



GOING UP — The new Safeguards office building is moving along on schedule and is slated for occupancy starting next January. This photo was

taken last week by LAB NEWS photographer Bill Laskar. Building is located on south side of Tech Area, near Gate 10.

LAB NEWS

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

Retirement Scene

SSAO Boosts Early Retirement Pension Income

As each service anniversary passes and yet another year is added to your years at Sandia, you may begin to think about retirement. Most of us are familiar with the minimum age and service requirements for retirement: with 30 years service we can retire at any age; with 25 years we can leave at age 50; or we can retire at age 55 with no minimum years service (employees hired after July 1975 need 20 years service to retire at age 55).

For most people, total retirement income comes from two sources — benefits under Sandia's Retirement Plan and Social Security benefits. However, Social Security benefits are not payable until age 62. So, if you do elect to retire before that age, you'll have a gap of several years before you receive Social Security benefits.

To help fill that gap, Sandia's Retirement Income Plan provides for a Social Security

Adjustment Option (SSAO) whose purpose is to enable early retirees to receive a more nearly level income throughout their remaining lifetime.

It works this way: Under the SSAO, your early retirement benefits from the Sandia Retirement Plan are increased until you reach age 62. This increase is based upon your anticipated Social Security benefits. Then, when you reach age 62 and receive your first Social Security benefit, your Sandia pension is reduced by that same amount. For example:

Early Retirement at Age 54

Early pension to age 62:	\$525
SSAO to age 62:	175
Total income to age 62:	\$690
Social Security payment at age 62:	\$340
Reduced pension at age 62 (-\$175)	350
Total income after age 62:	\$690

This retiree thus receives a uniform

monthly payment during his retirement years. Because the SSAO is based upon an estimated Social Security benefit at age 62, the actual benefit could be slightly different.

The calculation of the SSAO reflects a fixed percentage of the expected Social Security benefit, depending on age at retirement. For instance, under the SSAO, a Sandian retiring at age 50 would receive 40.4% of his estimated Social Security benefit at age 62. At age 56, the percentage is 60.9 and at age 60, 83.8%. The important point is that when you reach age 62 and receive Social Security benefits, your Sandia pension is reduced to compensate for the extra early payments.

We have explained here only the essential points concerning the Social Security Adjustment Option. If you have questions on retirement and this option, contact Benefit's Vern Henning (3543) on 4-7336; in Livermore, Jim Henderson (8214) on 2131.

Take Note

Sandia alumnus Sol Buchsbaum has been promoted at Bell Labs to Executive VP, Customer Systems. Mr. Buchsbaum was a VP at Sandia in the early 70's in the research area. In his new job, he has responsibility for network planning, customer services, processor and common software systems, computing technology and design engineering, and military systems.

* * *

Big Brothers/Big Sisters of Albuquerque is looking for physically handicapped volunteers to match with similarly handicapped children, the idea being for the adult to serve as a role model. Big Brothers and Sisters provide adult companionship to a child several hours each week. If you're interested, call Wayne Kellogg at 266-8653.

* * *

Claire Haut, Sandia retiree, has a show at UNM's Jonson Gallery. Claire is showing paintings, constructions, montages, drawings and sculpture. The exhibit will continue through June 21. Claire also has a painting in the 18th Artist's Salon at the Oklahoma Museum of Art in Oklahoma City and, in the last few months, her work was exhibited in shows in El Paso and Houston.

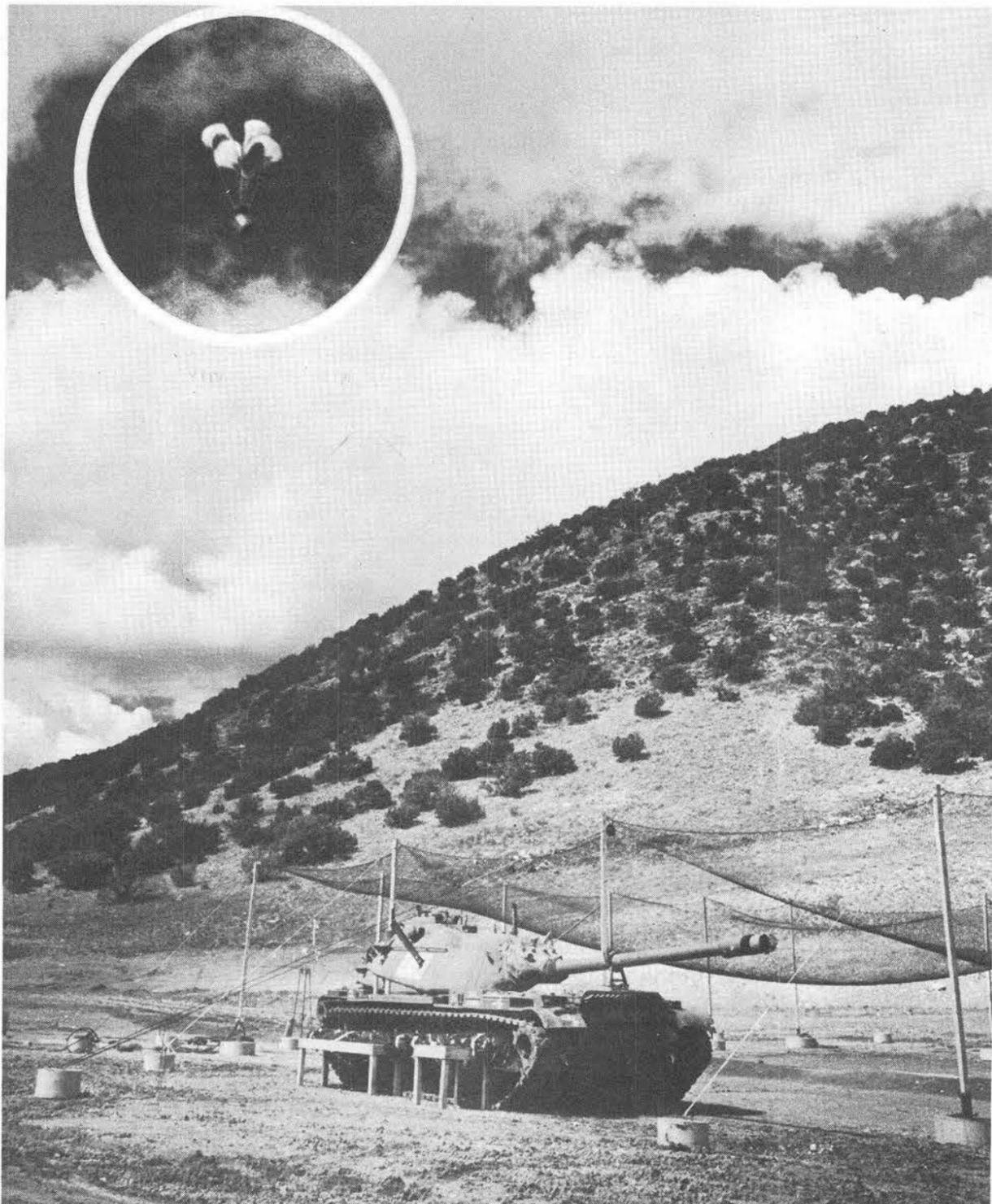
* * *

Ken Swanson (2436), whose wife Sharon is this year's President of the Albuquerque Rose Society, called to remind us that the Society's 30th annual rose show is set for this weekend at the Albuquerque Garden Center, 10120 Lomas NE. Hours are 3 to 8 p.m. Saturday and 10 a.m. to 4 p.m. on Sunday. Having attended the last two shows, we can absolutely confirm that Gertrude Stein didn't know what she was talking about when she said, "a rose is a rose is a rose." The sizes, shapes, colors and scents of the roses on display will be enough to boggle your mind. But don't take our word for it . . .

Congratulations

To Tim (1242) and Linda (formerly 4719) Taylor, a daughter, May 5.

To retiree Mary Davis and her husband Benton, on their 50th wedding anniversary, May 27.



SANDIA'S AERIAL CABLE facility in Coyote Test Field is being used to test an experimental device called SADARM (for Search and Destroy Armament) developed at the Army's Picatinny Arsenal. Dropped from an aircraft, the device is suspended under an array of small parachutes, then rotates and locates the tank and fires a munition. In these tests, only the infrared sensor elements are being tested, and the device is suspended beneath the aerial cable (stretched almost a mile between two mountain peaks), released, and tracked to impact. To save wear and tear on prototype units, a nylon net has been erected over the target area to catch the units. Later this summer, tests with live munitions will be conducted. Connie Coalson of Track and Cables Division 1535 is test project engineer.

Retiring



Vivian Montoya (3432)



Ed Roth (5614)



Mary Bacon (3154)



John Carter (3154)



Bertha Williams (3721)



Pete Wakeland (5500)

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Retiring



Ernie Mikles (8273)



Dorothy Andrews (8266)

Take Note

A total of 151 pints of blood was contributed by Sandians during SLL's recent Blood Bank Drive. From this total, 71 pints went to the Sandia Blood Bank and 80 to the Kaiser Health Care Plan and other designated agencies.

Jim Henderson of Benefits Division 8214, who coordinated the drive, says that employee participation was the highest since the first drive in 1959.

Andrew Trumbull, a senior at Granada High and a work experience student in Computing Division 8333, is student director of an anti-smoking campaign and, as such, is responsible for the training and coordination of 24 other student volunteers. Andrew reports that the group spreads the no smoking message at elementary and junior high schools. The campaign is sponsored by the American Cancer Society.

Congratulations

Thora (LOA 8265) and Art Van Hook (8342), a son, Shane Matthew, April 16.

Mr. and Mrs. Leo Mara (8352), a daughter, Nita Xinnia, May 2.

Mr. and Mrs. Ray Ng (8442), a daughter, Lori Deborah, May 17.

Shirley Archable (8322) and Roynal Elliott, married in Oakland, April 20.

Sympathy

To Jan (8212) and Wil Vandermolen (8123) on the death of her mother in Eugene, OR, April 27.

To Bob Peterson (8463) on the death of his father in Seattle, May 5.

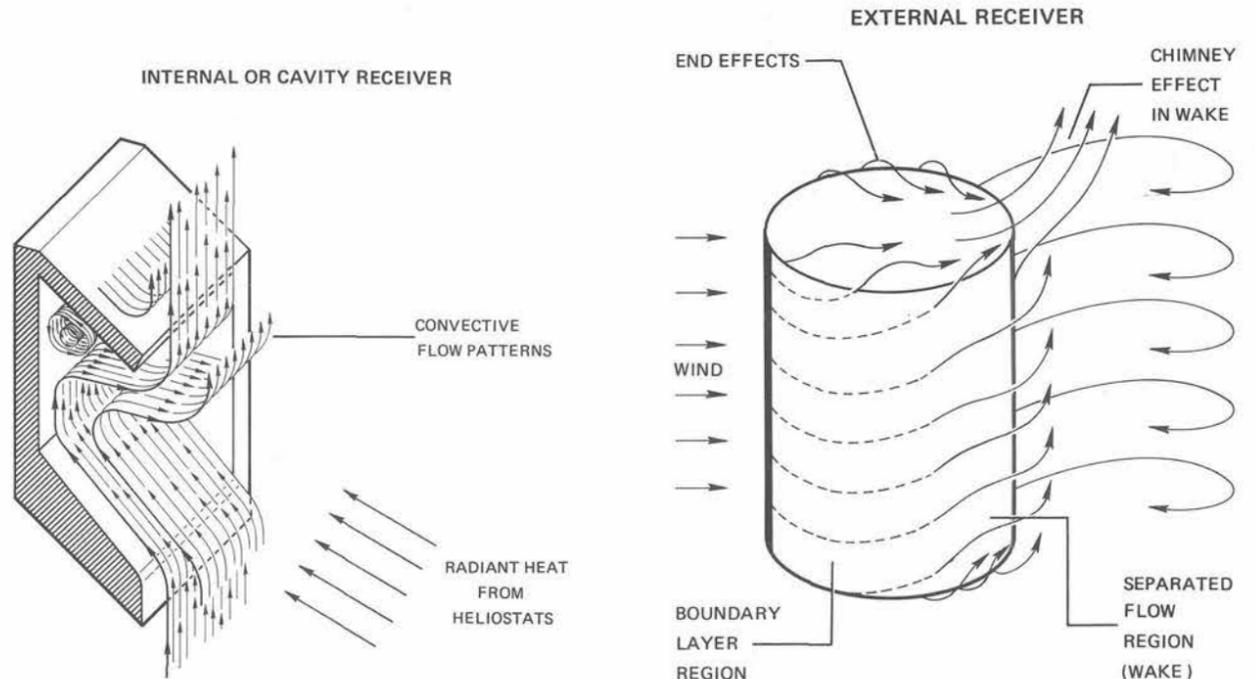
To Len Dighton (8151) on the death of his son in Livermore, May 13.

LIVERMORE NEWS

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LIVERMORE LABORATORIES

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HEAT LOSSES by convection are illustrated for two types of solar receivers. Some losses are caused by wind, others through the natural upward movement of air heated in immediate vicinity of receiver. In commercial type operation, such heat loss could be significant in terms of operating expense.

Convection Losses Significant for Solar Receivers

Sandia's Central Solar Receiver concept is straightforward — use heliostats to focus thermal energy on a receiver that converts, say, water to steam, then use the steam to drive turbines that generate electricity. But in practice some as-yet-unanswerable questions arise.

One of these — the effect of convective heat losses on receiver efficiency — was the focus of a recent workshop, sponsored by the Labs, for university, industry, and government lab people seeking ways to analyze the problem. One important outcome of the workshop was development of a series of topics in need of further study by Sandia and university-based researchers, on which more later.

The convective heat transfer problem is complex and potentially serious because it represents an energy loss from the system. Briefly described, the air around a receiver is heated as the receiver is heated by the heliostats. As the hot air rises, it carries off some of the heat that would otherwise be retained in the receiver. This is called free, or natural, convection.

Then there's forced convection, which is even more difficult to deal with. It's caused by wind. As it strikes a receiver, the wind splits, with some air passing on one side, some on the other; several types of air flows, including turbulent on the downwind side, are experienced — all of which could contribute to convective losses.

Existing heat transfer computer codes can predict both free and forced convection losses but not both at the same time. And the codes were constructed for small objects; they don't scale up to full-size receivers, which might be huge cylinders over 50 feet tall and across, or giant cubicles with a 25- by 25-foot aperture on the side toward the heliostat field.

While the existing computer codes don't agree with each other when applied to receivers (hence the inadvisability of

extrapolation), they do suggest that convective heat losses could be serious. Says Bob Gallagher (8124), "Depending on which computer code best simulates reality, we could lose tens of millions of dollars over the 30-year life expectancy of a full-scale solar central receiver plant. That's the amortized cost of the extra heliostats we would need in a 100 MW_e plant to make up for convective losses at the receiver."

With the goal of improving confidence in the codes, the panel suggested that Sandia 1) perform large-scale experiments aimed at understanding turbulence effects around a large structure; 2) construct a three-dimensional zonal heat transfer computer code (combining free and forced convection patterns means a 3D problem) for a cylindrical receiver; 3) conduct experimental programs emphasizing flow visualization, especially for cavity-type receivers; 4) as a long-term goal, perform the numerical work leading to solutions of the relevant Navier-Stokes equations (a complex set of differential equations governing such flows); and 5) continue with a multi-faceted approach — essentially, "don't put all your eggs in one basket."

According to Bill Alzheimer (8120), "Our primary responsibility will be to develop a new program to explore the convection phenomenon as it applies to receivers. To succeed, the convective loss program must be based on a team with strong university involvement. While the understanding of the phenomenon is certainly important, we must remember that it's not a question of whether or not the central receiver works; it's a question of just what, exactly, is the likely overall operating efficiency."

In addition to Bob and Bill, Joe Genoni (8450), Bill Winters (8453), Dennis Siebers, and John Mulligan helped workshop organizer John Draabel (all 8124) arrange the event.

Fun & Games

Volleyball — Sandia Volleyballers played for the A-league championship last month in a double elimination tournament that saw six teams competing. Team No. 3 came from behind to gain the championship, winning three straight matches in six games. Team members are Bill Kampfe (1535), Harry Blechinger (1127), John Kane (1712), Wendland Beezhold (4232), Frank Noda (1244), Jan Noda, Pat Eiler (1473), Mike O'Neal (2354), Jim Ellison (5111), and Bob Axline (2344).

Swimming — The military have lapsed into their summer schedule for the Olympic swimming pool under which the facility now remains open not four days a week but three — Wednesday, Thursday, Friday (and the weekend). This is consistent with their policy of inverse availability according to outside temperature. Anyhow, hours are 11 to 6.

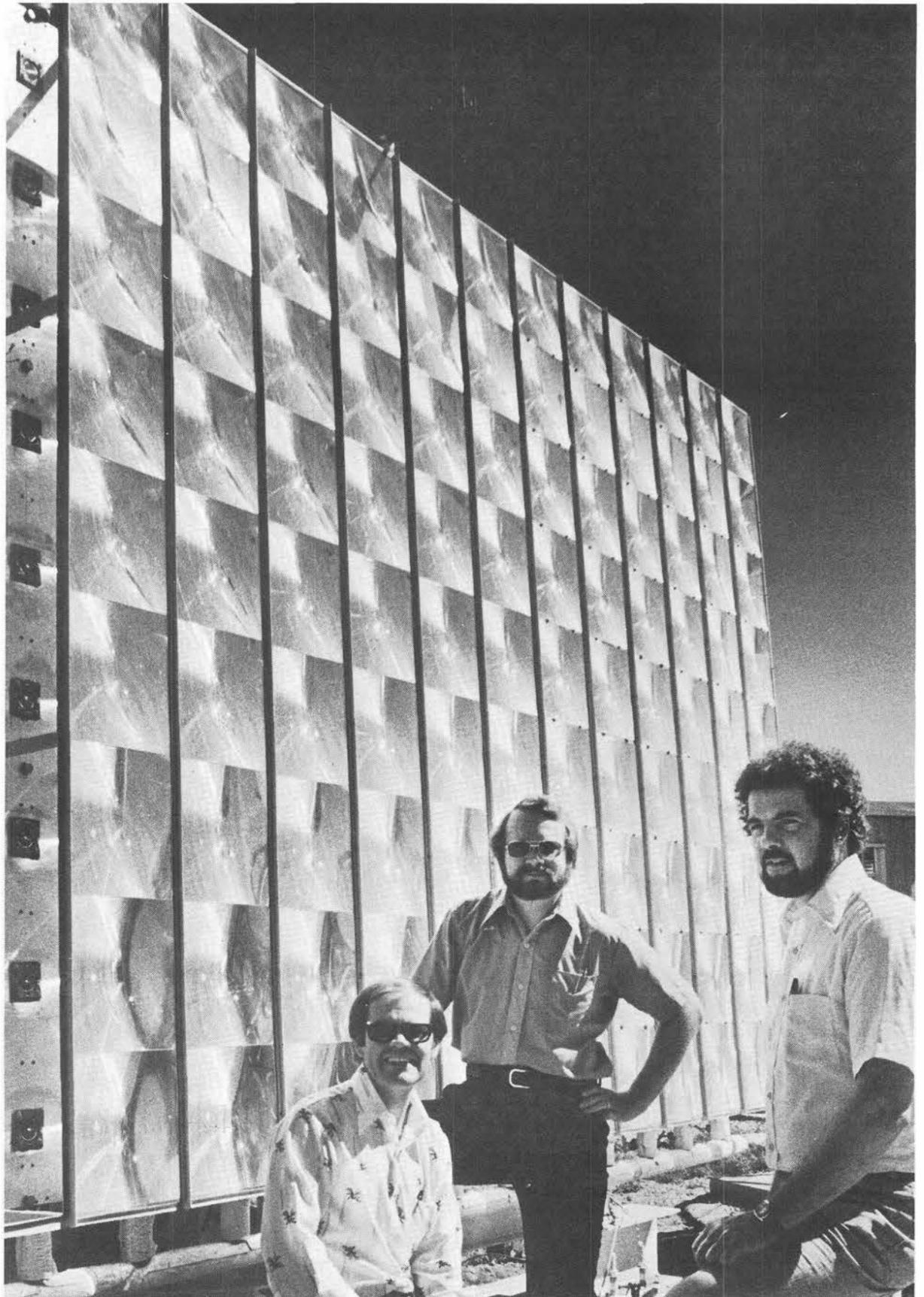
Boating — In The Great Boat Race on the Rio Grande a couple of weekends ago, Ray Bland (1472) and son Curt handled high water and a deluge from the skies to come in first in the raft division. The race, not infrequently a toting rather than floating trip, covers some eight miles.

Skiing — There's something a little wild about making reservations now for a ski trip next February, but that's ski biz these days according to Lyle Wentz (4323), who is chaperon for a Coronado Ski Club Dillon trip Feb. 3 to 8. The \$212 tab includes transportation, lodging, lift tickets and a few other goodies as well, and Lyle needs a \$25/person deposit by June 22. They'll be hitting Vail, Keystone and other areas on the trip. Dale Buchanan, 4-3451, will answer questions.

Running — The La Luz Trail run will be held this summer on Aug. 26, and there's a new twist. To reduce the traffic problem at the trail entrance, the starting line is being moved downhill two (2) miles, so now you have a jaunt of nine plus miles rather than seven with an elevation gain of about 4000 feet up to the Crest's 10,600. Obviously, training runs are necessary here, and LAB NEWS is willing to serve as a clearing house for would-be La Luzers interested in car pools. Call us on 4-1053 if you're interested. (If you haven't done this before, the problem consists in driving to the trail base, running up the hill, then finding yourself on top, tired and with a tiresome walk or run back down to your car.)

The Bonne Bell 10K run is set for June 10 and is billed as an open race for all women runners and joggers. Entry forms: LAB NEWS office.

Backpacking — It lies in wait in that sparkling mountain stream from which you just took a cooling sip, and a few days later you've come down with something that sounds like a vintage Italian wine but it isn't: Giardia lamblia. It's a parasite-borne disease and it produces diarrhea and fatigue and other distressing symptoms. Fortunately, it's treatable but prevention would be a better course, and backpacker Wendell Nelson (3242) has sent us a simple recipe to disinfect water, suggested by two medical experts, F.H. Kahn and B.R. Visscher. Take a one-ounce glass bottle containing about 6 grams of iodine crystals and fill with water. Shake vigorously to produce a concentrated solution of iodine. Add 12.5 cc of the solution to the quart of water to be disinfected. In 15 minutes,



PATENT AWARDED — DOE received a patent recently for a new method of mounting silicon solar cells onto conducting metals. Inventors are Ed Burgess (4719), Don Schueler (4719) and Bob Nasby (2146). The method solves the problem of different thermal expansion rates in joined dissimilar materials. Silicon, the basic material of most solar cells, is brittle and has a thermal expansion curve which does not match that of the metal on which the cells are mounted. The Sandians devised a mounting system using a copper plate which has been machined with numerous right-angle grooves to create, essentially, a multiplicity of tiny pedestals. These are soldered to the silicon cell and are flexible enough to accommodate the different expansion rates. In addition, the pedestals provide for cooling of the cell since copper is a good conductor. In the background is a photovoltaic array which incorporates a solar cell assembly behind each of the plastic lenses used to concentrate sunlight into the cells. Array has a peak power rating of 1000 watts.

the water will be safe to drink. The iodine crystals can be used over and over again — up to 1,000 times in fact. Both Kahn and Visscher believe this is better than Halazone, a chlorine product, because Halazone loses much of its potency under summer temperatures.

Basketball — Summer basketball league play starts June 19, and the league consists of the first eight teams to sign up. Entry fee is \$100 per team to cover cost of officials. Games will be played four nights each week, Tuesday through Friday, from 5 to 6. The season consists of seven games plus the single elimination tournament at season end. Call Ron Van Theemsche on 4-4380 to sign up.

Yoga & aerobic dancing — C-Club rec manager Skip Dougherty reports two upcoming classes whose object is fitness and a little fun besides. Guru Deep Singh will teach his third yoga class, beginning in July. Yoga offers both physical and mental benefits, and Guru Deep plans to have guest speakers who will discuss nutrition, massage and other related topics. Call Skip on 4-8486 to enroll.

The aerobic dance classes under Donna Ness will be held each Monday and Wednesday in the C-Club ballroom and run from 5 to 6:45 p.m. First class is June 4. Show up if you wish to participate and, since these are active dances, wear running or tennis shoes. Bring a towel too. Cost is \$10 for eight lessons.

The Credit Committee

by Willie Garcia, Education Comm.

The Credit Committee, which implements Federal Credit Union bylaws, has responsibility for approving each loan and its terms. Elected by the membership, the Credit Committee follows a policy based on three concepts: 1) A loan must be for a provident and productive purpose; 2) A Credit Union member should be given advice relating to the use of credit to improve his or her financial situation; and 3) A Credit Union will not survive if it does not adequately protect the monies entrusted to it by its members. Therein lies the challenge because it must also provide for members who have a need for quick, easy and economical financing. Inflation and fluctuating interest rates make the committee's job more difficult.

The committee's three members meet daily to approve loans recommended by the Credit Union Loan Officers, to pass on any loan which a Loan Officer is not authorized to approve, and to consider all loans which may be outside the "provident and productive" guidelines. Only the Credit Committee has authorization to disapprove a loan, and an application is never rejected without giving the requestor an opportunity to more fully explain the loan request. The Credit Committee will also advise a member if it believes a loan would be detrimental to the best interests of the member. On the other hand, if the arguments are sound, the Committee may grant a loan which it originally felt was not "provident and productive."

Our Town

Take The Tenderfoot Tour

While wandering through Old Town, have you ever wished for some historical background about what you're seeing? Or have you ever cut short your visit because of aching feet? Wouldn't it be fun to tell your visitors some anecdote about this quaint shop or that lovely patio? Albuquerque Parks and Recreation Department makes all this possible (except the aching feet) with their "Tenderfoot Tour" of Old Town.

The small train used during the State Fair to transport people moves to Old Town and will be used for the Tenderfoot Tours beginning June 11. Operating from 9 a.m. until 4 p.m., Monday through Friday, each tour lasts 15 to 20 minutes. With a capacity for 15 people, the train begins its trip at the Plaza, while a guide points out historical sites. It's free and the commentary is interesting — enough so that when you finish the tour, you'll probably want to further explore Old Town on your own.

Sympathy

To Jerry Johnson (3618) on the death of his father in Denver, May 14.

To Pedro Ortiz (3618) on the death of his mother-in-law in Santa Fe, May 18.

To Dorothy Brink (3253) on the recent death of her mother in Dallas.



PATT SHEA (3740) SHOWS OFF A NEW PLASTIC DISPLAY BIN that will replace divided drawers in Sandia's new Self Service Store. Patt, who's in charge of design and implementation, says the new store (scheduled to open in late Fall) will be neat, colorful, well-stocked and well maintained. (Patt, incidentally, is the daughter of former Sandia VP Tim Shea, now retired.)

A Home of Its Own

New Self Service Store Due in Fall

After a long history of being tucked away in basements and backrooms, Sandia's Self Service Stores are about to blossom out in a home of their own — one with light walls and floors, and colorful plastic bins that both delight the eye and make it easier for customers to find what they need.

Patt Shea, who does special studies for Bill Martin, Manager of Purchasing, Stores and Traffic Department 3740, is in charge of design and implementation of the new Self Service Store. She called us the other day to look over building plans and a display of sample store racks.

"We're several months away yet," Patt said, "but we thought people might like to know what's on the way."

Planned for the geographic center of Area I (north of 892 and south of 891), the new Self Service Store will stock supplies from the stationery, hardware, electronics and maintenance catalogues — more small items than are now available in the stores in the basement of 802 and in building 891.

The new store will be housed in two metal buildings connected by a breezeway, according to Patt. One building will house the hardware, electronics, mechanical and electrical supplies. Office supplies and forms will be stocked in a portion of the other building, with space remaining to be used by Bob Durand's Small Volume Procurement Section 3725-2.

Before deciding on an interior design for the new store, Patt visited Sandia Livermore, Bell Labs and a number of Western Electric facilities.

"The emphasis in the new store is on the customer," says Patt. "We'll arrange stock items by category and use easily read overhead

signs. Our objective is a self service store that's pleasant, neat, well-stocked and well maintained."

We also talked with John Coleman (2433), who's chairing a committee to evaluate the electronic parts stocked in Sandia's Self Service Stores. Members of the committee represent a cross-section of engineering design disciplines and they're calling in consultants as needed. The committee meets twice a week to study the Electronic Parts Catalogs page by page to decide whether to keep, delete or replace over 5000 items.

"Much of what we're doing," John says, "is getting rid of items no longer needed and adding items routinely needed in Sandia's current projects. In certain cases we've recommended upgrading the quality of stock items. In others, we've found we can downgrade SA items to commercial equivalents that are more readily available at a fraction of the cost."

The study of the Electronic Parts Catalogs will take two more months and the committee may also evaluate other classes of items like adhesives, solvents, chemicals and hydraulic fittings.

Patt Shea told us that two other committees have been established, one to study Sandia's needs for stationery and office supplies, a second to study the needs for maintenance parts. The result of all the studies will probably be a slight net increase in the number of items carried in both the Self Service Store and in warehouse stock.

"The real difference," as John Coleman puts it, "is that the inventory will be geared more closely to Sandia's current needs."

Ground breaking for the new Self Service Store should start soon, and plans are to open the store late this fall.

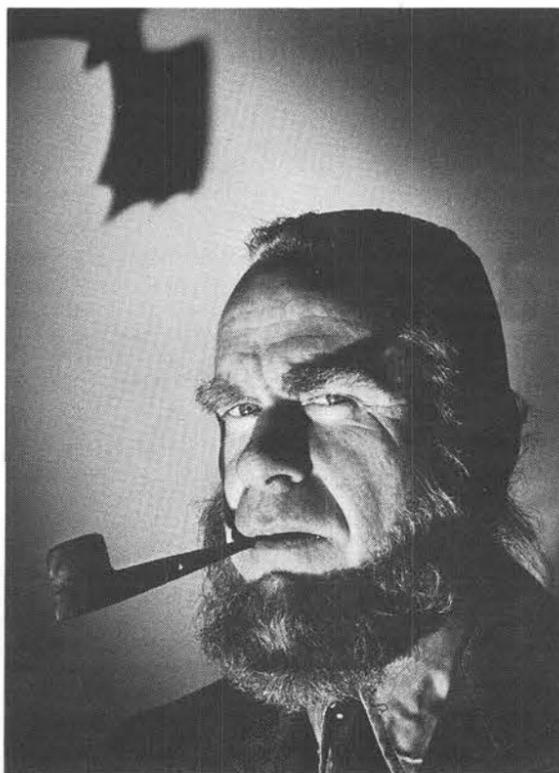
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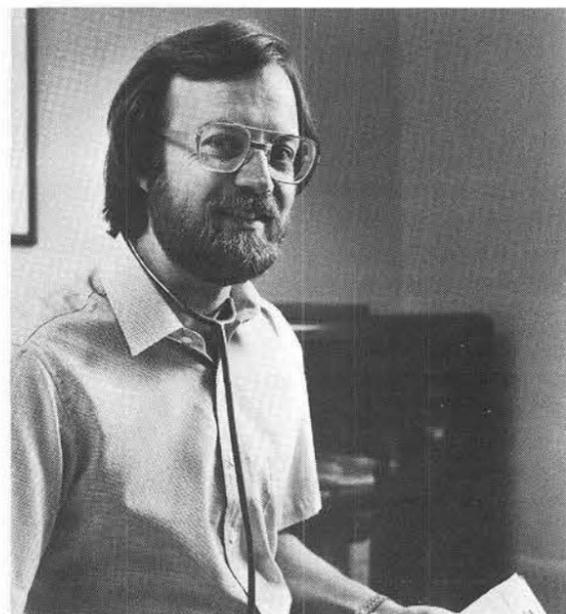
ATTORNEYS Larry Greher (left) and Ralph Smith recently joined Sandia's Legal organization. Both are on leaves-of-absence from Western Electric — Larry from Headquarters in New York City, and Ralph from the Greensboro plant in North Carolina. No stranger to Albuquerque, Ralph formerly worked at Sandia for one year and earned his law degree from UNM; Larry is here for the first time. Larry's wife Marian and their two children will be joining him this month. Ralph's family, Marianne and three children, will join him about mid-summer.



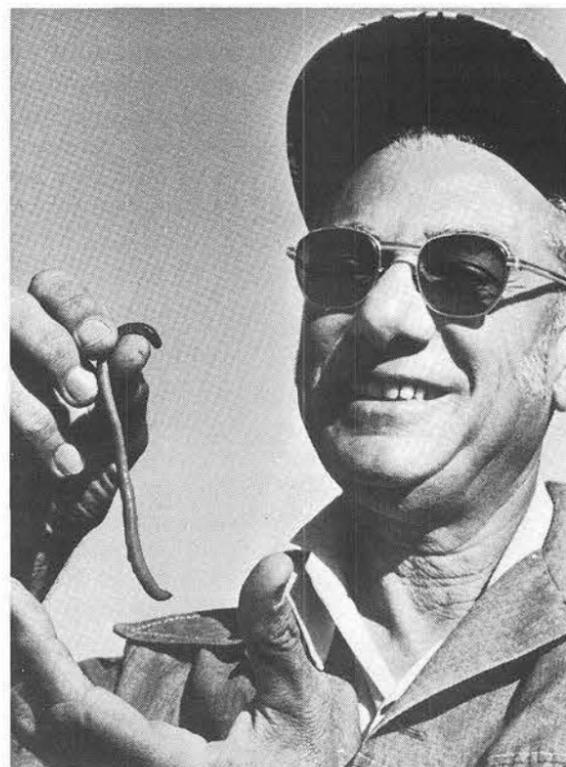
MORE WAYS THAN ONE to beat the high cost of gas. Steve Davis (1485) saves, weather permitting, by commuting from Central and Tramway to his work location in Building 840 by skateboard. It's a great method of locomotion on the way in since it's downhill or level all the way. At night, Steve hitches a ride home with a friend.



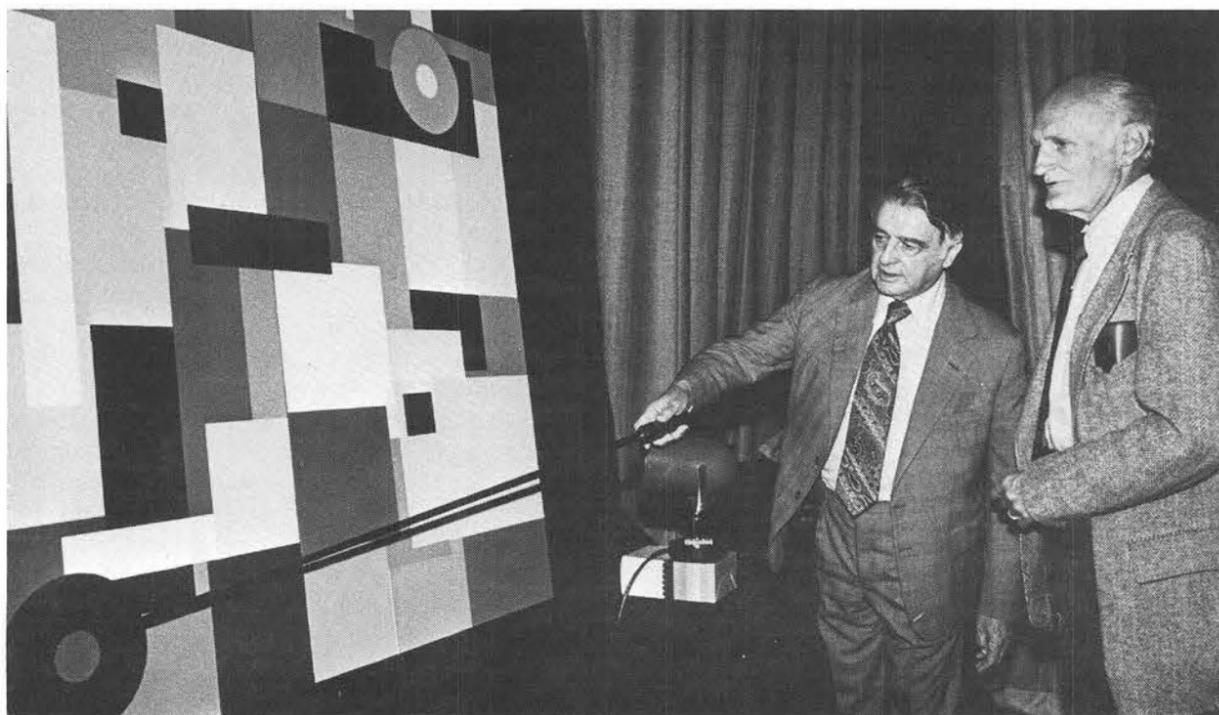
DRACULA'S NEMESIS, Von Helsing, is the character Crawford MacCallum (4231) plays in the Performing Arts Collective production of the classic thriller opening tonight at the Kimo Theater downtown. Crawford has appeared in some 40 local shows — he founded Old Town Studio and produced 100 plays there. He's also worked with Vortex and Classics Theatre. Dracula runs weekends through June 23. Curtain is at 8 p.m. For reservations, call 247-4047.



NEW MAN IN MEDICAL — Larry Clevenger, MD, joined Sandia's Medical staff last week. He graduated from UNM in 1974, interned at San Bernadino County Medical Center in California. For the past two years he has been a physician with UNM's Student Health Center.



THE WORM TURNS — This little critter is one of millions raised by Pat Liguori at his worm farm, 517 Virginia SE, since he retired two years ago after 24 years with the Labs. Pat got into the business when his wife Helen needed some worms for her organic gardening — she grew giant vegetables that year including cherry tomatoes almost as big as your fist. Now Pat markets his worms for gardens and fishing. He also packages a worm castings product which is useful as a potting soil for house plants.



POLAROID developer Edwin Land was a colloquium speaker last week. The renowned scientist/entrepreneur has been the recipient of numerous awards and honorary degrees. Here he discusses the human perception of colors and tones, the subject of his talk, with President Sparks.

Collecting Cacti: A Pointed Adventure

Cacti aficionada? Well yes, but Nancy Finley (4413) isn't the least bit prickly. A chemist, Nancy has been at Sandia since last September and is project coordinator for a study on transportation of radioactive materials in urban areas. She's the wife of a UNM physics professor and the mother of two young children. And, Nancy and her family are the custodians of more than 1100 cactus plants.

Eight years ago, when the Finleys moved into their new house on the west mesa, they opted for some carefree, Southwestern landscaping. They planted cacti and, becoming interested in the subject, soon joined the New Mexico Cactus and Succulent Society. Frequent vacations in Mexico whetted this interest, so they began to combine their hobbies of camping and backpacking with searches for different varieties of cactus.

"Our field trips to Mexico are done with the proper permits," Nancy says. "We've seen entire areas completely denuded because someone has illegally removed thousands of plants to take across the border and sell. It's difficult to believe, but there are areas in the Southwest and in Mexico where some species of cactus have been placed on the endangered list."

The Finleys propagate their plants and give the seeds away. "We encourage people to plant the seeds and thus help preserve the species," Nancy says.

To house their growing collection, they built one greenhouse and are now adding a



NANCY FINLEY (4413) can tell you something about most of these 1100 plus cacti in her greenhouse. Each plant is numbered, and the Finleys maintain a reference file which describes where the plant was found, its natural habitat, and information pertaining to care and propagation.

second. Contrary to what most people think, cacti cultivation requires some time and effort. "Cacti won't bloom without fertilizer," Nancy says, "and they're sensitive to watering — too much and they rot. My children have become adept at potting and cultivating, but I still supervise the watering. We also treat our plants for fungus about twice a year. In fact, the care of cacti is just about the same as that required for house plants, except for watering."

The Finleys entered 85 plants in the

recent NM Cactus and Succulent Society show. Their efforts were rewarded with the Best of Show prize as well as a number of ribbons. Recently, the Finleys attended the Cactus and Succulent Society of America show in Pasadena. Nancy and her husband Daniel often give lectures to garden clubs and other groups.

"With the second greenhouse, we'll be able to continue collecting," Nancy says, "and perhaps one day we'll stumble upon a new species."

Fit Is Better

Let's say you've been running regularly for the past two years and you know you've dropped a few pounds and you feel better. But you wonder: How fit is fit? If I double my mileage, do I then double my state of fitness?

Unfortunately, the answer to the latter is "no," by any measure, and in this article we will describe some methods by which you can gain a more-or-less objective measure of your fitness. Then, if you choose to alter your fitness regimen, you'll have some way of gauging the effect of the change.

First, if you have a spare \$200 or so, you can report to a medical facility (like the cardiology department of Presbyterian Hospital) and arrange to have a stress electrocardiogram (ECG). If you've ever had a physical at Sandia, you've probably had a resting ECG — a procedure in which you are wired up and your heart function is monitored and graphically recorded for analysis by a cardiologist.

The stress ECG is a different cup of tea. You're still wired up, but you're on a motor-driven treadmill, and the name of the game is for you to walk or to run until your heart rate approaches some percentage of your calculated maximum heart rate. For a person in good condition, that percentage is around 80%, possibly even higher for someone in excellent condition. But if your condition is only so-so, then the attending physician may shut the treadmill down much sooner, depending upon the function of your heart as reflected in the ECG tracing, which he continuously monitors.

The principal value of the stress ECG

Just How Fit Are You?

(and, for that matter, the resting ECG) is twofold: it may provide evidence of heart dysfunction, but a wider application is simply to establish a data base for you and your heart. That is, a comparison of your ECG taken, say, five years ago with the ECG taken yesterday is likely to be more meaningful to the cardiologist as an indicator of the health of your heart. Will he then turn to you and declaim, "My, you certainly have a great heart and I hereby adjudge it Grade A"? No, doctors are a cautious folk, given to pronouncements that have the spirit of the double negative: "Mr. Smith, I see no evidence of any abnormality." Or, "I see nothing here to indicate that you shouldn't run 10 miles a day."

But there are other, more pragmatic (and cheaper) tests of fitness. And these do assess your fitness over a range of values. Dr. Kenneth Cooper in *The New Aerobics* feels that a mile-and-a-half run is a good measure of fitness and has compiled a set of times by which you can rate yourself (below). (I hasten to inject here a note of caution: don't even think about running this distance without some prior conditioning as well as your doctor's ok.)

1.5 MILE TEST FOR MEN				
(Running time in minutes for 1.5 mile distance)				
FITNESS CATEGORY	AGE			
	Under 30	30-39	40-49	50+
I. Very Poor	16:30+	17:30+	18:30+	19:00+
II. Poor	16:30-	17:30-	18:30-	19:00-
	14:31	15:31	16:31	17:01
III. Fair	14:30-	15:30-	16:30-	17:00-
	12:01	13:01	14:01	14:31
IV. Good	12:00-	13:00-	14:00-	14:30-
	10:16	11:01	11:39	12:01
V. Excellent	<10:15	<11:00	<11:38	<12:00

Since we're a mile high here in Albuquerque, you can add 15 or so seconds to these values.

Finally, there's the Harvard Step Test, a classic procedure to evaluate cardiovascular fitness. In this test you step up and down on a bench for a few minutes, then see how quickly your pulse recovers. Here's the recipe:

A. Get a bench 14 inches high if you're under 5'3", 16 inches high if you're under 5'9", 18 inches high if you're under 6' and 20 inches high if you're over six feet. Step from the floor onto the bench and down again 30 times a minute for four minutes, using a metronome or having someone time you with the second hand of a watch. (If you get too tired to go on, you can stop earlier, but your score will be lowered.)

B. As soon as you finish, sit quietly and take your pulse, or have someone else take it, for 30 seconds one minute after you finish, another 30 seconds two minutes after you finish, and another 30 seconds three minutes after you finish.

C. Compute your recovery index (RI) using this formula:

$$RI = \frac{\text{Duration of exercise in seconds} \times 100}{\text{Sum of pulse counts} \times 2}$$

If your RI is 60 or less, your rating is poor; between 61 and 70, fair; between 71 and 80, good; between 81 and 90, very good; 91 or more, excellent.

Like running a mile-and-a-half, the Harvard Step Test is strenuous — so take care, especially if you begin to experience chest pain or other adverse symptoms.



RUSSIAN cruise ship which the Quants took to Istanbul on one-week voyage from Yugoslavia was modern and filled with European passengers — all non-Russian. Ship cruised through Aegean Islands en route to Turkey.



YUGOSLAVIAN coastline is characterized by islands, fjords, beaches. Al Quant (5813) reports it to be ideal for touring, sailing, swimming.

Unusual Vacations, III

Well, How About Dubrovnik?

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

Most touring Americans are a little put off when, after traveling perhaps half way around the world to some exotic place, they find it largely populated with other touring Americans. Part of the fun of touring, after all, is to be a stranger in a strange land, and the spell is hard to sustain when your charming *pension* fills up with a tour group from Odessa, Texas.

Al Quant (5813) and his wife Barbara think they have found one picturesque locale that as yet bears little imprint of American visitors. Last September they boarded a Yugoslavian Airlines plane in New York, flew for nine-and-a-half hours to Zagreb, then took a local flight to Dubrovnik. Assuming your geography is as skimpy as ours, Dubrovnik is a medieval walled city on the west coast of Yugoslavia that faces on the Adriatic Sea (the body of water separating Italy and Yugoslavia).

Why Dubrovnik? Because that's where Al and Barbara boarded the Russian ship *Armenia* which took them and some 200 other passengers on a week-long cruise through the Aegean Islands and on to Istanbul, with several stops along the way.

"The passengers were mostly European — English, French, German, but no Slavs or Russians," says Al. "The crew, of course, was Russian but except for a rather stiff introduction of ship officers at the outset of the voyage, we had little contact with them. I suspect that socializing is discouraged."

All was first-rate on the cruise ship, including the food, and the one day in Istanbul gave the Quants the opportunity to view historic sights in that legendary place. Al feels, however, that their week in Dubrovnik, to which the ship returned them, was the highlight of the trip.

"The Yugoslavian coast line is the most indented in southern Europe," he reports, "with scores of Norwegian-like fjords that almost always have a fortified town along the shoreline. Exploring these old places with their medieval fortresses and churches and other structures proved to be most interesting.

"If you tire of touring, the coast offers all kinds of beaches, and the waters are clear and warm — ideal for skin diving."

There are other attractions, too. Consider

this description which appears typical of one of the many towns along the coast:

"Vrsar — A summer resort at the entrance of the Lim Channel, next to Illyrian ruins and Roman fortifications; good beaches, groves and vineyards. Nudist camp. Excursions to nearby islands suitable for bathing. Hotels and bungalows (2000); private homes (1000)."

The parenthetical numbers refer to the numbers which can be accommodated.

Logistics — The two weeks, including air fare from New York, the cruise and the week in Dubrovnik, all with meals, was a package offered by Yugo Tours for \$999 per person. Yugo Tours maintains an office in New York City. Additional expenses would be the flight from Albuquerque to New York, but if you book that more than 45 days in advance you

can round trip it for about \$225. Al reports that prices in Yugoslavia are "about the same" as here. And, he says, Yugoslavia is a clean, orderly place with little evidence of political suppression. The people are friendly too, especially to Americans.

•js

Bus Notes

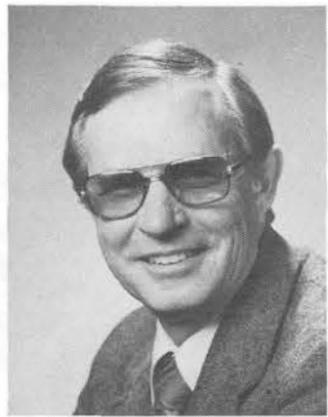
A number of lost Suntran bus tickets have been returned to owners through the diligent (and time consuming) work of the Credit Union staff — they go through their records to match the ticket number with a name. Jeff Gammon (3741), chairman of the Employee Transportation committee, urges all who purchase bus tickets to write names and organization numbers on the back. In case you lose it, you could have it returned quickly.



APPRENTICES GRADUATE — New Journeyman Structural Technicians are Bob Smyth and Leroy Garcia who received their certificates last week from Ward Hunnicutt, Director of Plant Engineering 3600, center. Both men completed the five-year program in 4½ years by maintaining an A average in all classwork and performing exceptionally in on-the-job training. They are assigned to Modifications Division 3613.



Sam Moore - 1170 30



Ralph Cozine - 8160 20



Elmo Dunn - 2145 25



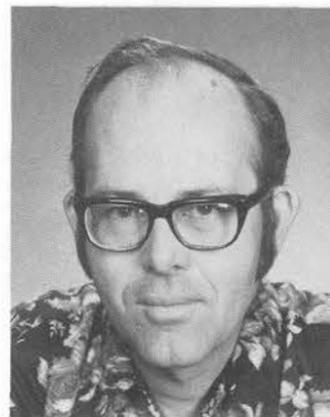
Johnnie Garcia - 1135 30



Lee Shaum - 2455 25



Florence Bonnell - 6020 25



Dick Finn - 8272 20



Tex Samuelson - 1173 25



Charles Duffey - 8111 20



LaRue Wildgoose - 3653 30



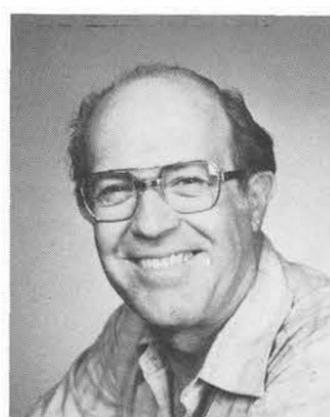
Howard Gipson - 1172 15



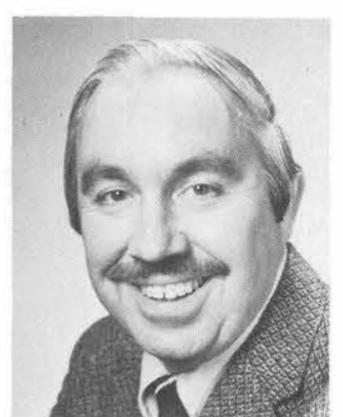
Warren Bronson - 3618 10



Arnold Rivenes - 8162 20



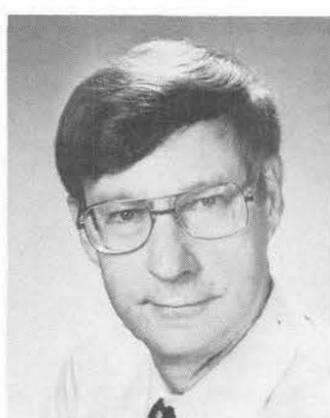
Verne Ivins - 8423 20



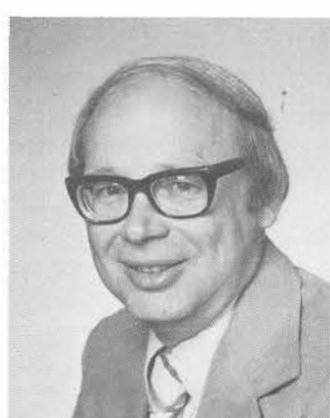
Glenn Dietel - 8465 20



Fred James - 1242 15



Max Schell - 8463 20



Hal Norris - 8116 20

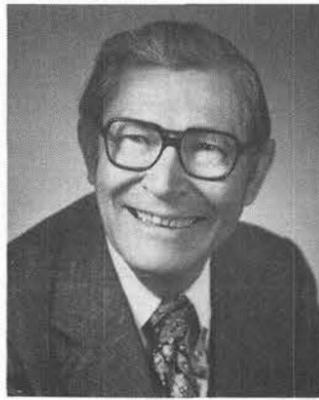


Willie Romero - 1483 10

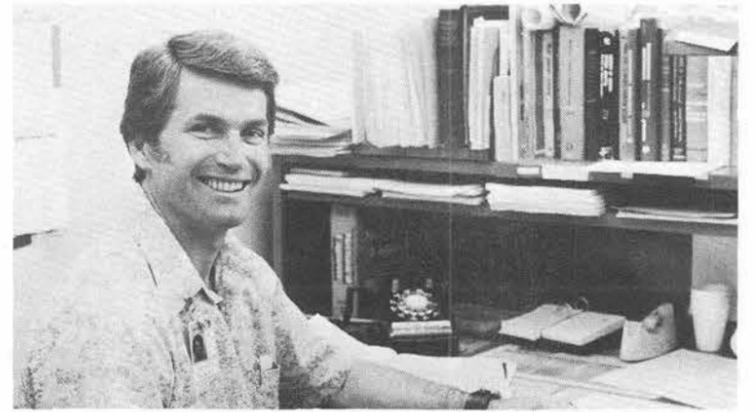
MILEPOSTS

LAB NEWS

JUNE 1979

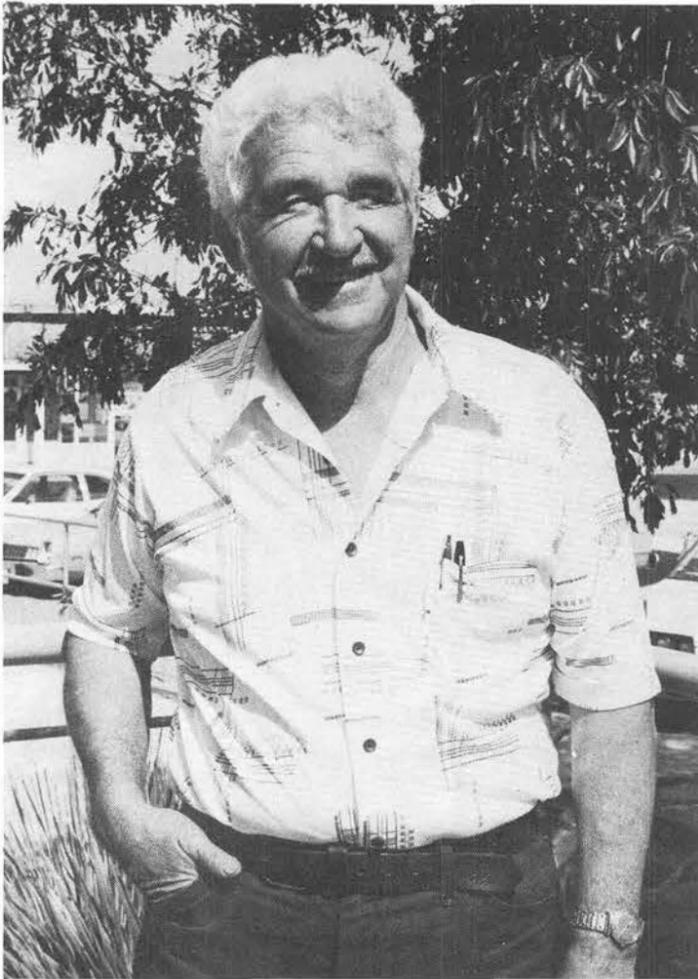


Byron Murphey - 8300 25



Joe Abbin - 2324

15

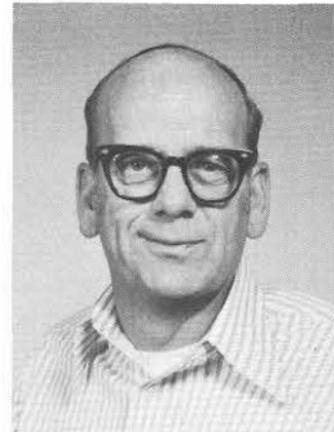


Elfego Sanchez - 3618

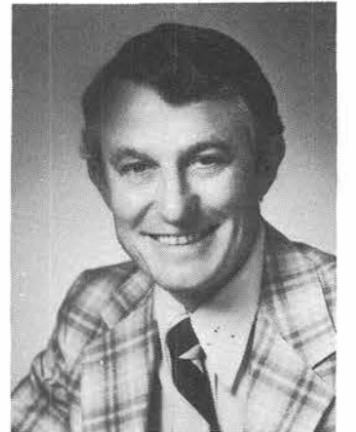
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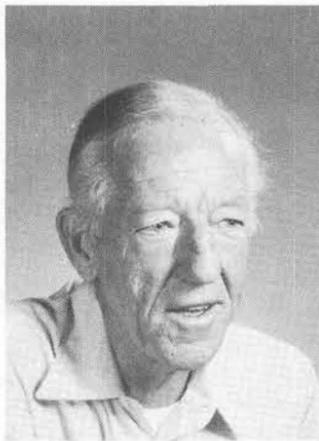
Bob Barton - 3421 10



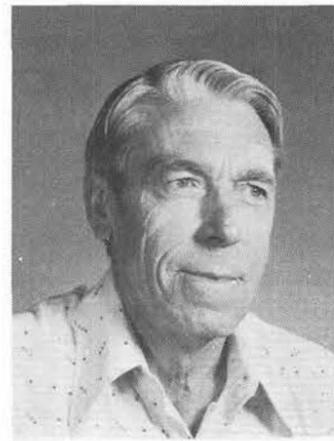
Jim Hawkins - 1424 15



Jim Barharm - 8110 20



John Wimpling - 3742 25



Clarence Muchow-1415 30



Jon Munford - 5832 10



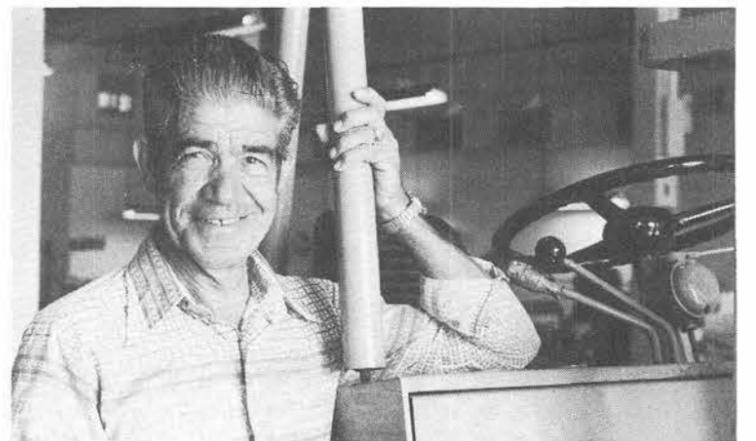
Bob Stinebaugh - 4541 20



Don Bohrer - 8111 20

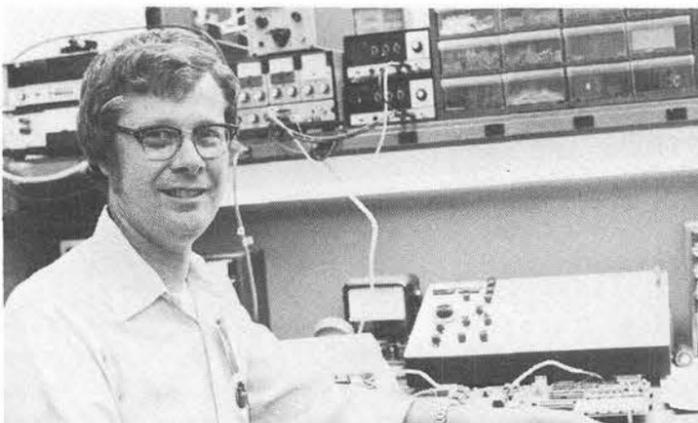


Harold Linker - 1714 20



Willie Baca - 3417

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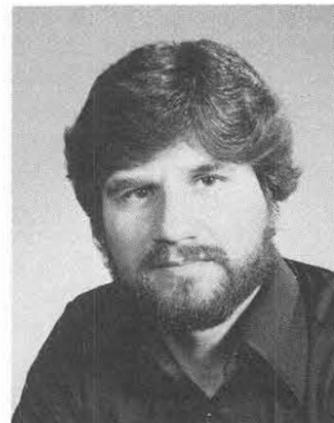


Larry Nelson - 2331

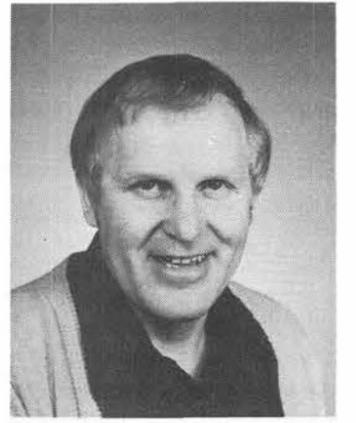
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Ray Culy - 8463 20



Mike Robles - 2626 10



Darrell Christensen-8111 20

Events Calendar

- June 1 — Navajo Rug Auction, Crownpoint, N.M., 7 p.m., 786-5319.
- June 1-2 — Albuquerque Arts & Crafts Coop Outdoor Show, Albuquerque Little Theater parking lot, 821-4202.
- June 1-2, 8-9, 15-16, 22-23 — "Dracula," Performing Arts Collective, Kimo Theater, 8 p.m., 247-4057.
- June 2-3 — Albuquerque Rose Society Show, Garden Center.
- June 2-3, 9-10 — Indian Pueblo Cultural Center: dances — 1, 3 & 5 p.m.; craft demonstrations, 843-7270.
- June 3-17 — 1978 N.M. State Fair Winners Invitational Art Show, Fine Arts Gallery, N.M. State Fairgrounds, 2 p.m. daily except Mondays, 268-8468.
- June 6-10 Rain Dance, Zuni Pueblo.
- June 8 — Buffalo Dance, Santa Clara Pueblo.
- June 8-10, 15-16 — "A Funny Thing Happened on the Way to the Forum," Albuquerque Civic Light Opera, 8:15 p.m./2:15 p.m., Sunday, Popejoy.
- June 9 — Syndicated columnist Ellen Goodman, "Can we have it all?"; 8 p.m., Kiva Auditorium, Convention Center; tickets \$4 ea. from all Ticketmaster locations.
- June 13 — Corn Dance & Fiesta Day, Sandia Pueblo; Corn & Buffalo Dances, Taos, San Juan, Santa Clara & San Ildefonso.



WHO says we're a paper mill? When Jerry Sprung of LWR Safety Research & Development Division 4443 dropped by Purchasing to pick up proposals relating to reactor safety, he came prepared. Red wagon is customarily used by Jerry's division to trundle tab runs around. Diana Silva (3721) looks on.

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 (814/6).

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. Include name and organization.
8. Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.

MISCELLANEOUS

- CRIB & MATTRESS: 3-dwr. chest w/hanging table top, \$40. Baca, 884-7793 after 4:30.
- BRIGGS & STRATTON power mower, \$25. Orr, 345-0631.
- SOFA, Stratford Early American, brown, 2-piece sectional, 90" long, \$185. Trump, 299-5162.
- DINETTE SET: table, 60"x36" w/leaf, wood-grained finish, 5 chairs, avocado green vinyl, \$30. Snyder, 296-5771.
- TYPEWRITER, SCM port. elec. w/carrying case, almost new, \$100 firm. Conlon, 268-6515.
- TENT, 9x9 umbrella, \$25; child's play tent, \$7.50. Moyer, 881-3879.
- BALDWIN Orga-Sonic concert organ w/Leslie speaker, solid walnut cabinet & bench, asking \$750, consider offer. Lyon, 299-9423 or 884-8515.
- PUMA TENT TRAILER, sleeps 6, sink, ice box, stove, low profile, 1975, \$1500. Hilton, 268-4448.
- HEAVY DUTY basketball backboard & net w/hangers for attachment to garage gable roof. Ricker, 296-2191.
- CARPET, nylon, 40 yds., \$40; scatter rugs. Joseph, 268-5414.
- DOUBLE BED; bureau, dinette set; plaid sofa; all used less than 8 mos.; Singer slantneedle buttonholer; Sears 10-key elec. adder; misc. kitchen items. Dureault, 294-1374.
- AIR CONDITIONERS: 2 ea. Fedders, refrig., window type, 220V-12000BTU & 120V-9000BTU, both \$100 as is. Lowry, 296-3326.
- BARCA LOUNGER, brown naugahyde, \$100, cost \$180. Phillips, 881-2450.
- FRENCH HORN, Holton Farkas double

- nickle plated, case & accessories, \$750. Kerr, 299-7527.
- CONVERT. love seat/bed couch; white bean bag, vinyl. Zucuskie, 881-4086.
- TRANSFERABLE life membership at European Health Spa for half price, \$400. Yaniv, 821-0999.
- FREE to good home: 2 mature, gentle pet bull snakes & glass display cage. Hymer, 298-2232.
- NORGE refrig./freezer, frost-free, 5 yrs. old, 21.3 cu.ft., 312-lb. freezer capacity, coppertone, \$300. Padilla, 898-3115 after 5.
- CAMP TRAILER, Jayco, sleeps 8, gas stove, ice box, water tank, 110VAC to 12 VDC converter, Portapotti. Merrill, 869-6534.

- RANCH OAK loveseat, blonde, armrest right side only, 46"w, 30"h, 31"d, \$150. Gerlach, 299-9084.
- 304 INTERNATIONAL engine complete w/manifolds, carburetor, distributor & fuel pump (without starter & generator), \$400. Burress, 298-5061 after 6.
- USED CARPET: approx. 45 sq. yds. avocado green plush, \$225; approx. 12 sq. yds. royal blue shag, \$40. Clem, 296-5204.
- PUPPIES, free, 5 1/2 weeks old, 1/2 German Shepherd, 1/2 ? , 5 males, 4 females. Wrobel, 255-3062.
- SKATEBOARD, Logan Earth Ski, top-of-the-line trucks & wheels, \$25. Hudson, 296-3484.
- TIRES: 4 Michen X steel belted radials, 185x14, 15,000 miles, \$120. Daut, 255-25\$9.
- CHILD CARE, hot lunches, personal reference, Eubank & Ind. School area, \$25 per week. Alger, 294-6259.
- 1928 CHEVROLET TRUCK, \$1200, 2 green velvet occasional chairs, \$80 ea.; Weber grill, \$40. Kmatz, 884-8122.
- HUMMEL plates & bells, 1971 through 1979. Fitzgerald, 265-3055.
- GREENHOUSE panels; baseboard heaters; wood stove UREA fertilizer; barbecue; waxer; tent; pump; car cooler; filing cabinet; record changer. Maak, 294-3207.
- WATER SKIS, fiberglass, adults, \$20; wood skis, children, \$10; Ben Hogan irons, set of 9, \$85; 19" color TV, port., \$150. Chandler, 296-3323.

- PUSH TYIE lawn mower. Quintana, 294-8930.
- POOL LINER, 18'x48", new, \$65; patio door, \$50; maple cradle, \$35; Equal-I-Zer brand hitch w/receiver, \$50. Hastings, 881-6789.
- SOFA & CHAIR, Early American, olive green, both \$100. Martin, 296-0941.
- BALLOON CLUB share, Barnes AX-6 (100 hrs.), low-cost instruction available, \$600 plus \$10/mo. dues. Wilmot, 298-9243.
- RECONDITIONED 390 Ford block, heads, rods, crankshaft, new pistons, lifters, camshaft, also other misc. parts, unassembled, \$350. Lowe, 299-7725.

TRANSPORTATION

- SAILBOAT w/trailer, complete, \$850. Merritt, 884-8487.
- '71 FORD Galaxy 500, rusted body, burns oil but runs, \$250. Wrobel, 255-3062.
- '71 MERCURY 10-pass. wagon, Colony Park, all power, air, AM/FM, one owner, \$975. Bagg, 298-4035.
- MEN'S 26" frame 10-spd. bicycle, Panworld lt. wt., \$65. Mendel, 265-3840.
- HONDA XL250 street/trail bike, 6000 miles, \$550 or best offer. Chapman, 296-4321.
- '76 DODGE Aspen, PB, PS, AC, slant six engine, 32,000 miles, below book, orig. owner. Winblad, 898-9762.
- '74 KAWASAKI 125 motocrosser, 6-spd., forward mounted shocks, recent rebuilt top & bottom ends, \$400. Hesch, 1-983-9382.
- '75 AMC Matador, 18 mpg, uses reg. gas, Brougham pkg., 32,000 miles, new radials, loaded, \$2400. Martin, 869-2049.
- '74 CHEV. 3/4 ton camper special, AT, AC, PS, PB, new tires-brakes-paint & overhaul, \$3000. Kerr, 299-7527.
- '75 AUDI FOX, 2-dr., 4-speed., AC, FM-cassette, low mileage, under book at \$2950. Lipkin, 881-6038 after 5.
- '71 PONTIAC Trans-Am, 400 V8, 4-spd., new upholstery, orig. paint, AM-FM stereo, \$2500 or best offer. Daut, 255-2529.
- '73 MAVERICK, 2-dr., 6-cyl., 3-spd., vinyl top, R&H, \$800. Kaneshiro, 864-2508 after 4.
- '78 YAMAHA 650 Special, many extras,

- 11,750 miles, \$1900. Bailey, 293-3639.
- 10-SPD. Motobecane, used 3 mos., Suntour derailleurs, alloy crankset, Michelin tires, fits person about 5'9" tall. Lagasse, 299-8357.
- '72 OLDS Delta 88 4-dr. sedan. Paxton, 292-3853.
- PEUGOT, ladies 10-spd., never used, w/light, bumpers, \$125; exerciser trampoline, \$100. Chavez, 294-1253.
- KAWASAKI KZ-400-D3, front disc brake, elec. starter, custom paint, less than 2100 miles, \$900. Monson, 298-7969.
- '77 TOYOTA Celica GT liftback, fully equipped, AT, 31,000 miles, stereo tapedeck, louvers. Dureault, 294-1374.

REAL ESTATE

- NORTH VALLEY home, 3-bdr., 1 1/2 bath, FR, dbl. garage, lg. cov. patio, landscaped, lg. side yard, \$51,000. Marquez, 344-8583.
- ACADEMY ACRES, 3-bdr., den, 1 1/2 bath, mid fifties, CTL, REC or refinance. Martinez, 821-8692.
- ARROYO DEL OSO Mossman, 3-bdr., pool, solar cover, whirlpool, heated workshop, side access, extra insulation, thermal windows, SW landscaping. Shane, 884-7925.
- WOODED mountain land northeast of Sandia ski area, panoramic view, photos on bulletin board. Clement, 298-4994.
- 3-BDR., 1 1/2 bath, DR, LR w/fp, extra insulation, 1+ garage, patio, sprinklers, storage shed, \$49,800. Staller, 298-8532.
- 3-BDR., NE heights just south of golf course, many extras, \$76,000, open house. Sun. 2-5 p.m. Beck, 881-9425.
- NE HTS., 3-bdr., 2 baths, LR, DR, FR w/fp, spacious kitchen w/dining area, open house Sun. 1-5 p.m. Dawson, 296-6173.

FOR RENT

- HOUSE in NE heights (Eastridge), avail. 8/15/79-9/1/80, 3-bdr., 2 baths, trailer access, all major appliances included, \$375/mo., water paid. Reif, 299-2665.
- VISTA LARGA AREA, home avail. 8/15/79-8/15/80, 3-bdr., 2 baths, study, play area, \$395/mo., DD

- required. Gerdes, 268-1885.
- 3-BDR., bath, den, all carpeted, washer & dryer, quiet established N valley neighborhood, \$300/mo. plus utilities. Garcia, 898-4543.
- LARGE, new 2-bdr. units w/fps, no pets, \$290. 12600 Dunes SE. Thalhammer, 298-8521.
- 4-BDR. unfurnished tri-level, Holiday Park area, avail. June 15, \$450 + utilities, DD, first & last month rent. McCoy, 821-2509.
- CABIN on Hondo River near Taos Ski Valley, deluxe accommodations, fully equipped kitchen, sleeps 8. Peet, 294-1250.
- NEW 2-bdr. unfurnished townhouse apt. near Central & Tramway, city view, \$225/mo. plus elec. & \$100 deposit. Berg, 296-2695.
- 4-BDR. unfurnished house, NE, 1 1/2 bath, FR, dbl. garage, no pets, \$395/mo., DD, Spencer, 296-6250.

WANTED

- SCREEN DOOR or storm door, 36"x80", good condition. Stuart, 299-9190.
- VISITING PROF. & family would like to rent a furnished or semi-furnished house for the month of Aug. Doherty, 265-0146.
- ARROW STRAIGHTENING TOOL w/dial indicator. Nichols, 294-3192.
- BABYSITTER in Comanche Elementary School area, for first grader, before & after school, beginning school year '79-80. Gallegos, 293-9545.
- CEMENT MIXER suitable for small home-type projects. Parker, 887-8525.
- SMALL car like VW in good condition. Miller, 255-1324.
- JOIN a car pool from Rincon Loop, Tijeras, N.M. Brown, 264-2241.
- CLEAN 55-gal. steel drums, top opening. Paxton, 292-3853.
- TO COPY or borrow operating instructions for Regina 2-spd. rug shampooer/floor polisher. Chavez, 294-1253.
- TIRES: 6.50-13 or B78-13 in good condition. Miyoshi, 821-9118.

WORK WANTED

- PAINTING, hauling, window washing, yard work, house sitting; also take family insurance photos. Peter Shunny, 265-1620.

Coronado Club Activities

Luau Set June 16

HAPPY HOUR TONIGHT sees Cornish game hens on the buffet menu, the Four Keys on the bandstand. Singles are mingling in the Eldorado room with munchables, music and dancing starting at 4:30. Yolanda and the group are making the music. The patio and snack bar are open.

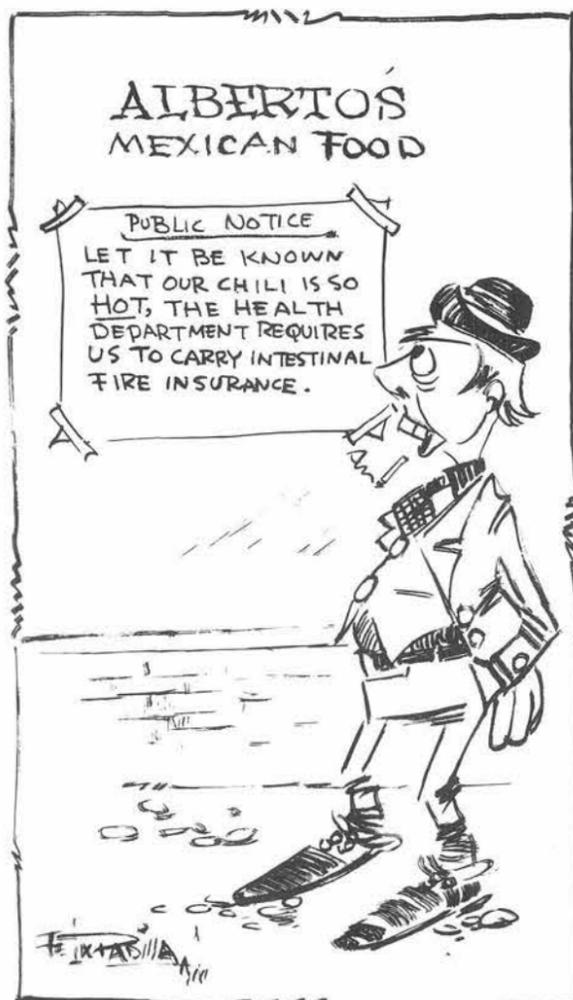
TOMORROW the Club's triple pools open for the season from 11 a.m. to 6 p.m. every day through Labor Day. The snack bar is also open those hours. Tomorrow evening, Variety Night features live entertainment by the Rocket Lockers, a dance troupe, starting at 7 followed by a movie, "Ten Who Dared." This is the adventure of the first exploration of the Grand Canyon by boat — Major John Wesley Powell in 1869. Super sandwiches are available at 6. Bring the family, admission is free to members.

NEXT FRIDAY, June 8, Happy Hour features an old fashioned fish fry and the Shades of Light on the bandstand. Call the Club office, 265-6791, by mid-week to reserve buffet tickets.

THE BIG ONE this month is the Club's annual Hawaiian Luau — fantastic food, great entertainment and dancing music by Horizon. One of the more popular events at the Club, the Luau is always well attended. Pick up your tickets by June 9.

SANADO WOMEN plan a western hoedown and potluck dinner Tuesday, June 5, starting at 6:30. Call Donna Urish, 298-0728, right now, for reservations.

BALLROOM DANCING LESSONS start June 12 with Mike Haly instructing. The class will meet Tuesdays at 7 p.m. for six weeks. Cost is \$30 for members, \$35 non-members. Enroll at the Club office.



THIS may not strike you as front page stuff, but there's a story in this photo. Those circular dams around the trees now fulfill the most mundane of tasks, but once they were up there in high technology. The plastic rings are cast offs from Sandia's Hermes II flash x-ray machine. Plant Engineering saw them in salvage and, unimpressed with their pedigree, assigned them this homely role. *Sic transit gloria* . . .

TEENAGERS should enjoy a disco party Thursday, June 14, from 8 to 11 with Ricci Dustin. Member parents must pick up tickets for their youngsters.

TRAVEL — The Club again offers discount tickets on Cumbres and Toltec Railroad excursions. Dates are June 23, Aug. 25 and Oct. 6. Adult fare is \$16, children (11 years and younger) \$6.50. Sign up at the Club office. Travel director Ed Neidel also has money-saving tour packages to Europe and Hawaii. See him in the Club lobby between 6 and 7 tonight.

A CALLIGRAPHY CLASS starts at the club June 12 and meets Tuesdays at 7 for six weeks. Sign up (members pay \$20) at the Club office.

THE WOLFPACK offers season football tickets to Lobo games for \$21. Contact Mary Winter, 4-6987.

ALL SQUARE DANCERS are invited to the graduation dance and associated festivities for the graduating class of the

FRIDAY	SATURDAY
1 — HAPPY HOUR Cornish Game Hens	2 — Pool Opens For Season
Adults \$4.50 Under 12 2.25	-----
FOUR KEYS -----	VARIETY NIGHT
Singles Mingle - 4:30	Rocket Lockers, Dance Troupe
8 — HAPPY HOUR Old Fashioned Fish Fry	"TEN WHO DARED" Movie
Adults - - - \$3.50 Under 12 - - 2.00	Supper - - 6 p.m. Show - - - 7 p.m.
SHADES OF LIGHT	9 — DEADLINE FOR LUAU TICKETS

Coronado Grand Squares. The party starts at 8 p.m., June 11, in the main ballroom. Refreshments will be provided. Fee: \$2/couple. Come on out, dance, and have some fun.



WHEN Maxine Stephenson steps down today from her role as president of the Office & Professional Employees International Union, Local 251, she will have occupied that office longer than anyone — more than nine years. As president of the Local, Maxine represented both employees of Sandia as well as those of 13 other firms in the city. She is succeeded by John Ayala (3172). Union members presented Maxine with a gift certificate and a Certificate of Appreciation for her work with the group.