

Invest In The Community

Most Sandians see only the input end of the Employees Contribution Plan pipeline—the figure on the paystub that indicates the amount deducted from the check. But many Sandians this year have seen the output end as well—they're the ones who have visited the ECP agencies providing the services to the community; they, like this year's ECP Chairman Jim Kenagy (3640), are acutely aware of the difference Sandia contributions make in the lives of thousands of people.

One of the agencies the visitors have seen is the Albuquerque Hearing and Speech Center. Watching the therapists there work with children has to be one of the most heartwarming sights around. The therapists develop whatever bit of hearing each child retains, an approach that takes patience, skill, and expensive equipment. Once the child can hear sound, the therapists can take advantage of the fun it is to learn by hearing and can gradually teach word comprehension and, finally, sound formation—speech. Then comes the

Bill Sherman's Stockpile Systems Test Division 9524 at Pantex has joined in the Amarillo United Way in record fashion: 100% fair share or better, with an average contribution per employee of \$105.54. Some 20 Sandians are assigned to the division.

task of teaching the child lip-reading. The advantage of this auditory-oral approach over conventional sign language is that the child who speaks and lip-reads well can live a nearly normal life—"In fact," says Maryan Holpp, Director of the Center, "most of our 'graduates' are attending public schools. It's a long, difficult task, but it's worth it. We accept children with hearing difficulties and with speech problems who are only two years old."

Less heartwarming perhaps but just as dramatic is the counseling offered for adults with hearing loss. Many older people become almost totally isolated from the rest of society once their hearing fails.

Altogether the Center serves about 4000 people a year. The United Way provided \$55,000 in fiscal '76 with fees for services

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Jack Howard To SALT Talks

Executive VP Jack Howard is in Geneva, Switzerland, as a member of the US delegation to the fall session of Strategic Arms Limitation Talks. He represents the Secretary of Defense on this SALT negotiation, a position on the delegation held until earlier this year by Dr. Michael May of LLL. Mr. Howard's formal title is Assistant to the Secretary of Defense for SALT.



WILLIS WHITFIELD & JACK SIVINSKI of Waste Management & Environmental Programs Department 5440 are down on the farm, sort of, in this plot of milo sorghum just east of Bldg. 880. The sorghum was fertilized with radiated sludge; its growth compares favorably with that of the sorghum (just behind them) to which commercial fertilizer was applied. Willis and Jack foresee nationwide potential in use of radiated sludge as fertilizer and soil conditioner.

SLUDGE ■ Showing Signs ■ Of Respectability

In most American cities it's not so much managed as coped with, and city mayors fret as much over disposal as they do the problems of rising crime rates and diminishing tax bases.

Sewage: it's one hell of a problem.

In Los Angeles there's 350 million gallons per day. In Chicago, they barge the stuff more than a hundred miles downstream. In New York the city's prime beaches were shut down in July when errant ocean currents washed the material into shore. And, here in Albuquerque, South Valley residents complain about the stench.

Two scientists at Sandia pose a startling proposition: suppose you could convert this monstrous municipal problem into

something both positive and profit making. The two are Jack Sivinski, manager of Waste Management & Environmental Programs Department 5440 and Willis Whitfield, head of Isotope Applications Division 5442.

Whitfield explains: "The final product in sewage treatment plants is sludge—a de-watered organic material containing nitrogen and other nutrients that make it a good fertilizer. But—and here's the rub—the sludge contains pathogens, that is, bacteria and other organisms which could be disease sources. Municipalities sometimes use sludge in a city's green areas, but they hesitate to sell it or even give it away because of the potential

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LAB NEWS

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OCTOBER 1, 1976

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



TOURING SANDIANS visit the Hearing and Speech Center. Therapists teach an auditory-oral technique that avoids the isolation of sign language. If enough Sandians request it (and have supervisory approval), other tours of ECP agencies can be arranged through Joe Laval (3163).

Continued from Page One

SLUDGE

health problem if it is applied to gardens or food crops.

"Jack and I think the answer to that problem lies in gamma-ray irradiation of the sludge. The pathogens are killed, there is no residual radiation, and the sludge becomes fit for general use. The cities can probably sell it for more than processing costs. In other words, they'll turn a profit."

Sterilization of sludge by radiation has been around for a while (LAB NEWS, Oct. 31, 1975), but only in the past few months have all the elements come together that add up to sludge-for-profit. These elements include the emphatic interest (and funding) of ERDA, the Department of Agriculture, the Environmental Protection Agency, and several cities.

ERDA sees in the irradiation of sludge an excellent application of certain radioactive byproducts of nuclear reactors. These byproducts have themselves constituted a disposal problem, and the widespread use in sludge treatment plants of the radioactive isotopes (chiefly cesium 137) would considerably ameliorate this problem. In fact, some funds would ultimately be realized from sale of the isotopes.

The Department of Agriculture is strongly supportive because of fertilizer applications of sludge, and the agency plans to set up a pilot sewage treatment plant at its agricultural station in Beltsville, Md., whose end product would be packaged bags of sterilized sludge, ready for sale. According to Whitfield, "If the plant demonstrates the feasibility of the process—and we're fairly sure it will—then a number of cities, including Philadelphia, plan to adopt it."

EPA's interest in sludge treatment parallels that of the cities. Sewage, its treatment, and occasional non-treatment constitute a major environmental consideration.

Why have these elements come together at this time? "Several developments have brought sludge treatment to today's promising stage," says Sivinski. "In the past few years centrifuges have become available that make the de-watering of the sludge economically feasible. De-watering then made it possible to compost the sludge, enhancing its nutritive value. And, of course, our group's development of sterilization by radiation is, perhaps, the final key in the process. Considering the national magnitude of the sewage treatment problem, I'd say we have an idea here whose time has come."

Congratulations

To Mr. and Mrs. Floyd Gallegos (3613), a son, Michael Daniel, Aug. 13.

To Mr. and Mrs. John Zuberky (5154), a son, Shannon Paul, Sept. 13.

To Mr. and Mrs. Dick Shaw (3613), a daughter, Leslie Lynn, Sept. 22.

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Invest In The Community

(based on ability to pay) making up the other \$50,000 it takes to operate. The budget would be even higher if it weren't for several volunteers who perform many of the clerical and housekeeping functions so the staff can concentrate on professional duties. Among these volunteers are several Sandians' wives: Ruth Deaton (Mack, 9751), Lora Volda (George, 2356), and Emily Mauney (Herman, 4330).

The Hearing and Speech Center is just one of the 30 agencies supported by United Way. In addition to support for these agencies, Sandia's ECP provides some funding for eight other groups. Calla Ann Pepmueller (3140) heads this year's Allocations Subcommittee. She reports the following percentage allocations for 1977:

Agency	Allocation
United Way	84.5%
Cancer Society	3.5
Heart Association	3.0
Cerebral Palsy	0.6
Muscular Dystrophy	2.0
Arthritis Foundation	1.0
Multiple Sclerosis	1.9
Crippled Children	2.3
Cystic Fibrosis	0.7
Reserve	0.5

The ECP drive this year begins today. It's your chance to join—or to increase your support for—the effort to solve a wide variety of social problems without depending on government funding. It's an investment in your community that pays off.

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OCTOBER 1, 1976



IT WORKS FOR ALL OF US

LAB NEWS

Published every other Friday

SANDIA LABORATORIES

An Equal Opportunity Employer

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bruce hawkinson & norma taylor write
bill laskar does picture work
so does russ smith

&

lorena schneider reports on livermore

LEAP Campaign Kick-off Monday

A meeting with solicitors will kick off this year's LEAP (Livermore Employees Assistance Plan) fund-raising campaign which starts Monday, Oct. 4. Brochures describing the 1976 program are being distributed, and solicitors will contact each person individually during the week-long campaign.

Chairman Don Benton (8411) says the committee feels the target of \$50,000 is realistic. To meet this goal, major emphasis will be on increased participation. For those employees who joined the Labs since last year, LEAP informational meetings are planned in each directorate.

In allocating this year's LEAP funds, the committee considered a number of proposed beneficiaries and voted to support eight local service agencies (up from seven last year), the United Way of the Bay Area, and national health agencies through the Bay Area Combined Health Agencies Drive (CHAD). The breakdown follows:

	Percent Allocation
LOCAL AGENCIES	19
Buenas Vidas Youth Ranch.....	5.0
Emergency Fund Center	5.0
Nursery School Scholarship Fund.....	4.0
Hotline, Inc.	2.5
Society of St. Vincent de Paul Emergency Fund	1.0
Valley Volunteer Bureau8
Connection5
Nurses Welfare Fund2
NATIONAL AGENCIES	
Bay Area Combined Health Agencies Drive (CHAD).....	20
UNITED WAY OF THE BAY AREA AGENCIES.....	60
RESERVE	1
TOTAL	100

Three of the local agencies are new on the list: Valley Volunteer Bureau which recruits volunteer workers and matches them against needs of non-profit agencies working with the aged and handicapped; the Society of St. Vincent de Paul, a volunteer agency providing food, clothing, shelter and furniture to local residents to meet emergency needs; and the Nurses Welfare Fund, used by nurses in the Livermore Valley Unified School District to provide needy students, on an emergency basis, with such necessities as clothing and shoes, dental and medical treatment, and repair of eye glasses.

"As LEAP '76 chairman," says Don, "I've had the opportunity to become better acquainted with the agencies serving our community. I'm impressed with the number of people, many of them Sandians, who donate their time and abilities to helping those in need. Because of this volunteer effort, each dollar invested in LEAP goes much farther.

"When the solicitor comes by for your pledge, please consider a LEAP Share—six-tenths of one percent or approximately one hour's pay per month. But whatever amount you give, it will be useful in helping others.

LIVERMORE NEWS

VOL. 28, NO. 20

LIVERMORE LABORATORIES

OCTOBER 1, 1976



EACH NIGHT Chuck Stockley's (8411) eight-year-old son Charlie sleeps in this plastic tent filled with mist composed of water, salt and vinegar to relieve respiratory problems associated with cystic fibrosis. Charlie also requires supplementary vitamins, special medication, daily postural drainage therapy and, at times, mist inhalation therapy.

Cystic Fibrosis Means A Special Lifestyle

"A disease little known to most people, cystic fibrosis (CF) is considered one of the cruelest that afflicts children," says Chuck Stockley (8411) whose eight-year-old son Charlie has been a victim since birth.

Not even identified as a distinct disease until 1938, CF is a chemical disorder causing abnormal thickening of mucous throughout the body which tends to clog up narrow openings. Primarily affected are the pancreas, liver, intestines and lungs.

"Cystic fibrosis often goes unrecognized because it is mistaken for asthma, bronchitis, allergy or other conditions," adds Chuck. "Yet, about one of every 1,500 babies born in the United States falls victim, and it's one of the leading causes of death."

In addition to being such a serious illness, the disease imposes severe burdens on the family—physically, financially and emotionally—as Chuck and his wife Allison have well learned.

Although incurable, the disease may eventually be conquered, providing a test for detecting CF "carriers" proves successful. The detection test is being developed through research conducted by the National Cystic Fibrosis Foundation. The CF Foundation participates in Sandia's LEAP program through the Bay Area Combined Health Agencies Drive (CHAD).

Since birth Charlie has lived in the so-called "white fog," descriptive of the mist composed of water, salt and vinegar used to alleviate respiratory problems. Each night he sleeps in a plastic, mist-filled tent from which he emerges completely drenched. His bed must be aired and changed daily.

Because the digestive process is affected and nutrients are not absorbed in the body, Charlie must take enzymes at each meal to help digest his food, plus supplementary vitamins. CF children eat tremendous amounts of food but they're

still thin and small for their age. He takes 23 different kinds of medication daily for a total of 57 capsules and pills; drug bills alone average \$350 a month.

Because he becomes immune to the antibiotics, Charlie's prescription has been changed several times by his doctor. Developing different and better antibiotics has been a major effort of CF research because, as more and more scar tissue forms from infection, less lung capacity remains.

Lung congestion, one of the most troublesome symptoms of CF, requires "postural" drainage therapy to remove and drain excessive mucous which accumulates in the lungs. Chuck and Allison learned the 18 different postural drainage positions and techniques through instructions at the CF clinic before bringing Charlie home from the hospital. Chuck gives him daily postural therapy.

"The antibiotics and daily therapy, plus mist inhalation when he's really plugged up, are essentially what have kept Charlie going," says Chuck. "Of course, it's a constant struggle, keeping up with his medication and being careful about activities which might expose him to infection.

"Overall, Charlie is doing very well. He has a really outgoing personality, gets good grades in school and does all the normal things for a boy his age—rides his bicycle, plays ball, swims, lifts weights, plays bongo drums. He's even been the subject of a special ABC-television program for cystic fibrosis awareness.

"Although Charlie is getting the best of care and takes good care of himself, his future depends on research and how CF can be controlled," Chuck concludes. "The more time that elapses before a cure is found, the greater chance there is for further lung damage; but even with a cure, lung damage already incurred cannot be reversed."

Retiring



Lyle Dillingham (9331)



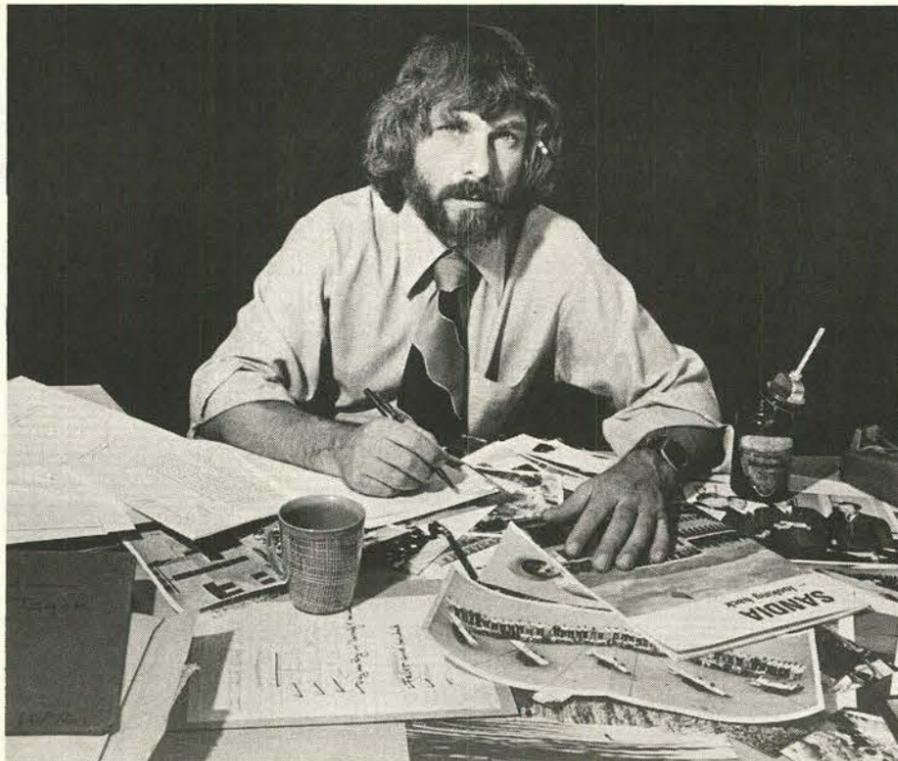
Ruth Kresge (3252)



Ed Bernard (3430)



Ed Downing (9742)



SANDIA—LOOKING BACK, a pictorial view of Sandia's 30 years, is the focus of Bruce Hawkinson's (LAB NEWS) attention. The 52-page book, compiled by Bruce and LAB NEWS editor John Shunny, will be distributed to employees a few days before Family Day (Oct. 16).

Take Note

FOR residents of Bosque Farms and environs, a church run Child Care Center has opened. Children age two and above are accepted. Call 869-3022.

REMINDER: Family Day is coming, two weeks from tomorrow, Saturday the 16th. Complete details on exhibits and demonstrations will be given in the next LAB NEWS, Oct. 15. In the meantime, review the Sandia Bulletin of Sept. 16 for information on Family Day '76; note especially arrangements for taking guests inside the various Tech Areas.

SIXTY-EIGHT colleges and universities from throughout the United States will attend the Albuquerque College Fair on Sunday, Oct. 3 at the Winrock pyramid. Aimed at prospective college students and their parents, the College Fair is free of charge and open from noon to 6 p.m. Purpose is to acquaint students with college opportunities in New Mexico and throughout the States.

EACH one of us with a New Mexico driver's license can become a donor of vital organs simply by having a certification sticker attached to the license. In the event of death, the certification sticker enables medical people to remove organs such as kidneys and corneas so that they might replace or supplant diseased organs in still living persons. According to the news release, "the need for organs for transplants is dramatic." The certification procedure can be completed at any Dept. of Motor Vehicles field office. Donors must be age 19 or over.

NEW YWCA classes and programs for youth and adults start next week at four city locations—Downtown YWCA (316 4th SW), Northeast YWCA (Parsifal at Candelaria), Paradise Hills YWCA (All Saints Lutheran Church, Coors Rd. & Paradise Blvd.) and West Mesa YWCA (Wesley United Methodist Church, 476

57th NW). The YWCA Town Hall lecture series starts Wednesday, Oct. 6 at 11 a.m. at the Fox Winrock Theater with speaker Ralph Salerno, authority on crime prevention.

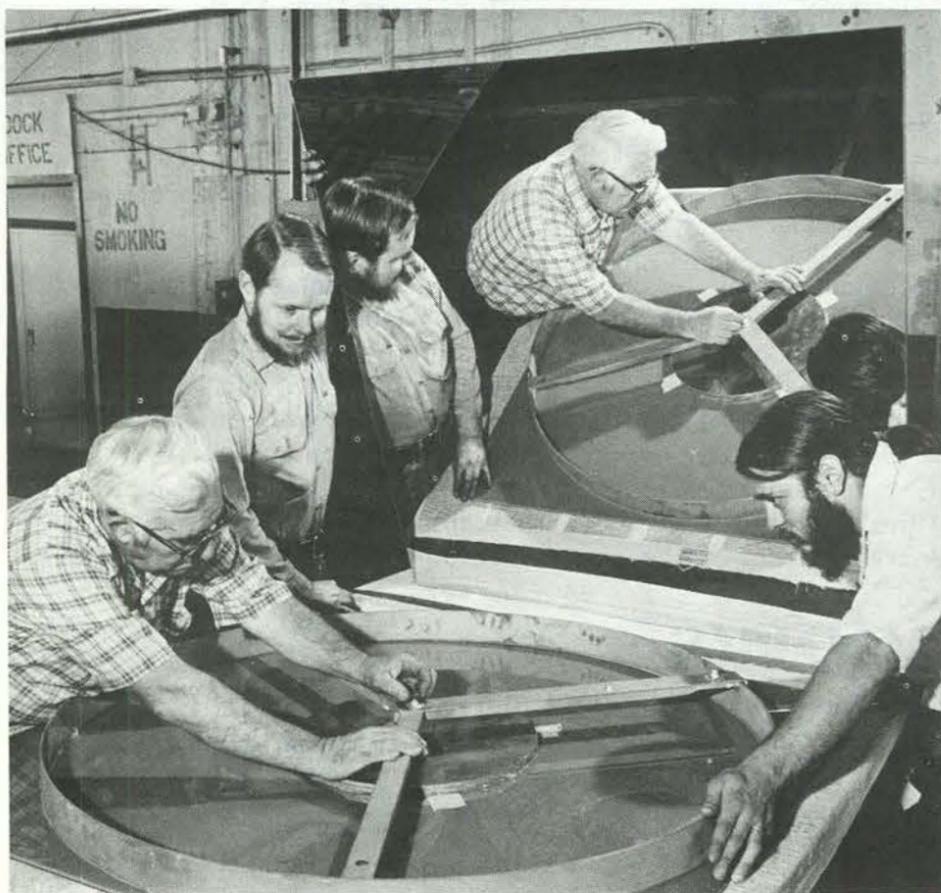
Information on class registration and lecture reservations is available from the YWCA, 247-8841.

FORMER employee Mary Alice Jarrell, now recovering from open heart surgery, sends her appreciation to Sandians who made blood donations for her use. Mary Alice worked in the Technical Library from 1961 through 1973.

INDUSTRIAL RESEARCH magazine has selected a device invented at Sandia as one of the "100 most significant new technical products of the year." T.A. Allen and Bob Sylvester (both 3623) are the inventors; their winning entry is a machine which levels solder on printed circuit boards with a blast of heated air instead of hot liquid. T.A. and Bob were honored last month at an awards banquet given in the Museum of Science & Industry in Chicago.

VIRGINIA MACHEN, wife of Art (now retired), reports from Port Ludlow, Wash. that Roger Warner died of a coronary at his home in Washington, D.C. on Aug. 3. Mr. Warner was head of "Z" Division, the offshoot of LASL that settled on Sandia Base in '45 to become present day Sandia Laboratories. He served as division director through early '47.

THE ITALIAN CULTURAL CLUB holds its annual spaghetti banquet on Sunday, Oct. 10, at the Youth Hall, State Fair Grounds. Called "La Festa Italiana", the dinner is served from noon to 6 pm and includes wine, salad and dessert. Tickets may be purchased at the door, \$3 for adults, \$1.75 for kids. Proceeds go to the Club's scholastic fund.



Hole-in-Ground Will Be New Power Tower

THE BIG HOLE above that Florencio Baca (9718) is trying not to fall into will one of these days be the base of the 5 MW Solar Thermal Test Facility (the "Power Tower"). The concrete tower will rise 200 feet above the Coyote Canyon mesa; tower construction begins later this month. The lower photo shows three Martin-Marietta employees now working in an old Air Force hangar on KAFB-West. Paul Flora and Bruce Milligan are finishing one mirror facet as Steve McBride holds another. Twenty-five of these facets will be part of each heliostat (sun-tracking mirror unit). And 78 heliostats will, by focusing solar radiation on the receivers at the top of the power tower, produce 1 megawatt of power. Eventually, 234 more heliostats will enable the facility to produce 5 megawatts.

Oct.—"Peculiar to Photography" Exhibit, Fine Arts Center, UNM, Tues-Fri, 10-5, Sun 1-5.

Oct.—"The Tender Trap," Barn Dinner Theatre, 281-3338.

Oct. 1-10—Australian Aboriginal Art Exhibit, Museum of Albuquerque.

Oct. 1-4—"The Good Doctor," (Neil Simon and Chekov), University of Albuquerque, 8 p.m.

Oct. 1-3—Grecian Festival 76 (food, pastry, music, dancing), 308 High St. SE, 11 a.m.-10 p.m.

Oct. 1—"Coastline California," Audubon Wildlife Film, Popejoy, 7:30 p.m.

Oct. 2, 6, 8—Hockey, Chaparrals vs Billings, Billings, and Tucson, Tingley Colliseum, 7:30 p.m.

Oct. 2-3—NM Gun Collectors Show, Convention Center, open 8 a.m.

Oct. 2—Albuquerque Youth Symphony Concert, Popejoy, 8:15 p.m.

Oct. 2—Aspen Hike, Hamilton Mesa (in Pecos), Barbara Waters, 255-9389.

Oct. 8-10—Chamber of Commerce/City Spirit Arts Festival (classical and

Events

Calendar

modern dance; contemporary, classical, and childrens' theatre; music; mime; etc.). Schedules and info: 766-4955.

Oct. 8-17—Balloon Fiesta.

Oct. 8—Arts and Crafts Fair, Civic Plaza, noon-6 p.m.

Oct. 8—Hector Garcia, Guitarist, UNM Keller Hall, 8:15 p.m.

Oct. 8—U. S. Marine Band, Civic Auditorium, two performances.

Oct. 9-10—Elizabeth Waters Dance Workshop, UNM Keller Hall, 8:15 p.m.

Oct. 9—NM Symphony Orchestra Brass Ensemble, Civic Plaza at noon, Old Town Plaza at 1.

Oct. 9—Albuquerque Professional Photographers Guild Exhibit Opening, First Plaza Galeria.

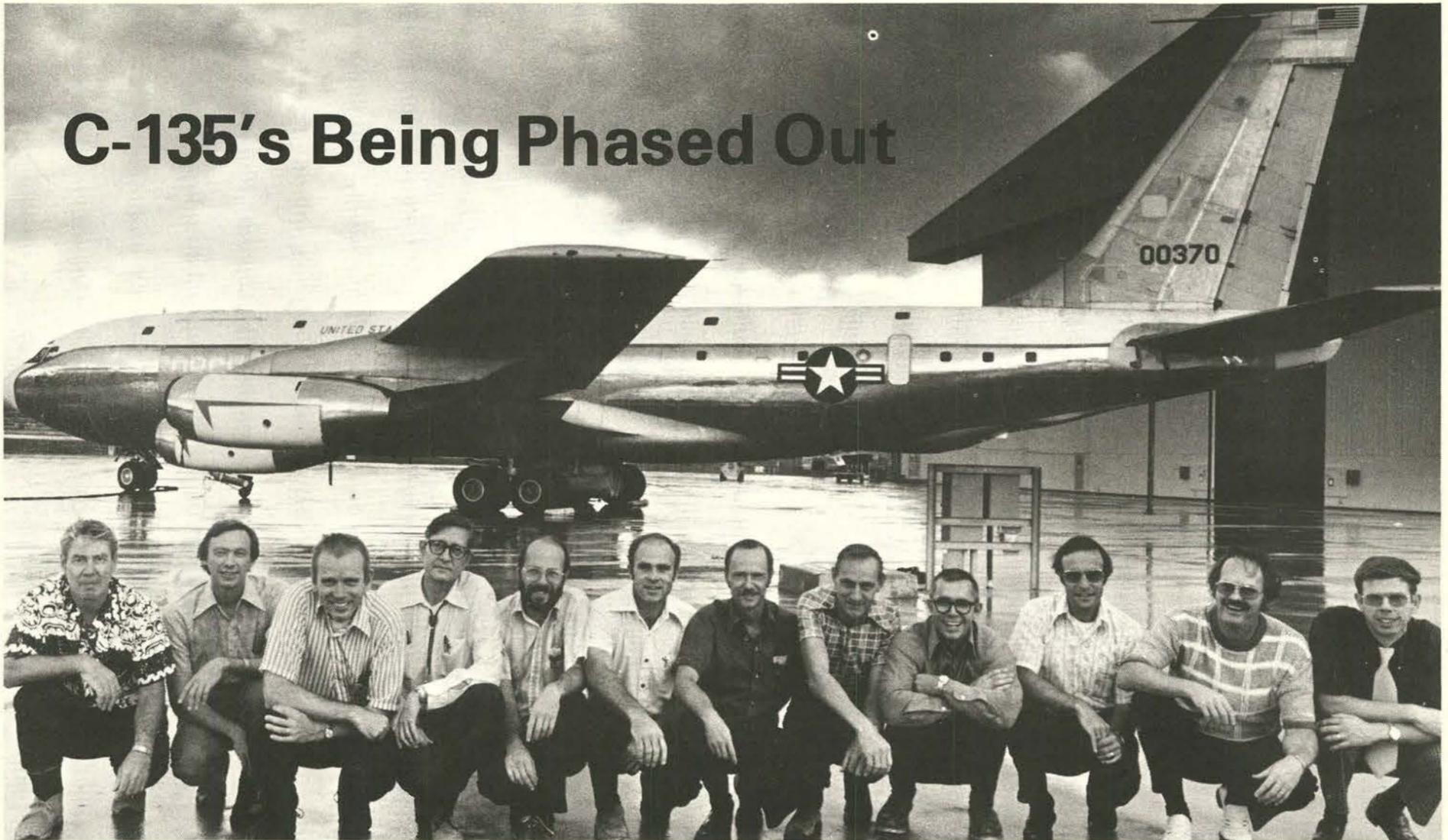
Oct. 9—"San Francisco and the Bay Area," Travel-Adventure Film, Popejoy, 7:30 p.m.

Oct. 10—"Twelfth Night," (Russian film with English dub), Popejoy, 7:30 p.m.

Oct. 10—Hike, Canyon Estates Trail, Dey, 256-7222.

Oct. 11—"Equus," Popejoy, 8:15.

C-135's Being Phased Out



GROUNDING: Dick Rudolph, Al Hutters, Tom Oakes, Bud Murphey, Chuck Nelson, Don Sayers, Larry Gillette, Jerry Lochtefeld, Billy Stanton, Paul

Stang, Boy Taylor, Dave Ryerson. Many other Sandians at one time or another served aboard the C-135's.

Their usefulness to the nation's test readiness program ended, the big C-135's are being decommissioned, phased out, mothballed. For 13 years, the three planes have been employed on a wide variety of scientific and technical missions.

The modified 707's, former Air Force planes, became flying monitoring stations, airborne laboratories, a kind of safeguard

device that could document fuzing and firing steps, take yield measurements, record the physics of a nuclear event—in short, perform operational diagnostics from an optimum location. Much of the instrumentation had been installed by Sandia. LASL, LLL, and Sandia were each assigned one of the aircraft.

Although the primary function of the

planes was readiness program diagnostics, the flying labs proved valuable in gathering data from solar eclipses, cosmic ray studies, aurora borealis studies, barium injection experiments, and the like. They participated in countless missions.

At Sandia, operational responsibility for the Labs' C-135 has been centered in Test Operations Division 1252 (now 9487).

All About Storm Windows

Following a note in the last issue of LAB NEWS asking for data about storm windows, we received information from several sources on the subject. One item discussed "U" values—"the amount of heat, expressed in BTU's, which will pass through one square foot of window area per hour for each degree Fahrenheit temperature difference between air on the inside and air on the outside. Some average U values: single glass, 1.13; 3/16" air space, .69; 1/4" air space, .65; and 1/2" air space, .58. These data are plotted on a curve which is nearly flat beyond 3/4" air space, suggesting that little additional insulating value is gained with a greater air space.

An FEA publication, however, recommends "at least 3/4 inch."

From Alan Pope (1400), "...glass is very nice stuff. It lets in sun frequencies, but it stops the long-wave infrared from getting back out. Hence the excessive heating of a closed parked car.

"As regards house windows, the heat loss is by conduction and convection; the inside air sliding downwards to provide more hot air to then be cooled by the cold glass. Sealing in some air between two layers of glass is very effective as

convection is reduced and conduction almost stopped. I would suggest at least a quarter inch between panes, but there is no upper limit. Small holes to permit pressure equalization are fine. Stuff them with cotton to pick up dust."

Another item states, "The storm window frame should fit flush with the outside frame. An opening on the bottom of the frame has a hinged cover and screen to permit outside air to come in when desired."

Single-strength glass is adequate for storm windows of up to 9 square feet, but for larger areas, such as that of a picture window, double-strength glass is recommended.

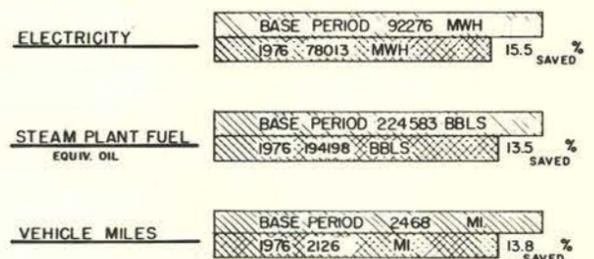
Reynolds Aluminum sells aluminum frame material for storm windows. Their how-to-do-it brochure indicates that making the windows is relatively simple.

In all cases, the storm windows should be caulked and should fit tightly. If necessary, weather strip the outside edge.

Unfortunately, glass is not cheap. For six 2 ft. x 5 ft. windows, we got one estimate of \$100 for the glass. On the other hand, if the price of natural gas doubles (and that seems to be a possibility), then the expense of the glass may become more acceptable.

ENERGY SAVINGS

COMPARED WITH USAGE IN BASE PERIOD - JULY 1972 THRU JUNE 1973
CURRENT REPORTING PERIOD ENDING AUG '76



commuting information
DIAL 4-RIDE

feed **liback**

To get a response to your comments and questions about Sandia Labs, complete a Feedback form (available near bulletin boards) and return it to the Feedback administrator. The substance of questions and responses of wide interest is published in LAB NEWS.

Q. Why NOS? What are the advantages of NOS over the PDP-10? After two classes and several attempts to use NOS, I am convinced that the disadvantages far outweigh the advantages for the casual user. NOS appears to be a way of giving remote terminals to programmers rather than a true time-share system.

A. For Sandia to compete successfully with other Energy R&D Laboratories, it was clear that we had to augment our scientific computing capacity. This was done by acquiring the CDC-7600 which was installed early this year. To get ERDA approval for Sandia's CDC-7600 we agreed that one of our less powerful computers would be placed on ERDA's surplus computer list. When this decision was made, it was realized that some segment of Sandia's computer user community would be adversely affected regardless of which system we chose to release. The decision was based on an assessment of what would be best for Sandia Laboratories as a whole.

The PDP-10 was declared surplus over a CDC-6600 because:

- 1) It has far less raw compute capacity.
- 2) The PDP-10 was nearly saturated at 45 concurrent users, whereas NOS on the CDC-6600 can handle additional concurrent usage demands.
- 3) Our PDP-10 hardware is old, and future operating systems released by DEC will contain no new features for our system. It is at a dead end unless a considerable investment is made in newer hardware.
- 4) Reducing the number of different types of computers simplifies hardware maintenance and scheduling/training of operators.

Other advantages of NOS on the CDC-6600 are:

- 1) Quicker response for CPU bound jobs.
- 2) Higher terminal data rates (1200 baud versus 300 baud maximum).
- 3) Word size and software compatibility with the batch CDC-6600's and 7600.
- 4) Timesharing on a CDC-6600 will eventually allow keyboard terminal access to Sandia's scientific computer network. (This software is currently being developed.)

We have known since our early investigations of NOS that in several ways it is more difficult to use than the PDP-10. However, for the occasional user who wishes to write a quick and simple FORTRAN or BASIC program, we feel that NOS is even easier to use than the PDP-10.

Whether NOS is easier to use or not, it will cause some difficulties simply because it requires the users to change. Similarly, we received many complaints about the PDP-10 when we converted to it from the G.E. timesharing service. (Incidentally, NOS was based on G.E. timesharing. Consequently it is in many ways very similar.) Like the PDP-10, we are quite confident that NOS will become easier to use with time. Not only will users become more familiar and comfortable with it, and obvious bugs eliminated, but like the

PDP-10, the software will be enriched and enhanced as time goes on.

It is our intention to provide good timesharing service with NOS. We will be in touch with you to determine what specific problems you are experiencing in hopes that we can improve the system.

L.E. Hollingsworth - 2600

Q. This morning I am trying to determine if a shipment has arrived from a manufacturer. Normally I can call a number in Receiving that can answer my question—but the update of the telephone directory won't reveal where to call—I can't find Receiving and Shipping. Surely the Sandia Directory could be kept more up to date by changing the Personnel Directory at the same time the Organization Directory is changed and/or at least include Shipping and Receiving in the Albuquerque Services of the Directory.

A. We appreciate your concern about out-of-date information in the phone book. We are now publishing the alphabetical section four times a year (up from twice yearly), and organization changes as often as the amount of change justifies. Without incurring great expense and creating stacks of paper, this frequency seems to be reasonable. We repeat again: listings of personnel and services, and of organizational changes *must originate with line secretaries* who request computer printouts from organization 3151 and return them with changes. In this instance, the alphabetical listing came out in June, and the new 3420 re-organization listing did not appear in print until July, so a few entries in the alphabetical section will remain inconsistent until the September re-issue. No one has ever asked that Receiving and Shipping be listed in the Services section. We rely upon users to alert us to missing or erroneous items, and upon line secretaries to request us to print changes and new entries.

K.A. Smith - 3100

Q. Could our medical insurance plan be expanded to include coverage for retirees' spouses after a retiree's death on the same basis as retiree benefits?

A. Coverage for medical expenses for employees and their dependents is of great concern to us because of the rapidly inflating costs of medical care and the potentially extreme financial burdens which may be experienced. A company such as Sandia, however, must make a decision as to how far it should properly go in providing company-paid health care. The Bell System has determined that health care for surviving dependents of deceased employees and retirees is beyond the scope of its responsibilities.

A conversion option is available for survivors without proof of insurability, and we are currently working to improve that option. I am sorry that I cannot provide you with a more satisfactory reply.

R.J. Edelman - 4200



Supervisory Appointment

MARIE SYME to section supervisor of Word Processing/Administrative Support Centers 4010 effective today.

For the past 10 years Marie has been a special security officer for Systems Research Department 1350. Previously at Sandia she was a secretary, including directorate secretary. Before joining Sandia in April 1957, she was a bookkeeper for a local school supply firm.

When she has time from her studies toward a business administration degree from the University of Albuquerque, Marie enjoys skiing in winter and golf in the summer. She is active in Eastern Star and Daughters of the Nile organizations. When her two daughters were small, she was Guardian of Job's Daughters, Bethel No. 4.

Marie and her husband live in Coronado Village, 8901 West Frontage Road NE, and enjoy visits from their four-month-old grandson.

Black Leaders Visit Labs

Black community leaders visited Sandia recently for briefings on the Labs. Bob Garcia, Special Assistant to the President for Equal Opportunity, was host and welcomed the group. VP Glenn Fowler, Personnel Director Bob Edelman, and Emma Hollingsworth, supervisor of Personnel & Employment Division, made presentations, and Ted Sherwin of Sandia's Information Department advised the group on Sandia resources available to them. Following a tour, the group lunched with President Sparks and several Black Sandia employees.





DURING THE YEARS before World War II, Tingley Beach was the most popular outdoor recreation spot in Albuquerque. Swimming facilities were among the finest in the state.



IN THE OLD DAYS speedboat races at Tingley Beach were held often. Canoes and kayaks were available for rental.

Our Town

Tingley Beach— Then and Now

It's enough to make old Clyde turn over in his grave. Tingley Beach ain't what it used to be.

In the thirties and forties Tingley Beach was the most popular outdoor recreation spot in Albuquerque. Oldtimers remember clear fresh-running water, sandy beaches, splashing kids, aquaplane races, rowboats, bathing beauty contests and Fourth of July celebrations. There were two long bath houses, a 20-foot-plus diving tower, great hotdogs and hamburgers and always a crowd in the summer time.

Clyde Tingley was "mayor" of Albuquerque (Chairman of the City Commission in those days) and people loved him. He was governor for a while too. The local papers criticized him for his unpolished language. "I ain't ever going to quit saying ain't," he said. Clyde was not a quitter. He worked untiringly for the city. He was the prime mover for Tingley Beach, the zoo, other parks, and the start of the State Fair in Albuquerque. Tingley Beach was typical of his maneuverings—he got the land from the Middle Rio Grande Conservancy District, the lumber and construction materials from a federal agency and talked the local members of building trades unions into donating their labor.

The place is really not Tingley Beach at all. During World War II they named it Ernie Pyle Beach. Now it's known officially as Conservancy Park. But there was never any doubt about who built the place. Some say old Clyde tacked up the street signs for Tingley Drive himself.

Tingley Beach became a reality in 1933 and ended its life as a recreation center in 1952. It was declared a health hazard. Since then it's been the home of a few catfish, some carp and a few thousand trout which the State Game and Fish people toss in once a year so that kids

with fishing poles can yank them out again. The place is also home for a couple of hundred free-loading ducks waiting for a handout. It's not exactly an eyesore, but it's not something you point out with pride when you're showing the visiting firemen around the city.

All that will change.

Some \$300,000 will be spent one of these days for renovation and improvement of Conservancy Park. The city has \$110,000 in hand now and is waiting for matching funds from the Bureau of Outdoor Recreation. Congressional action is required but City Parks and Recreation Director Robert Burgan is confident the money will be forthcoming. Maybe as early as November.

No plans are made for a resumption of swimming at Conservancy Park, but the plans do call for considerable construction—stone edging around the lagoon, an ornamental fountain, new trees, shrubs and grass, a gazebo on one of the islands, benches, tables and fountains, pedestrian walks, parking lots and lighting. A pedestrian bridge will be built from Laguna Street over Tingley Drive to link Rio Grande Park and the zoo area to Conservancy Park. All of this is part of a master plan to have a giant park along the river. Next step is to link Conservancy Park and develop the area along the river all the way north to San Gabriel Park on Mountain Road.

Old Clyde would be proud.



NOWADAYS Tingley Beach is not exactly an eyesore, but many improvements are planned. A new ornamental fountain will be built at this site on the north end of the lagoon. Recently the lagoon was closed following the death of numerous ducks from a type of botulism.

MILEPOSTS

LAB NEWS

OCTOBER 1976



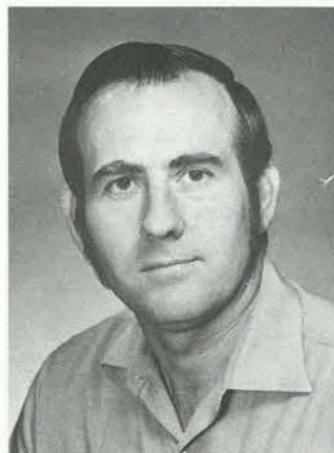
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Hazlet Edmonds—4231 10



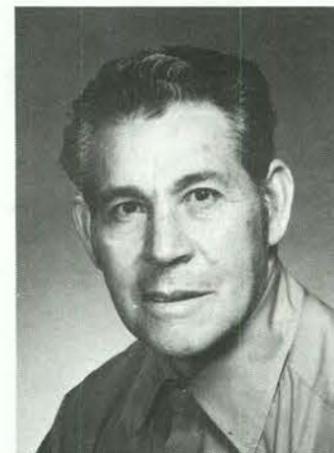
Brick Dumas—1240 20



Joseph Brown—3617 15



Carl Bailey—2644 15



Silverio Lujan—9713 25



James Constant—3623 15



Frank Raymond—9423 10



James Moreno—5261 10



Milton Waite—9654 15



Margaret Ebaugh—3254 10



Americo Cianchetti—9651 20



Bill Gamberale—9751 25



Oscar Carter—9721 20



G.W. Browning—3413 25



Fred Norwood—5166 10



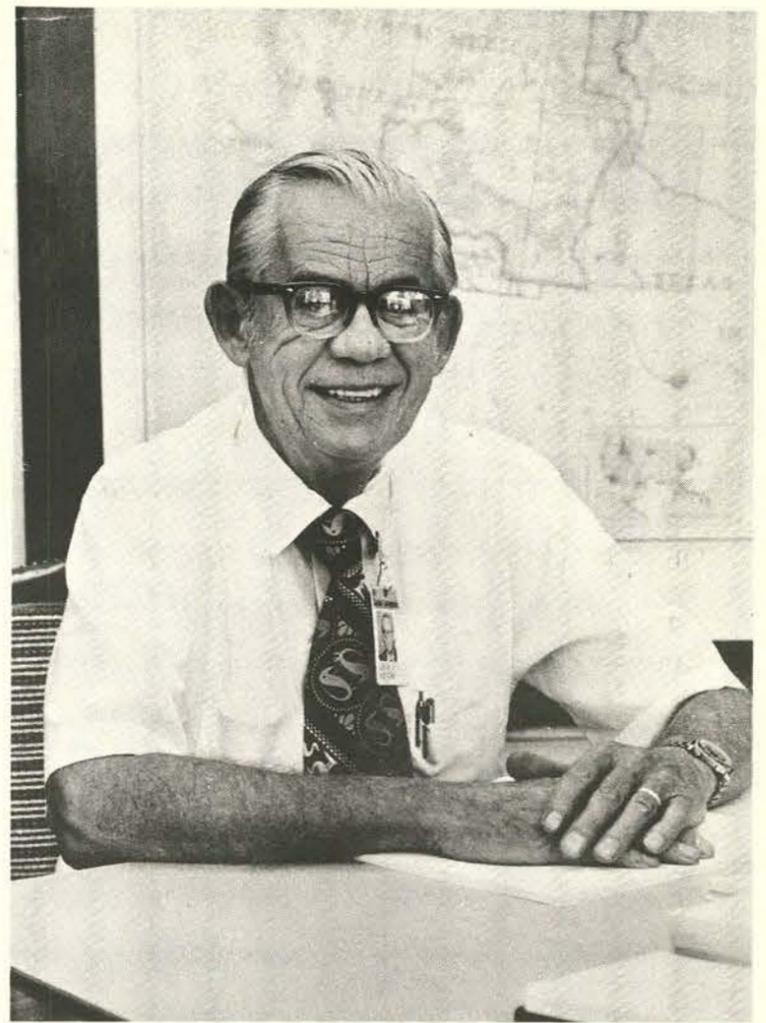
Peter Lysne—5131 10



Julio Pardo - 2327 20



Jack Travis - 9511 20



Lou Hopkins - 9300 30



Grace Campbell - 8264 10



Richard Bryant - 3647 10



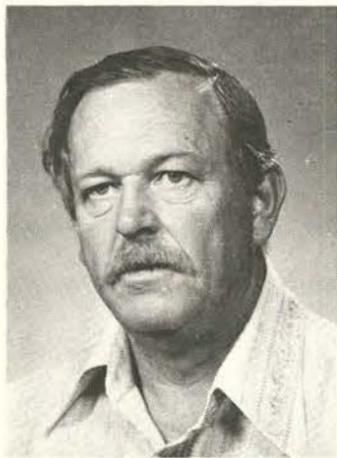
Donald Habing - 2116 15



Thomas Gerst - 2112 10



Consuelo Baca - 9723 10



Larry Harrah - 5811 10



Willa Urbanoski - 3252 20



Ralph Dalby - 3614 20



Bob Martin - 4312 15



Melvin Perkins - 2132 20



Ray Krieg - 1281 15



Freddie Millsap - 9422 20



Miguel Griego - 3727 20



Kenneth Shumway - 9623 20



Larry Bertholf - 5162 10



William Carter - 9524 20

FUN & GAMES

Sandia Bicycle Association—New officers of SBA are as follows: President, Terry Stalker; Secretary, Ron Malpass; and Treasurer, Lyle Wentz. Executive Board members: Don Argyle, Don Bliss, David Barnes, Tom Mayer, Walt Joseph, and Doug Drumheller. Contact your friendly Board member if you have a biking problem. The group meets every month or so to discuss bike commuting matters, including biking on the Base and in the Tech Area.

LAB NEWS has a new supply of Albuquerque Bikeway maps. Drop by or call 4-1053 for a copy.

The Base Traffic Regulation Committee turned down our proposal that the Zia Park gate be opened just wide enough to admit cyclists during the morning and evening. Some cyclists who have been using that gate are now entering through Gibson and taking an immediate right onto the dirt path across the field and into

the housing area. The path is reasonably free of goatheads.

Coronado Ski Club—Space is still available on these ski trips: Ski Utah, March 5-9, \$150, Bob Butler, 4-1632; Breckenridge/Keystone/Copper Mt., Jan. 8 for 4 days, \$119, Jan. 12 for 3 days, \$90, and Jan. 8 for 7 days, \$205, Dale Buchanan, 4-3451; Crested Butte, Feb. 19-21, \$94, Tom James, 4-1281. Ed Harley, 4-5449, reports that a few spaces are also available on the Wolf Creek and Aspen trips.

This Sunday, the 3rd, is the date of the annual Sandia Peak Walk Down. Club members ride the chair lift to the top, walk down, remove rocks and other obstacles (within reason). Hamburgers and beverages follow. The lift starts at 10:30, and food is served from 12:30 to 2:30. Jack Hanna (9300) is MC.

Metric Mishap

In the last issue, LAB NEWS carried an article on the potash drilling program in an area outside of Carlsbad. The original draft of the article carried all measurements in feet, e.g., "...constructed about 2100 to 2600 feet below the surface." So the editor dutifully converted the various measurements into metres, using his handy-dandy conversion scale. He had a little difficulty with zeros, however, and 2100 feet, for example, became 60 metres when it should have been 600. And so on throughout the article: all metric measures in it are off by a factor of 10.

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LAB NEWS
OCTOBER 1, 1976



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.

RULES

1. Limit 20 words.
2. One ad per issue per category.
3. Must be submitted in writing.
4. Use home telephone numbers.
5. For Sandia Laboratories and ERDA employees only.
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

GRINDER-POLISHER, 8" Rock's Lapidary; 220 X 1 1/2 Lapidgrade grinding wheel with splash guard; two sanding drums; one polisher; 1/2 hp motor, \$100. Azouz, 266-3512.

FLY & SPIN RODS, custom built, glass or graphite. Kindley, 881-4182.

ONE-HORSE TRAILER, single axle, covered, spare wheel, lockable tack compartment, new floor. Houghton, 299-3386.

WALNUT DESK, large, glass top, \$195. Marder, 256-7805.

POOL DOME, 20 x 40 foot, with blower, \$450. EerNisse, 298-3968

MOVIE CAMERA, Nitton Cine 8mm, \$25; Sampson cardtable chair, \$4.50; Barcalounger reclining chair, nylon freize cover. Smitha, 881-1001.

CEMENT MIXER, 4.5 cu. ft., 1/2 hp electric motor, \$100. Giovanis, 296-2839 after 5.

TRUNDLE BEDS with mattress, 33" x 79" when trundled, \$75; electric guitar and Sears 40XL amp, 2 channels, separate controls, \$100. Gray, 265-1883.

DOORS, hollow core: 30" white with complete Stanley hdwe, \$12; 36" natural, \$3. Merritt, 299-1482.

WASHER, Wards 18 lb capacity, needs repair. Perea, 255-7831 after 4.

GE PHONOGRAPH, solid state stereo amp, twin speakers, 4-spnd auto changer, all size records, auto shutoff, \$30. Daut, 255-2529.

OVEN, Tappan Custom, built-in, electric, coppertone, 24 1/2"H x 21 5/8"W x 23 3/4"D, new \$220, sell \$65. Browning, 299-6384.

LABRADOR RETRIEVER puppies, field champion grandparents,

father almost FC, mother CD. Loescher, 296-3154.

BROTHER SEWING MACHINE, zig-zag, new; Singer portable; Great Books set, 52 volumes; telescope. Plein, 293-5041 evenings.

CANON FD LENS, 28mm, with case, \$95. Vivian, 299-1785.

1 1/4" PIPE, galvanized, 231'; two 100 amp electric services, one with pole; seven Model 84 Norelco dictating recorders. Wright, 281-5828.

SKI RACK, Barrecafter SR71, key locks, for vehicle with rain gutters, \$25. Holmes, 292-0898.

SEE HALF of Lobo basketball games—share two tickets south end, \$40. Rose, 298-4849.

CABOVER CAMPER, Travel Queen, 10 1/2', jacks, heater, portapotty, \$650. Chambers, 281-5187.

DALMATIAN PUPPIES, nine weeks, AKC papers. Opperman, 281-5765.

TIRE, Goodyear wsw 6.85 x 15, 1/4 tread, \$5; car seat, Ford Totguard, ages 1-4, \$18. Caskey, 294-3218.

ELECTRIC RANGE, Whirlpool continuous cleaning, 30" avocado storage drawer, \$250. Johnson, 836-3164.

DOUBLE BED, maple; chrome youth chair; bar bells; misc. Shoemaker, 255-8820.

CHROME WHEELS, two 15", 6-hole, with H78 belted tires, \$45 each, both \$80. Schuch, 298-9924.

SEWING MACHINE, Singer, cabinet, carrying case, \$80. Bisbee, 293-0356 after 5.

PALOMINO MARE and 4-month colt, with tack, \$300. Case, 281-3769.

BAGBOY GOLF CART, ladies, \$35; 5' x 7' area rug, blue and green, \$30; kingsize bedspreads; 96" x 60" drapes, \$20; 8 mm movie camera. Chandler, 296-3323.

ARMSTRONG FLUTE, with case, beginners, needs pads, \$60. Roeske, 296-3946.

2 TIRES, L78-15, belted, \$10 each. Bennett, 296-8041.

DRESSER, solid mahogany; Bauer T-4 projector; patio round table & chairs; Swinger barbecue. Parisi, 881-0181, 9 to 5.

FREEZER, 22' Frigidaire upright, avocado; regulation-size pool

table; 30" gas stove. Walters, 296-5803.

CAMPER, '76 Leer 8' half-cabover, stove, icebox, furnace. \$1050. Jelinek, 298-2950.

KITCHEN SINK, divided, white, 22"x32"; 36" copper stove hood & fan; used Formica counter tops; carpet & pad, 11.5' square; Meyer, 256-9038.

REFRIGERATOR, Westinghouse, avocado, 2-door, 64 1/2" high, 29 1/2" wide, 27" deep. \$95. McGuckin, 299-1342 after 5.

RIFLE, Browning .338W magnum, safari grade, bolt action, recoil pad; Browning 4X scope, sling & ammo, \$350. Gubbels, 299-8089.

BOY'S BIKE, 2 trikes, 3x6 aluminum window, intercom, misc. Luna, 4809 Northridge Ct. NE, 296-5123.

UNIFORM, Camp Fire Girl, size 7-8, blouse, skirt, ceremonial jacket, beanie, \$3.50. Gatto, 298-8493 after 5.

CANVAS COVER w/bows, for long wide pickup bed, zipper doors & windows, 6' at peak, \$50. Baxter, 344-7601.

CORRUGATED IRON, 21 ea. 7', used, take all, \$20; 5-hole VW wheel & tire, \$10. Wilkinson, 299-8327.

4 TIRES, FR 70x14, wheels, Mustang mag-type hubcaps, 4 1/2" bolt pattern, \$100; 4 C-78x14 tires, 2 snow, \$40. Campbell, 255-2270.

CB RADIO, Midland mod 13-852, 23-channel, \$65; Vivitar pre-set lens, 400mm, 22-5.6, \$50. Eslin, 247-9166.

WINTER TIRE SET, Sears steel radials, 2 studded snow, 2 regular, 78-13's. Stevens, 299-6086.

CEMENT MIXER on wheels, \$50; free kittens. Good, 898-7963.

CAMPER, 8 1/2 ft. Open Road cabover w/butane stove, oven, sink, jacks, ice box, boot, \$600. Kendall, 298-2196.

CLARINET, Bundy w/music stand, \$65. Willems, 298-7261.

TRANSPORTATION

'70 MOTO GUZZI 750, fairing, leg guards, shaft drive, \$850. Shunny, 265-1620.

'71 VW SUPER BEETLE, below book, \$1400. Potter, 256-1169.

'75 MAVERICK, 6 cyl, 4-dr, std trans, \$2995. Romero, 298-8586.

'57 CHEV BELAIR, white, one

owner, \$1800. Foster, 294-0379. '66 MUSTANG, 3-spnd, 289 CID. Hielt, 298-2561.

'73 CHEV CAPRICE, 2-dr, blue with white vinyl top, AC, FM radio. Dunn, 298-4185.

'70 MAVERICK, 2-dr, 3-spnd, 45,000 miles, \$1100. Smallwood, 296-2931.

'75 CAMERO, 350 V8, AT, PS, PB, AM/FM/stereo tape, AC, elec door locks, tilt steering wheel, radials, below book. Giles, 299-3119.

'72 FORD CAPRI, 4-spnd, bucket seats, 63,000 miles, \$1495; '74 Yamaha 360 Enduro, 1100 miles, \$750. Coalson, 298-0061.

'54 CHEV 210, 2-dr, one owner, std trans, new tires, battery, brakes, differential, \$200. Daut, 255-2529

'62 INTL SCOUT, 4wd, \$1300. Gillon, 281-5233.

'75 CHEV 1/2 ton, heavy duty, Scottsdale, Bonanza package, 350 V8, 4-spnd, disk brakes, 8-ply tires, 20,000 miles. King, 299-9184.

'64 HONDA 90, street, green with yellow accents, \$100. Chandler, 296-3323.

'72 PLYMOUTH DUSTER, 2-dr, green with white stripe, R & H, 8-track tape, 318 V8, book \$1600, sell \$1100. Trump, 299-5162.

'69 CHEV V8, 4-dr, green, R&H, AC, std trans, Belair, \$750. Garcia, 344-1051 after 5.

'59 FORD PU, new paint, wide tires, Jackman rims, needs ring job, \$450 firm. Morrison, 877-7425.

'72 HONDA SL350, new chain, sprockets, cables, 55 mpg. James, 344-7854.

'73 SKI BOAT, 14', 50 hp Johnson outboard, tilt trailer with car tires, ladder, 2 sets new skis, ropes, \$1000. Falacy, 881-1802.

BICYCLE, lady's 3-speed, Sears, 26", thorn-proof tube in front tire, 2 yrs. old, \$50. Streater, 293-2490 after 5.

'64 CHEVY GREENBRIAR 9 pass. van, 3-spnd stick shift, 6 cylinder rear engine, \$895. Morgan, 299-2850.

'64 F100 FORD 4x4 pickup, 292 V8, LWB, limited-slip differential, heavy duty springs & radiator, \$1095. Jelinek, 298-2950.

10-SPEED TAKARA men's bicycle, all alloy rims, hubs, handlebars & stem, center-pull Mafac brakes, Suntour wide-range derailleurs,

\$90. Joseph, 299-6989.

'74 PINTO station wagon, 4-spnd, R&H, AC. Morris, 298-3349 after 5.

'74 VEGA GT, hatchback, custom interior, AM-FM, positraction, snow tires on extra wheels, below NADA, \$2100. Hart, 265-2221.

'57 GMC 1/2-ton, 396 V-8, 4-spnd, \$250; '66 Corvair 2 dr., HT, AT, \$115. Trujillo, 869-3008.

'65 T-BIRD, very fixable, negotiable. Spriggs, 256-3644 after 5.

WANTED

RELOADING PRESSES in good condition, shot shell and/or rifle, accessories as available, preferably Pacific, Lyman or RCBS. Ostrander, 298-8374.

'55 CHEVY parts & trim pieces. Bisbee, 293-0356 after 5.

MOTORCYCLE DIRT BOOTS, size 8-10 in good condition. Seidner, 883-8421 after 5.

SEWING MACHINE, industrial or upholstery, straight & zig-zag stitch. Eaton, 299-7271.

REAL ESTATE

10 ACRES, mobile home stie between Edgewood & Moriarty on County Road, electricity, \$700 per acre. Coalson, 298-0061.

3-BDR., San Gabriel Village, 1900 sq. ft. Miyoshi, 298-0666.

5 CITY LOTS in Moriarty, 1 blk. from Main St., utilities available, \$5000 all 5. Liston, 281-3283.

3-BDR. CUSTOM, 2 1/2 baths, formal LR & DR, den w/fp, landscaped, \$58,800. Harris, 1606 Figueroa NE, 299-8803.

4 LOTS, 100x160 total, 2 blks N. of Pats off Rock Canyon Rd. McKenzie, 296-0620.

7.5 ACRES 6 miles S. of Moriarty on Hiway 41, \$1500 acre, utilities adjacent to property. Zdunek, 299-1891.

LOST & FOUND

LOST—Clip on Polaroid sunglasses.

FOUND—lady's glasses w/light brown frame, TWEC on frame; money. LOST AND FOUND, Bldg. 832, 4-1675.

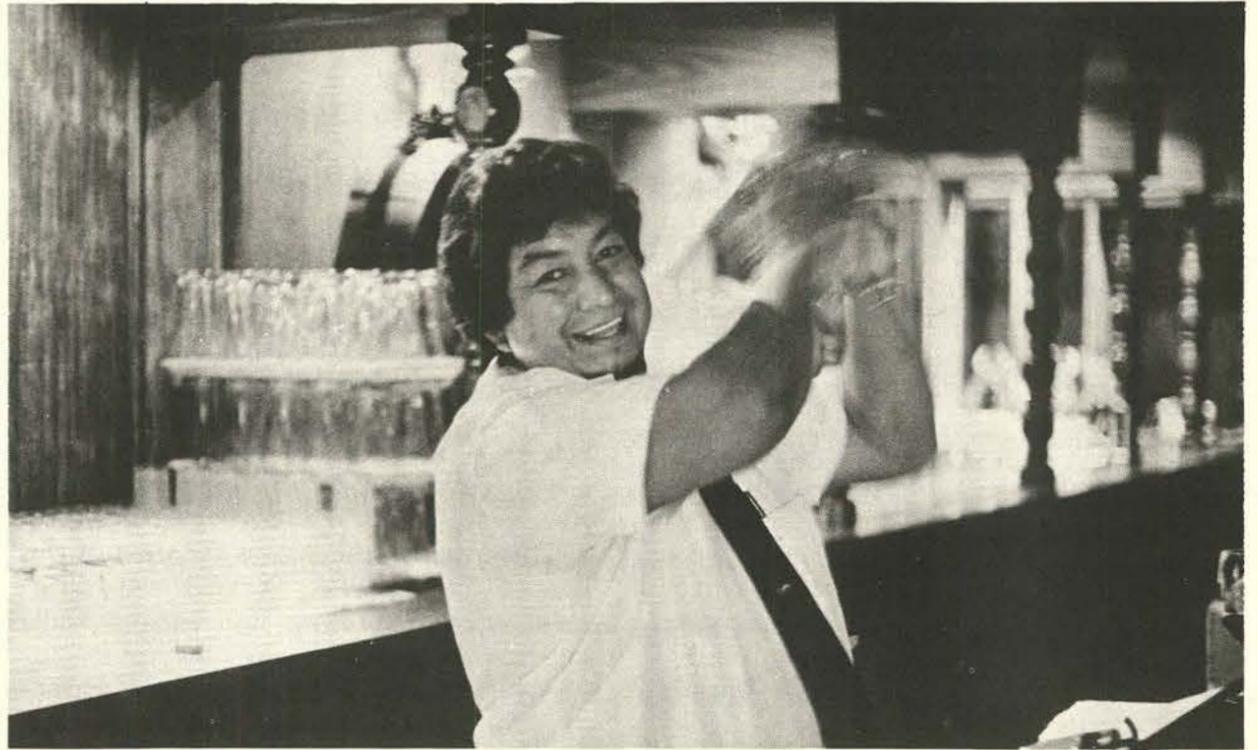
OKTOBERFEST • C-CLUB • BUSES • HOLY LAND • WALKDOWN • MIME • SEAFOOD • NEFF

FRIDAY	SATURDAY
1 —HAPPY HOUR SEAFOOD BUFFET Adults \$3.25 Under 12 1.92 <i>Sam Fresquez</i> 3 OF US & JEREMIAH	2—VARIETY NIGHT <i>Havre von Lambach</i> Mime & Pantomimist MELODY 2 Cartoons Food at 6 Show at 7
8 —HAPPY HOUR POT ROAST BUFFET Adults \$3.25 Under 12 1.92 <i>Jack Douthett</i> CHARLEY B	9 — SOUL SESSION 9:00 to 1:00 BROWN SUGAR Members Free Guests \$1 <i>Lobo Bus—6:45</i>

I—think you'll enjoy Sam Fresquez at Happy Hour tonight. He sings some really listenable stuff from 6:30 to 8:30. I know you'll enjoy the cod mornay, fried fish, corn fritters, more. Then there's **The Three of Us and Jeremiah** for dancing or whatever. Football ticket raffle too—see below.

CERTAINLY—a show at Variety Night tomorrow. See Havre von Lambach and learn the difference between mime and pantomime—and have fun doing it. The film is **Melody** which features music by the BeeGees and acting by the talented kids that stole the show in **Oliver** (luckily they brought it back).

AM—I thinking of Christmas already? Yup. That's because Ed Neidel is putting a great travel package and a great bunch of people together for a Christmas trip to the Holy Land. And what more appropriate time to be there? The package is all-inclusive except watching the flocks by night costs extra. See Ed or Joe Shelby from 6 to 7 any Friday evening in the Club lobby or call the Office for more information.



JOE THE BARTENDER (Griego) is celebrating his tenth anniversary with the Club, something of a record. For a change, stop by and don't tell him your troubles. Congratulations, Joe!

NOT—as far away and a bit less expensive but just as inspiring (if we win) is the Wolfpack trip to Tempe Oct. 22-24 for the Arizona State game. It's only \$82 (dbl occ) for bus fare, two nights lodging, game ticket, and more (Wolfpackers \$10 cheaper). Call Nancy Sanchez immediately.

STARTING—Sunday at 10:30 from the bottom of the chairlift at Sandia Peak is the Ski Club's Walkdown. Bring the family, wear your grubbies and gloves, and charge down your favorite trail getting the rocks off. Solid and liquid rewards for all back at the bottom. Free to Ski Club members, \$2 for non. And call Jack Hanna now if you're going and want enough food purchased.

AN—exciting Happy Hour next Friday when Jack Douthett makes Happy Hour. What he makes it is memorable from 6:30 to 8:30 with flamenco, classical, and contemporary guitar (not simultaneously). Then good old **Charley B** does it for dancing. Preface the whole thing with pot roast of beef **jardiniere**, fried chicken, mashed potatoes with country gravy (as opposed to urban, Dave?), buttered green beans, and salads.

ARGUMENT—raging in your family as to where to celebrate Oktoberfest this year? Well, if you can't make it to Munich, make it to the Club on the 23rd. Authentic German food that's more fun to eat than to contemplate: pigs knuckles, for Heaven's sake; plus marinated beef, knockwurst, sauerkraut, dumplings, potato pancakes, undt more gud Stuff. The International Folk Dancers and Der Polka Schlingels will have you polkaing all over the place. Tickets by the 16th: \$5.50 members, \$6.50 guests.

I'M—told both Mazatlan groups ought to show up at the Club at 7:30 on the 5th for briefings/orientations/questions-answers.

SIMPLY—sensible. Fun too. It's the Lobo Bus that departs the Club at 6:45 on the 9th for the San Jose Game. Only \$.50 for club members, \$1 for guests. And enjoy Fifth Quarter (is that where you go through a fifth, Julian?) after the game. Ask about the Wolfpack Special. NOTE: Popularity of the buses on Sept. 25 suggests that picking up tickets beforehand would be a good idea. that way extra buses could be ordered, and few, if any, would have to stand.

EXPLAINING—the role of the U.S. Treasurer to the Sanadoes on the 12th at 1:15 will be, logically enough, the U. S. Treasurer, Albuquerque's Francine Neff. Reserve with Vicky Clark at 881-3625.

WHY—not check out the sweet sounds of **Brown Sugar**—they're one of the most popular bands around. And they'll be around Soul Session on the 9th. You be around too.

YOU'RE—eligible for the football freebie, the pigskin prize, and/or the gridiron giveaway if you have one of the lucky tickets at tonight's Happy Hour. Nothing to buy, just get stubbed at the door. See the Lobos challenge San Jose State and do it free. The drawing's about 7.

WRONG—foot forward types can sign up for the next dance lesson series anytime before the 14th when the 6-week series begins. Classes for beginners from 7 to 8:30 and for intermediate-advanced from 8:30 to 10. \$20 per person or \$35 per couple.

MORE INFO—265-6791.

DANCE LESSONS • BROWN SUGAR • ARIZONA STATE