

LAB NEWS

VOL. 25, NO. 5

MARCH 12, 1973

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

The Layoff & The Labs — A Status Report

At a press conference Monday morning, March 12, President Sparks made the following comments:

"On January 29th we announced plans for an approximate 10 per cent cutback by the end of this fiscal year, which is June 30. Our plans are now complete and affected employees have been notified. The basis of our planning was 7196 employees, our budgeted figure for fiscal 1973, including 977 at Livermore, California. 728 of our employees, 10.1 per cent, will be off the roll by June 30.

"To minimize the hardship to individuals and the community, we offered all Sandia employees the opportunity to volunteer for layoff, with termination allowance and associated benefits. The 728 employees being laid off include both voluntaries and involuntaries. In selecting the employees to be laid off involuntarily we looked at both the contributions of individuals to the Laboratories and the specific jobs to be eliminated. The number of people who chose voluntary layoff exceeded our planning estimate. As a result we were able to reduce the number of persons to be involuntarily laid off by about 45. The selection criteria used were the same, with particular concern for long service employees.

"Of the 728 people leaving by June 30, 637 are in Albuquerque and 91 are in Livermore. Of those in Albuquerque, 234 are technical employees, 186 are in administrative staff jobs, and 217 are in graded jobs. Our graded employees are those in clerical, craft and manual skills.

"Among those identified for layoff were 71 employees who could reach critical anniversaries during the next two years. The anniversary dates relate to eligibility for retirement benefits. These 71 employees are being permitted to remain on roll until the anniversaries are reached. Adding these to the previously mentioned number leaving the roll by June 30, the total comes to 799 or 11.1 per cent."

* * * *

For an analysis of the layoff — how it is being carried out and some of the implications for the future — the LAB NEWS reports on an interview with President Sparks.

Mr. Sparks, how were the percentages and totals determined in planning the layoff?

"After a great deal of study we arrived at the approximate number of people in various classifications which we thought best fitted the work of the Laboratories for the future. It was clear that the changing character of our activities and tight limits on our resources

would require some changes in the numbers of people within broad classifications."

And that provided a basis for deciding who would go and who would remain?

"Yes. We tried to retain those who could make the maximum contribution to the work of the Laboratories. Regrettably, this results in termination of a number of people who have been doing a good job. A great many of those who are leaving, including voluntary layoffs, have rendered long and faithful service in a highly competent manner, and we are sorry indeed to lose these people."

How did you insure uniformity in application of the layoff guidelines?

"We recognized the possibility that a person selected for layoff in one organization might in fact be more valuable to the Laboratories than a person in another organization who was not selected. With this in mind, we established 'consistency' committees for both technical and administrative classifications whose job it was to review and compare the persons being laid off from all organizations. I feel that through the efforts of these committees and the changes brought about by their recommendations, inconsistency has been minimized. We also have special committees to consider hardship and medical cases."

How were supervisors affected by the layoff?

"About 55 supervisors, in all categories, are included in those terminating, and about 70 will be reclassified to lower rank."

Is a major reorganization forthcoming?

"I expect so. Certainly a fair amount of regrouping and restructuring will be called for."

What about the future?

"Sandia was set up to perform a vital mission for the Atomic Energy Commission in our national defense program. That job has been done well and, as I see it, the need will continue. I believe that the nation will insist on a defense technology second to none. In addition, we are seeking other programs, as announced in the Bulletin of Feb. 27, to add stability to our future workload and to provide diversity in our technical programs. I am optimistic about the future of the Laboratories. When we have passed through this difficult period of adjustment, I hope we can refocus on the important job ahead and rededicate ourselves to that standard of excellence for which Sandia has become known."



RUBEN URENDA (1325) displays the acceleration-actuated switch he invented for use in missile systems. At right is a cut-away display model showing the sensing mass and spring. The device was recently patented by the AEC.

Switch Invented By Ruben Urenda Awarded Patent

A patent was awarded to the AEC recently for an acceleration actuated switch invented by Ruben Urenda of Environmental Sensing Devices and Fluidics Division 1325. The switch is used in missile systems and has been in production more than three years.

The device incorporates a sensing mass which works against a spring to respond to preselected g-levels. When a certain level of acceleration occurs, the device closes a switch.

Ruben has worked at the Labs since May 1961, primarily in electromechanical component development organizations. He holds a Bachelor's degree from Oklahoma University and a Master's from Oklahoma State, both in mechanical engineering. He has taken advanced courses at UNM in the computer and electrical engineering areas.

Clogston to Bell Labs: Narath and Bowers to VP

At the March 1 meeting of Sandia's Board of Directors, the resignation of Albert Clogston was accepted to permit his acceptance of a position with Bell Labs as Executive Director of Research, Physics and Academic Affairs.

The Board elected Albert Narath to succeed Mr. Clogston as Vice President, Research and elected Klaus Bowers to the new position of Vice President, Component Development. Both appointments are effective April 1st.

Mr. Clogston came to Sandia from Bell Labs in May 1971. Mr. Narath joined the Labs in March 1959 after gaining his PhD in physical chemistry from the Univ. of California at Berkeley. Mr. Bowers came to Sandia in June 1971 from the Solid State Devices Lab of Bell Labs in Allentown, Pa., where he had been Lab director. His PhD in physics was gained from Oxford.

In further actions, William Baker, President, and Kenneth McKay, Executive Vice President, Bell Labs, were elected to the Sandia Labs Board of Directors.

Afterthoughts

Layoffs Aren't Much Fun--Since that initial announcement in late January about the layoff, one can't help but notice the tenseness that's developed throughout the Labs. Everyone's affected by it --whether individually being laid off or not. It's been a soul searing experience for people who have to tell other people, usually friends, that they're being laid off. And for those who are leaving, involuntarily, they are having and will continue to have some rough moments. For a largish company, Sandia has always been a close knit community. When we lose members of that community, we're all saddened.

Collector's Item--For those who collect weird versions of our name and address, this one on a letter from an east coast firm:

Sandia, Box 5800
Albutwurtwur, N.M. 87115

The Churchill Touch--"I had a feeling once about Mathematics--that I saw it all. Depth beyond Depth was revealed to me--the Byss and the Abyss. I saw--as one might see the transit of Venus or even the Lord Mayor's Show--a quantity passing through infinity and changing its sign from plus to minus. I saw exactly how it happened and why the tergiversation was inevitable --but it was after dinner and I let it go." Winston Churchill
*js

Sandians Participate in Sounding Rocket Meet

Today marks the final session of the three-day Sounding Rocket Technology Conference, being held in Albuquerque and sponsored by the American Institute of Aeronautics and Astronautics.

"The world-wide use of sounding rockets to gather more and more information about the universe has created the need for continued improvements and solutions to new problems," says Bill Barton (5624), general chairman of the conference. "The conferees -- scientists, engineers, legislators and administrators -- are jointly exploring solutions to these challenges."

The conference was opened by Bill and the welcoming address was given by Alan Pope, Director of Aerodynamics 5600. The

Technical Program Committee included Harold Vaughn (5625), Warren Curry (5621), Ed Rightley (5623), Robert Sheldahl (5628) and Randy Maydew (5620). Harold Vaughn also co-chaired the Aerodynamic Analysis and Design session.

Sandians presenting papers were: D.W. Johnson (5626), "Sounding Rocket Recovery Systems for Payload Weights From Fifty to One Thousand Pounds"; T.P. Krein (9223), "An Attitude Control System for a Stellar X-Ray Source Mapping Payload"; and L.R. Rollstin (5624), "A Rocket System for Hypersonic, High Reynolds Number Aerothermodynamic Research."



ENGINEER OF THE YEAR is the title bestowed on Cecil Land (5113) at a recent banquet of the Albuquerque Chapter of the New Mexico Society of Professional Engineers in recognition of his contributions to the professional image of engineering. Cecil is a past chairman of the Albuquerque Section of the Institute of Electrical and Electronics Engineers.

Variable Annuity Unit Value

March	1.834
February	1.894
Average 1972	1.738

Death



Edwin Hollar, supervisor of Materials Analysis Division III 5525, died suddenly March 1. He was 37.

He had worked at the Laboratories since May 1962.

Survivors include his widow and three children.

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bill laskar takes/makes pictures

&
in livermore lorena schneider does all



THE SOUNDING ROCKET TECHNOLOGY CONFERENCE and a new rocket model are discussed by Bill Barton (left) and Alan Pope. Papers on atmospheric and astronomical exploration and a panel discussion on sounding rocket technology were the highlights of yesterday's session.

Take Note

Ray Ng (8352) was awarded a citation recently for his service and contributions as secretary of student affairs for the Mt. Diablo Section of the American Society of Mechanical Engineers from 1970 to 1972. In addition to student affairs involvement, he was co-founder and active in the publication of the organization's newsletter. Sandians currently holding offices include vice chairman Del Elliott (8131), secretary Pat Gildea (8335), program chairman Charlie Landram (8351), and membership development chairman Jerry Alcone (8178).

* * * *

Attention boat owners! With the summer recreational season fast approaching, have you given thought to the safeness of your craft? When was your last safety examination? Bill Morehouse (8175), a member of Coast Guard Auxiliary Flotilla No. 95 in the Livermore-Pleasanton area, reminds boat owners that they may request an examination of their boat by the Auxiliary. No charge is made for the examination, and if the boat fails to pass the inspection no report is issued. But, if the boat passes, a decal to that effect is issued and the boat will not be boarded by the Coast Guard unless there is a violation of the law. For a courtesy safety examination, call Bill at ext. 2160 or 447-5519.

* * * *

Paula Cooper (8321) received a BS degree in mathematics recently from California State University at Hayward. The final portion of her course work was completed under Sandia's Educational Aids Program over a three-year period. She previously attended the University of Colorado for a year, the University of California at Berkeley for a year and Chabot College evening classes for two years. Paula participated in Sandia's summer hire program in 1960 and 1961 and became a full-time employee as a draftsman in the electronic design section in Sept. 1961. In 1967 she transferred into Numerical Applications Division 8321 where she is a computer programmer.



GARDENER Zell Terry (8257) prunes fruitless mulberry trees north of Sandia/Livermore's Building 913.



SANDIA/LIVERMORE HOSTED the 28th Weapon Contractor's Classification Conference recently. Classification representatives of the various AEC contractors meet periodically to exchange classification information. Current chairman is James Conder of Dow Chemical/Rocky Flats (in foreground). Arrangements for the Livermore Conference were made by Lurl Ostrander and Frank Halasz (both 8232).

LIVERMORE NEWS

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LIVERMORE LABORATORIES

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After Winter Freeze

Labs Gardener Offers Advice

"Look around and you can still see evidence of the unusually low temperatures and freezing weather experienced in the Bay Area this winter," says Zell Terry (8257), gardener at Sandia/Livermore for the past five years. "Some of the bigger trees such as the eucalyptus and California pepper trees have been killed off, something that hasn't happened here for over a hundred years. And damage to shrubs and plants has been severe.

"Hardest hit of the plants were the succulents," continues Zell. "They might as well be pulled out because they just won't come back. Tropicals of all descriptions, including citrus, were also badly hurt, but I'd suggest not cutting or pruning these for another month or so to see what has survived.

"And often it can be difficult to distinguish between what has been lost and what hasn't," he cautions. "For instance, we lost a lot of the bottle brush here at the Laboratories — the bark froze and the cambium layer was destroyed. Of course, they are still green, but as soon as warm weather comes, they are going to die."

A graduate in horticulture from Texas Tech, Zell was foreman for a landscaping engineering firm in LaJolla, Calif., for some 12 years and then park foreman for the Chula Vista Park and Recreation District. After going into business for himself in an unrelated field "for monetary reasons only," he notes, he is now back working at his first love — gardening.

About this time of year, Zell recommends that gardeners finish up any general pruning as well as their fertilization program so that rains can wash the mixture into the ground. "On grass, I use a mixture of high nitrogen and low phosphoric acid, about 11-8-4. For shrubs, a high phosphoric acid and potash fertilizer with low nitrogen is better, about 0-10-10, especially if it's been a hard year such as this has been. By adding too much nitrogen you get a lot of soft, new growth. Then, if we get more cold weather — as has been predicted — the new growth will burn off and you might lose plants that you wouldn't have lost had you not fertilized."

In addition to pruning, fertilizing, and weeding, Zell says now is a good time for putting in and mulching new bases to retain water and keep vegetation from drying out. You can also start working on the aphids. "Although the weather has been cold, I notice the bushes are full of them," he comments. "I recommend malenon which is good for all-purpose spraying. It's still a bit early for pest control, especially for spraying the junipers with Malathion or lindane for twig borers. I prefer to wait until the temperature reaches about 60 degrees around 4 o'clock in the afternoon, when the borers usually are the most active. If you don't spray at that time you might as well forget about it because when the damage shows up along in July or August, it's too late."



TOURIST-DRIVER-OWNER John Cunningham is installing all the comforts of home in the bus he bought from an Idaho firm. He's past president of the New Mexico Chapter of the Family Motor Coach Association.

Take the Bus

And Leave the Driving to Me

Most mobile homes aren't very. Most campers are more aptly crampers. So what you do, says John Cunningham (7453), is buy a bus and convert it into a vacation home.

Not one of those piddly little minibusses either. Get one Greyhound might use — a 23,000 pound, 35 foot, 1964 Flxible with an 8V71N engine, 5-speed transmission, and independent air-conditioning, say.

John bought his Flxible (without the "e" the word may be a trademark) from Sun Valley Stages last September. It's in excellent shape — only 330,000 miles on a vehicle you start worrying about when you hit 3 million or so. And the engine — big enough so the only thing it strains is your imagination. Nearly new too — 18,000 miles — because the Sun Valley people replaced the original with one big enough to get the bus filled with skiers and equipment over Idaho's mountain passes.

John is filling it with kitchen, living room, full bath, and bedrooms. No fireplace or billiard room, though. He knows how to do it

— he's already converted a 1947 Greyhound. "It'll cruise at a steady 70 with no problem," says John, "although in driving to work I seldom do over 35."

Driving to work? "Oh, not often, of course. I try to keep at least three of our ten vehicles in running order — and sometimes the Flxible is one of the three."

Right out there in the rush hour traffic, huh? "Drives like a dream," says John — "power steering, air brakes, great visibility, plenty of power. Here, take the wheel; try it."

We did (after a safe stop, of course). He's right — handles beautifully, but watch the corners — tight ones tend to relocate fire hydrants.

The diesel engine, coupled with a monstrous exhaust system, means it's a reasonably pollution-free vehicle. Nevertheless, it's not exactly what LAB NEWS has in mind when we encourage commuting by bus. •bh

Take Note

Hugh Leenhouts, management specialist in the Office of the General Manager at Atomic Energy Commission Headquarters in Washington, D.C., has been appointed Assistant Manager for Logistics at the AEC's Albuquerque Operations Office. He will assume his new duties about April 1. He succeeds Charles C. Campbell, who retired Feb. 16 after more than 31 years of Federal service.

* * * *

"Astronomical Forces That Affect Human Behavior" is the topic of Iben Browning's speech at a March 16 meeting of the American Nuclear Society — Trinity Section. Iben, a former Sandia staff member and consultant, generally addresses SRO crowds. Reserve yourself a seat by calling (before noon March 14) Bob Jefferson (5222)

at ext. 6136. Social hour at 6:30, dinner at 7:30 p.m., \$5.

* * * *

Attention Balloon Photographers: Community Relations Division 3163 is planning a display of color balloon photos in the foyer of Bldg. 802 soon. Also included will be an automatic slide display unit. So if you have a few outstanding slides of the recent hot air balloon festivities, contact Joe Laval, ext. 6531. Slides will be considered, but he still needs more prints.

Congratulations

Mr. and Mrs. George Novotny (1531), a daughter, Jenny Anna, Feb. 9.

Mr. and Mrs. Phil Watterberg (5532), a daughter, Aimee Aileen, Feb. 23.

Recreation Notes

FUN & GAMES

BOWLERS: Sign up now for the Scotch Doubles Bowling Tournament sponsored by the Sandia Lab Bowling Association, with prizes donated by local merchants. The event will be held at Fiesta Lanes on March 17-18. Send your entry forms to Mary Ward (7614) or John Nakayama (1514) before March 16.

* * * *

SKIERS: An annual event of the Coronado Ski Club is the Washington's Birthday trip to Purgatory Ski Area near Durango, Colo. During the weekend Coronado Ski Club/NASTAR races were held with the following results:

In the Men Expert category Ray Klein (5245) finished first with a time of 31.2 seconds; Bob Lassiter (3131) and Frank Mueller (7425) tied for second with 32.6; and Paul Souder (1513) finished third with 34.1. Zelma Beisinger (1541) won the Women Expert category with a time of 36.9 seconds.

* * * *

GOLFERS: Results of the recent Sunport Tournament of the Sandia Golf Association (Women) are: Low Gross winner, Emma Hollingsworth (3256); Low Gross runner-up, Jo Sena (1000); Low Net Winner, Joan Gillon (1200); and Low Net runner-up, Helen Watkins (4361).

Events Calendar

March 9-11, 16, 18 — Old Town Studio, "The Caine Mutiny Court Martial," 8 p.m.

March 10 — Cultural TV, "Long Day's Journey Into the Night," Channel 7, 7-10 p.m.

March 11 — N.M. Mt. Club, map reading, bring USGS quad of Tijeras, Snyder's map of South Sandias, compass, 6" ruler, Western Skies, 9 a.m.

March 13 — ASUNM Lecture Series, Michael Novak, theologian, educator, sociologist, author; 8 p.m., Student Union Ballroom.

March 14 — Albuquerque Arts Council general meeting, 7:30 p.m., downstairs in Convention Center.

March 14 — City Council open meeting on the "Sandia Foothills Properties" (520 acres of private land between the city and the mountain), 7:30 p.m., City Hall.

March 15-16 — Albuquerque Symphony Orchestra, featuring Ravi Shankar (sitarist), 8:15 p.m., Popejoy Hall.

March 16-18, 20-25 — Albuquerque Little Theatre, "My Daughter, Your Son," 8 p.m.

March 17 — Metropolitan Opera, Il Trovatore, KGGM radio, 2 p.m.

March 18 — N.M. Mt. Club, San Miguel ruins, Gulf Mart, 8 a.m.

March 21-26 — Albuquerque Civic Light Opera, "Man of La Mancha," 8:15 p.m., Popejoy Hall.

Sympathy

To Richard Marmon (7134) on the death of his wife, Feb. 12, in Albuquerque.

To Albin Jacobson (1941) on the death of his father, Feb. 22, in Longview, Wash.

Credit Union Reporter

By Bill Prekker, Chairman
Education Committee

Loans and Loan Volume

The Credit Union loans money to its members. No surprises there — but the number of loans and the dollar volume for 1972 are pretty impressive: CU members made 10,397 loans totalling \$17,292,302. Even more impressive, at least to lovers of large numbers (digital devotees?) are the figures reflecting the total experience of the Credit Union from its beginning through 1972: 154,963 loans totalling \$211,201,856, a figure very close to the current U.S. population count.

The Credit Union has not maintained records of the purpose for each loan, but information on collateral is available. For example, in 1972, the Credit Union assisted members in the purchase of 1,885 automobiles, 116 boats, campers and travel trailers, and 36 mobile homes. This represented a loan volume of \$4,435,489. In addition, many items like these were secured by other collateral such as shares, insurance, or stocks. First and second mortgages and FHA Title I accounted for another 206 loans totalling \$1,446,564 (that's over \$7,000 per loan, the highest average per loan of any type). Leading the parade in both numbers of loans and dollar volume were share secured loans, with 3,745 and \$5,553,098, respectively. Signature loans were second at 3,098 and \$3,268,008.

Obviously, the Credit Union is a busy place. It makes an average of over 40 loans each working day, and it provides many other services. Your Credit Union exists for your benefit; stop by and join your fellow members in taking advantage of the services offered. Each account is insured by the National Credit Union Administration.



assist the purchaser of a motor vehicle in determining the vehicle's condition and value."

The Credit Union has supplies of the form.

* * * *

FHA Title I Loans

Are you adding on a room or garage or improving your home in some manner? Why not consider your Credit Union for an FHA Title I loan? Insurance of the loan under FHA is your collateral. You can borrow up to a legal maximum of \$5,000 at 8.4% annual interest with up to 84 months for repayment of the loan. The 8.4% interest rate includes the 1/2% annual FHA insurance. And it doesn't take the Credit Union any longer to process your application for an FHA Title I loan than any other type of loan.

Biking to Work? Here's Latest Route Info

Billy Thorne (5162) was recently elected president of the 300-member Sandia Bicycle Association (succeeding Irwin Janney) and has since been busy working with the military authorities on Base to develop a system of Base bike routes. Principal immediate problem is the erection of that seven-foot chain link fence around the Base; the fence does not incorporate gates at the northeast and northwest corners of the Base as the old fence did.

But there are alternative routes and, according to Billy, the suggested alternative route for those who had been using the northeast gate is probably better. Reason: less dirt road. Note the map which accompanies this article. Proceeding south on Altez, turn west on Trumbull, then make a jog to continue west on Susan, which exits on Wyoming at the filling station just off Base. Altez, Trumbull, and Susan are all paved streets. Turn left at the filling station, remain on the dirt shoulder on the east side (facing traffic) for the half block or so into the Base. Then take Club Road and 7th Loop through Base housing to the Tech Area.

Cyclists approaching from the northwest, who had been using that gate, can continue east on Southern to Utah, then turn south the short distance to San Joaquin which exits on Wyoming at the Base entrance. For those who prefer, it is possible to bike through the Van Buren school yard (dirt) to a gate several hundred yards south of Southern. This gate will be manned and is chiefly for the benefit of the school kids.

SBA officers and its executive committee have explored at length with the military the possibility of gaining gates where the previous gates were located. "No way," concludes Billy. "The military say they'd have to man such gates and won't buy this. But look — before anyone starts writing to his congressman he really should give the suggested alternate routes a try — they're really pretty good." • js

Each member account insured to \$20,000



NCUA

by Administrator, National Credit Union Administration

Odometer Disclosure Requirements

A new federal law, now in effect, requires the seller of a new or used motor vehicle to fill out a form like the one below. The mileage on the odometer, as of the time of transfer, is inserted by the seller and the statement is then notarized. The disclosure is intended "to

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ODOMETER MILEAGE STATEMENT

(Federal regulations require you to state the odometer mileage upon transfer of ownership. An inaccurate statement may make you liable for damages to your transferee, pursuant to section 409 (a) of the Motor Vehicle Information and Cost Savings Act of 1972, Public Law 92-513.)

I, _____, STATE THAT THE ODOMETER MILEAGE (INDICATED ON THE VEHICLE DESCRIBED BELOW) IS _____ MILES.

(Check the following statement, if applicable:)

I FURTHER STATE THAT THE ACTUAL MILEAGE DIFFERS FROM THE ODOMETER READING FOR REASONS OTHER THAN ODOMETER CALIBRATION ERROR AND THAT THE ACTUAL MILEAGE IS UNKNOWN.

MAKE	BODY TYPE	YEAR	MODEL
VEHICLE IDENTIFICATION NO.		LAST PLATE NO.	

Transferor's address: _____

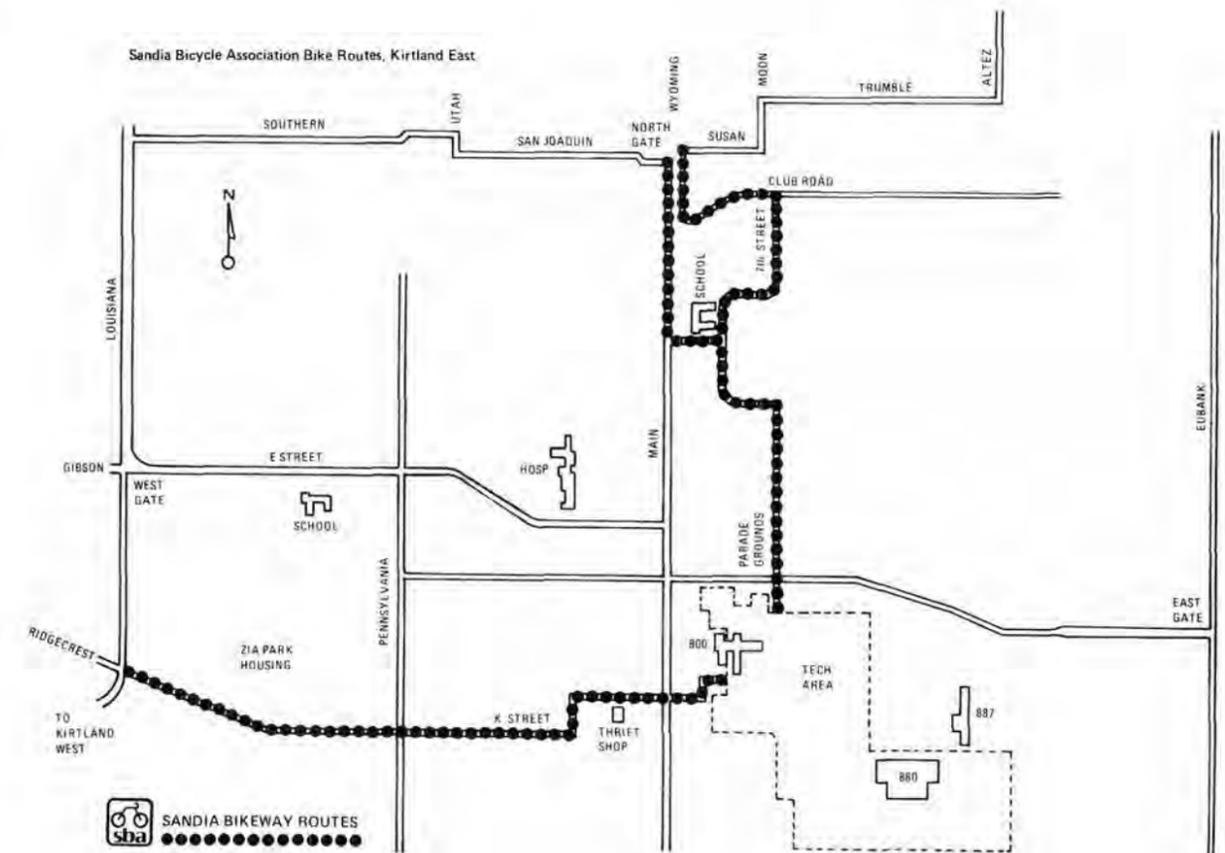
Transferor's signature: _____

Date of this statement: _____

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____ 19____.

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____





Albq Citizens vs Albq Air

(Part Three)

We know it's not good, but we don't really know how bad it is. We do know that in 1952 4000 people died in London because of it. And we know that people died from it in Donora, Pa., in 1948 and in New York City in 1966.

"It" of course is air pollution, and it is indeed hazardous to your health. But just how hazardous and just which pollutant (or combination of pollutants) creates the hazard is simply not known — perhaps not knowable: it would be a bit tricky to establish one control group that breathes only air at a given level of pollution and then to contrast the findings with those from another group that breathes air purged of, say, nitrogen oxides.

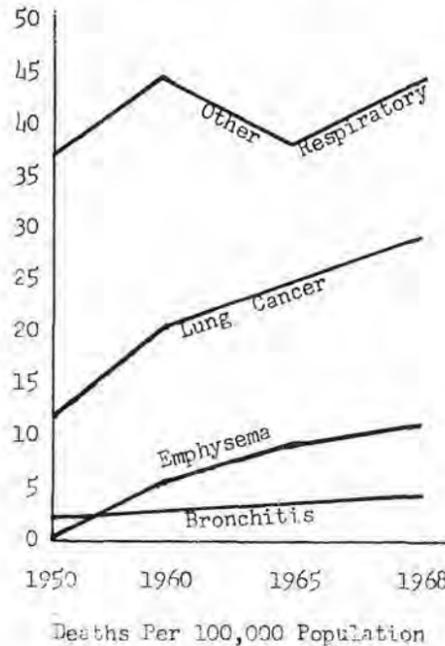
Then too, polluted air affects different people in different ways. It affects people who tend to respiratory diseases more than those with healthy lungs. (Smoking has been aptly labeled personal air pollution — not only does it do the bad things the Surgeon General describes but it also increases susceptibility to respiratory problems from polluted air.)

"Major illnesses linked to air pollution include emphysema, bronchitis, asthma, and lung cancer," says the Environmental Protection Agency. And the disease rates are rising. See the table.

Some other generalizations about the physical effects of breathing polluted air:

"Polluted air affects the health of human beings and of all animals and plants. It soils and deteriorates property, impairs various production processes . . . , raises the rate of automobile and airline accidents, and generally makes living things less comfortable and less happy . . . We interpret the studies cited [primarily from heavily polluted areas] as indicating that mortality from bronchitis would be reduced by about 50 percent if air pollution were lowered to levels currently prevailing in urban areas with relatively clean air . . . Approximately 25 percent of mortality from lung cancer can be saved by a 50 percent reduction in air pollution . . . It seems likely that 25 percent of all morbidity [read: illness] and mortality due to respiratory disease could be saved by a 50 percent abatement in air pollution levels . . . Finally, there is a good deal of evidence connecting all mortality from cancer with air pollution." (Source: *Science*, 21 August 1970)

The fact is we don't know the precise level of air pollution that causes people in general



to suffer measurable damage. We don't even know the precise level that causes a specific person to become ill, or how the threshold level may vary from time to time for that person. But we do know that air pollution, whether of short duration or long, does affect our health. For the worse.

The really insidious thing about pollution-induced illness is that the damage may not show up for a decade or two; with chronic bronchitis, emphysema, the pneumoconioses, and cancer, it's often many years between first exposure and full-blown disease. Therefore we're tempted to think we can adapt to pollution — that "it won't bother you once you get used to it" or Los Angeles syndrome. What we're doing is adjusting to it; it's no longer a nuisance. But there is no indication that the body adapts to the point that polluted air can be inhaled with no harm.

* * * *

The Federal government has not simply sat there, breathing. The Clean Air Act, as amended in 1970, prescribes primary threshold levels for six major pollutants. These primary standards will be difficult for the large industrial cities to meet by 1975.

Letter to the Editor

Re: Lab News articles on air pollution

I think your approach to the air pollution problem is backwards. "When your kitchen is flooding, you don't begin by mopping up the floor, you turn off the faucet." The real culprits are the manufacturers, the oil companies, the utility companies, and city and Federal governments. Vehicle manufacturers could easily supply low effluent, low fuel consumption engines for cars and busses, but this would affect their profits as well as those of the oil companies. Oil companies are further supported by city governments who seem to measure their affluence by the number of gas stations per square foot. The citizen can only use what is available and to punish him with one dollar per gallon gasoline when most have no transportation alternative is pretty stupid.

The Federal government, in New Mexico, could set an example by insisting that all Government vehicles be equipped with low pollutant engines. They could also make a beginning by providing bus service at nominal cost to employees, with special permission required to drive automobiles on the bases.

Once the people become accustomed to riding busses again, then the City can take over with extended services. Bus riding could be convenient and even fun, especially with double decker types fitted with bicycle racks. But the secret of a successful system is to have busses run at least every fifteen minutes, and cover all the main arteries of the city.

Also, I think all of this panic about power, water and fuel shortages is a lot of baloney. Oil companies create false shortages to jack up prices. Manufacturers, fully supported by utility companies and city governments, continue to flood the market with superfluous products such as neon lights, recreation vehicles, car washes, power this and power that, etc. It is more meaningful to limit the production and sale of these power wasters than to reprimand the public for using them.

The blame for pollution and power shortages lies with those who encourage the use and consumption of wasteful, polluting, and land-destructive products, and not with the working citizen who has nothing to sell.

Bob Schuch
5226

Albuquerque, however, should be able to surpass the primary standards and move immediately to the secondary ones. What saves us is the general presence of wind and absence of heavy industry — not our willingness to reduce vehicle travel.

It should be noted that meeting, or surpassing, these standards doesn't mean that air is harmless to health. It simply means that not as many people will be harmed — seriously — by breathing it. The standards were set on the basis of "what's it possible to do," not "what should be done."

In Albuquerque it's possible to surpass the Clean Air Act standards for most pollutants with no problem. But there's a kicker in the Act: air presently surpassing the standards must not be allowed to deteriorate. That's one problem for the City's air quality people — and for us. The other is that Albuquerque's particulate levels too often push the 60 micrograms/cubic meter limit prescribed by the Act — too many cars driving on too many unpaved streets.

The point of all this? The goals for all cities are almost certain to affect car travel. As William Ruckelshaus, Administrator of the Environmental Protection Agency, puts it, "To meet the legal deadline for carbon monoxide, . . . some cities may have to require drastic changes in their commuting habits." Working hours may have to be staggered, traffic may be prohibited in certain areas of a city, traffic may be restricted by gas rationing (if \$1 a gallon gasoline doesn't do it first). And mass transit would undoubtedly have to take up most of the commuter load. Even in Albuquerque.

Mass transit systems are not as convenient as automobiles — buses seldom are going where you want to go when you want to go there. Albuquerque's bus system is already heavily subsidized. But buses pollute so much less than cars (per passenger mile) that in spite of all these negatives, they're going to have to become a major means of getting to and from work and around the city. Ditto for bikes — and car pools.

Hitchhiking, anyone? •bh

Land Use Plan for Sandias

Some Consensus, Some Problems

The U.S. Forest Service people have announced preliminary results of their analysis of the public's response to the Draft Land Use Plan for the Sandia Mountains. (A ballot in the May 12, 1972, LAB NEWS helped gather reactions from Sandians.)

The analysis indicates strong support for: closing the mountains to off-road vehicles; prohibiting prospecting, or "mineral entry"; and declaring all or part of the west face a wilderness area. Slightly less support went to: "hardening" present recreation sites (paving roads in picnic areas to reduce dust; putting trails between tables to confine wear to smaller areas, etc.); improving the road between the ski area and the Crest; and working out some means to reduce the dangers presently caused by lack of parking near the tubing/sledding areas along the road to the ski area.

The biggest single problem remains the "Loop Road" from the ski area to Placitas. There's little agreement as to Crest Highway, Palomas Peak Highway, or the present Las Huertas Canyon road.



Marilee Letourneau — 4154

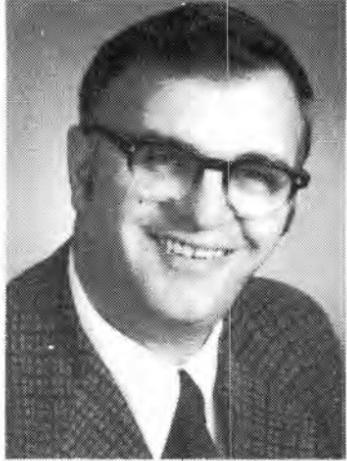


Charles Andes — 3131 15

MILEPOSTS

LAB NEWS

March 1973



Perry Lovell — 8263 10



Bill Otero — 4623 25



Marvin Moss — 5314 10



Tommy Sellers — 9239 15



John Allen — 8264 10



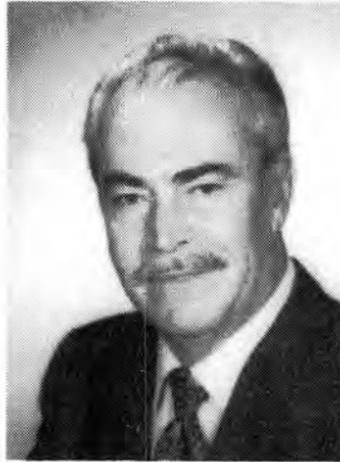
Evelyn Ostrander — 8217 15



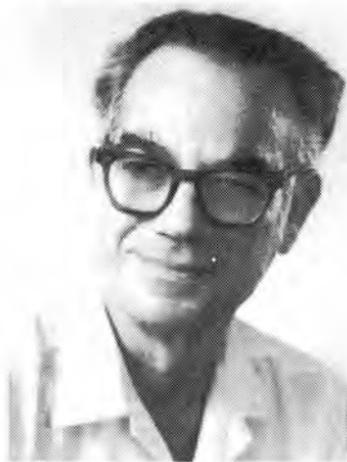
Paul Adams — 9331 25



Eve Baughman — 100 10



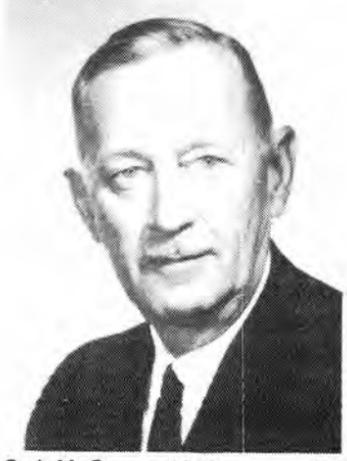
Wally Ives — 3155 25



Don Beard — 8423 15



H. Bennet Evans — 3513 20



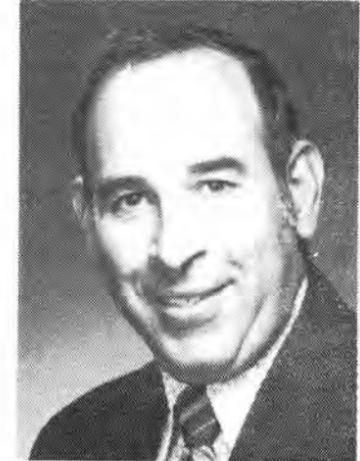
C. J. McGarr — 4600 25



Lee Parman — 100 20



Dick Hoagland — 1544 15



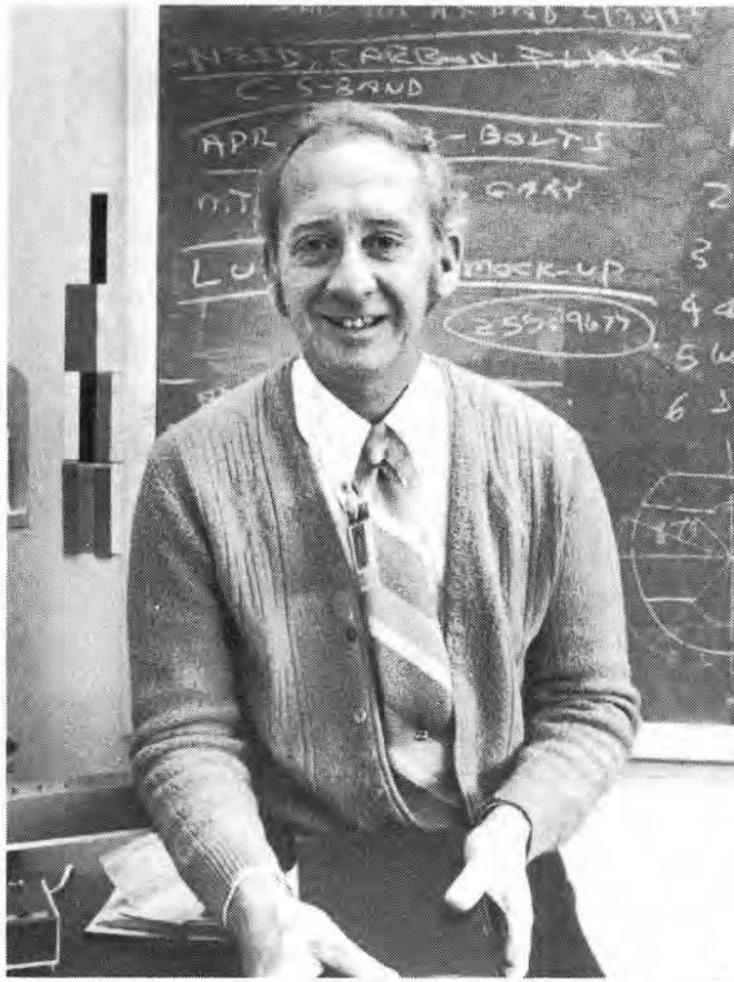
Floren Gabaldon — 1511 25



Ward Bower - 1312 10



Robert Durand - 4338 25



Fred Hansen - 1223 20



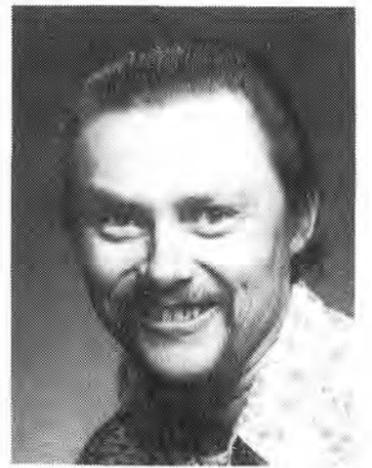
Harry Fisher - 9483 15



Ray Gott - 8423 15



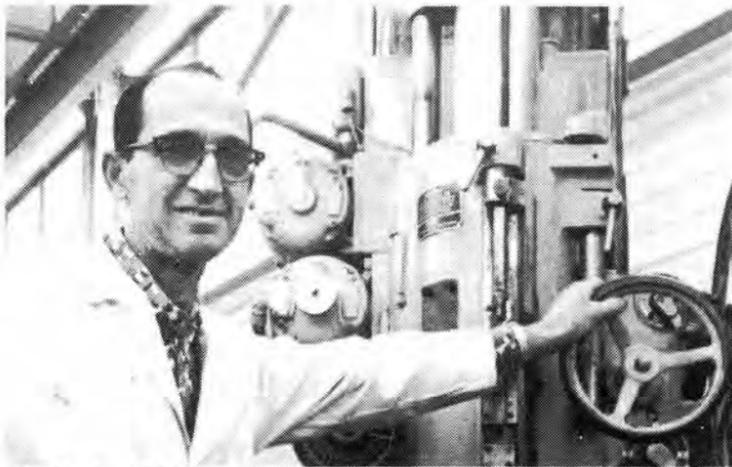
Wilda Kamm - 7632 10



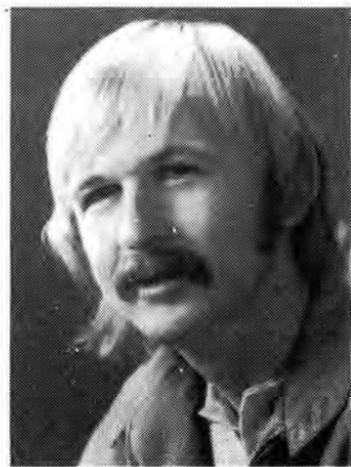
Cliff Wilson - 9222 10



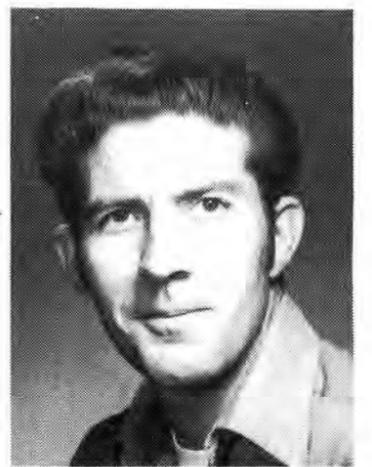
Audilio Tenorio - 5411 10



Art Kraft - 7145 20



Conrad Stayner - 8256 10



Adron Pritchard - 5411 10



Jim Mafit - 8251 20



Pasquale Liguori - 7655 20



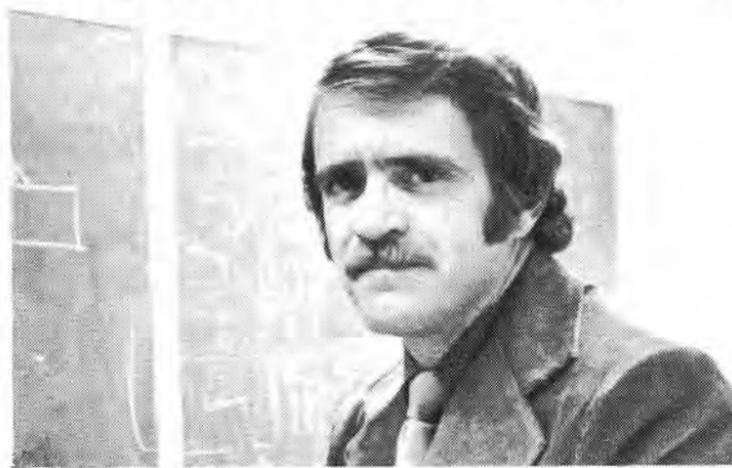
Jose Gutierrez - 4331 10



Janice Robertson - 1600 15



Gene Anderson - 8136 10



Jim Martin - 3521 10



Clarence Sandin - 4551 20



William Goldrick - 9214 15



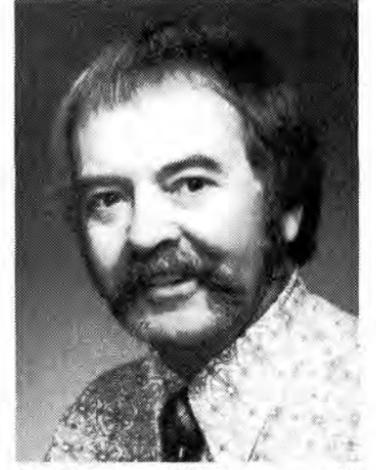
Robert Tomlinson - 9344 15



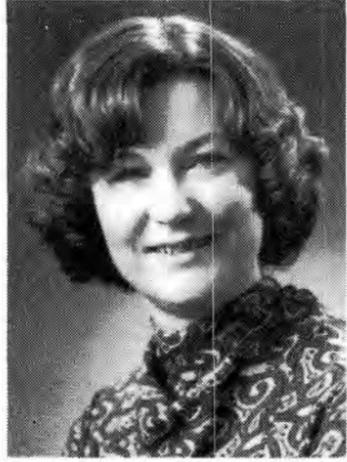
Al Fite - 1825 25



Victor Schulze - 9214 10



Lial Brewer - 3311 10



Carole Celoni - 8323 10



Charles Looney - 9216 10



Norman Berg - 1811 20



Gene Newlin - 6011 20



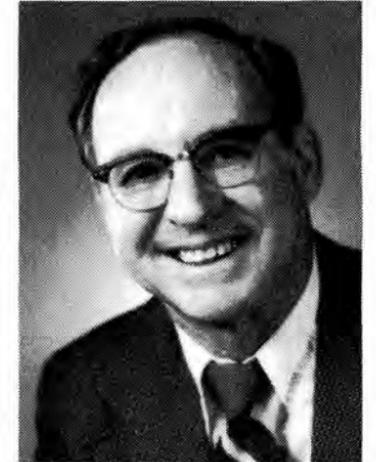
Billy Pontsler - 8168 20



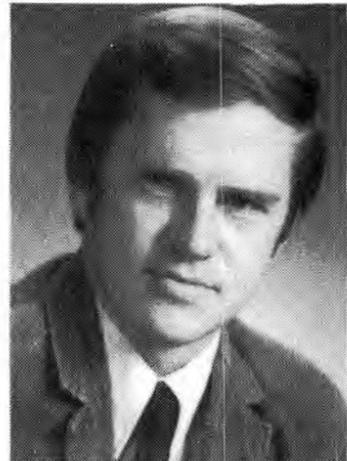
William Sieger - 1223 15



Silviano Chacon - 1323 10



Kenney Loughlin - 8421 20



Roy Pearson - 8178 10



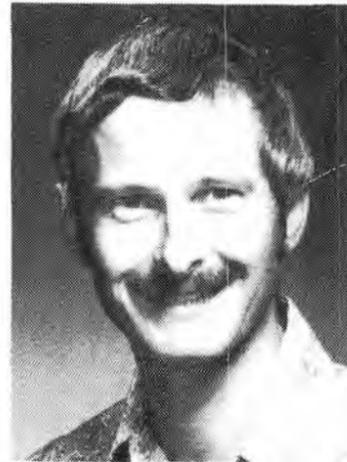
George Duda - 7633 10



Julian T. Chavez - 3520 20



Verna Clark - 7123 20



Richard Young - 5427 10



Don Stone - 4116 10



Celso Sanchez - 4518 10

Outplacement Service Helps Find Jobs

For people leaving the Labs, Employment Department 3250 is offering an outplacement service geared to help them find jobs. A number of services are available including an up-to-date listing of jobs now available. The listings were compiled after contacting more than 270 firms — local, state and nation.

"Jobs are available," Jack Rex says. Jack, supervisor of Employment Division 3251, headed a similar outplacement service effort after the layoffs in 1970. "The job market is much better than two years ago," he says. "We have more than 150 listings in the Albuquerque area, although most of these are in assembly and service areas. About 15 percent could be called staff level jobs. The picture is much brighter nationally. There are plenty of jobs available for those willing to relocate and who diligently pursue job opportunities."

In addition to the job listings, Jack's group of personnel specialists are helping Sandians organize their individual job-seeking campaigns, including the arranging of interviews and assisting in the preparation of resumés. These are printed by the Print Shop's Rapid Service Center. The Technical Library provides source material — national

directories, industrial directories, telephone directories, etc.

The personnel reps are also sending abstracts of resumés to various government agencies, to AEC installations and to Bell System companies. They are contacting possible employers by telephone and arranging for recruiters to visit Sandia.

Appointments with the Sandia personnel representatives are made by calling ext. 7138 or 5656.

Labs employees who are terminated are entitled to layoff allowances based on present salary and length of service. As described in SLI 4004, the allowance is roughly equal to one week's pay for each year worked with incremental increases for more than 10 year's service.

In addition, terminated employees may be entitled to receive unemployment insurance if they have accumulated sufficient wage credits during the base period, and if they meet the other requirements specified by the New Mexico State Employment Security Commission.

Unemployment insurance and registration for work with the Employment Service Commission will be explained at meetings

scheduled March 21 and 22 at 8:15 a.m. and 1:15 p.m. in the Theatre Bldg. 815. Security Commission people will explain the requirements and assist in the filing of applications. Concerned Sandians will be notified about which session they should attend.

At Livermore, Don Wagner (8212) is heading similar outplacement services and providing individual counseling to each employee affected.

20 Terminating Employees To Attend COBOL Course

One outplacement service being provided to terminating Sandians is a 40-hour course in the computing COBOL language. Some 20 employees will attend the course starting March 12. Instructor will be Bob James (5428).

Intent of the course, which was suggested by Leigh Hendricks (5424), is to make the attendees more competitive in the Albuquerque computer job market. COBOL is the primary computer language used by small businesses whereas most Sandians have worked primarily with the scientific FORTRAN language.

Authors

K.T. Kavanagh (5165) and S.W. Key (1541), "A Note on Selective and Reduced Integration Techniques in the Finite Element Method," Vol. 4, No. 1, INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN ENGINEERING.

B. Morosin (5132), "Superconducting Pressure Effect for NbSe₂ and NbS₂," Vol. B6, p 835, PHYSICAL REVIEW B; "Variation of Exchange Integral J With Lattice Spacing From Specific Heat Measurements on Linear Chain Antiferromagnets," Vol. 6, p 1058, PHYSICAL REVIEW B; "Crystal Structure of Tetramethylammonium Cadmium Chloride," Vol. B28, p 2303, ACTA CRYSTALLOGRAPHICA.

W.J. Brya, P.M. Richards, R.R. Bartkowski (all 5152), "Application of Moments to Light Scattering in Antiferromagnets," Vol. 28, No. 13, PHYSICAL REVIEW LETTERS.

W.J. Brya (5152), "Raman Scattering in the Intermetallic Compounds AuAl₂, AuGa₂, and AuIn₂," Vol. 9, No. 24, SOLID STATE COMMUNICATIONS.

G.J. Lockwood (5224), "Total Cross Sections for Charge Transfer and Stripping of Al, Cr and Er Ions in He and N₂," January 1973 issue, PHYSICAL REVIEW A.

G.J. Lockwood, G.H. Miller (both 5224) and J.M. Hoffman (5246), "Emission Cross Sections for the N₂ Second Positive (O,O) Transition for H, H+, He, and He+ Impact," January 1973 issue, PHYSICAL REVIEW A.

A.L. Stevens (5133), L.W. Davison (5131) and W.E. Warren (1721), "Spall Fracture in Aluminum Monocrystals: A Dislocation Dynamical Approach," December 1972 issue, JOURNAL OF APPLIED PHYSICS.

W.E. Warren (1721) and L.A. Rubinfeld (Rensselaer Inst.), "A Note on the Stress Singularity at a Penny-Shaped Crack in Three-Dimensional Electrostriction," Vol. 22, No. 5 (1971), ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND PHYSIK (ZAMP).

W.E. Warren (1721), "Interaction of Dislocations with Internal Voids and Cracks," Vol. 6, pp 889-904, DEVELOPMENTS IN THEORETICAL AND APPLIED MECHANICS.

G.W. Gobeli (5210), E.D. Jones and J.N. Olsen (both 5214), "Nanosecond and Picosecond Laser Irradiation of Solid Targets," LASER INTERACTION AND RELATED PLASMA PHENOMENA, edited by H.J. Schwarz and H. Hora (Plenum Press, 1972).

J.N. Deverman (1733) and R.G. Easterling (1643), "Product Reliability," Vol. LVI, No. 312, ORDNANCE.

L.W. Brewer (3311), "Gas Chromatography," June 1972, "Methods of Air Sampling and Analysis," published by American Public Health Association.



A NEW SECURITY BADGE deserves a pedestal. Margie Marquez (5422) treats hers right — remembers it every workday, wears it conspicuously when inside a Tech Area, protects it outside. Let us emulate.

RESPECTFULLY YOURS

Security Education

Speakers

L.C. Beavis (1413), "Vacuum: Its Measurement and Application," Instrument Society of America meeting, Jan. 18, Albuquerque.

H.J. Sutherland (5163), J.W. Nunziato (5131) and R. Lingle (5163), "An Acoustical Determination of Stress Relaxation Functions for Polymers with Applications to Shock Wave Studies," 43rd. Annual Meeting of the Society of Rheology, Jan. 29-31, University of Cincinnati.

D.R. Johnson (1435), "The Contribution of Plating Variables to Thermocompression Bond Quality," Plating in the Electronics Industry Symposium, Jan. 31-Feb. 1, Indianapolis, Ind.

C.E. Land (5113), "Electrooptic Ceramics: A Review of Materials and Devices," United Aircraft Research Laboratories, Feb. 5, East Hartford, CT.

D.L. Mangan and G.J. Scrivner (both 1935), "Numerical Calculations of Radiation-Driven Cavity Response," DNA Symposium on Internal IEMP Phenomenology, Feb. 6-8, San Diego, Calif.

M.R. Scott (5222), "An Initial Value Method for the Computation of Eigenvalues and Eigenfunctions for Integral Operators," Conference on System Sciences, Jan. 8-13, Honolulu, Hawaii.

H.C. Monteith (9344), "ESP Research in Russia, England, and America," Los Altos Kiwanis, Jan. 5, and Heights Lions, Jan. 25; "Electronics as a Career," Senior English class, Rio Grande HS, Jan. 12; "Contributions of Eastern Religions," 9th grade science class, Eldorado HS, Jan. 30.

H. Frauenglass (3152), "Bosque del Rio Grande — A Special Kind of Nature Preserve," Albuquerque staff, Bureau of Sport Fisheries and Wildlife, Jan. 9; President and administrative staff, Univ. of A., Jan. 11; Sociology class, Manzano HS, Jan. 12; Environmental Research Center, ISRAD (UNM), Jan. 18; and Board of Commissioners, Middle Rio Grande Conservancy District, Jan. 30.

R.W. Russell (9343), "Lost, But Not Forgotten," Heights Lions, Jan. 11.

O.L. Wright (4610), "History of Sandia Base," Sandia Civitan Club, Jan. 12.

C.S. Johnson (9421), "Amazing Mystery of the

UFO," Downtown Optimists, Jan. 19, and NE Albuquerque Lions, Jan. 31.

A. Goodman (5323), "Chemical Elements and All God's Creation," 6th grade class, Onate Elementary School, Jan. 22; "Physics Is Easy," six science classes, Young Jr. High School, Santa Fe, Jan. 24.

H.H. Patterson (9230), "Mexico and the Sea of Cortez," North Albuquerque Lions, Jan. 24.

H.M. Willis (3130) served as a panel member during the Ninth Annual Labor-Management Conference on Collective Bargaining and Labor Law, Feb. 8-9, Univ. of Arizona, Tucson.

J.G. Marsh (3154), "Classification Policies of the Military Services and AEC," Workshop for Classification Management, Martin Marietta Aerospace, Feb. 5-7, Orlando, Fla.

W.A. Von Riesemann (1541) and S.N. Burchett (1544), "Analysis of an Underground Protective Test Station Subjected to Severe Ground Motion"; J.T. Schamaun (1544), "The Application of Structural Mechanics Methods for Design and Analysis of Reentry Vehicles," American Society of Civil Engineers, NM State Section Meeting, Feb. 16-17, Las Cruces.

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.
A maximum of 125 ads will be accepted for each issue.

RULES

1. Limit: 20 words
2. One ad per issue per person
3. Must be submitted in writing
4. Use home telephone numbers
5. For Sandia Laboratories and AEC 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

LOWREY SUPER-GENIE ORGAN, almost new, w/side man & accessories; AKAI tape recorder deck, plus 35-40 misc. recording tapes. Kirchmeier, 344-5783 after 5.

COLEMAN lantern, \$8; Sony 777 tape deck, cost \$750, sell for \$400; girl's bike, \$20; '71 OSSA Pioneer, \$600. Jones, 298-8492.

8 TAOS SKI LIFT TICKETS, good through June '74, \$5 ea. Krenz, 298-0619.

SILVER TOY POODLE puppies, AKC, have shots. Ward, 296-6930.

GEAR-MOTOR 30 RPM, 110V, \$15; elec. dryer motor, 110 V, \$10. Schuch, 298-9924.

INDIAN-MADE concho belt, Zuni squash blossom. Atkins, 266-4408.

10-YR.-OLD Westinghouse washer, in working condition; girl's 26" bicycle. Peabody, 296-6239.

SOFA. Bonzon, 296-3022.

PICKUP SEAT; sewing machine; tape recorder; power lawn mower; couch & misc. Williams, 344-1000.

6-HP Johnson outboard motor, complete w/high capacity fuel tank. Causey, 299-0089.

NEW CHEST OF DRAWERS, 4-drawer, dark wood, \$45. Matlack, 256-7371.

BABY BED & mattress, \$10; stroller, \$5; walker, \$4; high chair, \$8. Allen, 299-8747.

RCA color TV, 25"; complete dbl. bed; elec. floor polisher; elec. fan, 20"; elec. grass edger; Health Spa membership. Parisi, 255-2933.

ACCORDION, Hohner, 120 bass w/case, \$75. Johnson, 344-9369.

DESK, 3/4 size, walnut veneer, \$30; Kay string bass w/case, \$130; school desk, \$7; car seat, \$10; lamp, \$10; infant's jump chair, \$5; TV stand, \$4. Hadley, 294-7834.

NYLON frieze hideabed, Kroehler brand, foam mattress, green, chair olive green; dbl. sink w/fixtures. Smith, 299-7151.

OLYMPIC hi-std. .22 target pistol w/extra barrel & weights, sell

or trade for old Indian items. Smitha, 266-9977.

FAT PUPPIES, assorted colors & sexes, free to good home, mother friendly German Shepherd, father high jumper. MacCallum, 842-0233.

WALL TENT, floor 12'x9', walls 5' high, peak 7'6" high, alum. poles, \$45. Finlayson, 296-4538.

WHIRLPOOL port. dishwasher, \$80; nylon shag rug, 9x12, \$20. Reed, 299-7425.

DINETTE SET, wood grain Formica top w/4 chairs, \$40. Lisotto, 298-6211 after 6.

FIVE small mixed breed puppies need home, part Cocker, will deliver free. West, 281-3460.

CULLIGAN auto. water softener, Mark 8, new over \$600, take \$100 as is; Computer Consultants stock, \$2/share. Hiltunen, 6500 Cochiti Rd. SE, Space 56.

2-BDR. 1971 mobile home, range, refrig., AC, washer, dryer, carpeting, dinette, LR furniture, set up w/skirting in Four Hills Park. Chapman, 299-9670.

15' TRAVEL TRAILER, gas range, ice box, sleeps 4. Forsythe, 299-2785.

CHAIN SAWS, McCulloch Minimac 6 and 10-10, 10% off list; 3/4 HP elec. motor, 2-spd., \$25. Toya, 898-0491.

OLYMPIA port. typewriter/case, \$25; gold shag full bedspread, \$12. Laramore, 299-6941.

3-PC. SECTIONAL, \$25. Jewell, 256-0414.

OAK ROUND TABLE & 4 chairs, 58 yrs. old; oak dresser, 62 yrs. old; plate camera, old. Saviteer, 296-3750.

KITTENS, free, male & female, 9 weeks. Holloway, 898-2110.

3 CHANNEL CB RADIO w/antenna, \$35; dinette set, \$15; queen size box springs, \$65; \$269 Whirlpool port. dishwasher, \$150. Lassiter, 298-2461.

1000 UNUSED electron tubes, make offer; 8 12' mobile home rafters, \$16; 8 white alum. exterior panels, \$12. Schubeck, 298-6697.

WRAP AROUND type bumper, heavy duty, fits wide box, \$25. Hobart, 255-7749 after 3.

SPORTERIZED Enfield 30-06 rifle, 26" barrel, scope, Weaver K-4, case, \$90. Preston, 344-4059.

DRAFTING TABLE, Mayline, oak, 72"x37 1/2" work surface, \$125; straight edge (K-E, 54"), \$25; stool, padded seat & back, \$30. Perryman, 247-8485.

SLR lens 28/f2.5 Vivitar T-4, \$30; 105/f2.8 Takumar Preset, \$25;

amplifier, Dynaco SCA-35, \$40; tuner, Dynaco FM-3A, \$40. Mason, 296-8390.

SWING SET, \$15; 6 alum. target arrows; speed punching bag set, \$5; Cox trainer plane w/.049 engine, \$5. Vollendorf, 298-4574.

NEIGHBORHOOD GARAGE SALE: twin beds, dryer, small appliances, pet cages, toys, clothes, viewlexes, much more. 10705 Cielito Lindo NE, on 3/10-3/11, 296-0115.

DISHWASHER, port. Frigidaire, \$40; 2-spd. elec. motor, \$3. Williams, 855-6857.

REFRIGERATOR, 18 cu. ft., Hotpoint, lg. frozen food section, brown, \$90. Beard, 298-9441.

CARGO DOOR for camper shell; adult & Boy Scout clothing, packs, frames; misc. camping gear. Zucuskie, 268-3105.

2 WINCH-TYPE camper jacks, seldom used, \$25; slide-out spare tire carrier (any size tire), \$15. Peckumn, 256-3363 after 5.

UTILITY TRAILER. Fisher, 299-9235.

TRANSPORTATION

10-SPEED BIKE, almost new, French made. Sanchez, 299-3393 after 6.

'67 VW pop top camper, sleeps 2 adults, 2 children, \$1550. Keltner, 298-7888.

'64 IMPALA 4-dr., 327, AC, PB, PS, new paint, new radials front & rear, bumper guards, tilt steering. White, 298-3683.

'64 CORVAIR, 2-dr., new battery, new brakes, 2 new tires, std. shift, 48,000 miles, \$300 or offer. Kirby, 296-7856.

'62 SCOUT pickup, \$700. Peters, 898-1238 after 5.

'69 HONDA 350, \$375. Walters, 296-5803.

'69 CHEV. Caprice, PS, PB, AC, and many more extras. Konrad, 299-8994.

'70 TOYOTA Corolla, new tires, stick shift, 35 mpg, NADA list \$1395, sell for \$1050. Coughenour, 296-4146.

'65 MUSTANG, PS, AC, 4-bbl. carb., V8, auto., sell for way under book. Craven, 286-7915.

'71 MAVERICK, V8, low mileage, 2-dr., AC. Ulibarri, 296-5816 after 5:30.

'59 FORD pickup, 4-spd., 6-ply tires, V8, \$500; raise-up camper w/stove, icebox, water tank, \$450; both for \$900. Lackey, 898-5175.

'71 125MX YAMAHA, best offer; '72 250MX Yamaha, best offer; '69 Grand Prix, loaded, best offer. Lutheran, 294-3297.

'69 KAWASAKI, 90cc, \$140; '67 Suzuki, 50cc, \$100; extra Kawasaki sprockets. Frasier, 299-6933.

2 EA. 26" GIRL'S BIKES: one \$5, another, \$15. Baxter, 1610 Bayita Lane NW, 344-7601.

'66 VW, new trans.; Appaloosa gelding, 3-yr., green broke. Higgins, 898-0409.

'72 DATSUN pickup w/camper shell, mirrors, radio, lt. olive, 3000 miles, \$2400. Morris, 345-3854.

'67 CADILLAC De VILLE, V8, HT, 4-dr., 60,800 miles, all power, lt. blue, '73 plates. Otero, 298-7177 after 5:15.

'69 PONTIAC Catalina 4-dr., air, full power, 30,000 miles, firm book retail. Uhler, 299-8271.

'68 CAMARO, V8, AT, PS, AC, vinyl top, spoiler, glass-belt tires, \$1950. Vance, 255-8032.

'61 DODGE LANCER, 3-spd. stick shift, slant six, 2-dr., used daily, first \$195 takes it. Granere, 296-5256.

'60 FORD 4-dr., one owner, used daily, \$285. Metzgar, 242-1028.

'70 VW squareback, under book, \$1600. Shunny, 265-1620.

'67 SCOUT, 4-wd, new tire, tow bar, hubs, limited slip diff., new upholstery, car top carrier, more extras. Madsen, 344-9970.

'55 FORD. Jones, 255-7924.

'72 MAZDA RX3 wagon, radio, radial tires, \$2800; '72 Mazda RX2 coupe, radio, radial tires, \$2900. Campbell, 268-8445.

'63 OLDS, 2-dr. HT, AC, PB, PS, new trans. Jamme, 299-5797.

'59 AUSTIN HEALEY, 3000cc, fresh paint, chrome roll bar, many spares, \$1150. Willingham, 298-7043.

'68 HARLEY Sportster, low mileage. Kelly, 294-7545.

'68 PONTIAC Catalina, 4-dr. sedan, AT, PS, AC, radio, \$950. Smith, 298-9092.

REAL ESTATE

3-BDR. home in SE heights, 1-3/4 baths, lg. 2-car garage, lg. lot, about 1200 sq. ft. living area. Ezell, 842-9136.

3-BDR. HOUSE, den, fp, new carpet, new draperies, assume existing loan at 5 1/4% interest. Brooks, 299-3364.

SECLUDED ADOBE, 2-br., 2 Mexican tile baths, 2 fp, brick floors, vigas, 60x150' walled corner near Base, golf, swimming. Burns, 242-2407.

2.4 ACRES land in Golden Valley Estate, Estancia Valley, leaving, must sell cheap. Eaves, 299-7728.

OREGON retirement property, approx. 2 acre level lot on fishing stream, located on paved road near Ashland, city water available, low taxes, 2 buildings. Ray Foster, Mercury, Nev., tel. 879-3851.

NEW HOUSE, 2048 sq. ft., 2-story w/lg. deck on 1 acre, Cedar Crest, \$34,500. Hill, 299-3772.

WANTED

TRADE low band 30-W transceiver, narrow banded for 5-W CB walkie-talkie. Flowers, 281-3458.

ROOMMATE wanted to share \$240 Villa apt. Guy, 268-5436 or 243-5567, 1111 Cardenas Drive SE, No. 313.

BODY, fenders, hood, windshield for Toyota Land Cruiser, 1969 through 1972. Wilkinson, 299-8327.

ALASKAN or other type of telescopic pickup camper, either 8 or 10' in good condition. Zanner, 294-7613.

CAR POOL or ride wanted from Bosque Farms to Bldg. 887, Beall, 869-2939.

OLD upright piano, preferably a player piano, any condition. Sander, 299-5761.

NEVADA bindings, cheap. Shunny, 265-1620.

MAN'S 5- or 10-spd. bicycle. Looney, 299-5029.

MOTORS MANUALS or Chilton's manuals, any year, any condition. Jones, 255-7924.

WAGONEER station wagon, 1969 to 1972 w/either V8 or 6-cyl. engine & 4-whd. Caffey, 296-3320.

FOR RENT

NEW, furnished 1-bdr. apt., deluxe features, shag carpeting, dishwasher, laundry, \$145/mo., 217 Pennsylvania NE, 266-3955.

DUPLEX, furnished, attached garage, utilities paid, no pets, available approx. March 15, 420 Rhode Island SE. Dodson, 255-0265.

LOST AND FOUND

LOST — 2 Chev. pickup keys, Sandia 15-yr. gold brooch, silver & turquoise ring, silver clip-on earring, 3 or 4 keys on key ring, flat silver-like button, ANB book w/name Bruce Barth, bifocal glasses w/blue-gray plastic frames. LOST AND FOUND, tel. 264-2757, Bldg. 832.

FOUND — 2 keys, tie tac, 10 keys in case, metal ruler, 1 pr. & 4 odd leather gloves, ring, stickpin. LOST AND FOUND, tel. 264-2757, Bldg. 832.

New Club Manager is an Artist

As the new manager of the Coronado Club, Jim Schultz has just one problem — where to get a 300-lb. block of ice.

In the past two months Coronado Club members have noticed a new eye appeal at the Friday night buffets. Part of this new attractiveness is the fancy ice sculpture dominating the buffet table. These are Jim's specialty (he's an artist in more ways than one), but he can only find 100-lb. blocks of ice locally.

The ice sculpture is only one innovation in the Friday night buffets. The serving area is completely rearranged for the buffets and



JIM SCHULTZ, Coronado Club manager.



A POT OF GOLD, maybe, but a lot of good things for sure are incorporated into the Club's St. Patrick's Day Party set March 17 — a fantastic buffet, entertainment by Derek Swinson (a former member of the Irish Rovers), and dancing to music by the original Irishman himself: Tommy Kelly. Photo is a winner by Bob O'Nan (1421) featuring Kathy Davis and prechaun daughter Molly O'Nan.

there is more variety offered in the salads, relishes and entrees. Comment of the Friday night patrons has been enthusiastic.

Jim is planning an international series in upcoming weeks for the buffets. Spreads featuring food from Arabia, France, Germany, Greece, Scandinavia and Slovakia are planned.

"We try to be authentic," Jim says. "Our approach is to blend flavors, sauces, spices and textures with an eye toward appearance, then serve with pride and pleasure. Dining should be an enjoyable experience all the way around — and that includes the staff that prepares the food."

"We will do this at reasonable cost," Jim says, "and try to hold the line against rising food prices."

Jim holds a degree in hotel, restaurant and institution management from the University of Denver. He's spent 23 years in the food business and has worked up the full ladder of success — from fry cook to executive chef to manager of a luxurious private club in Little Rock, Ark., and for the past three years with Szabo Food Service, Inc., Coronado Club concessionaire.

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HAPPY HOURS — Tonight, Italian buffet, Country Images on bandstand, Barbara Clark in main lounge, March 16 — Oriental buffet, Paul Plus II on bandstand, Denny Gallegos, lounge. March 23 — German buffet, Prisoners loose on bandstand, Yolanda Adent in lounge.

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TOMORROW NIGHT—Vaudeville and Family Movie night will feature Yolanda and the Music Makers at showtime with dancers from Regina's Dance Studio, songs by Yolanda and assorted friends, relatives and kids, plus a mad banjo player named Wayne Shrubsall. Pete Gallegos will emcee. Comedy classic movies will be shown — W.C. Fields in "The Dentist," The Little Rascals in "When the Wind Blows" and the Three Stooges in "Ducking We Will Go."

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CINEMA CLASSIC "Masque of the Red Death" starring Vincent Price is not your standard horror movie. It'll scare the pants off you but the photography, direction and acting puts this one in the classic category — a superior film. In addition, a couple of hilarious shorts will be shown: a Betty Boop cartoon and a romp with the Little Rascals. Admission is free to members. Make it there March 14 at 7:30 p.m.

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TRAVEL NEWS — Fifteen seats are still open on the Malaga, Spain, tour set May 17-25. The trip costs \$354 per person (double occupancy) and includes a lot of goodies which add up to eight luxurious days on Spain's beautiful Costa del Sol. Full fee is due at the Club office now.

A transportation only trip to Europe is set June 5-26 for a price of \$288. You will land in London, be picked up three weeks later in Paris. A \$100 deposit is due right away.

Mazatlan, Mexico, the Club's favorite vacation spot, is the destination Nov. 5-12.



PAM FRANCIS is one of five Flair models presenting Spring fashions from Penny's at the noon-hour style show at the Club Wednesday, March 14. Rosario Ayers will be moderator.

The luxurious package (which covers everything but lunch and bar tabs) costs approximately \$215. Many Mazatlan repeaters have already signed up. Reservations open April 1. A \$50 deposit is required. Only 135 seats are available.

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The Club will sponsor a doubles cribbage tournament Saturday, March 31, starting at 11 a.m. In order to build the competition ladders and take care of other details, contestants are urged to complete the following form and get it into the Club office right away.

We wish to enter the Doubles Cribbage Tournament and enclose \$1.00 each registration fee.

Name _____ Org. _____ Ext. _____

Name _____ Org. _____ Ext. _____

Please return registration and money to the Coronado Club Office before Thursday, March 29, 1973.