymers, such as superglue, but it’s a slow process. “The problem is to get the solvent inside the lock,” says Paul.

Heat’s the Secret

The secret was heat. Paul and his assistant, Don Strall (1811), first tried preheating the solvent, but that didn’t work well; the small amount of solvent wouldn’t stay hot long enough to penetrate the glue deep inside the lock.

They also tried heating the lock itself, but it would be difficult to control the process in a door lock — much of the heat would be dissipated into the door itself — so it could take quite a bit of time and quite a bit of heat.

(That technique was, however, the solution of at least one innovative locksmith in a California school district. Mike Madden, now with LLNL’s Security and Safeguards group, faced 200 jammed school-door locks one morning. He heated them with a small torch, sprayed them with WD-40, a common silicon-based lubricant, then repeated the process until he could work each lock.)



ONLY ON AN AIR FORCE BASE does the used-vehicle lot include a B-52.

It's MIAW

By Arlene Price (3330)



Mental Illness Awareness Week (MIAW) is a nationwide health promotion effort to bring attention to the seriously mentally ill. This year it's Oct. 2 through 8.

I'm providing a brief rundown of the week's activities so that if you're interested, you can be on the lookout for further information in the local media.

The theme for MIAW 88 is "Face the Facts." The theme is designed not only to inform us about the harsh realities of mental illness and its impact upon families, but also to provide hope for the future through continued research and improved legislation for medical and other assistance.

Sunday, Oct. 2, is Religious Involvement Day. The purpose is to educate the religious community about the facts of mental illness.

Monday, Oct. 3, is Proclamation Day. State and local officials will proclaim this week MIAW.

Tuesday, Oct. 4, is Business Link Day. The business community will be briefed about problems of mental illness and how they affect employment, and will be encouraged to provide opportunities to people who have had mental problems.

Wednesday, Oct. 5, is Legislative Alliance Day. Mental health groups will come together to review the mental health needs of the community.

Thursday, Oct. 6, is Professional Awareness Day. Special programs will be offered to health professionals in the area of mental health.

Friday, Oct. 7, is Developing Coalitions Day. Increased communication on mental illness issues between community groups and government will be encouraged. Special awards will be given to people who have made valuable contributions to the mental health needs of the community.

On Saturday, Oct. 8, the Alliance for the Mentally Ill, a group of people who have had mental illness in their families, will present a potluck dinner and Candlelight Service for anyone who would like to attend.

For further information, contact me at 6-0021.

Sandia to Observe Mental Illness Awareness Week

Medical's TLC Program is sponsoring a special program in honor of Mental Illness Awareness Week (Oct. 2 through 8).

This year, Joseph Cardillo, a clinical psychologist who specializes in problems of children, will help us learn to tell the differences between healthy and unhealthy emotional and behavioral reactions in our children, and will suggest ways to deal with those reactions. His talk is on Wednesday, Oct. 5, from noon to 12:45 p.m. in the Technology Transfer Center.

"Some parents don't realize that children, like adults, can have serious emotional problems," says Sandia's clinical psychologist, Arlene Price (3330). "Other parents worry way too much about the typical growing pains of children.

"You — and your spouse — are invited to join us and learn the difference between the two."

Super Squash?



A Hubbard squash confined to a foot-square box will hoist a John Deere tractor at the University of Massachusetts. . . In a repeat of a 125-year-old experiment, the growing squash will compress springs against a balance beam, which in turn will lift the tractor. Lynn Asinof, Wall Street Journal



TAKES A TOUGH TRAILER to move a boxcar across the trackless desert. This one, which belongs to the TOSI site operated by Div. 5219, was the subject of some radiographic tests requested by Los Alamos National Lab. So it had to be moved about three miles from TOSI to the high-energy radiographic facility in Bldg. 6635 (Area III) and back. With wheels, it weighs 75,200 lbs. So, even without the undercarriage, it took two cranes to load it aboard a commercial trucking firm's "low-boy" trailer for the trip. John Murray (7551) was the honcho for the move and worked with the LANL rep on the testing. He's shown here trying to shift the boxcar's center of balance. He failed.



SANDIA SOFTBALL CHAMPS, Version 1 — Meet the Dawgs, winners of the annual A League tournament. Back row, from left: Gary Rivord (2621), Bob Patton (7472), Clint Atwood (7482), Bill Lucy (AMO), Jim Hutchins (2622), John Dexter (2613), Dan Holloway (9224), Steve Wilde (9214). Front row: Rick Blose (Ktech), Larry Claussen (2613), Doyle Miller (AMO), Anthony Romero (9211), Joe Maez (9234), Gary Anderson (Ktech), Jim Garsow (9211). (Not shown, Don Wrobel, 1111.) LAB NEWS will run a photo of "The Champs, Version 2," the top team of the season (as opposed to the tournament), if/when we can get the Naturals together.



PLANT MAINTENANCE AND ENGINEERING Dept. 7810 held its second annual round-robin softball tournament last month. All five divisions entered teams, and the Div. 7813 team emerged undefeated. Back row, from left: Ricky Pierson, Chuck Dusing, Bob Smyth, Chris Knight, J. R. Lujan, Eugene Wade, Steve Schneider, Steve Trujillo, Martin Dimas. Middle row: Mike Kehoe, Mick Gorospe, Mario Ramirez. Front row: Div. Supr. Jim Winters, Mike Pacheco, Danny Baca, the "bragging rights" traveling trophy, Bernard Alexander, Doug Wilfon, and Ernie Nevada.

Mere Customer Satisfaction Not Enough

Sandia is one of the hundred-plus sites across the US that will receive a satellite broadcast of National Quality Forum IV, "Beyond Customer Satisfaction," on Oct. 5.

The live broadcast, which will originate in New York, is the highlight of National Quality Month. It's hosted by the American Society for Quality Control (ASQC) and sponsored by General Motors, *Fortune* magazine, and Eastman Kodak.

"It's an important event," says Paul Lemke (2639), who is coordinating Sandia's responsibilities as a host site. "The Forum gathers the country's leaders of business, industry, government, and academia for a dialogue on nationally important quality issues."

"Attention to quality has always been a part of the Sandia culture. It's every bit as important today as in the past — maybe more so. And we're now realizing that quality must be a greater concern of management, not only staff members and technicians."

"So we're encouraging all Sandians whose work involves product or software development to attend the televised Forum," says Paul. "It's just the kind of shot-in-the-arm we need to avoid taking quality for granted."

Glen Cheney, Vice-President of Component Development 2000 (and a recent transfer from AT&T Bell Labs) echoes Paul's statements: "Sandia has a long and enviable history of quality in its weapon programs. But quality concerns in Sandia's area of business are likely to become even stronger in the future."

"To continue to survive and prosper, an organization must pay greater attention to the needs and wants of its customers. In the coming decade, it will be insufficient for Sandia, as it will be for AT&T, to merely *satisfy* customers — we must *delight* customers. Achieving this higher standard of performance and quality requires attention and dedication by all the members of an organization."

"That's why AT&T is beaming the Forum to 17 host sites — and why I'm encouraging all concerned Sandians to attend the presentation in the TTC."

Renowned Companies Represented

The Quality Forum will be beamed into the Technology Transfer Center on Oct. 5 from 8 to 11 a.m. Among the speakers are Ford CEO Don Petersen, IBM CEO John Akers, GM President Robert Stempel, Coca Cola Chairman Roberto Goizueta, Walt Disney President Frank Wells, ABC's "Business World" anchor Sander Vanocur, and ASQC Chair-



III FOR IV — These three Sandians urge their colleagues in product and software development to attend National Quality Forum IV, "Beyond Customer Satisfaction." Featuring speakers from top US companies, it will be beamed live from New York to the TTC (via this control room) on Oct. 5 from 8 to 11 a.m. In foreground is Paul Lemke (2639), who's handling site arrangements and internal publicity; behind him is Glen Cheney, Vice-President of Component Development 2000. Max Littleton (7263, right) is in charge of external invitations.

man Douglas Eking.

In addition, ASQC President Spencer Hutchens Jr. will present the results of an ASQC/Gallup survey on "What Customers Want." And Colby Chandler, chairman of National Quality Month, will give the keynote address, "Beyond Customer Satisfaction."

Max Littleton (7263), a member of the local ASQC section, is inviting New Mexico business and industry leaders to the TTC for the event. Don Morrow (3522) and Richard Sanderville (3153) are handling the technical arrangements for the satellite downlink to the TTC.

Death



Carl Smith of Plant Facility Operations and Maintenance Div. 7812 died Sept. 6 after a lengthy illness. He was 59 years old.

He had been at the Labs since July 1968.

Survivors include his wife, two daughters, and two sons.

Spare Your Wastebasket

If you're about to retire or leave the Labs, don't toss your historically valuable records.

Corporate Historian Necah Furman (3141-2) is looking for audiotapes, records, and photos. Call her on 6-9619.

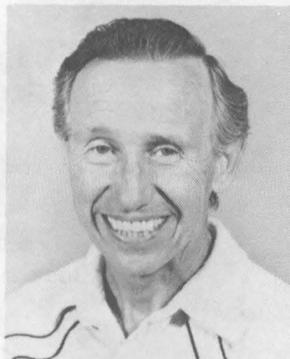
Retiring



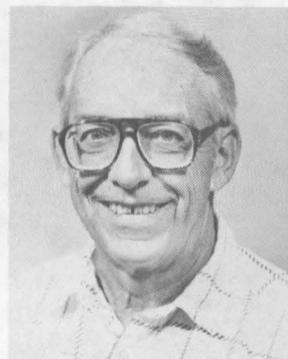
Bob Schowers (7213)
40 yrs.



Barbara Ruminski (3300)
32 yrs.



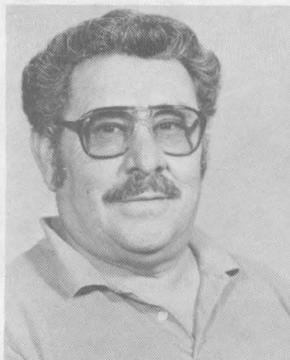
Don Bertholomey (5245)
26 yrs.



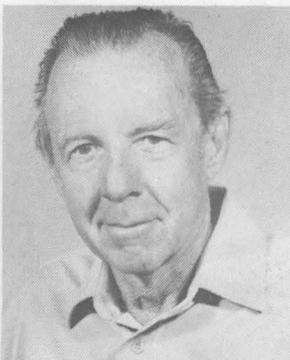
Dick Doyle (3315)
31 yrs.



Eve Baughman (400)
25 yrs.



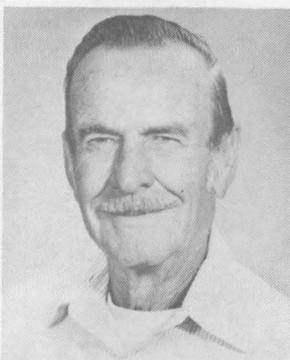
Tony Lopez (3154)
37 yrs.



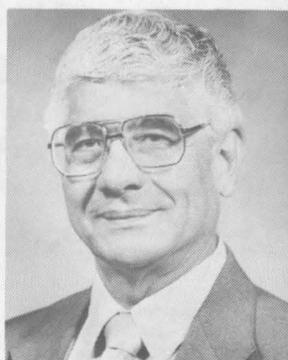
T.J. Tucker (1221)
31 yrs.



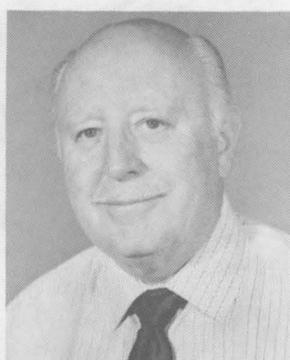
Ed Machin (2544)
36 yrs.



Joe Sieglitz (3424)
39 yrs.



Ramon Lamberson (2601)
37 yrs.



Jim Spirup (3432)
30 yrs.

MILEPOSTS

LAB NEWS

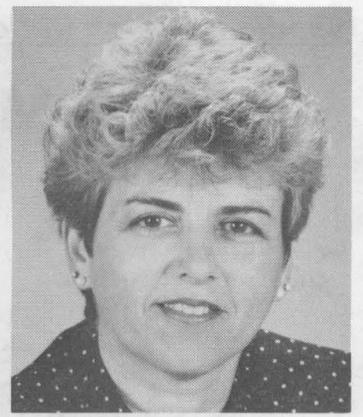
SEPTEMBER 1988



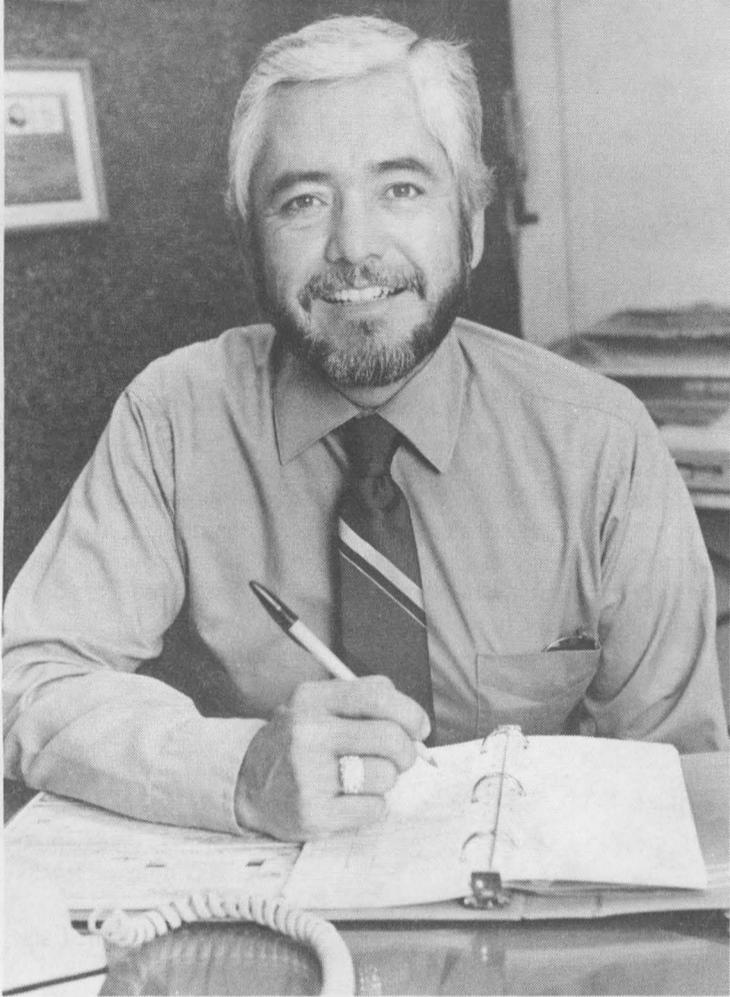
Tonni Nunley (8522) 25



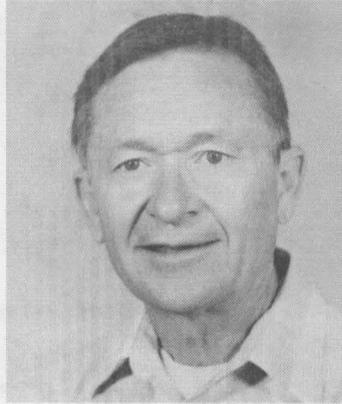
Betty Folkendt (8281) 15



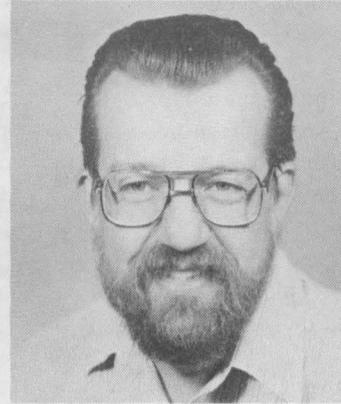
Marie Dremalas (8161) 25



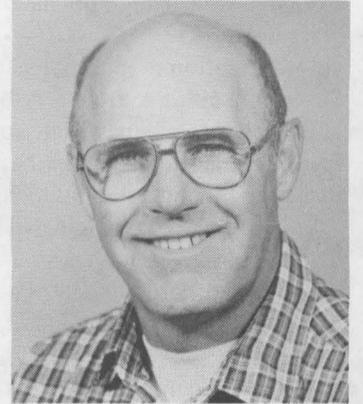
Fidel Perez (7485) 20



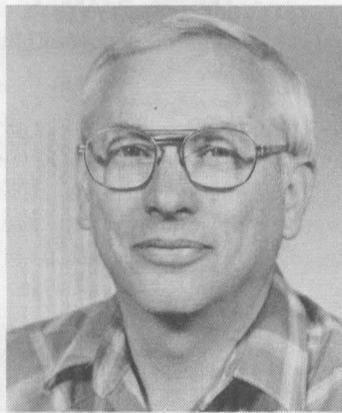
David Brice
(DMTS, 1111) 25



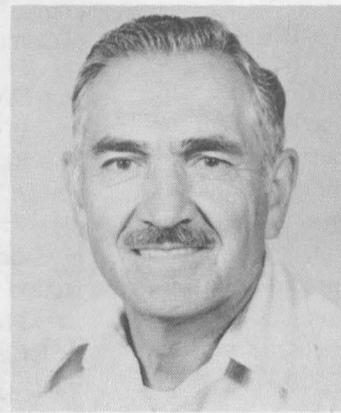
Randy Cole
(DMTS, 6418) 20



Irl Vance (7482) 20



Cliff Condit (3424) 25



Joe Lucero (9144) 25



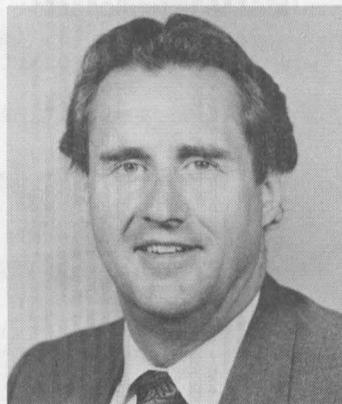
Alice Vancil (152) 30



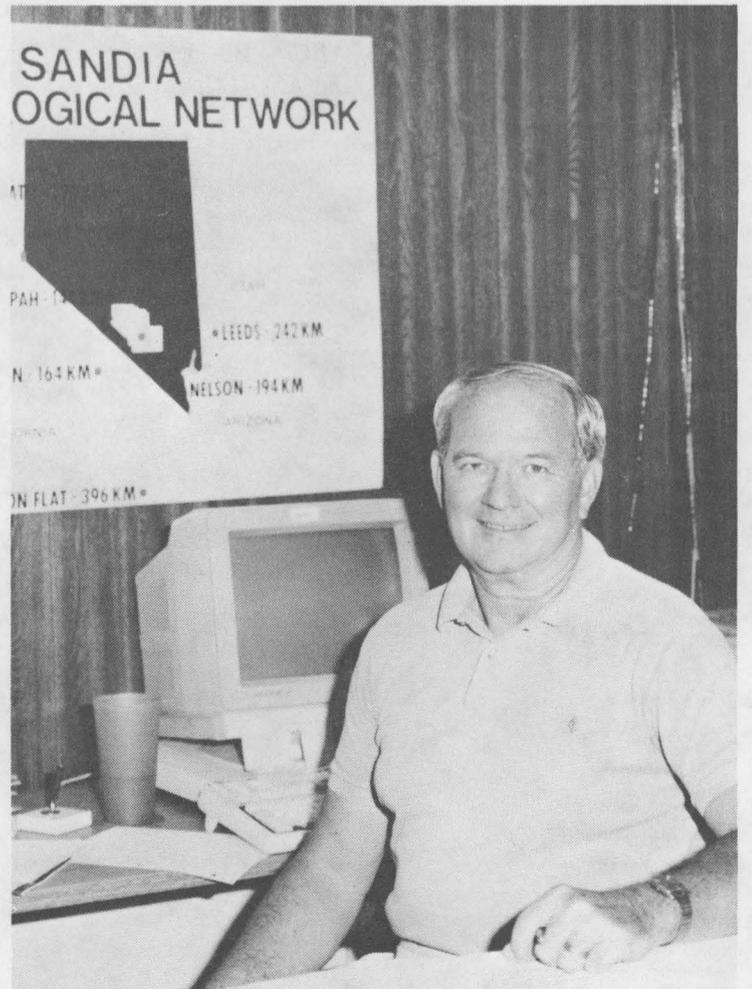
Yvonne Riley (3155) 25



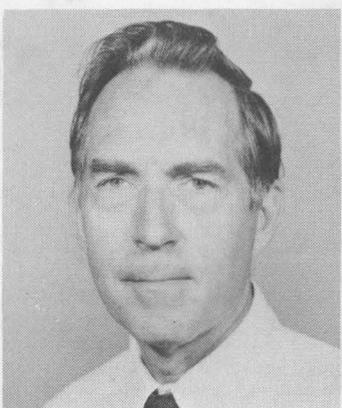
Jim Kannolt
(DMTS, 7265) 30



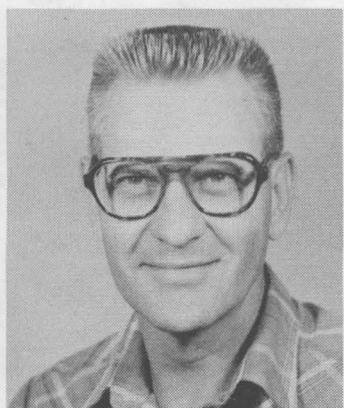
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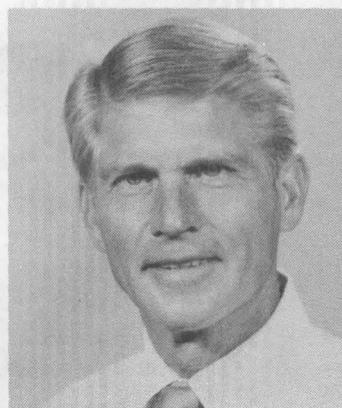
Leo Brady (7131) 30



Harry Hardee (6231) 25



Jim Myers (7481) 25



Bob Reuter (1522) 20

UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS

Deadline: Friday noon before week of publication unless changed by holiday. Mail to Div. 3162.

Ad Rules

1. Limit 20 words, including last name and home phone.
2. Include organization and full name with each ad submission.
3. Submit each ad in writing. No phone-ins.
4. Use 8½ 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.

MISCELLANEOUS

ALTO SAXOPHONE, Selmer Paris Pro Model, high F-sharp, w/1-yr.-old case. Lawrence, 268-5479.

MATERNITY CLOTHES, various sizes, some worn once. Pritchard, 293-5297.

PIANO, Wurlitzer Ultra console, w/ matching bench, \$950 OBO. Nutt, 821-4130.

SIMMONS BOX SPRING; Sears refrigerator, gold, 19 cu. ft.; recliner; hide-a-bed, red. Rose, 299-6445.

WINCHESTER 30-06 RIFLE, model 70B, w/4x scope, sling, cartridge case, cartridge pocket, 5 boxes of cartridges, cleaning kit, \$425. Ortiz, 869-3278.

TILT-N-TOTE AUTO WHEELCHAIR CARRIER w/cover, \$175; Sears chest-type freezer, 10 cu. ft., almond, \$100. Shelby, 292-4605.

DATSUN PICKUP TIRES, on rims, 5 for \$25; scratching post for cat, \$5; 60 small disposable diapers, \$4; drop-in stove, \$85. Crawford, 881-3812.

TUBE TESTER, viewer and splicer, slide viewer, reel-to-reel tapes, all free; bid on camera tripod, wrought-iron bar stools. Ward, 831-0393.

FOUR MATCHING MATE'S CHAIRS, \$100; child's toy chest, spindle back, \$15. Troncoso, 897-1167.

AMDEK COLOR MONITOR, model 600, CGA, color graphics card, IBM-compatible, best offer. Witek, 296-5198 after 5.

QUEEN-SIZE WATER BED FRAME, Danish-style w/2 nightstands, no mattress, \$225; Fastfold letter-folding machine, \$150; Kirby vacuum, \$50. Spiers, 275-3655.

KING-SIZE WATER BED, new heater and liner, bookshelf headboard, vinyl pads, waveless, \$175. Kelly, 294-7084.

WOODEN ADJUSTABLE SHUTTERS, 8" x 30", 18 for \$10; glass block, 12" x 12" x 4", \$15; machinist tools: micrometers, calipers, adjustable electric planer. Kross, 836-3860.

FLY-TYING EQUIPMENT, Thompson vise, Hackle pliers, scissors, 6 boxes of hooks, \$15. Lagasse, 293-0385.

WROUGHT-IRON BUTTERFLY CHAIRS, \$10/ea.; Bell & Howell movie camera, Super 8mm, w/zoom lens, \$20; O'Brien sailboard, w/2 sails, \$250; Cobre cordless phone, \$15. Bland, 265-6286.

TIMING LIGHT, Craftsman inductive, in original box, used twice, cost \$50, sell for \$25. Barr, 821-5870.

ELECTRIC GUITAR, Ibanez X-series, new, w/case, accessories, \$300. Lynch, 292-8523.

MOTORCYCLE CARRIER, \$25; bicycle carrier, \$15; sailboard sails: 4.3m² RAF, \$130; Primex OTL mylar RAF, 6.5m², \$185; 4' x 8' steel safety sheet, \$20. Healer, 298-6967.

SOFA AND LOVE SEAT, brown and beige plaid, \$300; reclining chair, rust, \$50. Chorley, 296-1454.

SAWS: 10" table, w/stand, \$125; 12" band, \$35; 78-rpm records, \$1; cello music, half price. Dalphin, 265-4029.

CHILD'S CAR SEAT, infant to about 3, \$20. Tucker, 256-7850.

DODGE WHEELS, 15", 5-hole, full-size covers, \$20/ea., \$60/set of 4. Vance, 255-8032.

GARFIELD WALL TELEPHONE, used 6 months, \$55. Schalles, 873-4320.

CHILD'S SKI EQUIPMENT: 90cm Hart skis, Tyrolia bindings, boots, size 30-11, \$50 OBO. Mills, 836-5154.

CHROME MODULAR TIRE RIMS, set of 4, 8-lug, 9.75x16.5, \$100. Thornton, 299-5747.

YASHICA MAT CAMERA, uses 120 film, hard case, lens hood, 5 filters, flash, \$150; Weber kettle barbecue grill, 18", \$20; Vogel, 256-0975 after 5:30.

RAILROAD TIES, short lengths, free. Esterly, 296-9759.

VISTA LINER CAB-OVER CAMPER, 11-1/2', fully equipped, w/extended bumper, \$1500 OBO. Caskey, 292-3894.

NEIGHBORHOOD YARD SALE: 10 families, Sept. 24, 8 a.m. to 3 p.m., Sandler & Haines NE (SW corner Indian School Rd. & Chelwood). Barnette, 292-5186.

MAPLE BEDROOM SET: single dresser w/mirror, twin-size headboard, chest of drawers, \$450. Williams, 268-9757.

DISHWASHER, Lady Kenmore, rebuilt pump, \$25 OBO. Borgman, 299-6010.

JVC 40-WATT STEREO SYSTEM, \$300; fruitwood coffee/end table set, \$175; sofa sleeper, \$75. Garcia, 298-2898 after 6.

REMINGTON 222 RIFLE, Leopold 3x9 scope, custom Fajan stock, \$395; Apple II+ computer, disk drive, monitor, \$650 OBO. McCoy, 821-2509.

FOUR ALUMINUM SPORT RIMS for '82 Chev. S-10 pickup, heavy-duty, w/tires and lug nuts, \$80. Rudolph, 298-0941.

VIDEO-GAME SYSTEM, Atari 2600, includes 21 games w/instructions, paddle and joystick controllers, AC power and antenna adapter, \$50. Peterson, 883-8463.

DRAPES, custom-made, lined, fit 6' x 6' window, shades of gold and spice, tie-backs, traverse rod, \$40. Cosden, 881-1412.

RELOADING DIES, RCBS, 3-die set, .38 Special, never used, \$23. Seamons, 292-2679.

DOUBLE BEDS, \$50 & \$30; queen-size sofa sleeper, \$100; microwave, \$75; answering machine, \$35; 14" color TV, \$50. Pompeo, 265-9182.

TRAVEL TRAILER, '87 Mallard Sprinter, 24', full-length awning, extras, below book, \$8400. Orth, 292-6174, leave message.

KING-SIZE BEDSPREAD, olive; Sapporo Rossignol skis, A190 OA. Wagner, 823-9323.

SEARS RADIAL-ARM SAW, 10", \$200; Sears shop vac, \$10; unused Nissan spare tire & wheel, \$15; 20" power mower, \$45; Kohler parchment bathroom sink and hardware, \$45. Iman, 299-6500.

SEARS RADIAL-ARM SAW, w/stand, 2 drawers, casters, \$250; Powermatic drill press, continuously variable speed, \$795. James, 294-6837.

BABY CRIB w/mattress & sheets, \$50; black leather chair, \$15; oak rocker, \$50; Wurlitzer organ, full-size upright, \$200. Patterson, 822-1196.

MICROWAVE OVEN, Sears Kenmore. Hunter, 865-5745.

SIX-FAMILY GARAGE SALE: household items, clothing, more, Sept. 24, 9 a.m. to 3 p.m., corner Ridgecrest & Kathryn SE. Cook, 888-2928.

OAK DRY BAR, 3 stools, walnut inlays & brass footrails, cost \$1750, sell for \$800. Cabe, 293-6895.

POWER POLE, temporary, meter box w/220V and 110V GFI outlets, 16", \$250. Hubbard, 281-1779.

DOGHOUSE, never used, \$50. Yu, 268-5355 after 5:30.

CAMPER TRAILER, 20', sleeps 6, AC, full kitchen & bath, \$2300. Bailey, 821-4394.

FURNITURE, weight bench, lawn mower, bumper-pool table, more. Bremer, 291-8297.

DRAFTING TABLE, lightweight, wood, 36" x 60" top w/48" parallel bar, stool included, \$75. Pucket, 298-6067.

HOUSEPLANTS, \$3/up. Mozley, 299-4204 after 5 p.m. & weekends.

WARHAWK CAB-OVER CAMPER, 8', sell for trade for 6' cab-over. Pryor, 294-6980.

SWING SET. Maestas, 831-4072 after 4:30.

SHETLAND SHEEPDOG PUPPIES, 2 female, 1 male, AKC-registered, 5 weeks old. Essenmacher, 865-7066.

DINING TABLES: expandable, \$150; drop-leaf, \$100; 2 arm chairs, \$50/ea.; 7-1/2' couch, \$150; 4 dining chairs, \$25/ea. Cole, 298-4527.

FIREPLACE INSERT w/blower, takes 18"-22" logs, heats 2000 sq. ft., \$350 firm. Trujillo, 293-2132.

HIDE-A-BED, burnt orange, \$150; swivel rocker, brown, \$50. Stephenson, 821-2484.

RED ROOF TILES, 66 at 75¢/ea. Ezell, 821-1768.

WOMAN'S CUSTOM WET SUIT, farmer john, jacket, hood. Shrouf, 821-0765.

TWIN-SIZE MATTRESS BOARD, never used, \$30; baby cradle, white, mattress, 2 fitted sheets, bumper pad, \$60. Stanley, 296-2946.

.32-CAL. COLT, 1905 model, automatic, \$250 firm. Mead, 294-2298.

TRAVEL TRAILER, '83 Nu-Wa, 19', dual-axle, self-contained, 2-way refrigerator, awning, TV antenna, \$4700. Melvin, 298-6402.

GE COLOR CONSOLE TV, remote control, cable-ready, cost \$700, sell for \$385. Cook, 293-8805 or 275-3534.

DP BENCH w/leg extensions, 110 lbs. of cast-iron weights w/bars, \$75; Yamaha PSR-31 61-key keyboard w/rhythm section, auto-bass chords, 16 voices, \$150. Homer, 836-5043.

TWO PROPANE TANKS, 50-gal., \$65/ea. or \$120/both; apt.-size refrigerator/freezer, used 3 months. Asbury, 268-3542.

ALUMINUM EXTENSION LADDER, 12', \$25. Marder, 291-8140.

TWO TICKETS, Albuquerque/San Diego round-trip, Oct. 10, cost \$150, sell for \$100. Cuthrell, 897-4207.

STRAUBE SPINET PIANO, 6-drawer chest, antique double school desk, GE portable oven, hanging lamp, jersey cans, Beta videotapes. Mills, 299-2130.

ENCYCLOPEDIA, Funk & Wagnall's, 29 volumes, \$25; wood-grain metal shelf unit, 2' wide, 4' high, \$8. Maloney, 828-9610.

TRAVEL TRAILER, '86 Coachman, 26', tandem-axle, full kitchen & bath, sleeps 6, awning, AM/FM tape, hitch. Taylor, 296-6657.

TOYOTA SUSPENSION LIFT, 4-1/2"-5", w/dual Rancho steering stabilizer, fits '79-'83, \$325; new 11.2-gal. gas tank, \$80. Fisher, 298-0526.

WOODEN CLARINET, Buffet Evette, w/reed cutter and holder, music holder, cost \$600, sell for \$250 firm. Barreras, 898-4951.

SLATE POOL TABLE, \$150; 2054 window, \$20; double-pocket door, \$25; air hockey, \$10; skylights, \$10-\$25; remodeling surplus. Atkins, 298-5762.

REFRIGERATOR, 15 cu. ft., white, rebuilt compressor, \$100; Rossignol Concorde skis, 185cm, Lok bindings, \$35. Brunneske, 897-4721.

TRANSPORTATION

'79 JEEP CJ-5, 304 V-8 engine, full roll-cage, AM/FM cassette, CB, new tires, interior, and paint. Butcher, 884-4818.

'86 CHEV. SUBURBAN, 5.7-liter V-8 gasoline engine, 4-spd., AT, PS, AM/FM radio, more, \$12,000. Ortiz, 869-3278.

BIKE, 10-spd., light-weight Takara, metal bumper, bike rack. Spray, 884-4264.

'83 NISSAN PICKUP, 5-spd., tan, AM/FM tape deck, custom speakers. Mills, 299-2130.

GIRL'S BIKE, 16" Huff, \$30; girl's 20" bike, \$20; AMF tricycle, \$7; man's 26" 10-spd., \$30. Troncoso, 897-1167.

'85 JEEP CHEROKEE, 4-WD, AT, loaded, new Michelin tires, transferable 2-year/20,000-mile warranty, \$8800. Martinez, 888-3067.

'86 PLYMOUTH COLT, 3-dr., AC, AM/FM cassette, 5-spd., 30K miles; '87 Ford Tempo GL, AC, PS, PB, AM/FM, 5-spd., 17K miles. Hyde, 293-6893 evenings and weekends.

'77 MOBILE TRAVELER MOTORHOME, 18-1/2', Dodge chassis, V-8, sleeps 6, \$6800. Butler, 292-8823.

'69 FORD RANGER F-250, loaded, 37K miles, 390 engine, PS, PB, AC, AT, w/camper, \$4800 OBO. Kross, 836-3860.

'84 PONTIAC 6000LE SW, power everything, third seat, wire wheels, wood paneling, cruise, tilt, AM/FM cassette, 57K miles, NADA \$5875, sell for \$5700 OBO. Bishop, 294-4745.

BOY'S BMX BIKE, 16" Fuji, \$35; boy's 10-spd., 20", \$60. Moore, 889-8934.

'80 HONDA CB650 CUSTOM MOTORCYCLE, w/cruise, Vetter fairings, passenger backrest, \$650. Conklin, 1-864-0207.

'84 NISSAN STANZA, 31K miles, PW, PS, PB, AM/FM cassette, \$4900 OBO. Reiser, 294-0691.

'86 FORD F250 PICKUP, supercab, 4-WD, AC, 460 CID, w/cap, built-in sleeper. Gasser, 299-2199.

SCHWINN BMX DIRT BIKE, 16" wheels, extras, \$60. Esterly, 296-9759.

CHEV. S-10 BLAZER, 2-WD, V-6, all power, stereo, AC, Tahoe package, hitch, \$6700. Richardson, 293-4219.

'81 FORD E350 VAN, raised camper top, new 6-cyl. engine, AT, new captain's chairs, \$3750 OBO. McDonald, 836-6787.

'87 MAZDA RX7, satin gold, power sunroof, 2+2 seating, graphic equalizer, one owner, \$12,500 OBO. Morrison, 275-7321.

'86 FORD AEROSTAR XL, V-6, electronic fuel-injection, 5-spd., AC, cassette, cruise, rear defrost/wiper, 15K miles, \$11,000 OBO. Cajas, 293-3758.

'88 HARLEY-DAVIDSON 1200 SPORTSTER, saddle bags, extras, \$5700. Hoke, 291-8587.

'80 FORD FIESTA, sport group, \$550. Aubert, 296-4173.

'84 HONDA 650 NIGHTHAWK MOTORCYCLE, \$750. Wright, 296-3850.

'73 VW BEETLE, new tires, one-year-old manual transmission, \$1200 OBO. Holloway, 296-6354.

'81 DATSUN 200SX, 2L fuel-injected 4-cyl., AC, AM/FM cassette, sunroof, 72K miles, new clutch & brakes, \$2250. Kerschen, 292-8001.

'80 OLDS. OMEGA, AT, AC, PS, 4-dr., \$1600 OBO. Plummer, 296-4327.

'83 YAMAHA VIRAGO 500, garaged, extras, \$950 firm. Hill, 275-7415.

'71 DREAMLINER MOTOR HOME, 19', sleeps 4, 31K miles. Perdue, 897-2249.

'86 BAYLINER CAPRI BOAT, 14', 50-hp force w/power tilt, canvas cover, AM/FM marine cassette, trailer & life jackets, \$4000 OBO. Henry, 831-3099.

'82 CUTLASS SUPREME, 4-dr., new paint, V-6, AT, PB, PS, AC, cruise, tilt, tint, \$2600 OBO. Mathews, 881-7368.

MAN'S BIKE, 3-spd. Shrouf, 821-0765.

'80 FORD FAIRMONT SW, 4-cyl., 4-spd., AC, AM/FM stereo, \$800. Prew, 296-3815.

'84 PORSCHE 944, fully loaded, 50K miles, \$15,000 OBO. Simpson, 299-2367 leave message.

'72 CHEV. NOVA, 30K miles, AC, PS, \$3500; '77 Pontiac Le Mans, 50K miles, AC, PS, \$2000. Sotel, 884-4693.

'86 CORVETTE, white, AT, Bose, sell for wholesale book price. Hudson, 821-3968.

'87 KAWASAKI ZL1000, water-cooled, shaft drive, below book. Strait, 842-1695.

'87 TOYOTA 4x4, 11K miles, \$8400 OBO; '70 VW Bug, \$1500 OBO. Kitta, 296-4057.

'83 MAZDA GLC HATCHBACK SPORT, AC, AT, sunroof, AM/FM stereo, \$3100. Burgess, 296-4254.

'85 JEEP CHEROKEE LAREDO, 4x4, cruise, tilt, AC, AT, PS, PB, AM/FM, luggage rack, \$9250. Wade, 892-1216.

'84 CORVETTE, new tires, glass & regular removable tops, 2-tone bronze, \$15,500. Syme, 822-1321.

'78 GMC 4x4, 4K miles on 350 engine, AC, PB, PS, \$5000. Chacon, 344-8645 after 5.

'85 DOLPHIN MOTORHOME, 23', Chev. 1-ton chassis, 26K miles, new tires, AC, \$18,400. Nunez, 884-3623.

'79 THUNDERBIRD, loaded, new tires, brakes, shocks, \$2000 OBO. Hoselton, 294-6109 or 277-2860.

WOMAN'S BICYCLE, Schwinn Varsity, 10-spd., \$125. Brunneske, 897-4721.

REAL ESTATE

4-BDR. HOME, 11516 Molly Brown NE, LR/DR, FR w/FP, 1-3/4 baths, 2-car garage, sprinklers, views, H. Humphrey, Eisenhower, La Cueva schools, 10% assumable, \$122,900. Chu, 293-1222.

4-BDR. HOME, Heritage Hills, \$14,900 assumable VA loan at 9-1/2%, \$102,900. Reed, 293-8056.

20 ACRES, Georgetown, NM, inside Gila National Forest, 1/2 mineral rights, sale or trade, estimated value \$17,000. Boal, 296-4660.

2-BDR., 2-STORY ADOBE HOME, 2100 sq. ft., 3 baths, 15' x 30' studio, double garage, shed, corrals, tack room, 1.5 acres, 2 wells, \$93,500. Conklin, 1-864-0207.

BUILDING LOT, on the island of Hawaii, natural state, \$6000. Thompson, 897-7672 after 5.

4.7 ACRES, fenced, well, alfalfa, Los Chavez. Knight, 275-3669.

3-BDR. HOME, NE, 1-3/4 baths, pitched roof, cul-de-sac, 800-sq.-ft. hobby shop, solarium, auto watering, updated, near Wyoming & Lomas, \$85,900. Spradling, 293-9421.

3-BDR. HERITAGE HILLS HOME, 1-3/4 baths, open floorplan, 1540 sq. ft., great room w/FP, 2-car garage, assumable FHA w/no qualifying, 7904 Puritan Ct. NE. Pyo, 822-9056.

3-BDR. HOME, 1-3/4 baths, 1424 sq. ft., open floor plan, 2-car garage, covered patio, new carpet, SE Heights, \$84,500. Smith, 298-9588.

WANTED

GE WASHER/ELECTRIC DRYER, prefer late model. Mills, 823-4484, leave message.

GM 350 ENGINE, entire, low mileage or rebuilt. Norwood, 266-2717.

BELL & HOWELL SLIDE CUBES, new or used. Witek, 296-5198 after 5.

MEDIUM-SIZE DOGHOUSE, for small price. Gregory, 299-8029.

CONCRETE BLOCKS, 6", used or project leftovers, will haul. Hertel, 345-1088.

GO-CART and/or go-cart parts: frame, engine, steering, wheels, etc. Crawford, 897-3282.

BASKETBALL POLE and backboard, in good condition. Garcia, 888-4735.

PRINTER for Commodore 64 computer, Epson FX80 or equivalent dot-matrix printer. Coleman, 884-5009.

HOUSEMATE, female, share 2-bdr./2-bath apt. w/young female, Montgomery & Juan Tabo, \$200/mo. plus 1/2 utilities. Haines, 298-4194.

CAMPER SHELL for standard long-wide pickup, 24" to 30" high, flat top preferred, must be lightweight. Yingst, 884-3812.

HOUSEMATE, share 3-bdr. home in SE Rio Rancho, mature and responsible male or female, nonsmoker, \$300/mo., split utilities. Hesch, 268-6122.

NIKON FG OR FE2 CAMERA BODY. Mead, 294-2298.

WORK WANTED

HOUSECLEANING, BABYSITTING, petsitting, pet grooming, horse care, etc., by responsible teenager, Raven Rd. or TVI-Montoya area, afternoons. Thomen, 281-4194.

SHARE-A-RIDE

VANPOOL RIDERS WANTED, along N14 and Frost Rd., \$34/mo., ride every day. Rentzsch (281-5017) or Burns (281-3922).

RIO RANCHO VANPOOL has openings. Nick Durand, 4-3265.

Ounces of (Hunger) Prevention Provide a Pound of Cure Tonight

Take Note

MIX OR MATCH your favorite foods this evening on the patio at Customer Choice Night. Purchase — by the ounce — your choice(s) of prime rib, roast pork, roast turkey, shark, cod, flounder, and halibut. Afterward, tuneful Trio Grande provides dance music under the stars from 7 to 11 p.m.

EAT 'EM UP, EAT 'EM UP, woof, woof, woof! That's the theme of the Coronado Wolfpack tomorrow afternoon (Sept. 24), as these longtime Lobo loyalists get together for another tailgate blast before the UNM/Akron football game. Tailgate action starts at 4 p.m. in the parking lot west of Dukes Stadium; look for the Wolfpack wind socks. The Pack furnishes carne adovada burritos and beverages; you bring a side dish to accompany the burritos, chairs, eating utensils, and paper plates. Game time is 6:05.

THE '88 SWIM SEASON winds down this weekend, so if backstrokes and butterflies are your thing, hurry on over. The pool's open tonight (4-8 p.m.) and this weekend (11 a.m.-5 p.m. both days).

Then (sob!), it's wait till next year.

SPEAKING OF SWIMMING, kids who took C-Club lessons last summer should remind their parents to pick up those hard-earned swimming certificates at the Recreation Office by next Friday (Sept. 30).

ORIENTAL NIGHT next week (Sept. 30) features a buffet loaded with far-East favorites such as sweet and sour pork or chicken, teriyaki beef, egg rolls, cashew chicken, and fried rice. Then dance to the tunes of Sonny & Co. from 7 to 11 p.m. (They play a mean Chinese cha-cha.)

TARGET TUESDAY, Oct. 4, on your calendar; that's the day you can sign up for the C-Club Dart League's fall season. Just show up at 4:30 p.m. in the patio area to join this fun-loving group of bull's-eye battlers. The league meets every Tuesday right after work; more info from the Club office (265-6791).

Arlene Schaefer (1500A) has been elected to a two-year term on the national board of directors for the National Assn. of Accountants (NAA). She recently completed a one-year appointment on the NAA committee on education, and has also served as president of the Albuquerque chapter of NAA.

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The 17th Annual Albuquerque International Balloon Fiesta lifts off Oct. 1, with competitions, mass ascensions, demonstrations, entertainment, and special events through Oct. 9. This is the Fiesta's second year at the 77-acre Balloon Fiesta Park between Paseo del Norte and Alameda Blvd. NE.

On Oct. 1 at 1 p.m., a parade through downtown Albuquerque marches to the Oktoberfest activities on Civic Plaza. More than 700 balloons are expected to rise in mass ascensions, beginning at 7:30 a.m. both weekends.

A "Balloon Glow" is set to begin lighting up around 5:30 p.m. on Oct. 2. The balloons remain grounded and burners are turned on to make the envelopes glow like luminarias at Christmas.

Volunteers are needed to crew (Oct. 1-9) and to help at the launch site (Sept. 24-25). Contact Linda Smith at the AIBF office on 821-1000 if you can help.

Look for Harold Rarrick's (7543) balloon photo in this year's Fiesta brochures, available at the LAB NEWS office (Bldg. 814) and in Finance (Bldg. 802). Contact Ruth Birdseye (ret.) on 255-6328 for information on balloon pins, patches, and calendars.

Events Calendar

Sept. 23-24 — Classical Concert I: "Wild Nights," NM Symphony Orchestra conducted by Neal Stulberg, featuring pianist Earl Wild performing "Piano Concerto No. 1 in E-flat Major" by Franz Liszt; 8:15 p.m., Popejoy Hall, 842-8565.

Sept. 23-25 — "The Matchmaker," Thornton Wilder comedy; 8 p.m. Fri., 6 & 9 p.m. Sat., 2 p.m. Sun.; Albuquerque Little Theatre, 242-4750.

Sept. 23-Oct. 2 — "Lives of the Neo-Modern Fang People," Albuquerque's own soap opera by Grubb Graebner, 8 p.m. Fri. & Sat., 6 p.m. Sun.; Vortex Theatre, 247-8600.

Sept. 25 — St. Elizabeth Feast Day: Harvest and social dances; Laguna Pueblo, free, 843-7270.

Sept. 25 — Keller Hall Series: Trio de Santa Fe, featuring "Albado" by New Mexican composer James Galloway; 3 p.m., Keller Hall, 277-4402.

Sept. 25 — Concert, Paillard Chamber Orchestra, French orchestra performing works from baroque to contemporary, with guest flutist Shegenori Kudo; 4 p.m., First United Methodist Church (4th & Lead SW), 243-5646.

Sept. 25 — Concert, Albuquerque Youth Symphony conducted by Dale Kempter; 3 p.m., Popejoy Hall, 842-8565.

Sept. 28-Oct. 2 — "Romeo and Juliet: The New Mexican Version," set in 1960s Las Vegas, NM, bilingual adaptation of Shakespeare's romantic tragedy; 8 p.m., Rodey Theatre, 277-4402 or 242-7929.

Sept. 29-30 — Ballet Folklórico de Mexico, UNM Performing Arts Series presentation; 8:15 p.m., Popejoy Hall, 277-3121.

Oct. 1 — Pops!! Concert One: NM Symphony Orchestra salutes Gershwin, Bernstein, and Sondheim; 8:15 p.m., Popejoy Hall, 842-8565.

Oct. 2 — Count Basie Orchestra, Centennial Jazz Heritage Series; 8 p.m., Popejoy Hall, 277-2131.

Oct. 2 — Balloon Fiesta gathering: arts & crafts, traditional Indian dances, food; 9 a.m.-5 p.m., Indian Pueblo Cultural Center, free, 843-7270.

Oct. 2-30 — Very Special Arts Exhibit: exhibits from the Museum of Modern Art, plus other local and national artists; regular museum hours, Albuquerque Museum, 768-5188 or 243-4600.

Oct. 3 — Keller Hall Series: music of the Bach family; 8:15 p.m., Keller Hall, 277-4402.

Oct. 4 — "King of Hearts," National Theatre for the Deaf presentation, based on classic French film, combination of sign language and the spoken word; 8 p.m., KiMo Theatre, 768-5188.

Oct. 6-7 — "Dance Brazil," dance performance combining Afro-Brazilian music, samba, and Brazilian martial arts; 8 p.m., KiMo Theatre, 848-1370.

Oct. 7-9 — Grecian Festival: annual event featuring Greek food, dancing, and gift booths; 11 a.m.-10 p.m. Fri.-Sat., noon-8 p.m. Sun.; St. George Greek Orthodox Church (308 High St. SE), free, 242-2214.

Sock It to 'Em!

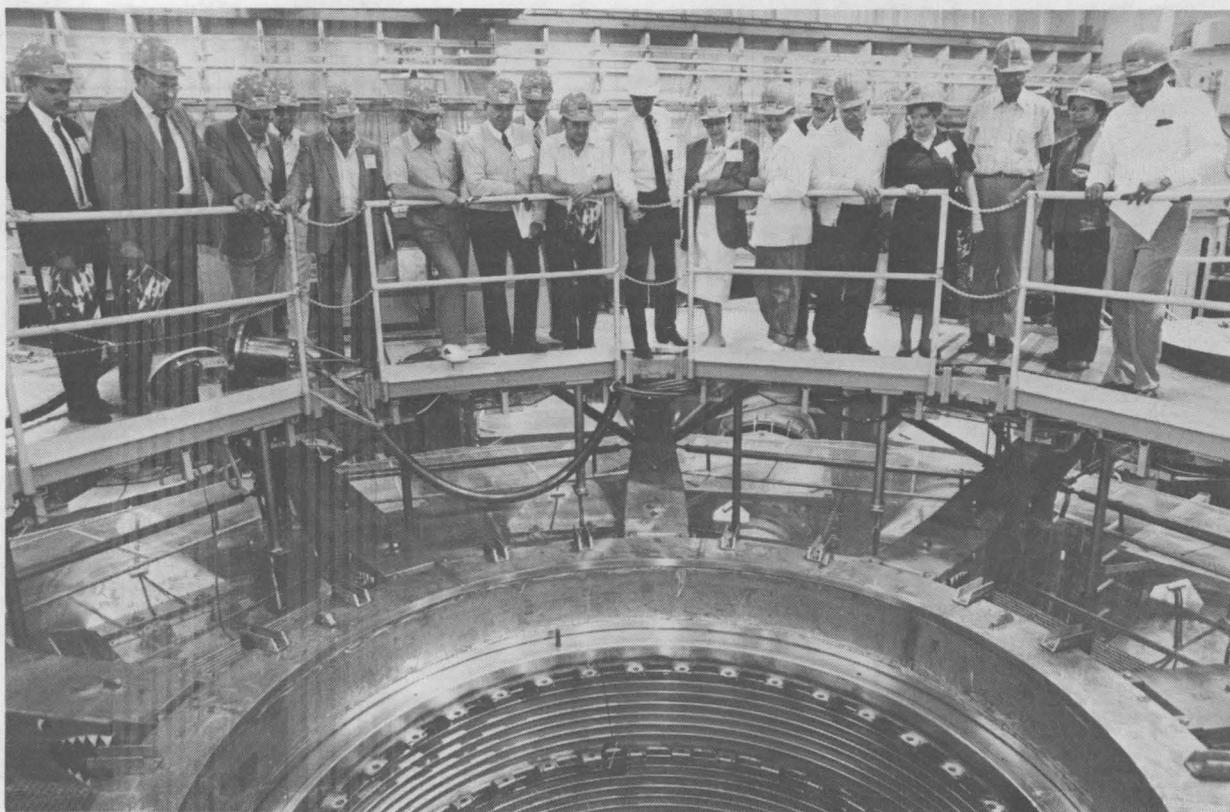


A collection of 472 socks is donated to North Carolina State University's textile library. It includes green Army socks from the 40s, bobby socks from the 50s, early panty hose from the 60s, and a Mickey Mouse sock of 1962 vintage.

Wall Street Journal

Retirement Seminar

Steven Stubbs and Michael DeVincentis of Dean Witter Reynolds will present two seminars — "Planning for Your Retirement" — on Sept. 28 and Oct. 5 at the DWR office, 6400 Uptown Blvd. NE. Both sessions begin at 5 p.m. Topics include IRA rollovers and Dean Witter's new retirement planning tool, PRIME (Pre-retirement Income Management Evaluator). RSVP to Steven or Michael on 883-0123.



SEVERAL SANDIANS were involved in last month's "Space 88: Engineering, Construction, and Operations in Space" conference at the Hilton. Purpose of the conference, which was sponsored by concerned professional societies and attended by some key decision-makers, was "to encourage and stimulate the development of the required technologies and expertise and, where possible, draw upon terrestrial experience in engineering and construction in harsh environments." A tour of environmental testing facilities in Area III and PBFA II in Area IV was an optional extra for those attending the conference. Here, Tom Alsbrooks (2853, center in white hard hat) talks about PBFA II with a tour group. Other Sandians involved in the conference: Laura Gilliom (1811), Paul Klarer (5267), Rudy Matalucci (6332), Robert Woods (9223), Roger Zimmerman (6313), Ray Caster (ret.), and several from the VIA (Volunteers in Action) program.