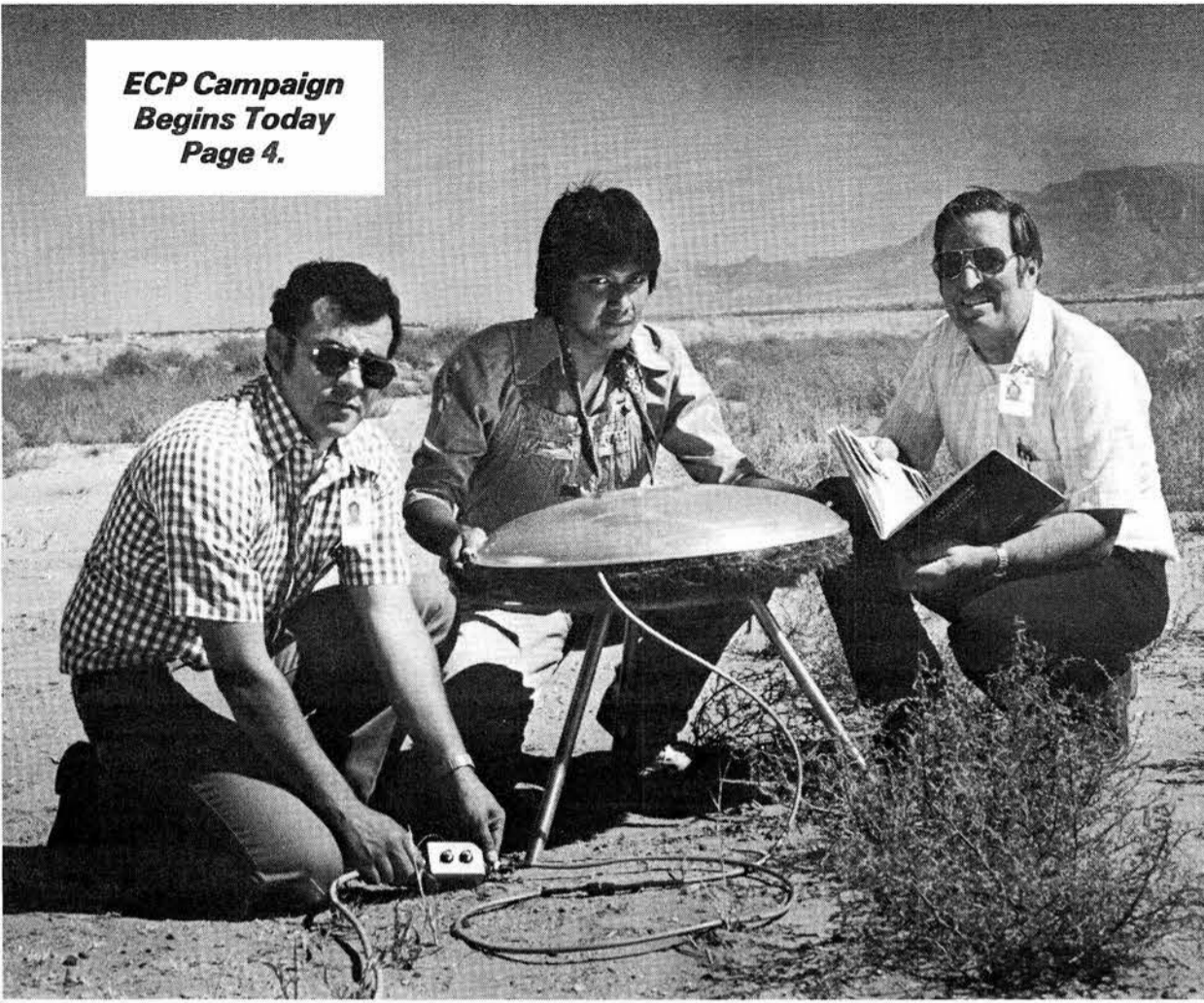


**ECP Campaign
Begins Today
Page 4.**



RESEMBLING a charcoal brazier, helicopter detector is an acoustic sensor that responds to unique frequency of chopper's rotor blades. Setting up detector for a demonstration are Eloy Cota, Youth Opportunity Trainee Todd Romero and Duane Arlowe (all 1765). The Hughes 500C helicopter used in the test is one of the quietest and most maneuverable but was not able to spoof the detector using a variety of approach tactics.

New Sensor Is Chopper Detector

A prototype of a Labs-developed detector was recently demonstrated at a sensor test site near Area III. The detector is designed to be a low-cost alternative to the use of radar to detect helicopter assaults upon government installations. It was developed in Facility Systems Engineering Division 1765 under Dennis Miyoshi.

In operation, the new sensor "listens" to the basic downwash sound from the main rotor blades. The frequency of this sound is peculiar to helicopters and so fundamental to their operation that successful attempts to reduce or mask this vibration are unlikely.

The inverted saucer-shape of the sensor minimizes the masking effect of wind turbulence, which can cause high background noise levels. Rubberized horsehair is attached to the sensor and serves as a windscreen.

Because the sensor is a passive detector and does not radiate energy, it has no environmental impact. Current plans call for installing a number of these units around a DOE facility on a trial basis.

LAB NEWS

VOL. 32, NO. 20

OCTOBER 3, 1980

SANDIA NATIONAL LABORATORIES • ALBUQUERQUE NEW MEXICO • LIVERMORE CALIFORNIA • TONOPAH NEVADA



BACK in 1950 the security of the Labs was tended by the Army's Military Police. But then the Army pulled out, and Sandia had to come up with an instant guard force. From those early days, this group of familiar faces has performed security duties through the three decades. Front row, from left, Les Baumann,

Milt Lesicka, Ted Varoz, Roy Brett, Noel Kent, Bob Byrd and Fred Lopez. In back, Tony Uszuko, Mac McMurfrey, Frank Martin, Clyde Sealey, Jim Hinson, Ed Sims, Verne Honeyfield and Bo Ellis. Three couldn't make the picture: Bob Stewart, Charley Farmer and Maury Orrell.

Afterthoughts

Secretaries & coffee--A recent issue of Swaps, the newsletter for Sandia secretaries, carries some spirited comment on whether or not a secretary should consider coffee preparation part of the job. Really, this is hardly a debatable question.

To begin with, as the legal mind might declare, there is a prima facie case for the secretary not to make coffee, nor any other comestible for that matter. (You don't expect her to bring in cookies, do you?) So the burden of demonstration falls upon those who are fond of declaring that coffee making goes with the secretarial territory. Aside from such declarations, the proponents offer little that is persuasive, falling back on feeble citations of tradition, convenience, and the like. Clearly, coffee making is not a bona fide element of the secretarial job.

But this does not exclude the possibility of the secretary doing the job on sufferance. In other words, it's clearly understood by all that the secretary performs the task not because she has to but because she's willing, just as a muscular staff member might occasionally push a desk a few feet to a new location. And, if the secretary is willing to take on the task, it would seem appropriate that the cook get a free ride and that other members of the coffee mess handle the supply end. No, my arm hasn't been twisted by a platoon of secretaries in arriving at these conclusions. I don't even drink the stuff, so my opinion here arises from a stance of neutrality.

* * *

Francophiles, attention--"I was not surprised to read (in the London Times) that four out of ten Frenchmen believed that the sun went around the earth. I take it that the other six believe that the earth goes around France." Ian Menzies. *js

Sympathy

To Antonio Salazar (3618) on the death of his mother-in-law in Albuquerque, Sept. 2.

To Paul Silva (3618) on the death of his sister in Martinezville, Calif., Sept. 6.

To Benny Montoya (1474) on the death of his son in Albuquerque, Sept. 28.

To Pro Padilla (3743) and Virginia (3163) on the death of his father in Albuquerque, Sept. 28.

To Bruce Caskey (2652) on the death of his mother in Artesia, Sept. 16.

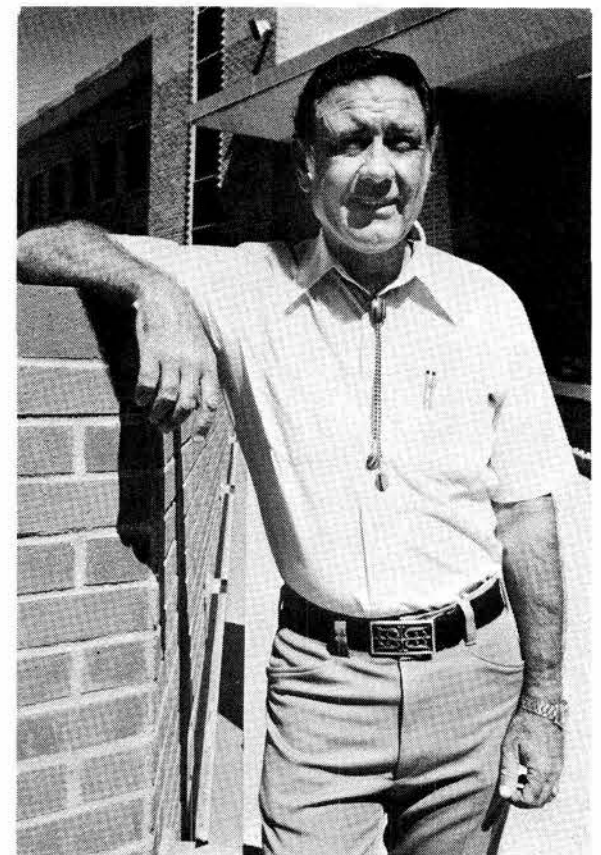
To Chris Northam (1250) on the death of her brother in Albuquerque, Sept. 18.

To Gerry Wilson (1252) on the death of his father-in-law in West Liberty, Ohio, Sept. 22.

Attention Retirees

The special increase in pensions for eligible retired employees or their surviving annuitants, first announced last December, has recently been approved by the Internal Revenue Service.

Therefore, the benefit increase will be reflected in the November 1 pension checks. A second, special check will be issued dated November 2 for retroactive payments covering the period from December 1, 1979, through October.



Supervisory Appointment

JOHN MILLER to supervisor of Reclamation Division 3418, effective Oct. 1.

Following graduation from UNM with a BA degree in education, John joined Sandia in November 1958. He was an expeditor in the purchasing organization for 18 years before transferring to a computer support group. For the past two years he has been with the Systems and Appraisal Division 3416 in the Property Management Department.

John served three years in the Air Force during the Korean conflict. Off the job he enjoys boating and camping. John lives in the SE heights.

Congratulations

Mr. and Mrs. Joe Fernandez (4538), a daughter, Elizabeth Rose, Sept. 20.

LAB NEWS

Published every other Friday

SANDIA NATIONAL LABORATORIES

An Equal Opportunity Employer

ALBUQUERQUE, NEW MEXICO
LIVERMORE, CALIFORNIA
TONOPAH, NEVADA

Editorial offices in Albuquerque, N.M.

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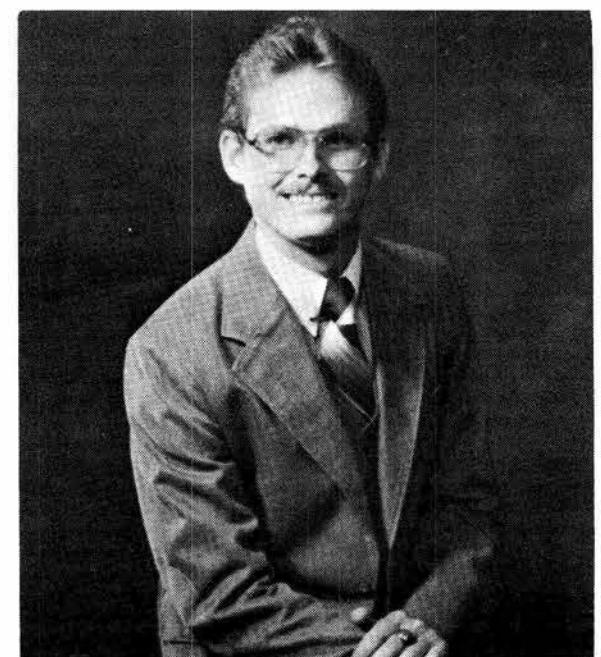
aided by gerse martinez

barry schrader & lorena schneider report livermore.

Death Comes to Keith Culver

Remember the young Sandian who suffered a heart attack last December while on the job and who was revived through the CPR efforts of his colleagues? Keith Culver was only 22. After the attack, he went to Stanford Medical in California for a heart transplant, got one in May and appeared to be making good progress. The new heart, however, began to experience problems and, on Aug. 18, Keith died. He had worked in Wayne Olson's Communication Systems Division 1715.

His mother sent us the photo at right and with it this note: "There is no way I can tell you how important Sandia was to Keith. He totally enjoyed his job, the people he worked with, and Albuquerque. It seems ironic when someone so young and happy has to die . . ."



LEAP is Caring . . . and Sharing

This year's LEAP (Livermore Employees Assistance Plan) fund-raising drive begins Monday, Oct. 6, with a briefing of solicitors. Solicitors will then contact each person individually during the week-long campaign.

Chairman Pat Gildea (8443) reports that brochures describing the 1980 program already have been distributed, and special informational meetings are being held for those employees who joined SNLL since last year.

"The target set by the Committee is \$70,000," says Pat, "up \$5000 from last year, yet a realistic goal. In keeping with the campaign slogan, 'LEAP is Caring . . . and Sharing,' our major effort will be aimed at increased participation. Of course, we'll also be encouraging each employee to up his or her contribution a bit."

In allocating LEAP funds, the Committee considered a sizable number of proposals and voted to support 12 local agencies (versus nine last year), in addition to the United Way of the Bay Area (206 agencies) and 14 national health agencies through the Bay Area Combined Health Agencies Drive (CHAD). This is the breakdown:

	Percent Allocations
LOCAL AGENCIES.....	22.3
Valley Emergency Fund Center	6.0
Buenas Vidas Youth Ranch	4.0
Tri-Valley Haven for Women	4.0
Children's Emergency Council	1.7
Hotline	1.4
Good Samaritan Home	1.0
Health Care Center	1.0
Nursery School Scholarship Fund	1.0
Twin Valley Learning Center	1.0
Parental Stress Service	0.6
Valley Connection	0.5
Nurses Welfare Fund	0.1
NATIONAL AGENCIES (CHAD).....	15.2
UNITED WAY OF THE BAY AREA AGENCIES.....	62.5
Total	100.0

New on the list of local agencies is the Twin Valley Learning Center which helps children in the Livermore, Pleasanton, and Dublin area whose psychological needs are compounded by learning problems. The Nursery School Scholarship Fund and Parental Stress Service agencies, although not funded last year, are back on the list this year.

"We've increased our support of the local agencies, particularly those operating with volunteer staffs and those providing the needy with direct support such as food, clothing and other essentials," says Pat. "We've also adjusted the allocation to United Way in view of the fact that the American Cancer Society, previously a CHAD agency, has joined the United Way."

"All of us are being hurt by inflation," he notes, "but the cost of helping others also goes up. When the solicitor comes by for your pledge, please remember that LEAP is caring . . . and sharing."

Sympathy

To Ollie Olivotti (8412) on the death of his mother-in-law in Merideth, Wis., Aug. 26.

LIVERMORE NEWS

VOL. 32, NO. 20

LIVERMORE LABORATORIES

OCTOBER 3, 1980

Cancer Rehabilitation

Jean Stuart Helps Women Through 'Reach to Recovery'

From her attractive appearance, cheerful outlook and active lifestyle, one would hardly guess that Jean Stuart, supervisor of Material Processing Section 8262-2, has experienced the trauma of losing a breast to cancer through surgery known as a mastectomy. A wife, mother, and grandmother, she stands as proof of recovery to other women who have recently undergone mastectomies.

Jean is a volunteer in the Reach to Recovery program sponsored by the American Cancer Society. The Cancer Society is one of the agencies which SNLL's LEAP program will be funding this year through the United Way.

As a Reach to Recovery volunteer, Jean visits new mastectomy patients, offering the support and understanding of shared experiences on a direct woman-to-woman basis. Having had the same surgery enables her to counsel, reassure and understand both the physical and emotional problems the patient must face and resolve.

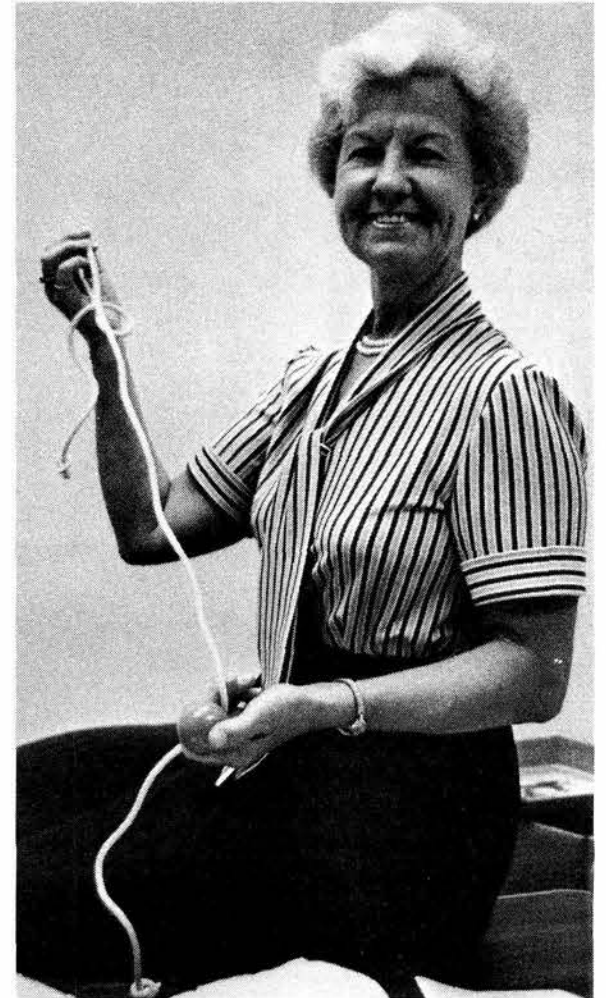
Most likely, a breast cancer patient today will be visited in the hospital by a Reach to Recovery volunteer, which was not the case a few years ago. "When I had my surgery in 1971," she recalls, "I had never heard of the program, and as I went home from the hospital I remember so vividly wondering what I was going to do. I didn't even know there was such a thing as a prosthesis (an artificial breast) and proceeded to makeshift my own."

About six months later, she learned of Reach to Recover, recognized it as something she wanted to be a part of and, with her doctor's consent, went through the required special training in how to approach a patient and how to answer questions and demonstrate exercises. To maintain her certification, she takes an annual refresher course. Today there are seven Reach to Recovery volunteers in the local area, 46 throughout Alameda County and over 6500 nationwide.

Jean takes each patient a kit containing a temporary breast form, an information booklet, a rope and a small, red rubber ball.

"I show her how to use the breast form, explaining that it's temporary until her doctor says she can wear a permanent prosthesis. The rope and ball are for simple exercises to strengthen the muscles in the arm. The booklet is good practical reading material for her and members of her family.

"And I always write my name and phone number on the book in case the patient has additional questions or just wants to call and talk. Most questions deal with how others—husbands, friends or co-workers—



Jean Stuart displays exercise rope and ball, part of the gift kit she takes when visiting mastectomy patients. Jean became a Reach to Recovery volunteer following her surgery in 1971.

will react. Some are very concerned about going back to work—what to say, how to relate, or what to expect."

Jean adds that a request for a visit by a Reach to Recovery volunteer comes from the doctor, and that Reach to Recovery volunteers answer only questions of a non-medical nature.

"The main benefit," continues Jean, "is that the patient sees a perfectly normal, healthy, womanly woman who's been through it, too. She realizes she's not alone, nor abnormal or different. And she can still function in every aspect because here is someone who is doing just that."

"For me, I get satisfaction in knowing that I've helped someone. I know what a struggle those first few weeks are. I've had any number of calls telling me what a blessing my visit had been."

Reach to Recovery was founded by Terese Lasser following her mastectomy in 1952 and later became a nationwide program of the American Cancer Society. Jean and other volunteers are available to speak to organizations on the program. For information, call the Alameda County Unit of the Cancer Society, 832-7012.

ECP Goal Is \$783K

The annual Employee Contribution Plan drive gets underway today and continues until next Friday. ECP helps support nine health care and more than 35 other agencies through United Way, all of which offer a wide variety of services to the community.

This year's theme is: *Thanks to You, It Works, For All of Us.*

The 1981 ECP goal is \$783,000 which represents an 8.6% increase over 1980. More than 85% of Sandia employees participate and of these, two-thirds are Fair Share or greater.

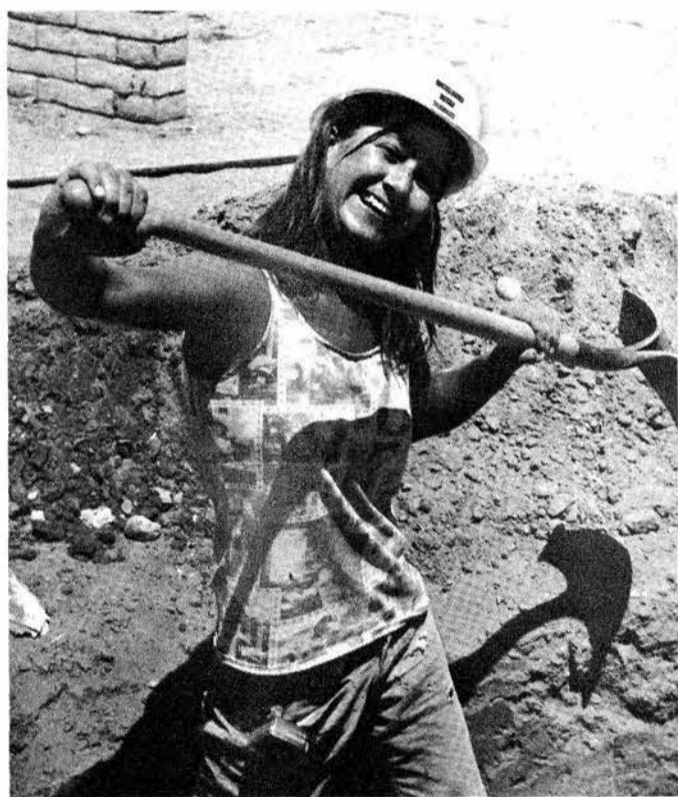
"Sandia contributes a little over 20 percent of the total Albuquerque United Way," says Art Arenholz (3520), Solicitation Chairman. "The agencies view Sandia as a model for the community—they really appreciate the tremendous support they get from us. And this support is not limited to dollars—Sandians are also generous with their time. I've been to board of directors meetings at 13 or 14 agencies and have always been surprised at the extent of Sandia participation—there's always been a Sandian involved, either on the board or as a volunteer."

No agency is fully funded by United Way—one agency might receive 10% of its total funding while another might get 75%. "It varies a great deal," Art tells us, "but the one common thread is that all agencies must provide a needed service to the community. When a brand-new agency is accepted by United Way it receives a planning grant, which might be just enough funds for a phone and office. Agencies are scrutinized by a planning board, a screening committee, and an auditor—the agency also submits reports every three months. United Way is supportive and helpful but strict, too—it makes sure there's no duplication of efforts. Every penny spent is where it will do the most good."

Jerry Hood (4360), ECP Chairman, urges Sandians with questions about the fund drive to get in touch with their directorate representatives: 1000, Joe Calk (4-4076); 2000, Dick Damerow (4-8912); 3000, Dan Brewer (4-0352); 4000, Eldon Boes (4-5634); and 5000, Cecil Land (4-6385).



ECP THROUGH THE YEARS—As Chairman Jerry Hood (4360) steps through the United Way door, three decades of Labs participation in the charity venture precede him. These photos from those years show how ECP funds have helped. In the '50s (and today), day nurseries provide care for small children whose parents work. Off for an outing (circa 1965) are boys from the Albuquerque Boys' Club. In 1978, we visited a Senior Citizens Center and came away impressed with the friendliness and good spirits of people there. Today, United Way helps agencies such as the YWCA to pursue new departure activities: this young woman (at left) is learning to become a plumber, and the Y is easing the way with a training program to condition women to meet the physical and mental challenges of jobs in non-traditional occupations.



Sandia Secretary Leads Second Life With Jazzercise

As I gingerly picked my way through the 60 kicking and yelling women, the thought came: "What am I doing here?" Ahead in the dim light, I made out the wildly gesticulating leader, a blond Valkyrie with a Texas twang, urging her eager followers to even greater excesses. I was reminded of Mark Twain's observation on Virginia City: "It's no place for a Presbyterian."

But the scene was not as it might seem and, indeed, there's every likelihood of its repetition in the most prim and proper circles of the land. For what we have here is a class in jazzercise, a blend of calisthenics, modern dance, and 500 db rock music. Jazzercise has become popular because it's fun and is physically effective because it's vigorous.

Once upon a time, Debbie would have been called "demure." But that's out of fashion, and we can report today that Debbie Shepperd is a pretty and soft-mannered young woman, secretary to Division 1111. That's by day. After hours, Debbie is a dedicated, physical fitness cultist who is born again, reincarnated as a jazzercise instructor (the "blond Valkyrie" of earlier mention).

Debbie cheerfully acknowledges her life's conversion by jazzercise. "When I got out of Alamogordo High School a few years back, I was 140 pounds, shy, and my legs ached a lot. I figured, well, this is it. Then I came to Sandia and my supervisor, Jay Benson (now deceased) got me interested in running. Running was fine, but that was mostly legs. So I tried a jazzercise class and noticed almost immediate improvement in overall muscle tone. And I was limber, too.

"Eventually, I passed a screening test and went on to become a jazzercise instructor. I love it—it's changed me completely, physically, mentally. Recently I gave a jazzercise demonstration down in Alamogordo. My sister was in the audience—she couldn't believe it was really me!"



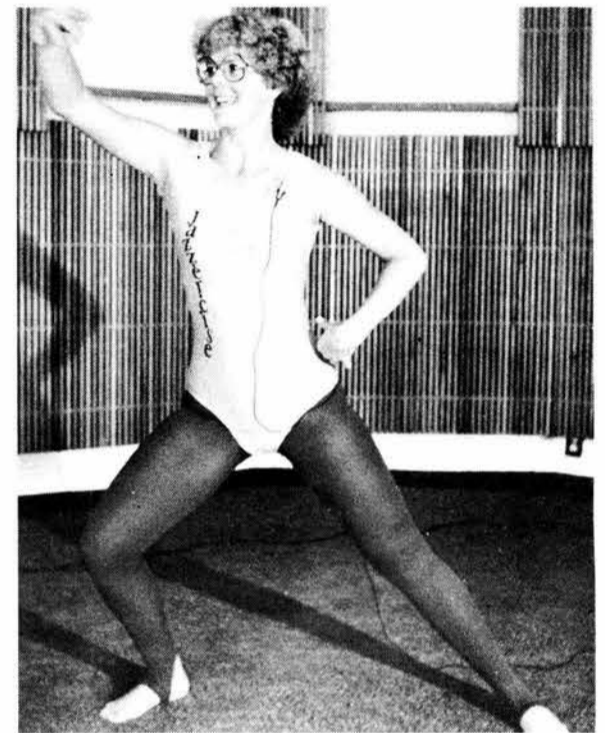
JAZZERCISE instructor Debbie Shepperd (1111) and one of her classes. Performed with music and a strong beat, jazzercise is vigorous. Debbie instructs several classes each week after hours at the Heights Community Center on Buena Vista SE.

We can't speak to its spiritual benefits, but jazzercise strikes us as the right solution to the fitness problem for many. These many include the people who (1) dislike running, (2) find calisthenics boring—and they are, (3) need the discipline of a structured setting, (4) enjoy rhythmic activities and (5) like a little sociability with their exercise. The *modus operandi* of the class is simple: do what the instructor does, and if you do as Debbie does, as vigorously as Debbie does, then you, too, will get a super workout. Of course, if you're just starting, you'll moderate your version of Debbie's performance.

What about the yelling? Debbie encourages expression. "Lets out frustrations and other emotions."

Jazzercise is a nation-wide, incorporated system whose head guru operates out of Vista, Calif. Its instructors learn several hundred exercise routines set to music before they begin their practice.

Finally, a word about gender and jazzercise. When I went to observe Debbie's class, I went with a resolve to participate. But once there, I quickly reverted several decades and there I was at the high school



dance, lined up along the wall with the other studs, barely daring a glance out upon the dance floor. Jazzercise is clearly as good for men as it is for women, but only an occasional male joins in. Too bad . . . it looks like fun. If only it could be more *manly* . . . • js

feed iback

Q. Each of my last three purchase requisitions has required more than one month between my line organization sign-off and issuance of an RFQ; in one case the delay was 31 working days.

A. Approximately 80 percent of Sandia's procurements are placed without issuing a written Request for Quotation (RFQ) and the average time required by Purchasing to process these requirements is less than 1.5 days.

Since your inquiry addressed the time required for issuance of an RFQ, this response is directed to the remaining 20 percent of Sandia's procurements.

Actions that may be required after receipt of a PR in Purchasing and prior to issuance of an RFQ include: for the purchase of personal services, a 45-day

delay may be experienced to obtain a wage determination from the Department of Labor through DOE; for a Sandia-designed item to be purchased on any basis other than price, proposal evaluation criteria must be jointly established by the requesting Engineer and the Buyer; for a cost-type procurement, a determination must be made by the Auditing Department that the proposed Contractor is auditable which may require a visit to the Contractor's plant; for the purchase of ADP equipment, time for the approval of the DOE 1830 must be allowed; before an RFQ can be issued for procurements having an estimated value in excess of \$10,000, a credit approval for the proposed bidders must be obtained from the Financial organization; for construction work, a determination must be made by

DOE that the Davis-Bacon Act does or does not apply; in some instances, advertising in the Commerce Business Daily is required to obtain from contractors an expression of interest in performing work for Sandia; and, if classified matter is involved, making arrangements for personnel and facility clearance and mail/shipping channels.

As indicated above, there are numerous variables associated with the purchasing process and it is not practical to compute the average time required to process the 20 percent of Sandia's procurements subject to such variables. Depending upon the complexity of a requirement, the purchasing process could take from two-three weeks to several months.

Sandian & Family Enjoy A Rocky Mountain High

[Ed. Note: Have you taken an unusual vacation? Tell us about it—call 4-1053.]

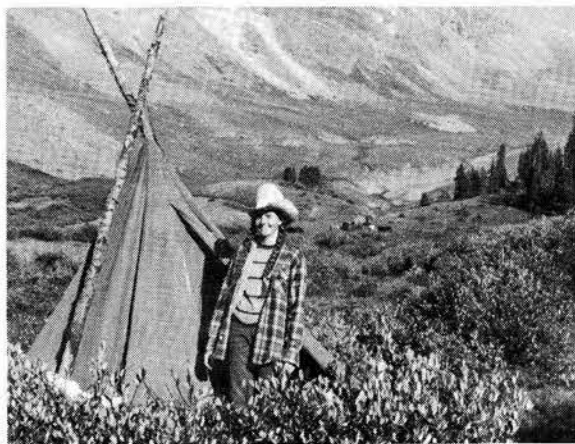
"We want to do it again!" is how Art Arenholz (3520) describes his family's vacation in the Colorado wilderness.

Art, wife Cathy and 16-year-old daughter Helen were part of a small group making the seven-day horseback trip in July. The trip was arranged by a lodge in Wagon Wheel Gap (midway between South Fork and Creede in southwestern Colorado). "We covered about 60 miles on horseback in the La Garita Wilderness of the Rio Grande National Forest," Art says. "The weather was perfect and, at altitudes of 7500 to 13,000 feet, the scenery was spectacular. The ride wasn't too strenuous; we were in the saddle about five hours a day. Most of the time we rode above timberline and then moved down into the shelter of the trees to camp. Besides the three of us, there were six other guests, our guide, four wranglers and two cooks.

"Every second day we traveled to a pre-determined campsite. The following day we made a side trip, coming back to our camp that evening. So if anyone got sore or tired and didn't feel like riding, they could spend every other day in camp. My daughter rides whenever she can in Albuquerque but I hadn't been on a horse in 10 years, and one of the women in the group had never ridden. But the pace was leisurely with stops to rest often and a long lunch break.

"Fishing was excellent—the wranglers and I caught enough native trout late one afternoon for our dinner that evening. One day our guide warned us to go quietly because we would probably see some elk just over the ridge ahead. We peeped over the ridge and watched a herd of about 100 head. We didn't see any deer—they feed at lower altitudes—but saw other small game and birds. The wild flowers were blooming, the air was clear, the food was excellent, and we thoroughly enjoyed the relaxed camp life."

Logistics—Wagon Wheel Gap is 62 miles west of Alamosa, Colo., and 120 miles east of Durango (from Albuquerque, via Chama and Pagosa Springs, it's about 260 miles). Cost was \$50 per day, per person. Everything was furnished except sleeping bags and clothing. Each guest was allowed 30 pounds in their pack. Several lodges in the area operate this kind of trip. Give Art a call for more specifics.



DAUGHTER HELEN and her tent. All equipment, horses and food were furnished by the outfitter.



ART & CATHY ARENHOLZ in the Colorado high country near Creede. Seven-day camping trip on horseback took them well above timber line.

Photovoltaics

New Solar Cell Improves Performance

A new silicon solar cell offering greatly enhanced efficiency has been developed in Photovoltaics Division 2146. "This is our third and our best silicon cell design so far, and it's given the best performance," says Harry Weaver, head of the group. "These cells are used in concentrators that focus sunlight through a lens upon a small area of silicon."

The efficiency of the present design is 90% at a temperature of 27°C (81°F). "And that's actual operating efficiency," emphasizes Harry. "It includes the loss from shadowing due to the metallic pattern superimposed on the cell, which blocks out a certain amount of light. By way of contrast, our '77 and '78 designs had 13% and 18% efficiencies."

Harry points out that cell fabrication procedures used are common throughout industry and readily adaptable to commercial production. "Cheap power is the ultimate objective," he says. "Photovoltaics is expensive today because silicon cells are not in mass production and also because of the cost of high-quality silicon. Silicon itself is inexpensive—it's made from silicon dioxide which is the principal constituent of sand—but by the time it's purified and processed into a cell it becomes quite expensive."

Photovoltaics Division 2146 developed the new silicon solar cell in conjunction with Photovoltaic Projects Division 4719 which has overall responsibility for DOE's Photovoltaic Concentrator Technology Development Program.



HIGH-EFFICIENCY SILICON SOLAR CELLS developed by Photovoltaics Division 2146 are displayed by Harry Weaver, head of the group. When sunlight is focused on a small area of the cell, it yields the highest efficiency achieved to date of any solar cell design.



At MIT they've been taking a long hard look at how karate experts can break up wood and concrete blocks without doing irreversible damage to their hands. Their key finding is that experts develop a peak velocity of 10 to 14 meters per second and exert a force of 675 pounds. If the hand is positioned properly it can easily withstand the resulting counterforce.

Take Note

The first National Crime Stoppers Conference will be held Oct. 8, 9, and 10 at the Albuquerque Convention Center. Representatives from existing and potential programs throughout the country will attend. Among the scheduled speakers are Greg MacAleese, founder of Albuquerque Crime Stoppers, Governor Bruce King, and William Webster, FBI Director. For information, call Benito Marquez, 4-6051.

* * *

"Crude Oil Economy and Pollution Control in the Internal Combustion Engine" is the title of next Wednesday's (Oct. 8) colloquium. Speaker is Prof. Enoch Durbin of Princeton Univ. who is working toward much improved engine efficiency and economy through experiments with alternative ways to deliver air and fuel to the engine.

* * *

You can learn more about the history of Albuquerque from the colonial days to the 1900s by taking an evening class on Tuesdays, from 6:30 to 8:30, at the Albuquerque Museum. Byron Johnson, curator of history for the Museum, teaches the class, which begins Oct. 7 and runs through Nov. 25. Cost is \$15 and classes will be held in the museum auditorium. Contact: 766-7878.

* * *

Retiree Richard Carlisle, class of '77, dropped by LAB NEWS to urge other retirees to join him in volunteer work at Presbyterian and Anna Kaseman Hospitals. "It's interesting and it's a worthy cause. And you can work a lot or just a few hours," states Richard. Call Millie McClure in the Volunteer Office of Presbyterian if you're interested.

* * *

Still smoking? You can bust the habit by attending the Quit Smoking class sponsored by Medical and scheduled to begin Oct. 7. Arlene Price, clinical psychologist, and Phil Cheremiah, counselor, will conduct the class which runs from Oct. 7 to Oct. 30, Tuesday and Thursday afternoons from 3:30 to 5. For sign-up, call 4-3993 or 6-0021.

* * *

Also from Medical, the next program in the *Go For Health* series in theater building 815 is set for Oct. 14 at 12 noon. Title: *Coping with Stress—Deep Muscle Relaxation*. Meanwhile, video films on health-related subjects continue to be shown during the noon hour every Tuesday and Thursday in October in Bldg. 892, room 207. Oct. 7 & 9: *Live or Die*. Oct. 14 & 16: *On Your Mark, Get Set, Exercise*. Brown baggers are welcomed.

* * *

Visitors to the Labs last month included some 30 members of the state's Joint Interim Legislative Committee, who were given briefings and a tour of Sandia, and Nobel Laureate Hans Bethe, who was



WOMEN COMMUNITY LEADERS and representatives of New Mexico's educational institutions came to Sandia in September to learn about the Labs and to visit some of its energy facilities. Here Karen Shane (at left) of Community Relations Division 3163 explains operation of equipment at the Mid Temperature Solar Facility. Gerda Krefft, women's program coordinator in Dept. 3510, organized and coordinated the tour.

featured speaker at a Sandia colloquium. Prof. Bethe, from Cornell Univ., talked about the merits of the fusion/fission hybrid reactor.

* * *

John Finger (4741) and Fred Heard (4742) received best paper awards in their respective technical sessions at the recent Geothermal Resources Council annual meeting in Salt Lake City. John's paper, "Laboratory Testing of Percussion Drills for Geothermal Applications," was presented at the Drilling Technology Materials Session. Fred presented "Upgrading the Acoustic Borehole Televier for Geothermal Fracture Mapping" to the Reservoir Engineering Session. Each paper was selected from those of 10 finalists from industry, the academic world, and the DOE labs. This year 950 people attended this annual meeting of international geothermal researchers and developers.

* * *

Rape Awareness Week runs from Oct. 12 to 19, with various events planned during the week: Oct. 14 and 16, self-defense workshops; Oct. 15, a mock trial at the Kimo; Oct. 17, Meg Christian concert; and Oct. 18, a march and candlelight rally. For specifics on these events, call the Rape Crisis Center on 247-0707.

* * *

Mike Coltrin (4211) dropped by the other day to discuss the statewide membership drive now underway by the New Mexico Academy of Science. The Academy's objectives are to stimulate scientific education and research throughout the state. Anyone in scientific research, education or service, or anyone active in the promotion of science is eligible to join. More info and membership forms from Mike at 844-7843.

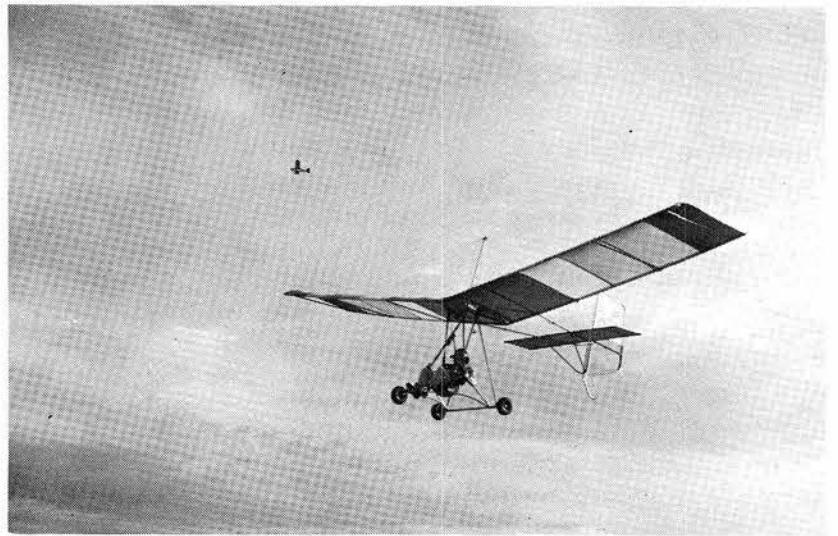
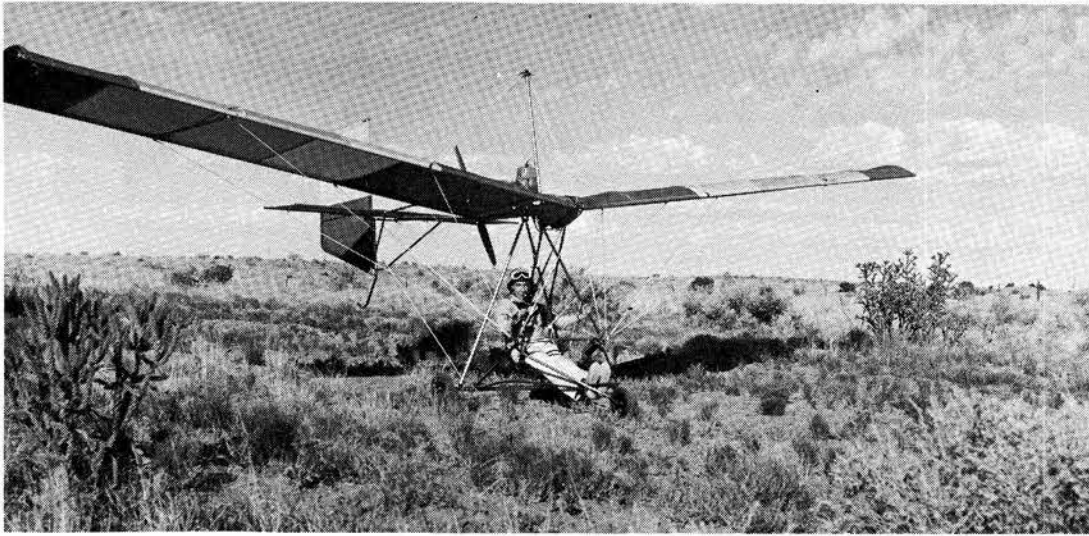
Events Calendar

- Through Oct. 7—Annual Taos Festival of the Arts: painting, photography, sculpture; arts & crafts fair along the plaza; ballet & folk dancing in community center, Taos, N.M.
- Oct. 3-5—Fifth Annual Greek Festival: dances, entertainment, food; St. George Greek Orthodox Church, 11 a.m. to 10 p.m., 308 High St., SE, 247-9411.
- Oct. 4—Flea Fair, Cedar Crest Pharmacy parking lot, N. Hwy. 14, 10 a.m.-3 p.m., Mt. Christian Church.
- Oct. 4—Annual San Francisco Feast Day, Nambe Pueblo.
- Oct. 4-5—Annual El Rancho de las Golondrinas Fall Festival, La Cienega (I-25 to turn-off about 8 miles south of Santa Fe).
- Oct. 5—"Caribbean Carnival of Trinidad," folk dance ensemble, 8:15 p.m., Popejoy.
- Oct. 5—"Tijeras Canyon: Analyses of the Past," opening reception, 1-5 p.m., Maxwell Museum, UNM.
- Oct. 9-19—Santa Fe: Fourth Annual Festival of the Arts. Contemporary crafts, fine arts, photography, indoor/outdoor exhibits, bronze pouring demonstrations, receptions. Free, 9-5: convention center, capitol and numerous art galleries and museums. (Santa Fe, 982-4923.)
- Oct. 11—UNM Homecoming: Football—Lobos vs. Colorado State, UNM Stadium, 7 p.m.
- Oct. 11—NM Jazz Workshop presents Woody Shaw Quintet in concert, Kimo Theater, 8 p.m., 766-7816.

Authors

R. L. Iman (1223), H. P. Stephens (4731), J. M. Davenport (Texas Tech), R. K. Waddell (USGS) and D. I. Leap (USGS), "Sensitivity Study on the Parameters of the Regional Hydrology Model for the Nevada Nuclear Waste Storage Investigations," PROCEEDINGS OF THE 1979 DOE STATISTICAL SYMPOSIUM.

Hal Vaughn Loves His Quicksilver



POWERED HANG GLIDER was built from a kit by Hal Vaughn, supervisor of Aeroballistics Division 5631. The engine is a 13 hp Chrysler go-cart motor

which drives a 4-ft. pusher propeller. Hal sits in a harness suspended from the wing and controls flight of the craft by shifting his body position.

The brightly colored little craft is neither airplane nor glider but Hal Vaughn (5631), who flew P-47 Thunderbolts and P-51 Mustangs in WWII, just loves it. Called a Quicksilver M, the craft is classified as a "powered hang glider," a classification which removes it from most FAA regulations.

"I fly along about 30 ft. off the ground, doing about 25 mph, chasing jackrabbits and coyotes, scaring hawks and having a ball," Hal says. "The 13 hp Chrysler go-cart engine gives me a top speed of 35 mph if there's no wind. The three gallons of gas in the tank will keep me up about two and a half hours."

Hal bought the Quicksilver in kit form, and assembled it in his garage in about two weeks of after-hours effort. Construction material is very light, very strong aluminum tubing, stainless steel wires and cables, and dacron sail cloth. Wingspan is 32 ft. The wings fold in the center, the undercarriage and tail come apart, and the whole package fits on top of a pickup truck. It's an engineering miracle.

"I weigh more than the airplane," Hal says. "I sit in a nylon sling-harness under the wing inside a kind of cage. Control of the plane is by shifting my body weight—the harness is attached to the rudder by control lines. If I lean back, the plane goes up. If I lean left, the plane turns left. It's simple and it works, but it took me a long time to get used to it."

After first assembly of the craft, Hal practiced maneuvering on the ground on a seldom used airstrip near Belen. After four mornings of ground exercises and slowly taking the glider up just a few feet off the ground, Hal felt he had the necessary skill for flights at altitude.

"It feels right, now," Hal says. "You really do fly by the seat of your pants."

The Quicksilver was marketed for several years as a hang glider before the powered version became available. It is a very stable design, will not stall under power, and is not capable of a dive angle steeper than 45 degrees under normal conditions.

At our altitude in Albuquerque, Hal has to worry about temperature. "If it's a hot day, the air density is so low I can't get off the ground. I've been getting up at 4:30 and flying at around 7 in the morning. It's cooler then and it's a great time for flying

and just looking."

Hal grins. "I mean that flying this little machine is fun. You have to be alert for wind changes and obstructions—wires and trees—but it's a free feeling. I usually drive

into the boondocks with my pickup, find a smooth dirt road, assemble the machine and take off. Then I just fly around enjoying the scenery and the wildlife. Terrific!"

Fun & Games

Running—"Sandia Crossing" is the bland description for a run that is one of the Southwest's more rigorous: the 28 mountainous miles from Tijeras Canyon along the ridge line of the Sandias and down into Placitas. Among the 50 participants in last month's Sandia Crossing were five Sandians. They are Jim Harrison (4311), finishing 6th, Terry Bisbee (2613), 11th, Henry Dodd (4744), 12th, Alan Spencer (3611), 15th, and Irv Hall (1223), 34th. Harrison's time was 4:03.

Coming up: The Corrida de Taos, 5K and 10K, at Kit Carson Park in Taos on Oct. 5. Register before 8:45 a.m., entry \$5, contact 758-2042. The Triathlon of Albuquerque, the Jay Benson Memorial, takes off on Nov. 2. It's ten miles by bike, five by running and a quarter-mile swim, back-to-back sans interruption. Place: KAFB. LAB NEWS (4-1053) has entry forms.

* * *

Backgammon—How about a backgammon tournament? If enough people call Tom Lenz at 4-8486 (he's C-Club Rec. Mgr.), he might be persuaded to set one up.

* * *

Bridge—NASA Singles (National Assn. of Single Adults) is sponsoring a bridge tournament to run from October through April. Entrance is limited to single intermediate-level (or better) players. Entry fee and prizes, object is fun & fellowship, cutthroats do your cutting elsewhere. Contact Carolyn Eckart on 299-3888 or Bob Bailer on 298-5131.

* * *

Tennis—STA is sponsoring a tournament for men, women and mixed doubles on Oct. 11 and 12 at the Tennis Complex on Stadium Blvd. SE. Contacts: Joe Kubas, 4-7667; Eric Keck, 4-2046; or Dora Montoya, 4-4052.

Guns—The Fall Gun Show of the NM Gun Collectors Assn. runs tomorrow and Sunday, Oct. 4 and 5, from 8 a.m. to 6 p.m. in the Agriculture Bldg. of the State Fairgrounds.

* * *

Skiing—Sandia Peak Ski Patrol's annual Ski Swap is set for Oct. 17-19. Coronado Ski Club announces that the Sandia Peak Walkdown is scheduled for this Sunday, Oct. 5, and the Dryland Ski School for Saturday, Oct. 11.

* * *

Ballooning—The 9th annual International Hot Air Balloon Festival is scheduled to begin this weekend. First event is a mass ascension tomorrow, Saturday, out at Simms Field, which is located near Osuna and San Mateo. The mass lift-off will occur shortly after sunrise, so plan on getting there early. (Last year we bicycled to the event and thereby avoided the humungous traffic tieup.) Some 350 balloons have entered the festival this year, including those of several Sandians. Besides the mass ascensions, the nine days from Oct. 3 on will include competitive races, rides and a grand ball. For more information, contact 256-9401.



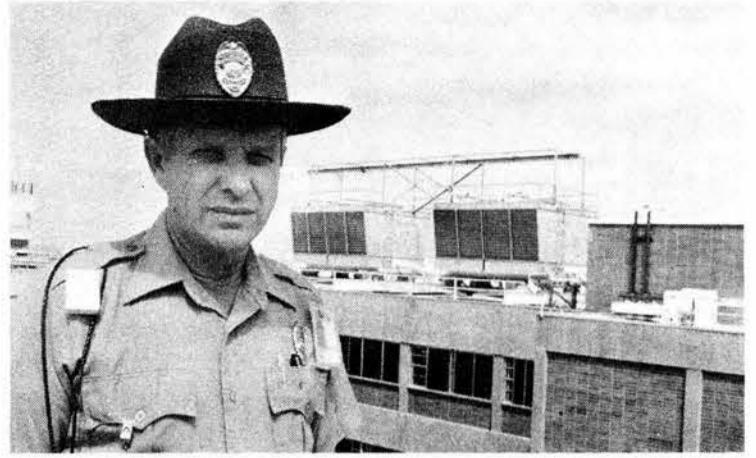
Filling out accident reports can be a perplexing business—the kind that causes furrowed brows, long lingering licks of the pencil point and a careful choice of words to make absolutely sure the blame is placed squarely where it belongs (on the other guy, of course!). Here are three examples of what we mean, supplied by the N.M. State Highway Department:

- "A pedestrian hit me and went under my car."
- "My car was legally parked as it backed into the other vehicle."
- "An invisible car came out of nowhere, struck my vehicle and vanished."

MILEPOSTS
LAB NEWS
OCTOBER 1980



Barbara Freeman - 8264 10



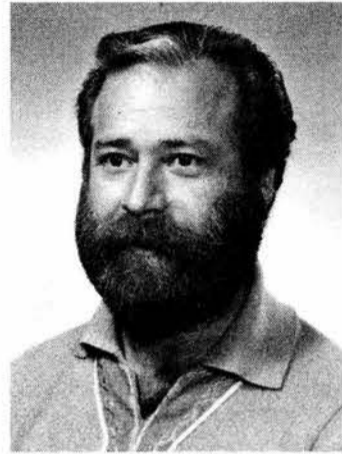
Bob Byrd - 3432 30



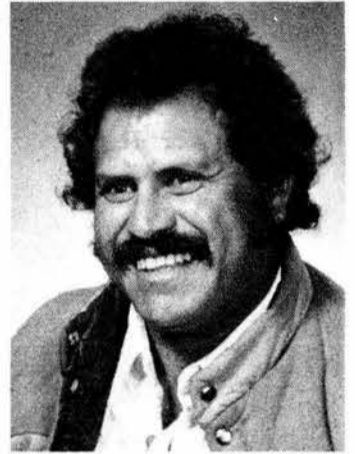
Chris Olson - 1758 15



Bernard Ellis - 3432 30



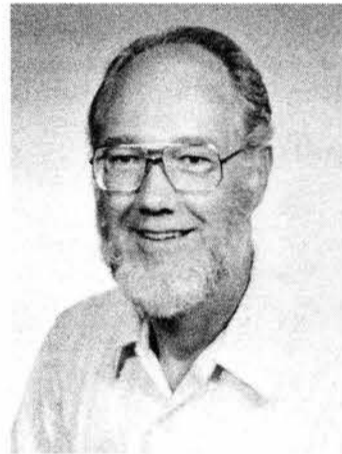
Richard Padilla - 1556 15



Dennis Gutierrez - 1535 15



Donna Hodges - 2432 15



Charles Clark - 1223 30



Patti MacPherson - 3411 25



Edna Baca - 3144 25



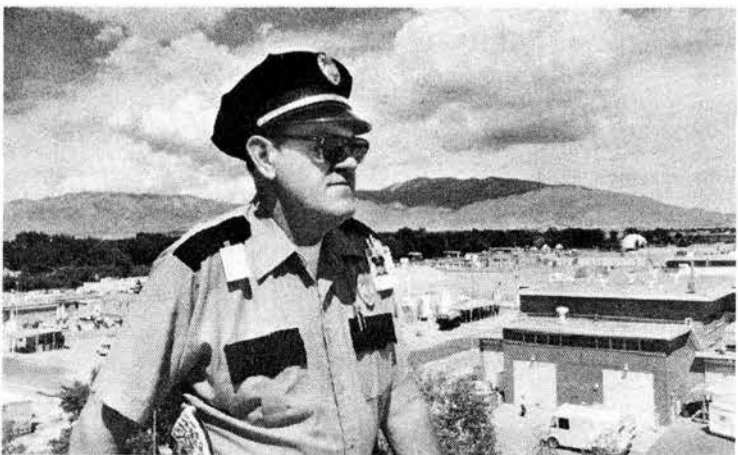
Robert Vasquez - 4232 10



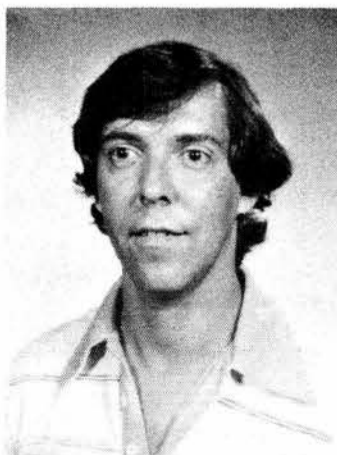
Ray Lucero - 3618 10



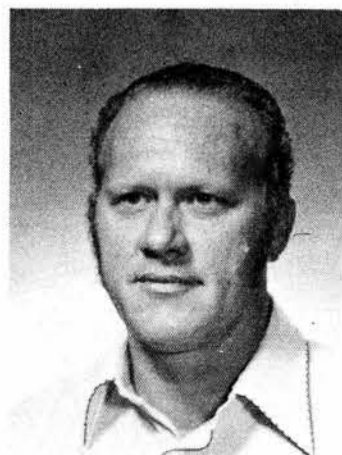
Roy Brett - 3432 30



George Uszuko - 3432 30



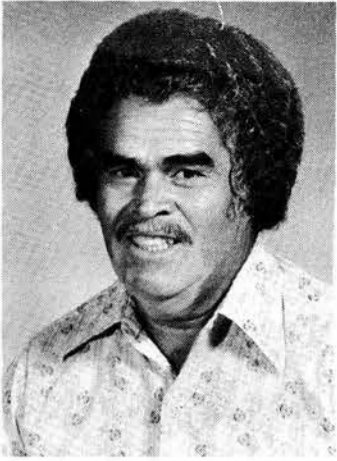
Jose Gonzales - 1483 10



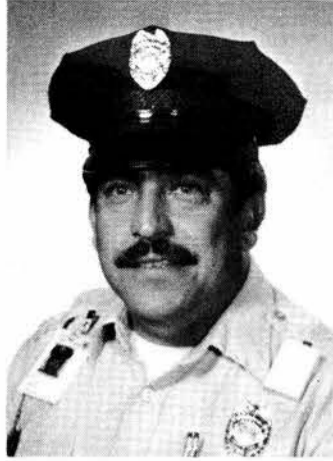
Marlyn Sterk - 5623 15



Virginia Dalin - 6001 20



Abedon Ortiz - 3426 10



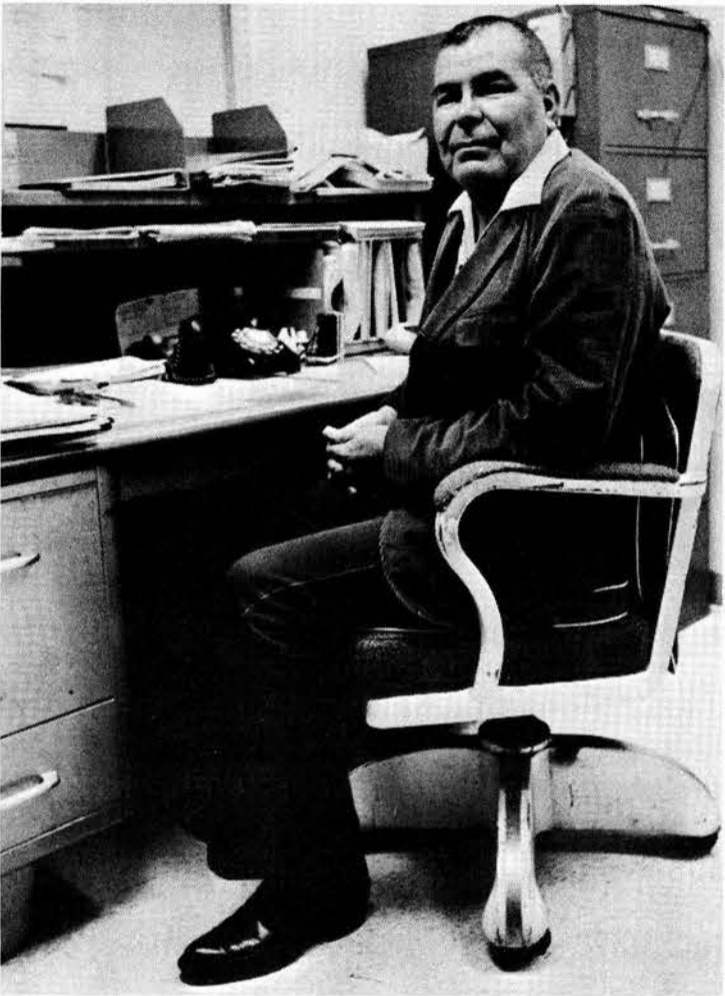
Albert Luna - 3432 10



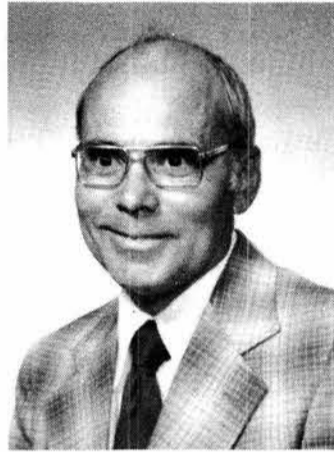
Harold Meidal - 1485 30



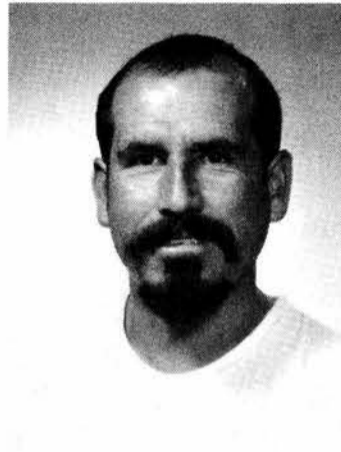
Aurora Baca - 3152 20



John Anaya - 3644 30



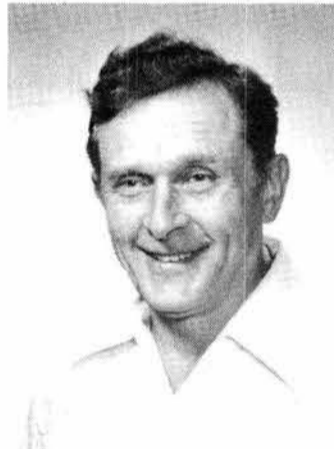
Waylon Ferguson - 3730 30



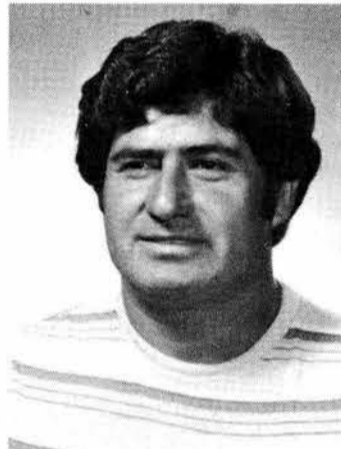
Felix Garcia - 3618 10



Basil Cafferty - 1222 25



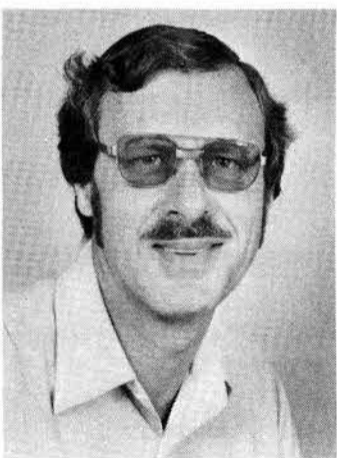
Joe Szymanski - 6011 30



Joe Jaramillo - 3618 10



Larry Verzi - 3741 25



Don Chenoweth - 8124 15



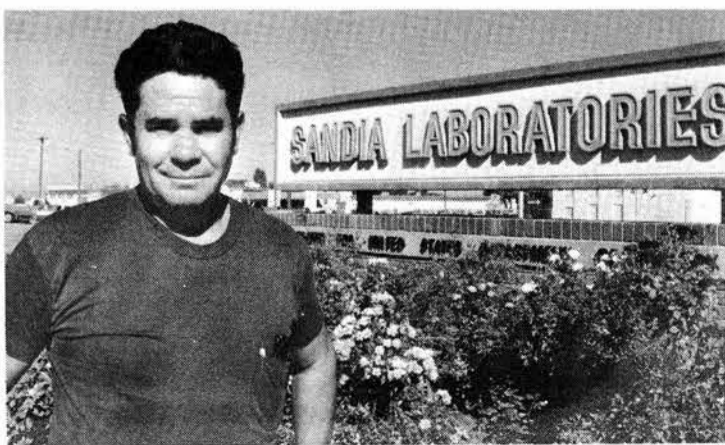
Moe Robert - 8257 20



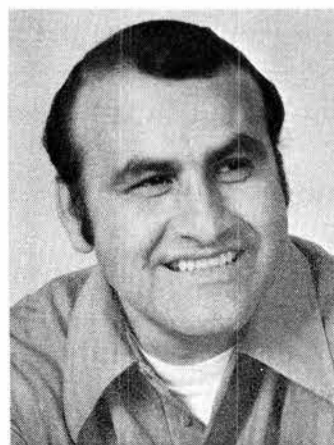
Barbara Champion - 3543 20



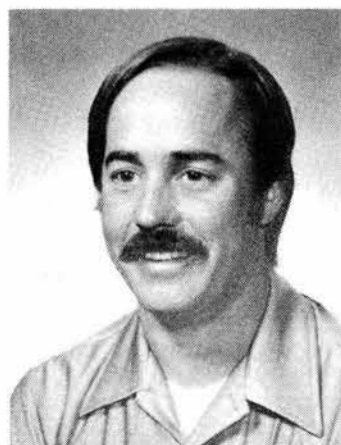
Margaret Lloyd - 2455 20



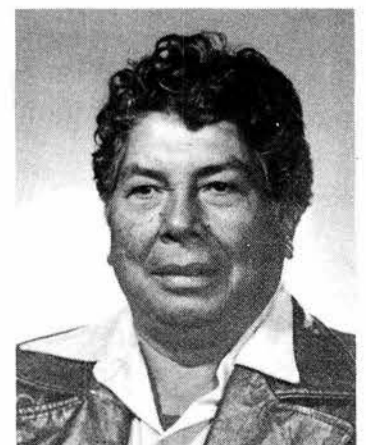
Gabe Chavez - 3423 30



Andy Cardiel - 8423 15



Richard Weatherbee - 1537 10



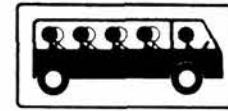
Miguel Garcia - 3618 10

My Favorite Old Photo

[Got an old photo that means a lot to you? Bring it over to the LAB NEWS and tell us about it.]



In 1924 Dad was 18 and in the 111th Cavalry of the National Guard, which later became the 200th Coast Artillery that saw action on Bataan. That's Dad at left on a training patrol on Rio Grande Blvd. near the Old Town Plaza. He remained a member of the Guard into the '30s. Dad's in his 70s now, lives in Alameda, still loves to ride. (David Salas—2611)



Commuter Notes

Sun-Tran Fare Schedules

Cash Fares

Adults	\$.45
Between 9 am & 3 pm on weekdays and all day on weekends	.20
Students (through high school)	.20
62 or older, handicapped, blind w/Sun-Tran ID	.20
Under five	free

Passes

Commuter monthly (available at Credit Union)	\$13.00
Semester (full-time student)	\$36.00
Punch—20 rides (available at Credit Union)	\$7.00

Tokens (available at Credit Union)

Adults—20 rides	\$7.00
Others—20 rides	\$3.50



Using the resources of the post office, you stand a reasonable chance of getting off the junk mail lists, but there's apparently not much you can do about junk phone calls. Hundreds of phone owners have turned to the Federal Communications Commission for help, but the FCC says they lack the "constitutional, jurisdictional and enforcement tools to effectively regulate junk calls." Which is too bad, because there are an estimated seven million such calls made in the U.S. every day.

JUNK • GOODIES • TRASH • ANTIQUES • KLUNKERS • CREAM PUFFS • HOUSES • HOVELS • LOST • FOUND • WANTED • & THINGS

CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication unless changed by holiday. Mail to: Div. 3162 (M0125).

RULES

1. Limit 20 words.
2. One ad per issue per category.
3. Submit in writing. No phone-ins.
4. Use home telephone numbers.
5. For active and retired Sandians and DOE employees.
6. No commercial ads, please.
7. No more than two insertions of same ad.
8. Include name & organization.
9. Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.

MISCELLANEOUS

PHONO CARTRIDGE, Sonus Blue label, \$50; motorcycle helmet, \$15; safety shoes, new, gray suede, 8E, \$20. Booth, 296-3955 after 5.
RV LP 3-burner range w/oven & hood, \$95. Ulrich, 881-2649.
VACUUM CLEANER, upright, 2-spd. w/attachments, K-Mart by Singer, new, \$80; round picnic table, 5 benches, \$75. Stang, 256-7793 after 5.
WASHER & gas dryer, gold, \$150. O'Neill, 898-5753.
REMINGTON model 600, caliber .308, 4x scope, \$175; 2300 Alcan maximum fire small rifle primers, \$12. Stuart, 299-9190.
GASOLINE GENERATOR 3000 watts, 2-cyl., 1800 RPM, old, rebuilt, \$400. Muirhead, 844-7885.
KITCHEN TABLE, enameled metal top, 1 drawer, 4 chairs, \$30. Phil-green, 256-1956.
COVER for round doughboy swimming pool, diameter 12', new, never used, \$12. Foor, 298-4980.
DINETTE set, 36" x 60" formica table, 4 chairs in salmon-colored vinyl, \$40. Lang, 884-5288.

TOSHIBA pocket LCD alarm clock/calculator w/full month calendar display, cost \$51.95 last June, sell for \$35. Hale, 298-1545.
BUNK BEDS, complete w/mattresses, frame, ladder, \$125. Atkins, 298-5762.
THERMOSTAT, Robert Shaw dual setback type, 24 hr. clock, continuous charge, 24 volt, fits most heaters, \$30. Nelson, 268-0208.
COMPLETE SET kitchen cabinets, built-in elec. oven & counter unit w/matching range hood, kitchen dinette set. Pewe, 884-3682.
4-BBL. CARTER CARB., Offenhauser manifold, air cleaner w/chrome cover, all for Dodge, make offer. Arnold, 898-1467.
75 YARDS of used carpet. Grant, 255-6105.
14' SEARS refrigerator, frost-free, copper-tone. Ingram, 298-0390.
STEREO SYSTEM: receiver, 8-track recorder/player, turntable, all in one unit, plus 2 speakers, Juliette, \$100. Mondy, 292-5286.
REGISTERED miniature Dachshund puppies: 1 female & 1 male, both red, but different shades. Ashbaugh, 1-384-2665.

SNOW TIRES, 2 Firestone A78-13 Snowbiter tires, used 1 season, \$35. Burd, 884-9133.
PIANO, Wellington spinet, walnut finish, recently tuned, \$900. Fisher, 298-0526.
SEIKO alarm chronograph, new \$325, includes all time functions, stop watch, night light, alarm, international guarantee, best offer. Collins, 292-0495.
DISHWASHER, O'Keefe & Merritt, harvest gold, \$15. Greenholt, 294-5286.
LAWN MOWER, \$40; glass fireplace doors, \$125; grate, \$17.50; humidifier, \$25; 2-element beam, \$35. Muchow, 299-1813.
HANSON SKI BOOTS, ladies' size 8, tan, 2 yrs. old, worn once, \$100. Hawkinson, 281-5239.
TROMBONE, Conn, \$150. Bando, 292-2452.
TWIN BED (Beauty Rest mattress, box springs, frame); bookcase headboard, dbl.; electronic parts for hi-fi & recording; misc. household items. Ronan, 268-0726.
TIRE CHAINS, fit most 14 x 15" wheels, used once, \$20. Clement, 299-1501.

DRYER, elec., \$100; grinder, 1/2 HP, \$25; bicycle, Schwinn 10-spd., \$75; ski boots, men's 9 1/2, \$30; ladies' 8 1/2, \$10. Nagel, 298-2779.
FREE 4 FEMALE, 7-wk.-old, 1/2 Ger. Shep. puppies, black. Iverson, 869-3123.

TRANSPORTATION

70 GREMLIN, AM-FM radio & tape player. Garcia, 255-3201.
76 FIAT, 5-spd., 4-dr., \$2450; or 73 Datsun SW 4-spd., 4-dr., \$1650. Lackey, 898-6638.
75 FIAT 128 4-dr. sedan, ST, AM-FM radio, Michelin radials, best offer. Neal, 299-3587.
77 FORD F-150 pickup, 400 cu. in. V-8, fiberglass shell, 23,000 miles, new tires, loaded w/options, \$4500. Wempe, 884-7325.
76 HONDA CB500T, 7655 miles, \$1200. Aguirre, 877-4430.
'66 MUSTANG, 6-cyl., AT, AC, \$2600. O'Neill, 898-3916.
BOY'S 20" Free Spirit bike, banana seat, hi-rise handlebars, \$35. Lang, 884-5288.
79 HONDA-Four, 750K, 3000 miles, \$2100 cash, firm. Gallegos, 255-5264.
'69 GTO, \$1400. Hunter, 869-2566 after 6.
78 LAVERDA 500-CETA, low mileage, cost new \$3000+, sell for \$1650. Stang, 299-8688.
73 OLDS 98, full power, 4-dr., AC, 59,000 miles, \$1500. Nowicki, 294-6572.
HONDA EXPRESS II, 900 miles, 90+ miles/gal., \$340 w/baskets. Blejwas, 294-2057.
78 HONDA GL-1000 Goldwing, windjammer, AM-FM radio, new tires, low mileage, \$2875. Marquez, 344-8455.
78 CUTLASS Supreme, PS, PB, AT, AC, cruise, AM-FM stereo cassette, 28,000 miles, below book/best offer. Tinker, 293-1729.
'80 YAMAHA Special 400, black, lots of chrome, golden touring plexiglass fairing and windshield, \$1700. Montoya, 836-1809.
'67 MERCURY Monterey, 4-dr., HT, PB, PS, AC, one owner, \$575 or best offer. Flaxbart, 255-9271.
'73 MAZDA Rx stn. wgn., AT, AC, priced to install new engine, \$450. Pendall, 265-3008.

74 MIDGET, European racing orange, \$2000, negotiable. Gauerke, 281-5876 after 3.
'65 MUSTANG convertible, 289 V8, AT, PS, recent paint, new top, \$3700. Greenholt, 294-5286.
78 YAMAHA motorcycle, 125 Enduro, street and/or dirt, Monoshock, turn signals, 6-spd. Hyde, 268-2885.
79 HONDA CB750F, w/windjammer, low mileage, silver color, \$2100. Vigil, 255-7920 or 294-2771.
78 DATSUN B210GX blue hatchback, AC, 5-spd., OD, radial tires, custom wheels, AM/FM stereo, \$400 under Blue Book. Gregory, 268-2022.
77 MITCHELL RV, 9500 miles, self-contained, sleeps 6. Wickham, 293-6340 after 5.
BICYCLE, 3-spd., Raleigh, girls' 24", 2 yrs. old, \$80. Holt, 294-6928.

REAL ESTATE

3-BDR., 14x70 mobile home, AC, partially furnished, entry porch, skirted, SLFCU loan value \$12,050, asking \$11,500. Sylvester, 256-0404.
24x44 MOBILE HOME, 3-bdr., heated workshop, all appliances, low lot rent, set up and ready to move into, 1 mi. from Wyoming gate. Hufnagel, 294-5949.
NE HTS. home, 3-bdr., 1 1/2 bath, FR, convenient to Lab, low down, assumable loan, \$59,900. Whitley, 293-1828.
MOBILE HOME, 3-bdr., walk-in closets, LR w/fp, carpeting, 1 yr. old, family section Four Hills, \$28,500. Tye, 293-6961.
MOBILE HOME, 14x80 Solitaire w/energy pkg., 2 bdr., 2 bath, walking distance to Base. Wickham, 293-6340 after 5.
2300+ SQ. FT., block const., adobe style, 2 fp, 2 full bath, 4-bdr., den, mature trees, many extras. O'Malley, 873-1200.
MOBILE HOME, 24' x 56', 1 1/2 baths, carport & awning, storm windows, stove, refrig., washer, dryer, set up in adult park, consider offers. Magruder, 298-9119.

WANTED

TRADE piano lessons for guitar lessons. Padilla, 296-8772.
'69 MUSTANG owner's manual to borrow for one day; also want to buy '69 Mustang jack w/handle. Underhill, 294-5774.
TO RENT HOUSE, isolated, rural, in mountains or near river, within 40 mins. of Base. Dodson, 821-8803.
TO RENT cabin or condo near northern NM or southern Colo. major ski resorts for long weekend. Shoaf, 296-6166.
PIANO TEACHER, long term, for beginners, located in or near SE heights, w/references. O'Bryant, 268-9049.
FULL SIZE cello in good condition; compressor w/100 psi or more rating. Worrell, 299-0381.
HOUSEMATE: non-smoking female, share 2-bdr., 2-story townhouse w/garage, pool & fp, \$190/mo. + 1/2 util., avail. Nov. 1. Barhydt, 268-6682.
FURNISHED HOUSE to rent Jan. 1-Aug. 1 by Prof. & wife on assignment at Sandia. Eagan, 281-5696.
HOUSEMATE: nice house, Menaul-Eubank area, extra lg. room plus plenty living space, \$100/mo., share utilities. Cosden, 296-1220.
PEOPLE interested in a 2-week sailing tour of the Galapagos Islands sometime in early 1981; will cost about \$2000/person. Carnicom, 281-3421.

WORK WANTED

BABY SITTING in my home weekdays. Four Hills Mobile Home Park. Booth, 296-3955.
SMALL masonry jobs, brick & block, new construction or remodeling. Rogers, 344-9991.

SHARE-A-RIDE

NEED fourth carpooler from Paradise Hills area. Arnold, 898-1467.



ON TO LUBBOCK! ON TO DALLAS! ON TO ALBUQUERQUE! Anyhow, that's the sequence the Wolfpack followed on a recent long weekend as they watched

the Lobos in Lubbock and the Cowboys in Dallas. The bus was a sellout and bus honcho Bob Banks plans many more.

Coronado Club Activities

Sit-Down Dinner Tonight Features Four Entrees

TONIGHT the traditional buffet is replaced with a sit-down dinner. Waitresses will serve your meal, selected from an impressive menu, while Jeanne Rich and Friends provide the entertainment, 8 p.m. to midnight. The menu includes: hors d'oeuvres (\$1.95) of fried mushrooms, sweet & sour meatballs, shrimp cocktail or combination platter; entrees (\$6.50) of prime rib au jus, broiled salmon steak, veal a la Oscar, or London broil w/Bernaise sauce. All are served with salad or fruit cup, vegetable du jour, and a choice of rice pilaf or baked potato.

The Oct. 10 buffet features steamship round of beef (adults \$5.25, children \$2.75), and Youngblood to entertain.

VARIETY NIGHT on the 11th offers The Great Barnaby and his musical juggling act plus a full-length movie, *Paco*, with Jose Ferrer.

WOLFPACK members will enjoy a preview of the upcoming basketball season given by UNM Head Basketball Coach Gary Colson at the Club on the 28th. If you're interested in riding the bus from the C-Club to the Arena for Lobo basketball games, then call Pro Padilla, 4-3462.

TRAVEL: The Caribbean cruise out of Miami (Dec. 13-21) is full with a short waiting list. Some cabins are available on the *Amerikanis* for its Jan. 3-10 cruise starting and ending in San Juan, Puerto Rico. It's \$1125 per person (double occupancy) for the entire air-sea package.

The first "Real Mexico" tour for this season leaves on Nov. 6. The Mazatlan trip (Nov. 3-10 and 10-17) has a short waiting list, but space on the holiday season (Dec. 28-Jan. 4) bus tour to Anaheim is still open. This trip takes in a casino at Laughton, Nev., Disneyland, the Rose Bowl Parade, Wild Animal Safari, Grand Canyon, and more (\$315 per person).

PRO PADILLA (3735) is the FY 81 president of the Coronado Club Board of Directors. Other officers and committee assignments are: Charlie Clendenin (2633), VP/Publicity; Ron Ward (1483), secretary/special interest groups; Dick Shepardson (3242), treasurer; Dick Chapman (3244), Sandia representative; Gil Cordova, DOE representative; Bob Banks (5000), pool/patio and tennis; Frank Biggs (4231), travel; Adele Caldwell (3416), special events; Frank Gallegos (3510), capital improvements; Bernie Kenna (5812), bar and membership; Nick Magnani (5840), recreation; and Julian Romero (DOE/OPD), entertainment and food.

THE C-CLUB JUNIOR BOWLERS need youngsters age seven through high school to bowl Saturday mornings at San Mateo Lanes, starting at 9. Three lines cost \$2. The league participates in city and state competitions. Call Cis Kelly, 255-8011.

Go For Fun: Horseshoes

Club Cultivates Ringers

[Ed. Note: With this issue, LAB NEWS begins a series describing the many recreational programs now offered by the Coronado Club.]

Every living American male has played horseshoes. We concede that in the inner urban fastness of places like New York and San Francisco, there may be a male or two who hasn't, but we haven't met him/them. Horseshoes is that comfortable, down-home pastime, full of sociability, played whenever the weather is right and you've got a half-hour or more to spare.

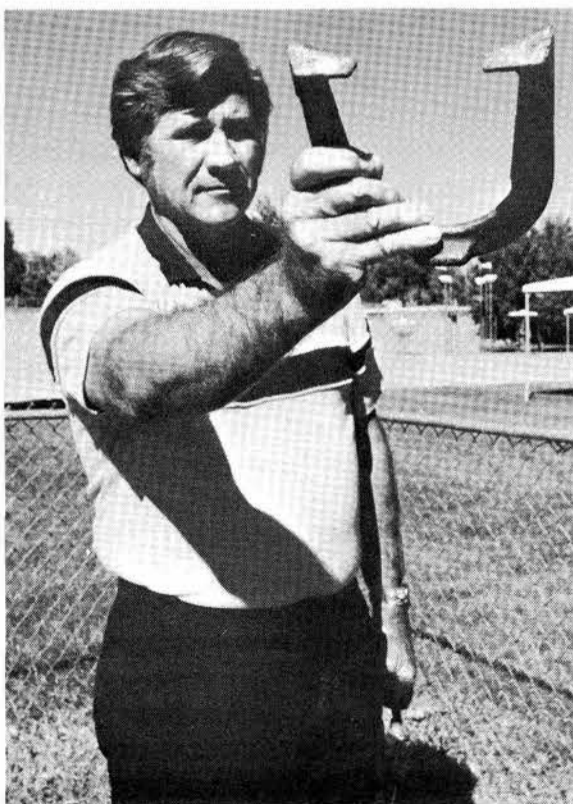
Sandians have been at the game since Sandia came along. Up to the early '70s, the Tech Area had numerous courts and, during lunch, the clink of horseshoe and stake was heard around many buildings. But then the Labs expanded and the courts were covered with buildings, so that now only the courts south of Bldg. 892 remain.

Bob Schuch (4233), who heads the

Coronado Horseshoe Club, hopes he can change all that. "We've got two regulation courts down at the Club," Bob says. "I'd like to see more in the Tech Area—they don't take up much space, they're cheap and if we had them I think a lot of men—and women—employees would be out there pitching."

The Horseshoe Club has 35 members, and the season runs from April through October. Sandians, DOEans and contract employees may join, and family members may participate as well. A number of women are active in the game. Members challenge one another, and both local and regional tournaments are offered during each season. All play is under National Horseshoe Pitchers Assn. rules.

Interested? Then attend the Club's next meeting, after work on Oct. 9 at the C-Club. Or contact one of the following: Leo Bressan on 4-7933, Dan Padilla on 4-7579, or Bob Schuch on 4-2676.



TOM TOWNE (1124) shows the style that won him the New Mexico State Championship at the recent State Fair.