



# LAB NEWS

VOL. 32, NO. 18

SEPTEMBER 5, 1980

## Wind Energy

### **ALCOA To Build Labs-Developed Wind Turbines**

Four vertical axis wind turbines (VAWT), each capable of generating about 100 kilowatts of electricity, are being built by the Aluminum Company of America (ALCOA) for installation at four sites under a \$1.6 million contract with DOE.

Sandia National Laboratories, which is heading Darrieus VAWT research and development, is providing technical support for the project and will monitor initial operation of the machines.

The first ALCOA-designed VAWT is being erected near Denver, Colo., and the electricity it produces will be used at DOE's Rocky Flats Facility. A second machine will be installed in November at a Department of Agriculture Experiment Station at Bushland, Texas. Sites for the other machines have not been selected, but prospective sites in the areas of steady winds are being investigated.

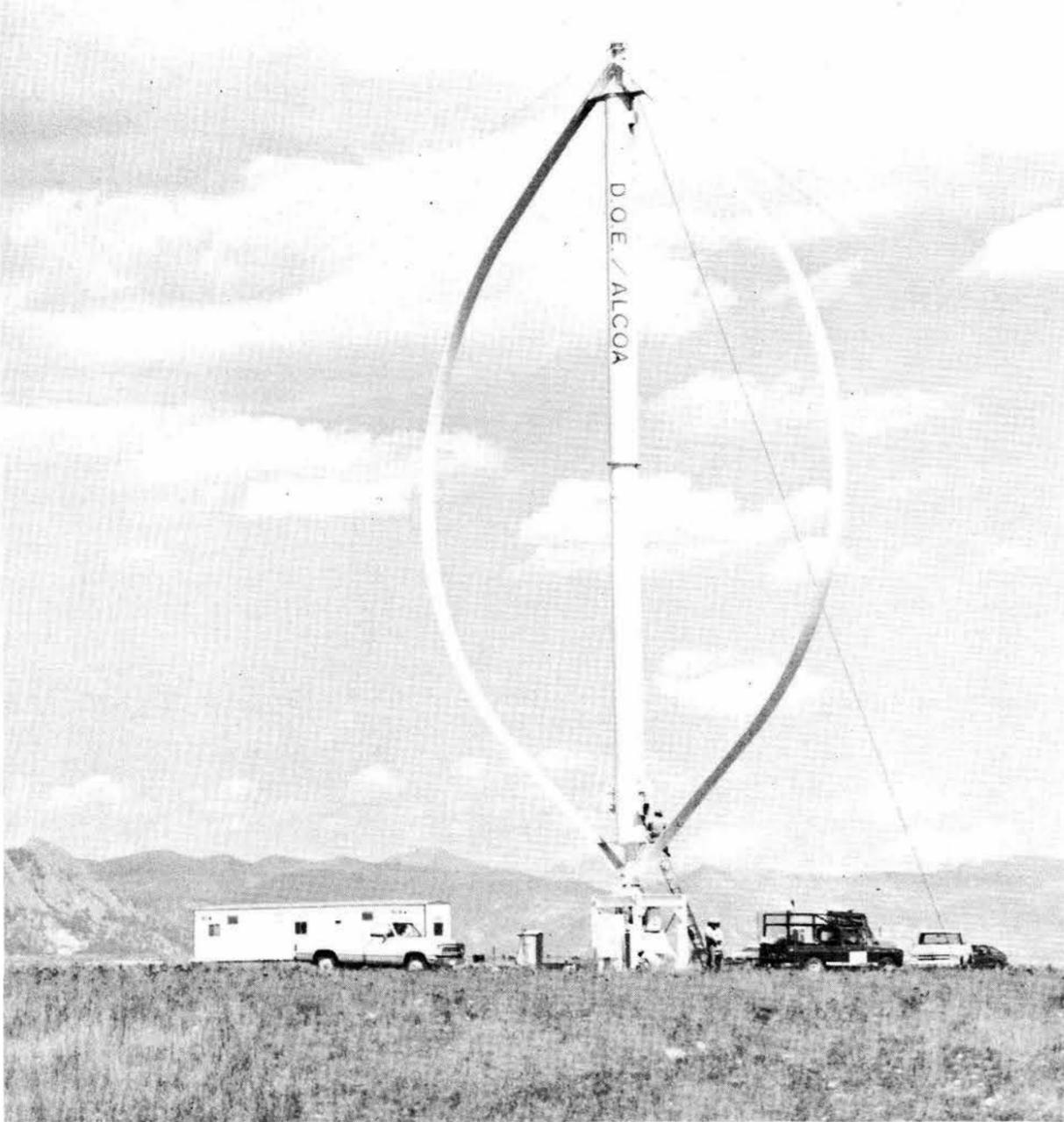
Electricity produced at the Bushland site will be used to pump water from a 300-foot-deep well or to the sprinkler irrigation system. Excess electricity will be fed into the electric utility grid. The utility, which is limited in capacity for powering new irrigation systems, will purchase the excess VAWT-generated electricity.

The new VAWTs will have two blades, each attached at the top and bottom of a rotating vertical shaft to form an egg-beater-shaped unit, 56 feet in diameter and 82.5 feet high. The 24-inch-wide, 100-foot-long blades, formed like an airfoil, were extruded and bowed using an ALCOA-developed method that is relatively inexpensive. This low cost, combined with the inherent simplicity of the VAWT, is expected to make the output from the machines cost competitive in areas of steady winds.

The VAWT utilizes wind from any direction without a device to turn it into the wind; it needs no feathering device to keep it from producing more power than the rated capacity of its generator; and does not require a complex tower structure because generating equipment is placed at ground level.

Feeding electricity directly into utility lines—probably the greatest potential use of the machines—eliminates the need to store electricity for later use.

Sandia began investigating the VAWT in 1974 and is now operating its original 15-foot-diameter model as well as a more sophisticated 55-foot-diameter research turbine. The objective is to design long-life, low-cost VAWTs that can be produced and marketed by industry. The work is funded by DOE's Wind Systems Division. The effort at Sandia is centered in the Advanced Energy Projects Division 4715 headed by Dick Braasch.



DEVELOPED at Sandia, this vertical axis wind turbine has been built by ALCOA at Rocky Flats, Colo. It generates 100 kilowatts of electricity. Three more such turbines are planned at other locations around the country.

## Super Computer

### **Cray-1 Delivered To Livermore**

Delivery last month of a Cray-1 Model S/500 super computer to Sandia National Laboratories Livermore places the Labs among a select group of the nation's computer systems users.

"The Cray places us in an excellent position to manage today's complex calculations in science and engineering," said Tom Cook (VP-8000), adding, "The Cray is one of the most advanced super computers in the world."

The \$7 million system, being installed in the SNLL Computing Center, includes 500,000 words of central memory, eight disk units with a total storage capacity of 2.4 billion bytes (characters), and related software. Cray Research also will provide interface units for integrating the Cray with the existing dual CDC 6600 system.

The CDC 6600 peripherals will also be upgraded.

The Cray will allow Sandia staffers to perform calculations previously intractable. Component design studies and energy research problems, which would have taken tens to hundreds of hours with existing equipment, can now be run overnight, and problems that previously involved overnight turnaround can be run in minutes during the regular workday.

How powerful is the Cray? Arnold Schuknecht (8333), whose Computing Division is responsible for the system's care and feeding, reports that when computer programs are modified to take advantage of the machine's vector capabilities, "We

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DICK ROGERS (3241)

## Supervisory Appointment

DICK ROGERS to supervisor of Programmatic Support Division 3241, effective Aug. 16.

Since joining Sandia as a staff auditor in November 1964, Dick has had assignments in general accounting, plant accounting and, more recently, in budgeting. His career was interrupted for 16 months when he was called up with the N.M. Air National Guard in 1968 to serve in Korea.

Dick earned a BSC degree in science and commerce from the University of Louisville. He is a certified public accountant and a member of the National Association of Accountants. His leisure activities include reading, fishing and camping. Dick and his wife Nancy have two children and live in NE Albuquerque.

## Take Note

*A Personal Philosophy in the Changing National Defense and Energy Environment* is the theme of the 1980 Science, Philosophy and Religion Symposium to be held Sept. 11-13 on Kirtland West. Examining the theme topic from a variety of approaches will be five invited speakers: Richard Bube of Stanford, Robert Dinegar of LASL, Peter Franken of the University of Arizona, Theodore Malloch of Gordon College and Gerald Nash of UNM. Moderator will be Col. Glenn Jones of Tactical Air Command. Limited seating in Conference Room 3, Air Force Weapons Laboratory, Bldg. 414, Kirtland West, necessitates advanced registration. Tax-deductible registration donation is \$10. Forms and additional info from Capt. Dave Ellis, 844-0196, or Hank Happ, 255-4313.

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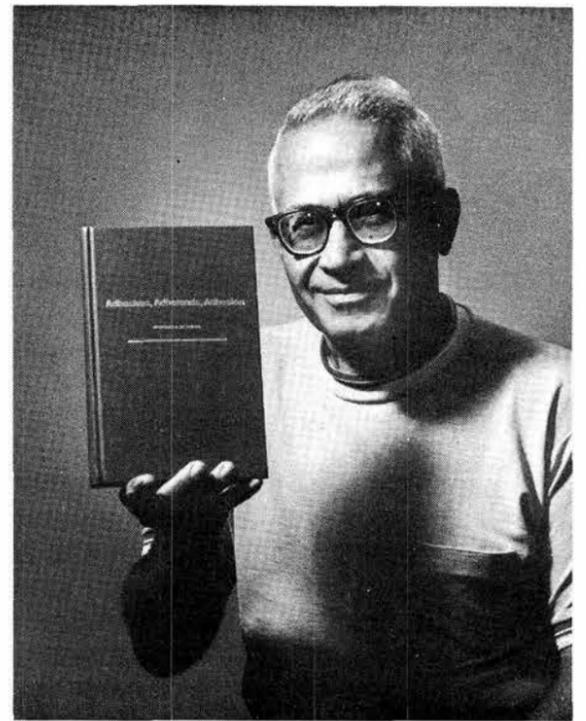
Retiree Felix Padilla continued his winning ways by taking the "Best of Show" award in the recent national invitational artists Alpine Holiday and Festival art exhibit in Ouray, Colo. His winning painting, "Clouds All Around," was purchased by the Ouray County Arts Association for its permanent collection, which is displayed in the County Courthouse.

\* \* \*

*The Sandians* describes an organization for wives of past or present employees whose purpose is to provide education and social activities for its members, and to help introduce newcomers to Albuquerque. Meetings, held on the first Monday evening of each month in a member's home, feature a speaker. Various interest groups also meet monthly, and a baby-sitting co-op is a popular service. Several social events each year include husbands. If you'd like to get the monthly newsletter or wish further information, Marjorie Berry is the contact at 294-3549 or Kitty McLellan at 299-0266. Sept. 8 is the date of the next meeting, and it's open to non-members as well as members.

\* \* \*

A major conference on solar energy is scheduled for next week, Sept. 9 to 11, at



RETIREE NICK DELOLLIS, who left Sandia last January, has just come up with his second book. *Adhesives, Adherends, Adhesion* (Krieger Publishing Co.) presents a comprehensive view of the theory, materials, and technology in the world of adhesives. Besides his publishing activity, Nick now pursues consultant work.

the 4-Seasons Motel in Albuquerque. Sponsored by DOE and Sandia, it is entitled "Line-Focus Solar Thermal Energy Technology Development Conference," and its chairman is Virgil Dugan, head of Solar Energy Projects Dept. 4720. Sidney Johnston (4715) is conference coordinator. Purpose of the meetings is "to provide for the exchange of the current state-of-the-art and predictions for future line-focus collector technology." Many exhibits are anticipated and more than 300 people are expected to attend.

### Go For Health

"Natural Occurrences: Dying, Death and Grief" is the topic of this month's *Go For Health* program. Joan Guntzman, Director of Counseling at Presbyterian Hospital is the speaker, and she will discuss death as a part of life and how to deal with it. The program is set for Tuesday, Sept. 9, in Bldg. 815 (outside Tech Area) from 12 to 12:30 p.m.



"It is one of the great mystifications of science," says Lewis Thomas of Memorial Sloan-Kettering Cancer Center, "that warts can be ordered off your skin by hypnotic suggestion. Not everyone believes this, but the evidence goes back a long way and is persuasive."

## LAB NEWS

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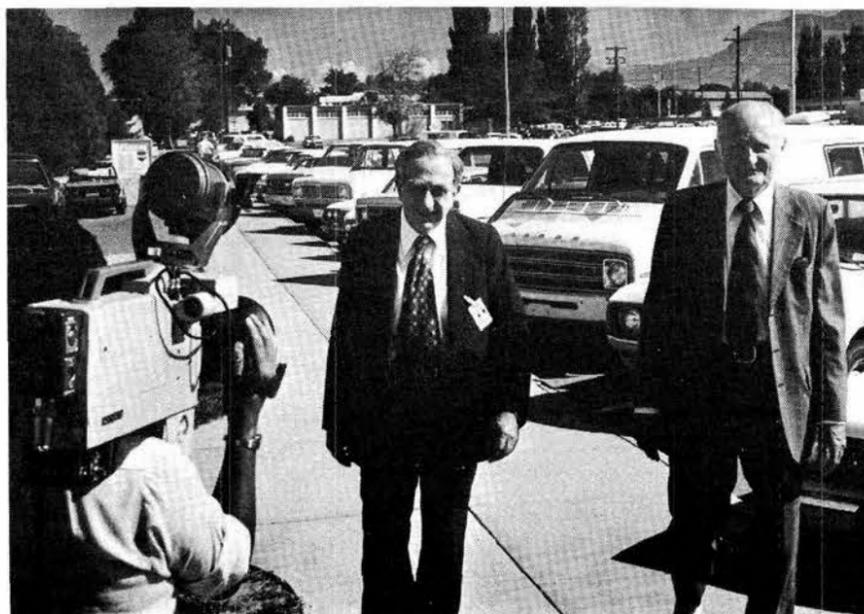
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PHYSICIST Edward Teller walks with President Sparks to the Base Theater where, in a colloquium presentation before a full house, he treated the audience to a mix of scientific discourse and acerbic wit. An outspoken advocate of nuclear power, Teller now spends much of his time explaining the subject to audiences around the country.

# Sandia Makes Corporate Cup Nationals

Twenty-one Sandia Livermore runners were among those participating in the 1980 Corporate Cup National Championships last month at the Stanford University track. The Championships were held on Saturday (trials) and Sunday, with more than 64 corporations competing in 11 events on the first day in order to qualify for Sunday's finals.

Each of the Sandians who ran had qualified in the previous month's regional Corporate Cup Relays when they competed against several hundred other employees of Northern California companies.

"This was the third year for the Corporate Cup races, the second year Sandia participated in the regionals and the first time in the nationals," says Jerry Williams (8272) who coordinated the Sandia teams. "Again, a great time was had by all. Everyone who ran during the two days at some point ran his or her personal best. We made a respectable showing considering we're a local team up against some hand-picked squads selected from all over the United States."

The 21 Sandians entered 10 of the 11 events. Overall they finished 29th. The Sandia team which qualified for Sunday's finals—Dave Bray (8461), Barry Bolden (8212), and Dick Shimada (8271)—led Sandia to an 11th-place finish (out of 14) in the master's relay.

Other Sandians who participated: Dale Boehme (8313), Carol Ford (8341), Annette Freitas (8347), John Hachman (8271), Len Hiles (8151), Tom Jefferson (8332), Carolyn Kramer (8313), John Liebenberg (8112), John Martin (8161), Carl Melius (8326), Oak Noell (8341), Bill Ormond (8261), Dave Ruddle (8271), John Smith (8271), Bill Spencer (8100), Bill Wilson (8341), Chris Wilson (8315), and Genine Winslow (8312).



LEADING (at right) in the first lap of master's relay is Barry Bolden (8212).

# LIVERMORE NEWS

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LIFTING the Cray's 10,500 pounds from moving van into the basement Computing Center at Sandia Livermore.

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## Cray-1 Delivered To Livermore

can expect 20 or more times the speed of one of our existing CDC 6600s." C. M. "Spike" Leonard (8333) explains the system's capability this way: "If a person using a hand calculator did one calculation, per second for eight hours a day, it would take five and a half years to accomplish what the Cray can do in one second." The system can perform some 20-60 million additions and subtractions per second, much faster than any other computer system in the world. The Cray-S series, newest in the line, has the added advantage of being upgradable in the field.

Despite its power, the Cray is small in physical size compared to earlier scientific computers. The mainframe unit contains some 200,000 integrated circuits, 3400 printed circuit boards, and more than 60 miles of wire, but takes up less than 70 square feet of floor space. It stands six and a half feet high on a nine-foot-diameter base and weighs 10,500 pounds. The central unit is cooled by two 25-ton compressors in tandem and draws 115 kilowatts of power.

Systems programmer and computer operator training has been underway since May at Livermore, with 17 people from Org. 8333 taking this training. Several

hundred more Sandians will be trained in the coming months.

The Cray has the ability to expand in response to Sandia's growing requirements during the 1980s. Central memory can be expanded up to a maximum of four million words. The input/output capabilities may also be increased by the addition of I/O processors, additional disk drives and high-performance tape equipment. Future plans call for the addition of a mass data storage sub-system and modern time-sharing capabilities.

Procurement of the new equipment has been a two-and-a-half-year effort on the part of a Sandia team headed by Arnie, including Dick Isler and Gene Angvick (both 8333), Tom Jefferson and Jim Lathrop (both 8332), and Al Derby (8264). Also participating in various phases of the study and acquisition were Kelly Montoya (2630), Walt Williamson (6001) and Fred Whitworth (8333).

### Sympathy

To John Keilman (8121) on the death of his father-in-law in Spokane, Wash., July 31.

## Youth Activities Program Goes Year-Round At KAFB

Young people 6 through 18 years old whose fathers or mothers are employed at the Labs are eligible to participate in the KAFB Youth Activities Program. Designed as a year-round program, with minimal membership fees, youth activities provide professionally planned social, cultural, creative, educational, sports and outdoor activities.

"Specifically," says Larry Hileman, director of the program, "we offer two things: the facilities (and there are two youth centers—one on the west side and one on the east side) and the programs sponsored by the center."

Sponsored athletic programs include: swimming, bowling, junior wrestling, basketball, soccer, softball, football, volleyball and T-ball (kids' baseball). These activities employ both volunteer and professional coaches and officials, and the teams participate in season-end local and regional tournaments.

Social and recreational programs at both youth centers feature an abundance of board and card games; Monopoly, backgammon, risk and chess are examples. Large table games are also popular: air hockey, atari, bingo, bumper pool, foosball, pool tables, shuffleboard, table tennis, and pinball machines.

"The center is really a fun place," Larry says. "We're not baby-sitters, but parents of these kids know that they are supervised. We have an excellent staff and offer all types of activities. Parents are invited to compete in family tournaments like the father and son pool tournament or family flag football games. And parents often come along with the kids on our cultural or recreational trips."

Other services at the center include: free tutoring in all academic areas for 6th through 12th graders; lessons, with fees varying from none to nominal, in the



**CHESS** is one of many games available at the KAFB Youth Center for young people 6 to 18 years of age. The kids can take lessons, come in and practice, then compete in one of the many weekly tournaments. The Center offers much more—youth athletic programs, tutoring, trips, picnics, movies. And the facilities and programs are open to dependents of Sandians.

following: backgammon, chess, gymnastics, judo, golf, poker, guitar, arts & crafts, dance (ballet, disco, creative, modern and tap), skiing, baton twirling, cheerleading, tumbling, karate, swimming, pinochle, piano and tennis. "If we don't list a program that a parent or child is interested in, just let us know," Larry says. "We'll run an interest count and if it can be added, it will."

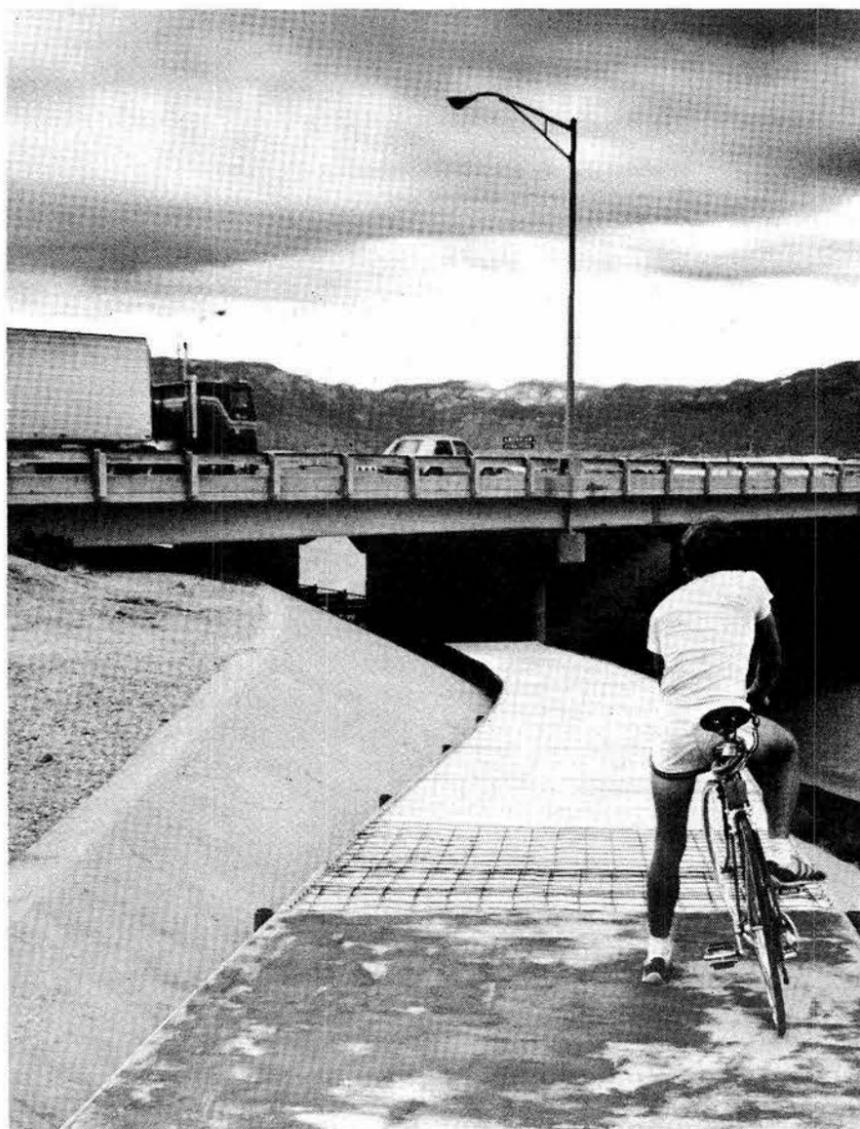
Funding for the Youth Activities Program comes from three sources: 1) appropriated funds (military funding), 2)

nonappropriated funds (membership dues, registration fees, entry fees), and 3) United Way (Sandians' ECP donations are a part of United Way money).

During the summer the center is open from 12 to 9 p.m. The facilities are used for lessons during morning hours; Saturday afternoons are set aside for sub-teens (ages 6-12) and Saturday evenings are for senior teens. The East Side Center is located at the corner of "F" and First Streets, Bldg. 20219, across from the gas station. The telephone number is 844-9975.



"**GREAT FISHING**," reports retiree Joe Ozmina from Homer Spit, Alaska. Joe and his son, who works for BLM out of Anchorage, caught huge lake trout (5 lbs., average size) and 128 king crabs during a long weekend. They also fished the Russian River and "other exotic places." Joe retired from Sandia in 1968 after working 16 years in environmental testing of components.



**PASEO DEL NORDESTE** — Albuquerque's first commuter bike path is shown here as it dips under I-40 to head north and east to the vicinity of Sandia High School. Still under construction, the seven-mile trail follows the flood control channel and begins near BCMC and UNM. Completion is expected by November. Sandians Terry Stalker (4426) and Sharla Van Devender (4533), members of the city's Bikeway Committee, were principals involved in the planning and development of the bike path.

# A Colorado Bicycle Tour

by John Shunny, LAB NEWS

I like bicycling, and when I had the recent opportunity to join a group of cyclists for a tour of southwestern Colorado, I quickly accepted. Our group of nine, mostly Sandians, was accompanied by two support vehicles and we thus were able to cycle unencumbered by camping and other equipment.

The tour is now completed, and I plan to relate here what it was like for the benefit of those hundreds of Sandians who, like me, do a fair amount of daily cycling but have never undertaken a bicycle trip in which, every day, you get up, get on your bike and go.

Was it fun? Well, yes, but that's the answer you give years later when asked if you enjoyed Marine boot camp. There are the moments of quiet pleasure as you cycle through a Colorado valley of a morning, nodding at the solitary cow gazing at you. And there are the moments of exultation when, at long last, you reach the summit of the pass (in Colorado, there's always a pass). And, occasionally, there's the enjoyment of riding with another biker, though these visits tend to be short because a cyclist adopts a certain pace that almost never is the same as the next person's.

Perhaps it's obvious, but bicycle touring has a physical component of considerable extent. We spent six or so hours in the saddle daily, and the moments came, especially inching up to the summit of the



BICYCLE touring in southwestern Colorado is an uphill proposition. Monarch is one of the higher passes at 11,312 feet. Regrouping and recouping after the climb are Billy Brock (2343), George Patton (1253), Jim Harrison (4311), Janet Brock (4342), tour leader Jim Parvin (4332), Wilson Brooks (4332) and John Shunny (3162).

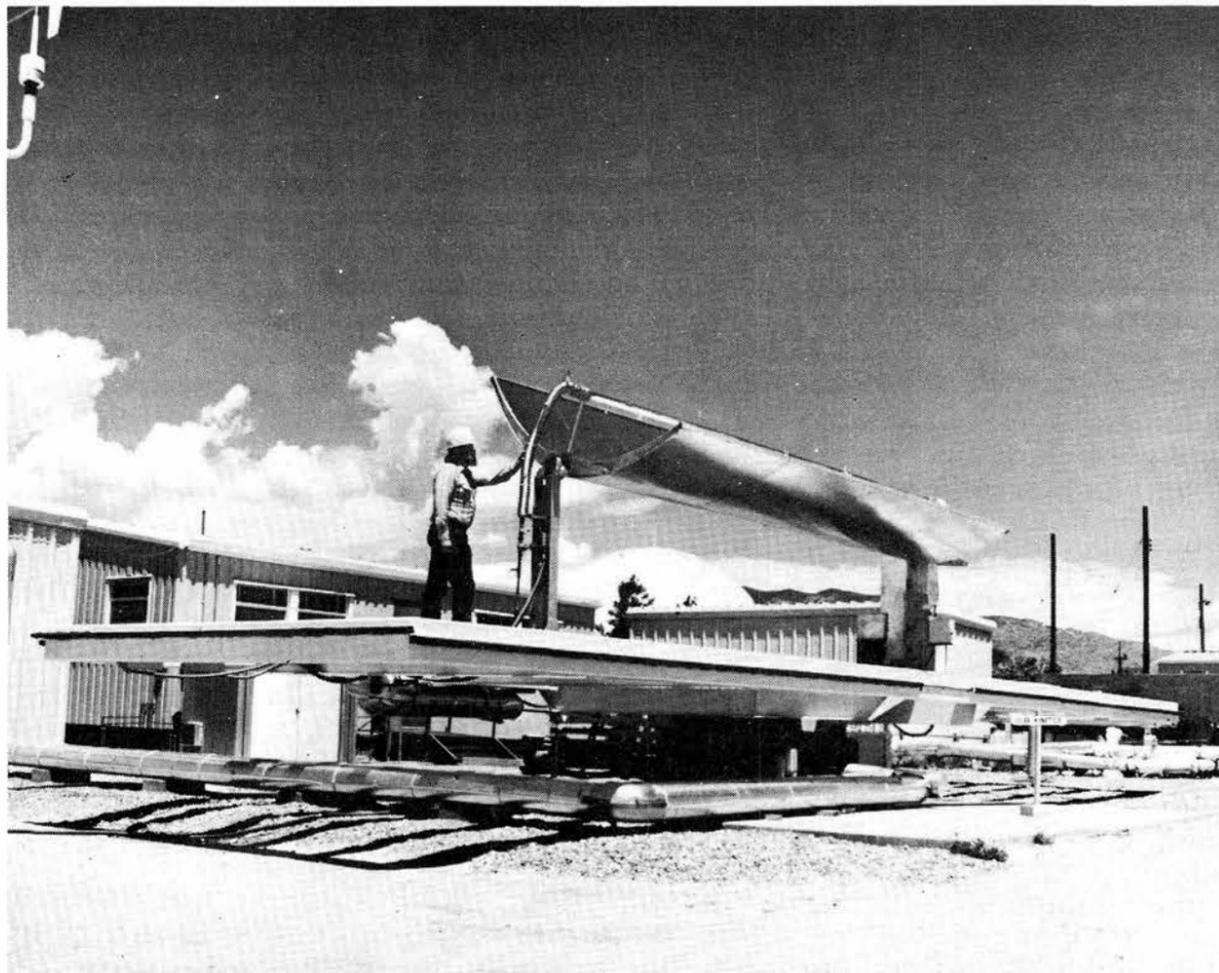
next pass, when one wondered if physical resources were equal to the challenge. I suppose a healthy young person, not particularly fit, could undertake a bicycle tour and gradually reach the point where the daily mileage was not unduly tiring. But there would be days of pain and fatigue, and I would urge prospective bike

tourers to prepare. Even on the flats, bike riding takes effort. I'd judge that you should be able to complete 50 miles without undue difficulty before undertaking a tour.

Then there's the traffic. You usually follow secondary roads to avoid it, yet other people have this idea and, in Colorado in July, these roads are busy with recreational vehicles, campers and trailers. Most intimidating of all are the 18-wheelers. When the shoulder is narrow and a tractor/trailer whooshes by with inches to spare, the effect is chilling.

On our bike tour (covering a loop defined by Durango, Montrose, Salida, Alamosa and Pagosa Springs), most of the riders were underway for seven days. I joined the group later and spent four days cycling. For me that was just about right. The experience and its duration reminded me of skiing vacations where, after three or four days, I reach the saturation point and interest wanes. Be assured—bike touring is fun . . . but you'll want to consider how much of that brand of fun is appropriate for you.

(A technical note: gearing is all in the mountains of Colorado. Before the trip I made the simple installation of a 36-tooth chainwheel which, combined with a 32-tooth rear sprocket, gave me a 30-inch gear, just about right for grades that ran up to 8%.)



LAZY SUSAN—To collect data on the peak performance of a parabolic trough solar collector, the researcher is normally limited to the brief period around the solar noon. But this rotating platform, controlled by microcomputer, compares collector angle with the position of the sun at any time and maintains the "solar noon" orientation (or any other), thus permitting long periods of stable test conditions. The platform is a new addition to the Collector Test Facility run by Experimental Systems Division 4721.



The most treasured reward for work well done may be that proverbial pat on the back and a heartfelt, "Thanks! I don't know what we'd have done without you." "The truly mature, well-adjusted individual," writes UC Berkeley Professor Wayne Wilcox in *Forest Products Journal*, "should be able to obtain full satisfaction from knowing the job was well done. Nevertheless, most of us don't have that utopian degree of self-sufficiency. We still have the need to hear it from someone else occasionally."

# Sandians Enjoy Jamaican Vacation—Before The Hurricane

Last January when retiree Gabby Gabaldon and his wife Pauline took up Peace Corps duties in Jamaica, they invited friends to drop in if they happened to be in the area. Two friends did. They are Katy (1135) and Denny (3743) Gallegos who spent 10 days with the Gabaldons last month.

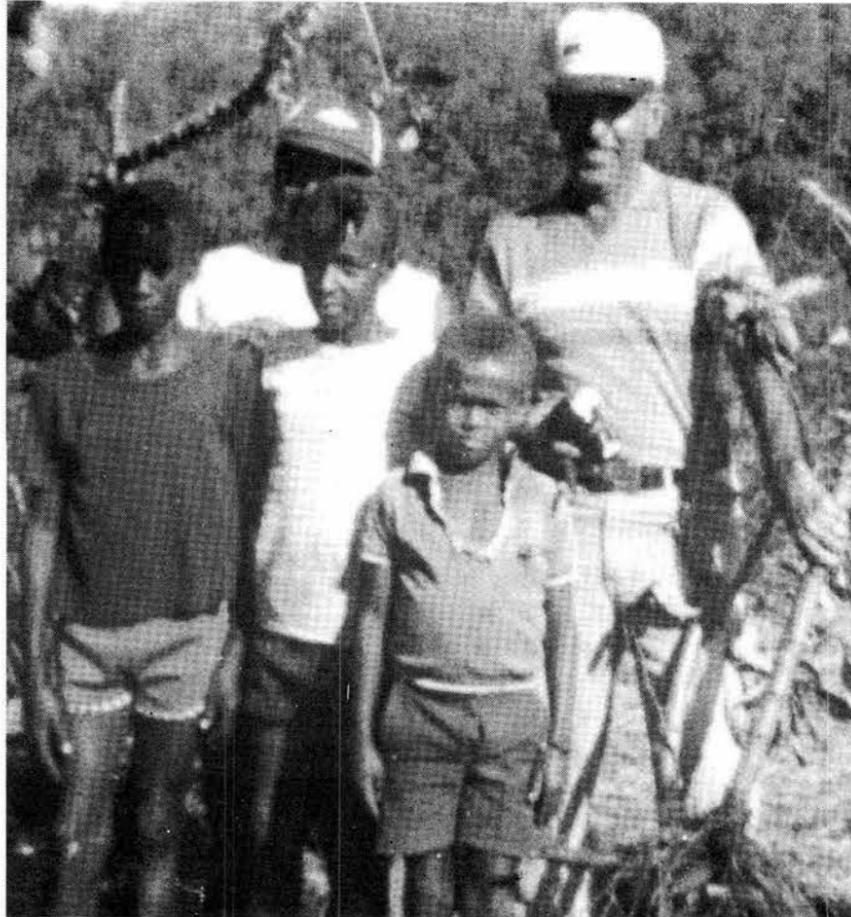
Denny brought us up to date: "Gabby and Pauline lived with a family in Kingston when they first arrived in Jamaica. But they now live in a duplex in the town of Mandeville, where Gabby is overseeing the construction of an automotive workshop. He's in charge of construction, and of management and operation of the shop. And he teaches mechanics to shop supervisors who, in turn, train their own staff. Pauline is instructing village women in home economics, child care and family planning.

"The island, 60 miles wide and 250 miles long, is really beautiful," Denny says, "with mountains, lush growth and wonderful beaches. Farming and bauxite (principal source of aluminum) mining are the main industries, but most of the people are very poor. The crops include bananas, mangoes, rice, pineapple, sugar cane, some wheat and corn; the fresh fruit is wonderful!"

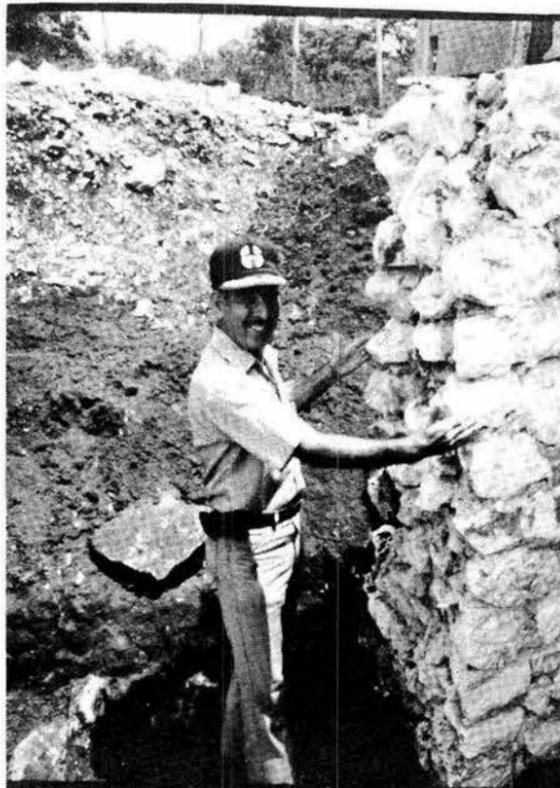
Denny says that the people, mainly of African origin, are happy and very friendly. They speak an English *patios* and they eat lots of goat and chicken curry, fish, black-eyed peas and rice. "After a few days I was ready for a change of food," he says, "so when Pauline made us some enchiladas, we truly enjoyed the meal. Katy took a 'care package' to Pauline containing red and green chili, pinto beans and jerky."

Katy and Denny recently had a letter from Gabby telling them about Hurricane Allen. Early predictions indicated that the center of the storm would hit the south side of the island (where Mandeville is located) but it shifted to the north side. ". . . Hurricane Allen gave us a good scare . . . thank God we were lucky. We prepared for the worst and boarded up all the windows. Pauline and Mini (their helper) put food and plenty of water under the house . . . if we saw the storm coming our way we would all get under the house . . . We stayed up all night listening to the radio . . . the power had been off for two days and all we could hear was a roaring sound outside. By this time, we knew the storm had swung north but we had high winds and very heavy rain."

Gabby continues: "Since you were fortunate in seeing the hotels and beaches, you can visualize damage to the northern part of the island. In Port Antonio the Trident Hotel is no longer there. It disappeared into the sea and all the beach is washed out. In Ocho Rios the International Hotel has 18 inches of mud in the lobby . . . and no more beach. Katy, remember where you danced by the bandstand and that outdoor restaurant? It's no longer there, all washed out . . . all those trees and the beach where we rented the



YOUNG FARM WORKERS pose with Gabby, who is holding a taro root—a staple of the Jamaican diet. The youngsters work 10-hour days for about 90 cents a day.



GABBY GABALDON, Sandia retiree and Peace Corps volunteer, is overseeing construction of this automotive repair shop in Jamaica.

water skidoo are all gone . . . the hotel escaped because it sits a bit higher and was well boarded up . . . we heard that the water splashed up to the ninth floor . . . Remember the banana plantations just 13 miles from where we live? All of that was eroded and 80% of the crop is lost and 13,000 workers are out of a job.

"We went to see how we could help . . . looks like next week I'll be in Ocho Rios operating a front-end loader clearing the roads, etc."

"It must be very bad for the natives," Denny notes. "Most of their homes are so flimsy and they are poor—\$40 a month is the top wage for a skilled mechanic. Gabby and Pauline and the other volunteers have a big job ahead."



KATY AND DENNY GALLEGOS with Mini (in hat) and Pauline Gabaldon. "The people were shy with us at first," Denny says, "but once we got acquainted, we had some good times. They really liked my country-western music."

## Sympathy

To Demus Jojola (1482) on the death of his sister, Aug. 16.

To Frank Fuentes (1471) on the death of his mother-in-law at Isleta Pueblo, Aug. 16.

To Mary Valenzuela (2423) on the death of her mother, Aug. 16.

To Robert Chavez (3615) on the death of his brother in Albuquerque, Aug. 1.

To Pablo Garcia (3618) on the death of his father in Albuquerque, Aug. 22.

To Merri Brown (2458) on the death of her step-father in Albuquerque, Aug. 6.

**LA LUZ TRAIL RUNNERS**—More than 40 Sandians made the trail run this year, a nine-mile climb from 6500 feet to over 10,000. A total of 330 participated. First Sandian across the finish line was Frank Briscoe (4425), who finished fourth with a 1:24. Pete Richards (5132) took a first in the 40-49 bracket, while Larry Johnson (4323) did the same in the 60-plus bracket. One indication of the dramatic growth of running: in '73 our group photo for this event included just nine Sandians.



## Fun & Games

**Bowling**—Men and women bowlers are needed to join evening mixed handicap leagues at the Kirtland East and West Lanes. Sandians are eligible. Call the East Lanes, 4-4327, or West Lanes, 4-0165, for further information.

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**Base gym**—If you want to play racquet ball or lift weights at three in the morning, you can do so because the gym is now open continuously from 6 a.m. Monday through 9 p.m. Friday. Saturday and Sunday hours are unchanged. The new hours will be on a trial basis for two or three months.

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**Running**—The 6th annual Allsup's Marathon, half-marathon and 10K run takes place in Clovis Saturday, Oct. 4. LAB NEWS has entry blanks.

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**Boating**—The Coast Guard Auxiliary starts its fall safe-boating courses in both sailing and power boating on Sept. 15. Both run for 13 weeks. The \$7 fee includes the text book. Registration begins at 7 p.m. and classes at 7:30 in the Education Bldg., Christ Lutheran Church, 7701 Candelaria NE. Call 255-3483 or 298-3723 for further information.

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**Softball**—A post-season slow pitch tournament is being played this weekend (Sept. 5-7) at east and west fields on KAFB. The double elimination tournament, sponsored by the C-Club, begins tonight at 6 and continues Saturday and Sunday, with play starting at 8 a.m. on those days.

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**Aerobic dancing**—Another class led by Donna Ness is being offered by the C-Club. It starts Sept. 10, runs Mondays and Wednesdays for 12 weeks, and costs

\$50. Two sessions will be run, from 9:30 to 10:30 a.m. and from 5:30 to 6:30 p.m. Class size is limited. Call Tom Lenz, C-Club Rec Manager, on 4-8486 or drop by the Club to sign up.

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**Theater**—M\*A\*S\*H will be presented at the East Base Theater on Sept. 18 by the Kirtland Little Theater and, on Sept. 19, at the Que Pasa Rec Center. Performances begin at 8 p.m. and tickets, at \$2, are available at the Rec Center, Bldg. 20155, 4-5420.

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**Horseshoes**—The Coronado Club's annual Horseshoe Championship Tournament was held in late August, and Earl Saxton (1556) emerged as the new Class A Champion. Other winners included Lyle Dave (2113) in Class B, Pete Shaw (3417)

in Class C, and Carnella Towne in the women's class. Bob Schuch (4233) and Pete Shaw took the doubles championship.

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**Snorkeling in Baja**—Ken Mills (4552) is looking for six people to accompany him on a snorkeling/beachcombing trip to Cabo St. Lucas at the tip of Baja California from Nov. 27 to Dec. 1. It's a camp-on-the-beach trip run by a commercial outfit which furnishes guides and equipment. Cost is \$350, including air fare to the locale. Call Ken on 265-6289 for more information.

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**Volleyball**—Sign-ups continue for the fall season that begins on Sept. 22. Sandia employees and their dependents, DOE and contract people are eligible to play. Contact: Al Spencer, 4-3553.



DINO GALLEGOS (1485) wallops one as Los Barrachos catcher Jeff Lachance (4444) wins. The occasion was last week's season finale in the Labs Slow Pitch Softball League. In the final game, Los Barrachos and TOMA exchanged the lead in nearly every inning, but it was Los Barrachos in the end with a 12-11 score, making them league champions. Julian Lovato (2455) manages the winning team, while TOMA is managed by Sal Baldonado (1474). Tom Massis (2516) was honcho for the 14-team league that fielded several hundred players.

## State Fair Notes

The 43rd annual New Mexico State Fair will be held Sept. 10 through 21, with the 17-day racing meet and horse shows starting Sept. 5.

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Special State Fair buses will run between Coronado Center and the fairgrounds. (In previous years, buses left from Winrock.) Departure from Coronado will be from the south parking lot midway between Louisiana and San Pedro.

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Some 15,000 ribbons—in a rainbow of colors—and 1000 trophies will be presented to top winners in various competitions. The ribbons were made by the Vocational Center of the Rehabilitation Center of Albuquerque. The center, which trains handicapped persons, is a recipient of Sandia ECP funds.

\* \* \*

Renovation of the racetrack grandstand has added 700 new seats in the mezzanine, new elevators, restrooms and additional betting windows.

\* \* \*

An information booth will be open daily from 11 a.m. to 7 p.m. It is located just inside Pedestrian Gate No. 4 at San Pedro.

\* \* \*

A DOE energy exhibit, housed in two 50-foot trailers, has more than 25 visitor-activated displays, free literature, demonstrations of geothermal power generation and other possible energy sources, solar heat collection displays and two systems for solar heating. The exhibit is operated for DOE by Oak Ridge Associated Universities, an educational research association of 50 colleges and universities.

\* \* \*

Saturday, Sept. 13, is State Fair Parade Day. Beginning at 8:30 a.m. at Louisiana and Lomas, the parade will move east on Lomas to Wyoming, south on Wyoming to Central and west on Central to Louisiana.

## Events Calendar

Sept. 5-7\*—"Pippin," Albuquerque Civic Light Opera, 8:15 p.m., \*2:15 matinee, Popejoy.

Through Sept. 17—(Thursday-Sunday) Adobe Theatre, "Spoon River Anthology," 8:30 p.m., 898-3323.

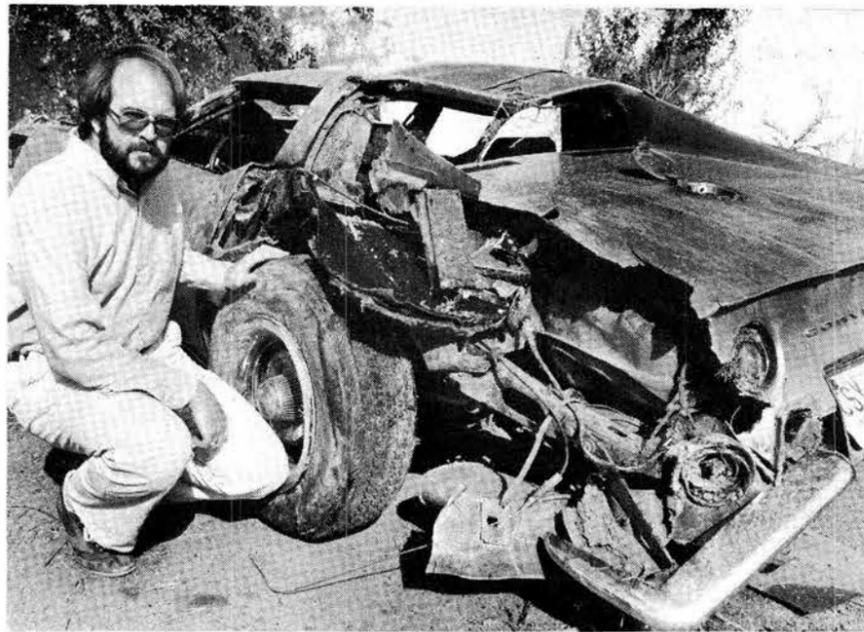
Sept. 5-21—"Deathtrap," Albuquerque Little Theatre, 8 p.m., 242-4750.

Sept. 10-21—43rd Annual New Mexico State Fair.

Sept. 12-14—268th Annual Fiesta de Santa Fe; Burning of Zozobra, 8 p.m., Friday.

Sept. 12-14—Benefit performance by Masterchorale for Friends of Music, 8:15 p.m., Keller Hall, UNM.

Sept. 18—Cleveland Symphony Orchestra, 8:15 p.m., Popejoy, 277-3121.



BLAINE BURNHAM (4444) and the remains of his '69 Corvette.

## 'Buckle Up' Testimonial

Blaine Burnham (4444) didn't have to read the seat belt article in the LAB NEWS (Aug. 8, 1980); he buckles up routinely.

Blaine called us last week to say that he felt he was alive because he had used his seat belt. Leaving work on Friday afternoon for his home in Placitas, Blaine drove through some fairly heavy rainfall. However, somewhere in the foothills, toward the northern end of the Sandias, a real gully washer had occurred. Nearing his home, Blaine was suddenly confronted by

a large amount of debris and a good-size boulder blocking his traffic lane. "The stuff had washed down from the cut bank along my side of the road," he says. "I swerved and almost missed the boulder, but the car flipped upside down and slid backwards into a depression on the other side of the road."

Blaine was uninjured except for a small gash requiring four stitches. "The car was a total loss. And, I'm not sure I would have survived if the seat belt hadn't held me in the car," Blaine adds.

## Coolidge, Arizona

### Solar Electric Plant Runs In High Gear During Solstice

Extensive tests on the world's largest solar-electric power plant at Coolidge, Ariz., were conducted during the week of the summer solstice by engineers from the University of Arizona and Sandia.

On June 21, the longest day of the year, temperatures reached 113°F, highest in the nation, as the power plant's staff recorded data under optimum conditions. Some 1180 kilowatt hours of electricity were generated during the day.

The DOE experimental 150-kilowatt solar irrigation project at Coolidge has been operated since last November by the University of Arizona under a contract to Sandia, which serves as technical manager of the project.

The power plant uses 23,000 sq. ft. of parabolic trough, line-focus concentrating collectors to focus sunlight on receiver tubes filled with heat-transfer fluid. The hot fluid (550°F) vaporizes a low-boiling-point fluid which drives an organic Rankine-cycle turbine to generate electricity. The hot fluid may be stored in a 30,000-gallon thermocline heat storage tank for later use.

Electricity from the plant is fed into local electric utility lines. Electricity to power three pumps, each of which requires about 50 kilowatts, is drawn from the power lines to pump 1400 gallons of water per minute from 380-foot-deep wells for irrigating cotton crops. About 70 percent of the annual electric requirements for a

100-home community could be provided by the system.

"We're operating the system with two objectives," says Dennis Larson, manager of facility operations and a University of Arizona faculty member. "One is to examine the individual performance of all subsystems. The other is to operate the total system as if it were a commercial power plant with no interruptions and no experimental adjustments."

"Like several other operations around the country, the Coolidge project is supplying valuable data and experience about performance, cost, operation and maintenance of a solar energy system," states John Otts, supervisor of Sandia's Experimental Systems Operations Division 4721.

"The Coolidge system is performing quite well. It produced over 1100 kilowatt hours on several days during the solstice week, with the best daily output being 1180 kilowatt hours.

"The peak efficiency of the collector field in converting solar energy to heat was about 45 percent. With improved collectors and reflecting surfaces now being developed, collection efficiency would approach 60 percent, with a corresponding increase in electrical production.

"The operation team has done an exceptional job in characterizing this facility and in gathering data on solar plant operations."

# MILEPOSTS

## LAB NEWS

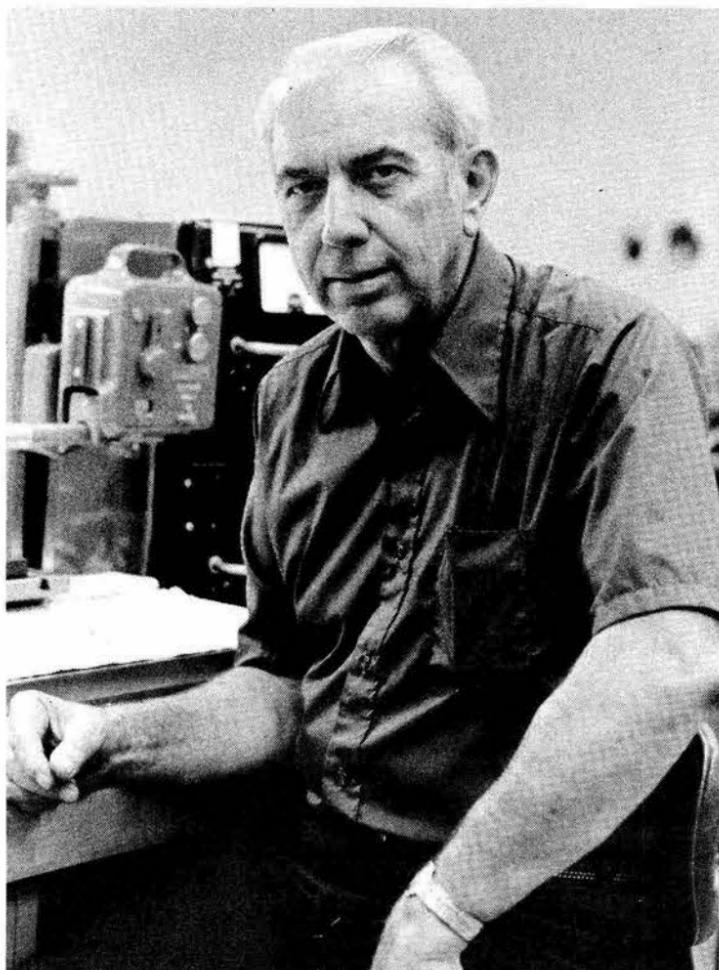
SEPTEMBER 1980



William Roady - 2351 15



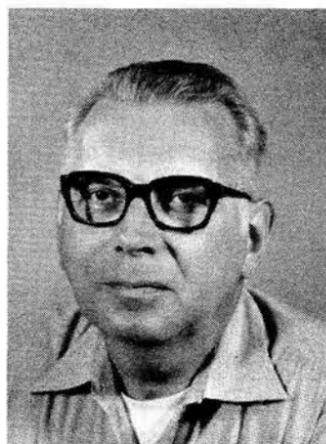
Don Anderson - 1172 20



Art Wickham - 1485 30



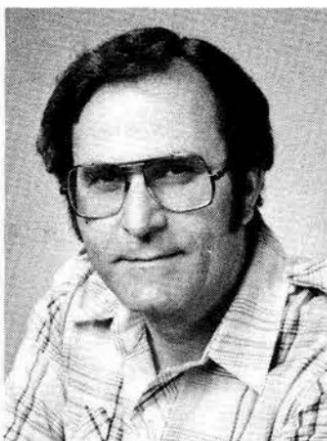
Ernesto Montoya - 1471 15



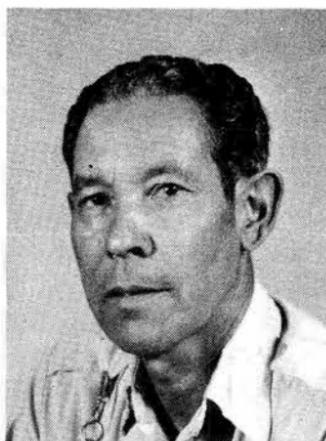
Martin Dieter - 3141 25



Larry Chavez - 3612 10



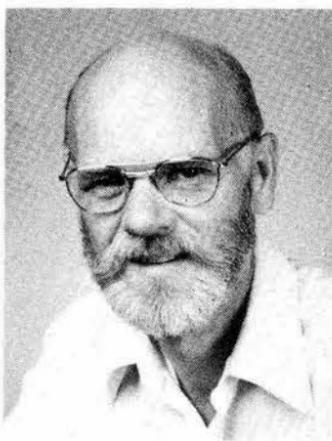
Norm Wagner - 8329 15



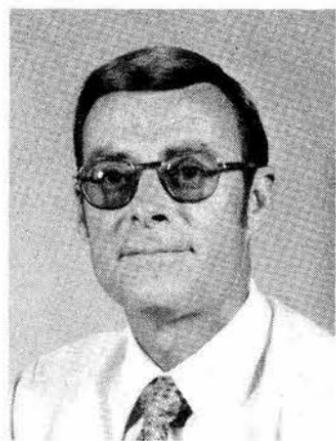
Fernando Lopez - 3432 30



Pat Anderson - 1522 30



Gene Angvick - 8333 15



Arthur Ahr - 2613 20



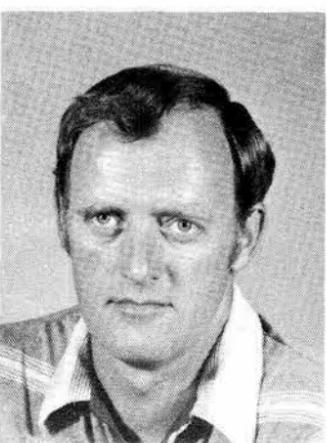
Howard Anderson - 1474 15



Sesario Cordova - 3613 30



Alice Hodyke - 3700 25



Carl Pennington - 1471 15



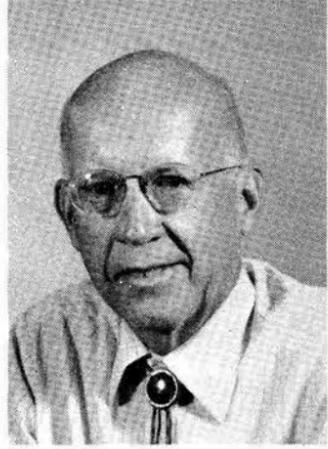
Miriam Hall - 8264 20



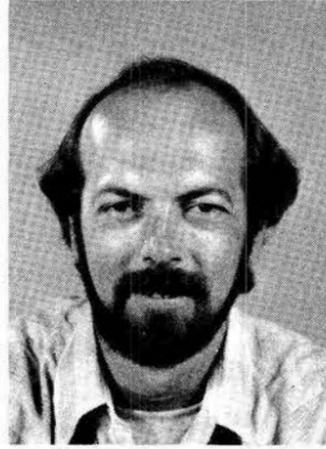
Ernest Nevada - 3615 10



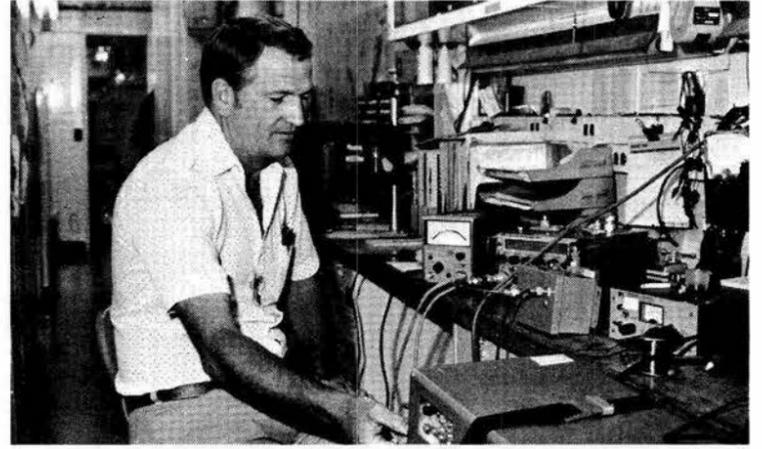
Pat Chisholm - 3144 15



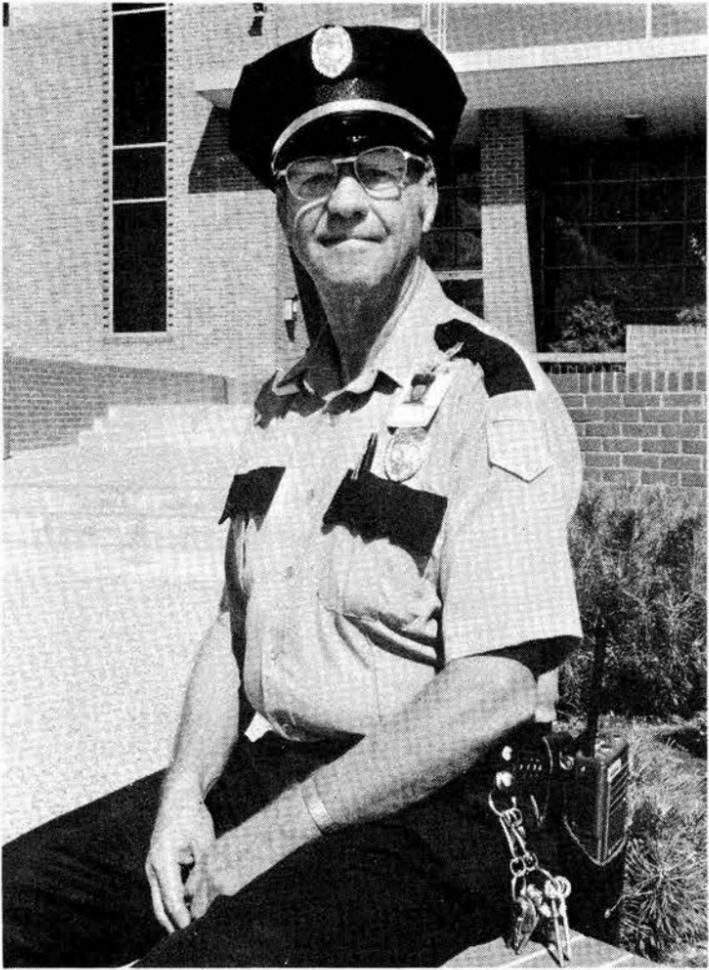
Irwin Janney - 2533 25



Curtis Domme - 3613 10



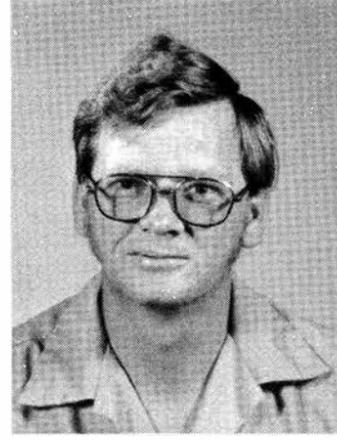
Gene Arndt - 1171 15



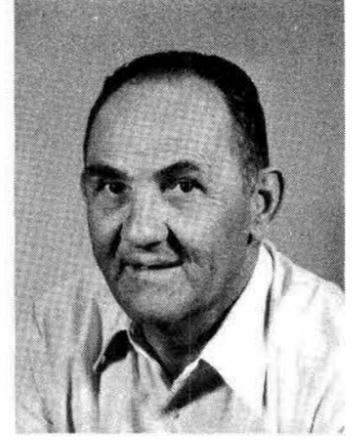
Noel Kent - 3432 30



Levi Anaya - 3613 10



Jerry Smith - 3613 10



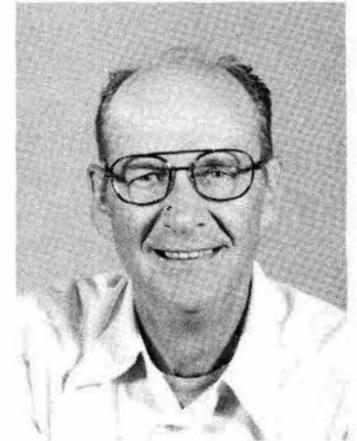
Jim Davidson - 3416 30



Stephen Gonzales - 3612 10



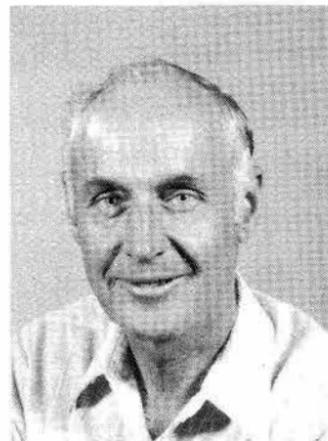
Homer Ator - 4372 30



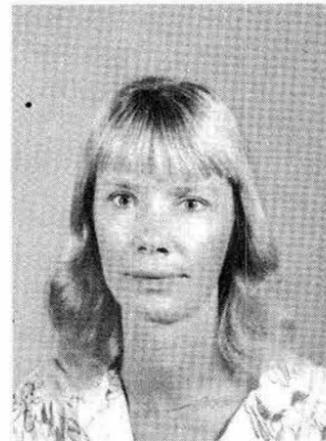
Wallace Eder - 2457 30



Billy Neil - 3423 30



Theodore Reed - 2323 30



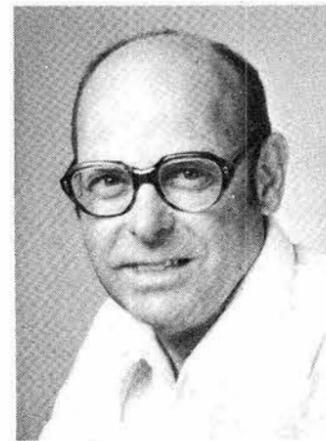
Danielle Seager - 2632 10



Ted Varoz - 3432 30



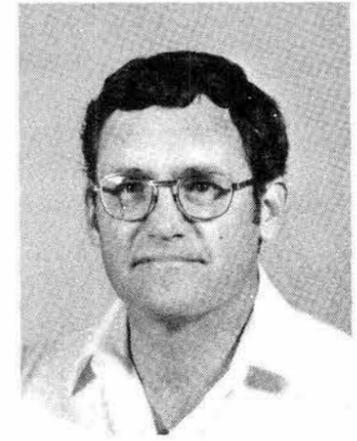
Charles Farmer - 3432 30



Len Bedinger - 8255 20



Mearle Hicks - 8168 25



Bob Benham - 1533 15

# feed **lib**back

*Q. How come it is so difficult for Purchasing to supply me with the following?*

1. A copy of the RFQ as sent to the supplier.
2. A copy of the answering quote.
3. A copy of all pertinent transactions.
4. A copy of the contract.

*I was embarrassed the other day to accidentally discover from a supplier that he was about to complete a special contract and ship, although I had never seen any of the above, much less having been told that the contract had been placed.*

A. Copies of procurement documents are made available to the line organizations by the buyer as follows:

1. A copy of the RFQ is not furnished to

the requester routinely because it contains contractual information which, in most cases, is of no interest to anyone other than Purchasing. If a special need arises, a copy can be furnished upon request.

2. Copies of quotations are furnished to the requester on an "as-needed" basis. Furnishing quotations routinely to the requesters would be costly and time consuming in addition to the fact that many requesters do not want to receive them. Additionally, quotations involve proprietary or private company information which Sandia is obligated to protect from unauthorized disclosure.

3. Copies of "pertinent transactions" (correspondence) are sent to requesters on an "as-needed" basis for the same reasons indicated in 2. above.

4. A copy of each contract is sent to the "Originator" and "Consultant" as listed on the Purchase Requisition. This has been

done on an "automatic" basis since January 14, 1980. Prior to that time, a copy was sent upon request.

As to communications between you and suppliers, it should be noted that all communication between a line organization and a contractor should be coordinated with the cognizant buyer. See SLI 6432 which states in part, "The Buyer . . . maintains all liaison and correspondence with contractors . . ."

The functions and relationships of the 3700 Directorate with other organizations of Sandia are defined in SLI 6432 and it is our policy and practice to cooperate with the line organizations in making procurements within the constraints of established rules and regulations. If a need exists for specific documents or information relating to a procurement, please contact the cognizant buyer.

J. C. Strassel—3700

## 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

- WATERBED, kingsize, built-in drawers w/wood headboard and canopy, solid wood frame, \$800 or best offer. Arellano, 298-3938.
- JEEP PARTS: complete transfer case, front axle parts; 3 hydraulic pumps. Wright, 296-3850.
- CAMPER SHELL for lwb 1/2-ton pickup, fiberglass, \$275. Marquez, 344-8455.
- SONY BETAMAX, 3 hr. capability. Tafuya, 883-6090.
- FRANKLIN MINT catalogs, 1974, 75, 76 editions, make offer. Buckingham, 298-1239.
- 4 EA. all-terrain tires w/turbine magnesium wheels, 2 ea. 10x15 & 2 ea. 12x15, fits Chevrolet 6-hole pattern, \$275 or best offer. Lyngen, 898-6654, 344-4116.
- BLACK ANGUS cattle: reg. bulls w/both reg. & grade cow-calf pairs. Ashbaugh, 1-384-2665.
- TIRES: superwide traction, M&S, 3 12-15LT & 2 10-15LT, raised white letters, dynamically balanced, mounted on 8-hole chrome wheels, \$350. Hernandez, 268-5000.
- COUCH, orange floral pattern, \$75; Kenmore portable dishwasher, \$90; 10" Homelite chain saw, \$45. Schwartz, 294-1113.
- USED Kenmore top-loading, portable dishwasher, \$75; apt.-size dryer, portable, \$75. Jaramillo, 268-5033.
- FREE: road maps of states between NM and Maine. Hesch, 881-9874.
- 2EA. used 700-15 6-ply tires, \$25 for both. Martin, 869-2049.
- '68 PROWLER trailer, self-contained, no restroom, sleeps 6, refrig., stove, heater, 16', \$2200. Sena, 345-0466.

- FREE-STANDING gas range w/hood, 30" wide, harvest gold, \$120. Wright, 281-5828.
- SCREEN DOOR, aluminum, 36x80, \$15. Rakoczy, 881-1372.
- TRAILER, 2-wheel, lights, wooden box, spare, \$175. Madsen, 294-3235.
- SOFA, 8' beige tweed. Stoever, 296-3717.
- CAMPER SHELL for lwb Dodge, \$80. Dishman, 296-2457.
- FREEZER, lg. upright, \$125; Jason telescope, model 313 w/SLR, \$225. West, 255-5855.
- 2 TRUCK TIRES w/16" 8-hole split rims, 8-ply, used 4800 miles, mud & snow tread, \$115. Nutt, 821-1857.
- SEARS 19" color TV, \$150; play pen, \$25. Sniezek, 265-3891 after 6.
- 50 QUARTS 20 wt. Texaco diesel engine oil, 60 cents/qt.; Sears 1-wheel trailer, \$150. Stuart, 299-9190.
- DOG KENNEL, chain link w/roof, 6'x6'x12', \$125. Martinez, 821-8692.
- LAB BENCHES, \$7.50 to \$10; lab stools, \$5 to \$7.50; padded metal folding chairs, \$8. Johnston, 869-3196.
- ROSS root feeder in orig. pkg., \$9; used Sears pool filter & pump, make offer. Liguori, 256-3613.
- AERIAL photos of Tech Area, color, 11"x14", \$3.50; 16"x20", mounted, \$12; Sandia Labs caps, \$4.25. LAB NEWS, MO-125/Bldg. 814.
- JR. GOLF CLUBS, Walter Hagen, 4 irons plus putter, 2 woods, bag & cart, \$50. Jackson, 294-7547.
- REFRIGERATOR/FREEZER, 15.1 cu. ft. white Kenmore, 3 1/2 yrs. old, frost-free, \$250 or best offer. Miller, 873-3450.
- USED packing cartons for china, clothes, lamps, etc. McMillan, 256-3991.
- MOONRAKER 6 CB antenna, 6 elements vertical-horizontal polarization, 32' boom, 16' elements, good on 10-meter ham bands, \$500 orig. cost, \$150. Kirkland, 299-3461.
- SWIMMING POOL, Sears 30x15, filter, ladder, cover, 1 yr. old, 1/2 price \$749, can be seen. Banas, 265-0924.
- TIRES: two 155SR14 tubeless steel belted studded snow tires, \$40 ea.; bike rack, \$10. Lundergan, 299-8368.
- DBL mattress/box springs, \$100; x-country skis/boots, \$100; Raleigh 3-spd., \$100; table model hair dryer, \$15; logger, \$10. Brice, 344-4855.
- GARAGE SALE 9/6-7: dishwasher, rug, toys, swing set, misc. 3404 Reina Dr. NE, Harstad, 298-6551.
- CLARINET, Bundy Goldentone, w/case & music, \$100. Banks, 268-7723.
- CHAIRS, gold velvet barrel back, w/skirt, 2 for \$75. Duvall, 881-4406.
- 20" girls' bike, \$35; 2 wagons, \$15 & \$10; tricycle, \$15; child's patio chair, \$7. Stephenson, 898-4126 after 6.

- MEN'S ACME cowboy boots w/walking heel, size 8D, mahogany, \$15. Gamble, 294-2877.
- COUCH, 7', \$150; wine rack, \$10; calculator, \$10; calculator, \$25; fertilizer spreader, \$15; chadeller, \$10. Botner, 298-6007, call nights.
- HEAVY DUTY pool cover, 36x18, best offer. Easterling, 298-7083.
- DRUM, snare; new top head, case, stand, practice pad, tool, 3 pr. sticks, 2 pr. mallets, stick bag. Fisher, 298-0526.
- WOODWORKER'S CLAMPS, 6' industrial quality bar clamps, \$25 ea.; 6mm & .25-06 factory ammo, \$5.50/box. Brammer, 266-5158.
- TROMBONE, Conn student model, tenor trombone, \$150. Magnuson, 821-5330.
- LAWN MOWER, 22" self-propelled, 2 1/2 HP B&S engine, grass catcher, \$85; kitchen table, simulated wood grain, \$45. Sutherland, 345-1183.
- FALL WEDDING DRESS, New York design, classic style, w/veil, size 9, \$400 new, \$200 now. Hawkinson, 281-5239.
- FLUTE, Armstrong, w/case & music stand, \$75. Kish, 298-7090.
- TWO LOBO basketball season tickets for '80-81 season, Section 11, Row 9. DeVargas, 299-0477.
- TWO back seats '79 Volkswagen bus; Walton exercycle. Brooks, 821-0885.

### TRANSPORTATION

- COLUMBIA touring bikes, 5-speed, his & hers. Sharp, 842-0218.
- '67 MUSTANG fastback, new paint, fold-down rear seat, V-8, 3-spd., \$2450 or best offer. Lyngen, 898-6654 or 344-4116.
- 5-SPD. Suburban Schwinn ladies' bicycle, \$50. Schuster, 255-5970.
- '79 HONDA CB650, 2200 miles, extras, \$2500 or best offer. Roginski, 296-6535.
- '74 HONDA 550-4; 1962 Thunderbird. Crooks, 296-6182.
- '72 DATSUN pickup w/camper shell, 61,000 miles, \$2200. Chavez, 294-7933.
- '68 VOLKSWAGEN, 4 extra tires, \$1000. Sena, 345-0466 after 6:30.
- '73 DATSUN 240Z, AC, AM-FM, mags, new paint-tires-brakes, etc., below book \$3875. Tarbell, 266-5374.
- HONDA Goldwing GL-1000, new tires, fairing, AM-FM radio, carrier, \$3150; '69 Chev. 4-dr. sedan, PS, PB, AC, AT, \$395. Marquez, 344-8455.
- '63 CHEVROLET Impala, vinyl HT, PS, PB, PW, 409 engine. Schultz, 255-0686.
- '79 MOTOCROSS BIKE, Yamaha YZ250F, pro-ported, new tires, \$1300; Moto-X Fox mono-airshock, \$150. Navratil, 292-3897, 293-5527.

- '74 YAMAHA 360 Enduro, Preston Petty headlight, front & rear (IT) fenders, skid plate, K&N bars, Magura throttle, 3200 miles, \$595. Healer, 298-6967.
- '73 CUTLASS Supreme, AT, AC, PS, PB, low mileage, \$1650. Martinez, 821-8692.
- SUZUKI 90 motorcycle, for youngster 10-15 yrs. old. Arana, 299-1214.
- '74 MERCURY Montego stn. wgn., AC, AT, PS, PB, \$1000; '71 Renault, 4-dr., R-16, needs work, \$400 firm. Prevot, 864-3816 after 6.
- '75 SUZUKI GT 550, low mileage, \$650. Orth, 298-8838.
- '58 BUICK Super, 2-dr., runs, \$200; '66 Chrysler stn. wgn., runs, \$500. Ellison, 296-6645.
- '78 KAWASAKI KE-100, 1354 miles, \$500. Baca, 281-3315.
- '73 DATSUN SW, 4-spd., 67,000 miles, \$1795; '74 Courier pickup, AT, 34,000 miles, \$2250. Lackey, 898-6638.
- '75 MAVERICK 6-cyl., 4-dr., no radio, no AC, 38,000 miles, one owner. Magnuson, 268-5955.
- '72 HONDA CL350, elec. start, 11,330 miles, 45-50 mpg. Zucuskie, 881-4086.
- MOTOCROSS BIKE, Roger DeCoster chromemoly frame w/number plate & pads, \$125. Banks, 268-7723.
- '71 CADILLAC Fleetwood Brougham 4-dr. sedan, all extras; new tires, battery & water pump; reg., unleaded or premium fuel; 62,000 miles, \$1195. Kobs, 281-1102 after 6.
- '71 PONTIAC Grandville convert., 60K miles, \$1200. Robertson, 299-7561.
- '75 PORSCHE 914/2.0, 47,000 miles, regularly serviced, new radials & battery, high 30s on regular, \$6200. Brammer, 266-5158.
- '74 HONDA, MT-250 cycle, street legal, 1100 miles. Lenz, 256-7440 late evenings.
- '75 SUZUKI GT 380, 3-cyl., digital gear readout, front disc brake, low miles, silver paint, \$750. Bentz, 299-3448.

### REAL ESTATE

- PASSIVE SOLAR, 2050 sq. ft., 4-bdr., 1 1/2 bath, 2-car garage, extras, Taylor Ranch. Austin, 898-8255 or 255-5904.
- 1980 TOWN & COUNTRY mobile home, 2-bdr., 2 baths, in park. Stibick, 821-8112.
- CEDAR CREST, 2220 sq. ft., 1 acre, exclusive subdivision, passive solar, \$80,000/offer. Sachs, 266-9841.
- NEWLY decorated 3-bdr. home, FR w/fp, new carpet, \$57,500, \$12,500 cash + REC, assume 8 1/2% FHA. Richer, 1040 Westerfeld NE, 298-6304.

- 3 ACRES irrigated & cultivated land, south of Valencia on Route 47, \$33,000, terms available. Burton, 869-2541.

### FOR RENT

- FURNISHED apartment, 2-bdr., sublet Oct. 20-Jan. 20, \$175/mo. plus utilities, 1 mile east of UNM. Sears, 266-3243 or 866-0138.

### WANTED

- USED bricks or red flagstone suitable for building a patio, will consider 10 or 1000. Chorley, 296-1454.
- CEMENT MIXER. Zanner, 281-1789.
- LATE MODEL big car, low mileage, 4-door w/power seats & windows, elec. door locks. Hendrix, 299-8872.
- CHILDCARE, mother of 3 will care for child 0-4 yrs., Tramway & Indian School. Jarrell, 293-9671.
- BOYS 11-14 yrs. old to join Boy Scout Troop 4, meets at McCollum School, Thurs., 7 p.m. Carl Smith, 296-3626.
- TODDLER SIZE car seat. McFall, 299-3476.
- SHOTGUN, used 12 or 20 gauge, any type. Arana, 299-1214.
- BASKETBALL GOAL, including pole, backboard & rim. Ellis, 821-7992.
- BOY'S 20" BIKE, good mechanical condition, standard castor brakes, no gears. Burton, 869-2541.
- PAIR of good B78-13 glass-belted mud & snow tires; one fair 775-15 tire for trailer. Hawkinson, 281-5239.
- CAMERA: Zeiss-Ikon super Ikonta or Voigtlander Bessa I or II 120 rollfilm camera. Mattox, 821-3945.
- SKI EQUIPMENT for child, 140 or 150 cm skis & bindings, ladies' size 6 or 7 boots, & poles. Oberkamp, 292-4366.
- MATURE female will be in Abq. Sept. 11-22 & desires housesitting position, experience with all types of animals. Brewer, (415) 462-7327.

### SHARE-A-RIDE

- THIRD PERSON for car pool, vicinity of Del Rey Mobile Home Park/ Area 1, drive 1 week in 3. Courtin, 821-2042.
- WANT to form or join car pool, Sandia Heights area NE to Tech Area V. Sciocco, 293-0633.

# Annual Meeting & Elections To Be Held Monday

AN ALL-YOU-CAN-EAT buffet to-night features Bar-B-Que beef ribs. Max Madrid and the Stardusters play for dancing beginning at 8.

Next Friday, Sept. 12, diners have a choice of prime rib or broiled salmon steaks. The Charlie Baca Band will provide the music.

VARIETY NIGHT on Saturday, Sept. 6, presents food, stories and a movie—the Jerry Lewis version of Cinderella. Food service begins at 6, Action Arts presents "Storytelling" and "Pecos Bill and Slewfoot Sue" at 7, and the movie begins at 7:30.

The club is looking for amateur talent from its membership for a variety night amateur hour and talent show. Get your act together and call Betty or Charlie Clendenin (299-2071) for more information.

ANNUAL MEMBERSHIP meeting and election of eight new board members will be held Monday, Sept. 8, at 7 p.m. Nominees are incumbents Julian Romero (ALO/DOE), Bernie Kenna (5812), Pro Padilla (3735), Frank Gallegos (4510), and Dick Shepardson (3242); new nominees are Ron Ward (1483), Adele Caldwell (3416) and Nick Magnani (5840). Refreshments will be served.

CALLIGRAPHY classes start Oct. 6 for beginners and Oct. 9 for advanced. Classes will meet for six weeks at 7 p.m.; \$20 fee for members, \$25 for non-members. Contact instructor Al Fine (844-7125) for more information.

SKI CLUB meets at 7 p.m. on the 16th. Steve Yestness, head coach of the Sandia Peak Junior Racing program, will discuss the racing and recreational programs. Al Church, official at the 1980 Winter



URBAN COWBOYS who want to learn to "stomp" can join Mike Holey's Country-Western dance class, beginning at the Coronado Club on Oct. 28. His partner is Michelle Thompson.

Olympics, will present his impressions of the event with a slide show. Bring your ski-related articles for sale or trade in the Traders Corner.

BALLROOM AND WESTERN dance lessons will be offered at the Club this fall by Mike Haley. The eight-week social dance classes—fox-trot, cha-cha, waltz, swing, rhumba, disco & polka—will meet on Tuesdays from 7 to 8 p.m., beginning Sept. 30. The four-week country-western course—country two-step, western swing, cotton-eyed Joe, four-corners, cowboy schottish—will also meet on Tuesday evenings, 8 to 9 p.m., beginning Oct. 28. Attendance will be limited, so enroll early at the Club's front office.

TWO NEW TRIPS are now available. A one-day bus trip on Oct. 6 takes people to the Los Ranchos de las Golindrinas fall festival where homes, crafts, and New Mexico's colonial life are depicted. Lunch at Chimayo. Leave Albuquerque at 8 a.m., return about 6. Snacks and cold drinks on the bus are included; lunch is Dutch. Cost is \$14/person.

A tour of "real" Mexico departs on Nov. 6, led by Lyle Thompson of UNM. The tour runs between Guadalajara and Mexico City and concentrates on the culture, art, people and language of the country. Fifteen days runs \$630, which includes all transportation, lodging, meals and

other events. A slide presentation on this trip is planned at the Club on Sept. 24 at 7:30 p.m.

Other travel packages include the Cumbres & Toltec Scenic Railroad tour on Sept. 28 (\$40, \$25/child); Washington, D.C., Oct. 1-5, \$568; Rose Bowl, Disneyland, Animal Safari, Dec. 28-Jan. 4, \$315; Caribbean cruise, Dec. 13-21, from \$780.

Travel Director Frank Biggs is in the Club lobby Friday between 6 and 7 to discuss these and other trips.

### Congratulations

Michael Carson (3618) and Theresa Young, married in Albuquerque, Aug. 9.

Mr. and Mrs. Charles Jakowatz (1251), a daughter, Amy Carissa, Aug. 26.

### Death



Mac MacGibbon of Machine Repair & Tool Crib Section 1485-1 died Aug. 25 following a two-month illness. He was 62.

He had worked at Sandia for 26 years.

Survivors include his widow, a daughter and three sons. One son, Richard, works in Division 1542.

