

Improving Synthetic Rubber's Bondability

A Sandia-developed technique for improving the bondability of cured RTV (room temperature vulcanizing) silicone rubbers was announced in May and is already arousing interest in both the scientific and medical fields.

RTV rubbers are often used to give printed circuits and electronic components a protective resilient coating before they're permanently potted or encapsulated.

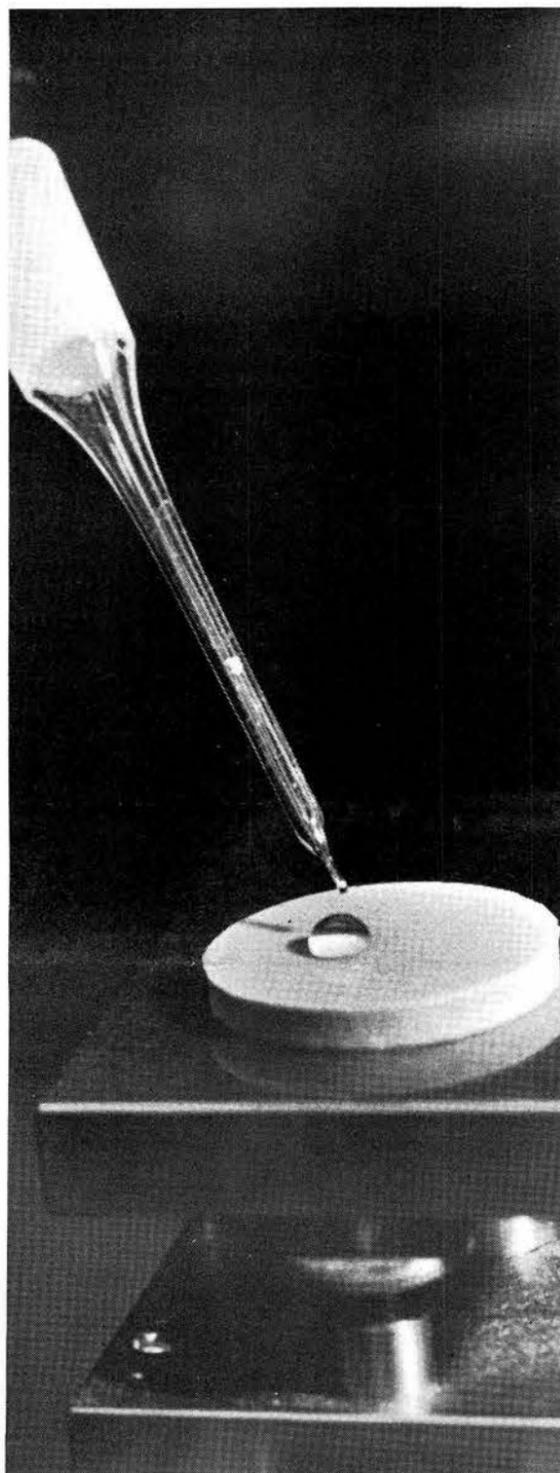
But adhesives — epoxies and the like — don't stick well to the rubber coating. In fact, under some conditions, the rubber separates completely from the potting material — which is sometimes highly undesirable.

Enter Nick DeLollis, Bob Sowell, Harold Gregory, and Orie Montoya (all 5332). And a theory which has been around quite a while. The theory is that a liquid (such as an adhesive or encapsulant) can wet a solid (such as RTV rubber) only when the surface energy of the solid is greater than that of the liquid. (This can occur, for example, when a surface is oxidized, thereby creating more polar groupings and thus more surface energy.) It

follows then that the team should find a technique by which to increase the surface energy of the rubber and thus improve its wettability.

They did. They exposed the rubber to an activated gas plasma (argon and helium work best) which consists of ionized gas particles. This process apparently causes dissociation of the polymer molecules which, on being quenched in air, results in oxidation of the surface and succeeds in improving rubber's wettability. Tensile adhesion tests showed that untreated specimens failed at less than 10 psi compared to 533 psi for the treated specimens.

The technique is now being adopted by Bendix Kansas City, Monsanto, GE Florida, and LASL. In addition, medical labs may be interested in the possibilities of a more wettable silicone rubber, perhaps for certain hospital products or even for artificial organs. And there may well be other applications for RTV rubber treated with activated gas plasma — the better wetter. •bh



WATER DROPLET on untreated RTV rubber disk. Following gas plasma exposure, water droplet will spread across surface of disk.

DeLollis Chairman of International Standards Meeting in Germany

Nick DeLollis of Surface Physics and Chemistry Division 5332 was the U.S. representative and chairman of a 12-country task group meeting in Baden-Baden, Germany, this past week developing international standards for adhesives.

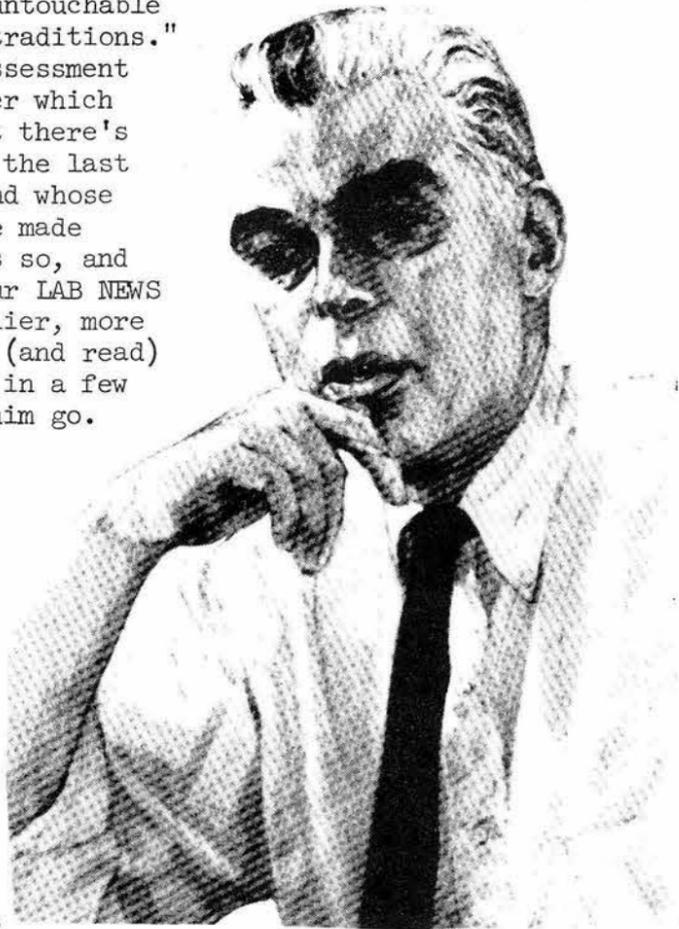
The task group is one of the technical committees within the International Organization for Standardization. IOS was formed at the initiative of the United Nations 25 years ago by representatives of 25 national standards organizations to establish international standards aimed at overcoming technical barriers in international trade.



UNION PRESIDENTS at Sandia, long-time supporters of the Employees Contribution Plan, visited a number of UCF agencies last week as part of tours by Sandia solicitors for the coming campaign. In top photo, Merle Alexander, Metal Trades Council, and Maxine Stephenson, Office Workers, entertain children at the Christina Kent Day Nursery. At left, Bob Byrd, Guards Union, watches progress of students at the Albuquerque Speech and Hearing Center.

Afterthoughts

Adios Mr. H.-- A writer working on a house organ soon finds, as one observer puts it, that "...corporate publications exist in a sort of highly-charged political arena that makes it necessary for the editor to be supremely conscious of executive pecking orders, untouchable 'skeltons' and sacrosanct traditions." That's a fairly accurate assessment of the typical climate under which a house organ operates, but there's been one man around Sandia the last few years whose presence and whose approach to management have made these constraints much less so, and one consequence is that your LAB NEWS is (in all modesty) a livelier, more credible and more readable (and read) publication. He leaves us in a few days and I'm sorry to see him go.



I first encountered John Hornbeck three years ago when it was proposed that LAB NEWS carry a "State of the Union" message by him at the beginning of the new year. The merit of this feature now seems obvious, but the fact is that (1) it had never been done before and (2) managers, like diplomats, tend to have reservations about being completely explicit about company matters (what you say can come back to haunt you). One could sense that John Hornbeck wasn't entirely comfortable with the notion, but he said "go" and we had that interview, as well as repeat interviews in succeeding years.

The content of those interviews is now a matter of record, but they reveal little of the man. A few observations: he's a pacer, given to jumping up from his chair, strolling around, forming thoughts on the run; he's more at ease with words and ideas exchanged and developed in a dialogue than with words on paper; he tends to the brusque, not because of his authority, but rather simply because he wants to get on with the business at hand; he'll never be characterized as unassuming and I recall one assertion he made offhandedly-- "Bright people tend to be brash"-- that struck me as entirely in character; he dislikes obsequiousness-- don't tell him what you think he wants to hear; and with his good looks and the tailored insouciance of his mode of dress there emerges a certain flair or, if you will, style.

He took interest in, i.e., control of subjects large and small: we are now, by God, a Laboratories; our official color is a very certain blue and you'd better have a good reason if you choose to use another shade; we've got a host of new and handsome service award jewelry, motif a Mod Thunderbird; timeclocks and laboratories don't go together; and the cheesecake on the LAB NEWS back page is a good and enduring tradition, not to be trifled with (and call him if you get any static from people in high places). Clearly matters of greater import within the Labs were likewise shaped and recast in the six years of John Hornbeck.

I think we'll miss the rakish black Jag and its driver. Adios Mr. H.-- it's been interesting, always a pleasure, and fun. *js

Unusual Vacation

Sandians with campers and trailers may be interested in a trip that Dave Poli (7415) is trying to set up over the Christmas period.

It consists of loading these vehicles on railroad flat cars in Chihuahua, Mexico and proceeding westward through the Sierra Madre Mountains to Los Mochis on the Gulf of Baja California. The three-day piggyback ride takes you through spectacular mountain scenery, including Copper Canyon, reputed to be the equal of our Grand Canyon.

Dave has already got most of the elements of the voyage established — firm dates, prices, itinerary, etc., but needs a minimum number of sign-ups before the trip is a definite "go". Call him if you are interested and to get more detailed information.

Take Note

The Road Runner Bottle Club of Albuquerque, a collection of people who collect old bottles (empty ones), is hosting its first annual bottle show and sale at the State Fairgrounds Hobby Bldg. Oct. 7 and 8. On Saturday the hours are from 9 a.m. to 6 p.m. and on Sunday, 10 to 5. Contact Frank Potts (9341) for more details.

* * * *

Non-stop bus service from the Arroyo del Oso area may soon become a reality. Between 7:15 and 7:30 a.m. the bus would make a series of stops within two blocks of about 100 Sandians' homes, then would go non-stop from Louisiana and Montgomery to the Labs. The route would be re-traced in the evening. Ben Bader (1543) has been doing both head and legwork on the project. If you live in the area, are interested in busing, and haven't gotten a letter from him, give him a call.

Did you know you can get a recorded weather forecast by dialing ext. 3468? It's a service offered by the meteorology group in Test Operations Control Division 9311. The recorder works day and night so that calls can be made during non-work hours. The forecast is updated daily or whenever a significant change in weather is anticipated.

As of Oct. 2, the Thrift Shop has new hours — and new days. Monday, Tuesday, and Thursday, 10:30 a.m. — 1 p.m. for contracts; 10:30 a.m. — 2 p.m. for sales. Wednesday, 3 — 7 p.m. for sales only. First Saturday of each month, 10:30 a.m. — 1 p.m. for sales only.

* * * *

Non-fade Operation Identification decals are now available at the Op Id office in the Security Police building (diagonally across the intersection from the Base Gym). Sgt. Tillman says that future customers (and past ones who wish to replace their likely-to-fade decals) will receive no more than three decals because the supply is limited.

 **LAB NEWS**

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SANDIA LABORATORIES

An Equal Opportunity Employer

ALBUQUERQUE, NEW MEXICO
LIVERMORE, CALIFORNIA
TONOPAH, NEVADA

*john shunny is editor
&
don graham ass't. editor*

*bruce hawkinson writes
as does norma taylor while
bill lasker takes/makes pictures
&
in livermore lorena schneider does all*

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LAB NEWS
SEPTEMBER 29, 1972



ECP Chairman Answers Questions

With the Employees Contribution Plan campaign primed and ready for kick off Tuesday, Oct. 5, Ken Sutton (3250), ECP committee chairman, called in the LAB NEWS to help head off some questions that crop up every year about this time. Ken feels strongly that all Sandians would be Fair Share (one hour's pay per month) contributors if they understood the work and the needs of the agencies that receive our gifts.

Here are the questions most commonly asked during the ECP drive:

How does ECP differ from UCF?

The United Community Fund (UCF) is a city wide effort which raises funds for 34 local health and welfare agencies. ECP (Employees Contribution Plan) is an organization of Sandia employees. We support the 34 UCF agencies plus eight other national agencies — Heart, Cancer, Arthritis, Cerebral Palsy, Muscular Dystrophy, Cystic Fibrosis, Multiple Sclerosis, and Crippled Children and Adults.

How are the other agencies selected?

The agencies apply for participation in ECP to the ECP committee which determines (1) if they are ineligible to participate in the United Community Fund (the national policy of some agencies stipulates individual drives for funds) and (2) if the agencies have established a successful history of fund raising efforts in the community. We must assure employees that the agency is definitely in business and that the community is willing to support it.

How much of the ECP contribution goes into administrative overhead costs?

None at Sandia. The entire cost of the campaign is absorbed by the Laboratories. Of the funds collected by the United Community Fund, about seven percent goes to the administrative costs of the campaign. In the day-

to-day operations of the agencies there are other overhead costs. The \$23,000 of UCF funds that go to the Legal Services for the Poor, for instance, pay a director, a secretary and rents an office. However, this agency provides the services of 115 volunteer attorneys at no cost to the poor. There are literally hundreds of volunteers who work for UCF agencies whose activities are given direction by the professional staffs.

Does one of the UCF agencies advocate gun control legislation?

No. We still get this question after its being settled two years ago. At one time the National Council on Crime and Delinquency had taken a position in favor of firearms registration. Through the efforts of the New Mexico chapter of this organization, the national board assumed a neutral position on the issue.

Will Fair Share contributors be solicited this year?

In some directorates, Fair Share contributors will be resolicited. Directorate ECP representatives decide how to conduct the campaign. In most directorates the volunteer Sandia solicitor will probably concentrate his efforts on those who are not giving a Fair Share. Hopefully, more will join the 3053 Sandians who now give one hour's pay per month to ECP.

Where at Sandia can employees get more information about ECP?

From Joe Laval (3163), secretary of the ECP committee. He's in Bldg. 610, ext. 6531. Joe works on the ECP program year 'round, thus lending continuity to the ECP committee whose membership changes periodically. He monitors the program to assure that money is distributed as allocated, acts as the source of information about eligibility for new agencies, and performs research to assure continuing agency eligibility. Joe welcomes questions and suggestions.

How will ECP funds be allocated in 1973?

The committee determined the following distribution:

United Community Fund	85.2%
Cancer Society	3.1
Heart Association	2.8
Cerebral Palsy	1.0
Muscular Dystrophy	1.7
Arthritis Foundation	1.5
Multiple Sclerosis	1.5
Crippled Children	1.9
Cystic Fibrosis	0.8
Reserve	0.5

100%

What is the ECP goal this year?

One hundred percent participation at the Fair Share level.

Retiring

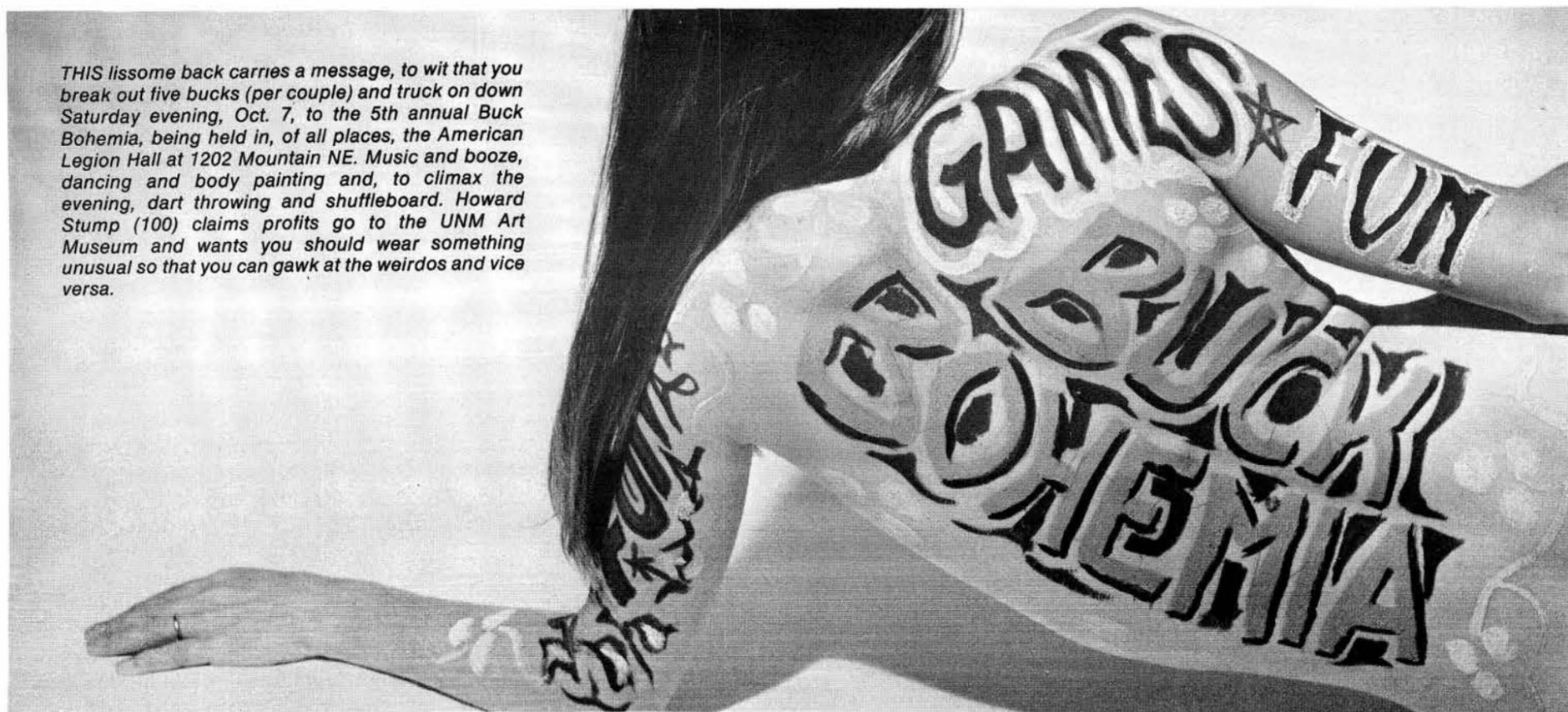


William Fleming (7434)



Roy Furrow (4518)

THIS lissome back carries a message, to wit that you break out five bucks (per couple) and truck on down Saturday evening, Oct. 7, to the 5th annual Buck Bohemia, being held in, of all places, the American Legion Hall at 1202 Mountain NE. Music and booze, dancing and body painting and, to climax the evening, dart throwing and shuffleboard. Howard Stump (100) claims profits go to the UNM Art Museum and wants you should wear something unusual so that you can gawk at the weirdos and vice versa.



Adopting Kids From Foreign Countries

In the late '40s Bob White (7432) was a merchant seaman with a gal in only one port — Hong Kong. He would see Mary (now Mrs. White) about every six weeks. Then came the war in Korea and Bob spent a couple of years in the Army. He made it back to Hong Kong in 1953, married Mary, and the couple moved to Albuquerque where Bob joined Sandia and settled down to raise a family.

But not all couples can have children. They decided to adopt an Eurasian child. Both Bob and Mary had personal knowledge of the great numbers of orphan children in the Orient and they thought adoption would be a simple process. It wasn't. It took two years of waiting to get Tom, their son, and another three years for Lola, their daughter. Both children are bright, active youngsters attending Emerson Elementary School. To say that Bob is a proud father is some understatement. He beams and pops buttons talking about his kids.

To adopt a child from a foreign country, the procedure is the same, up to a point, as for a local child. Bob and Mary had to apply through the New Mexico Department of Health and Social Services and undergo the standard investigation for prospective adop-

tive parents. The agency tries to locate a child within New Mexico and then from several surrounding states. Finally, with the cooperation of the U.S. Immigration Service, an international agency such as International Social Service (formerly WAIF) enters the picture and the search continues for the child.

Tom came from an orphanage in Korea. He arrived in Chicago as part of a group escorted by ISS officials. He was two years old, small for his age, and very frightened.

"It was a great thing when, on the trip back to Albuquerque, Tom began to have confidence in us," Bob says. "He adapted quickly and grew like a weed."

Lola was six when she came to the US from an orphanage in Hong Kong. Since she spoke Chinese, her "adjustment period" took a while. Mary speaks Chinese and this helped, but finally she gave this up so that Lola would learn English more rapidly.

Both kids are good students and well adjusted. They look forward to weekends usually spent at Bluewater Lake where Bob maintains a permanent house trailer and a sailboat. In addition to swimming, boating and fishing both children are avid rockhounds and fossil collectors.

"They run my tail off," Bob says. • dg



Tom, Lola, Mary and Bob White

Life Is an Artificial Kidney

Serious illness of a family member over several years' time can mean financial disaster for middleclass Americans, even for Sandians who enjoy generous health care benefits up to \$20,000.

Gene Bates of Technical and Crafts Training Division 3132 faces such a crisis. His wife Louise is the victim of a rare hereditary

kidney disease. She has undergone a number of expensive operations in the past few years, culminating in the removal of both kidneys. She survives now by using an artificial kidney machine three times a week, six hours each session.

The kidney machine will keep her alive for a while but its effectiveness will diminish. Her only hope is for a kidney transplant, providing a suitable donor can be located — another expensive (from \$12,000 to \$15,000) operation.

Friends of the Bates family have organized a couple of events to help.

A women's doubles tennis tournament will be held Oct. 10, 11 and 12 at the new city tennis complex, 1903 Stadium Blvd. SE. All women tennis players are invited to enter in either beginners, intermediate or advanced categories. Play will start at 9 a.m. Oct. 10. A donation of \$5 plus a can of Wilson Champion or Dunlop balls is required. Registration forms are available at the tennis complex or from Fran Morgan at the Beverly Park Tennis courts.

A garage sale is scheduled at 8408 La Camila NE, on Oct. 12, 13 and 14 from 8 a.m. to 5 p.m. Call Faye Durham at 298-0733 if you have items you wish to donate.

Cash donations will be accepted at any branch of the Albuquerque National Bank. Deposit in the Louise Bates Kidney Fund or mail checks to any of the committee working on the fund — Everett Westfahl (1415), Bill Riggan (1411) or Ed Jacobs (1823). Donations are tax deductible.

The problem of finding a donor is acute and it is nation-wide. Many people (but not enough) are making arrangements to donate their bodies upon death to the national organ donor program. Membership cards and additional information are available by writing the National Kidney Foundation, 116 East 27th St., New York, N.Y., 10016. • dg



ARTIFICIAL KIDNEY MACHINE means life itself to Louise Bates who has had both kidneys removed. She uses the machine three times a week, six hours during each session. Husband Gene (3132) spends a couple of hours each time setting up the machine.

National Fire Prevention Week Oct. 8-14

Sandia Laboratories will join with industry and governmental agencies throughout the country in observing National Fire Prevention Week Oct. 8-14. A year around activity at Sandia, the fire prevention program is conducted by Planning Division 4551 under Sam Johnson.

Emphasis this year has been on the training of building fire teams in the use of various kinds of fire extinguishers. According to Vern Duke (4551), fire prevention engineer, some 18 classes have been held at which 672 employees have gained experience with fire extinguishers.

Eight fires were reported at Sandia this year — all were minor. Total dollar loss as a result of these fires was only \$288. "There were two cases," Vern says, "where the automatic sprinkler systems were activated and extinguished the fires. This probably saved more than a million dollars in possible fire loss.

"The point is," Vern continues, "that fires occur at Sandia. The hazard is always with us and we have been extremely lucky."

In the City of Albuquerque this year 10 persons died as a result of fires. The city fire department responded to 600 residential fires, 186 mercantile and manufacturing fires, 206 church and public assembly building fires and 101 storage area fires.

The National Fire Protection Association warns that the average *daily* toll of fire in the United States is 33 lives, 1486 homes, 215 apartment buildings, 30 churches, 116 farm buildings, 207 stores, offices and restaurants



and 142 industrial plants. More than half of the 12,800 lives lost to fire in the US and Canada last year were in the home. Children make up approximately one-fourth of all fire fatalities. Equally shocking is the fact that about one-third of these children are alone or without responsible supervision at the time fire occurs.

"These are facts," Vern says. "Fire is a constant threat to each of us. National Fire Prevention Week brings this message home each year on the anniversary of the Great Chicago Fire of 1871. Now is the time to take a close look at your home and your work area. Let's be safe from fire."



Jerry Kennedy and Don Rigali

Supervisory Appointments

JERRY KENNEDY to manager of Test Sciences Department 9110 effective Sept. 1. He has been engaged in shock wave physics research since joining the Laboratories in March 1963 and, more recently, has headed Underground Test Division and Experiment Planning Division.

Jerry joined Sandia after earning his PhD in Physics from Lehigh University. He was awarded his MA in physics from the University of California, Berkeley, in 1959 and his BS in engineering physics from the University of Oklahoma in 1956.

He is a member of the American Physical Society.

Jerry and his wife Lynn (5166), also a physicist, reside with their daughter Kimberly, 12, and son Michael, 10, at 8904 Crestwood Dr. NE.

* * * *

DON RIGALI to supervisor, Exploratory Systems Division VIII 1225. He has been engaged in experimental aerothermodynamics for rocket systems since joining the Laboratories in July 1957.

Don earned a BA in liberal arts from College of St. Thomas in 1955, a BS in aeronautical engineering from University of Notre Dame in 1957 and MS in mechanical engineering from UNM in 1967.

He is a member of the American Institute of Aeronautics and Astronautics.

Don and his wife Barbara and their four youngsters, two sons and two daughters, reside at 12301 Pineridge NE.

Errata

On page 7 of the September 15, 1972, issue of LAB NEWS, it was stated that the scanning electron microscope photos were "prepared by Jim Horak and Dan Sasmor of Reactor Studies Division 5252." They were actually prepared by H.V. Rhude and J.E. Sanecki of Argonne National Lab working with Horak and Sasmor (both 5222) on the examination of failed SPR II fuel. The photos are part of a report and a journal article co-authored by the four investigators.

Tech Institute Consultant

Paul and His Thing with Siam

"The East isn't all that inscrutable," says Paul Robertson (3134), "at least the part of the East I was in wasn't." Paul's part of the East is Thailand (formerly Siam) where he spent nearly two months as consultant to their Ministry of Education.

Paul's specialty is vocational training, and the Thai government had a need for such a specialist. They contacted Paul through his alma mater, Oklahoma State University, and presented their problem — Thailand has an excellent educational system with strong vocational schools for those 11th, 12th, and 13th graders who don't make the university grade. But they needed a technical institute program for the top one percent of the vocational school graduates which would add theoretical foundations to their vocational skills.

So Paul gathered his vacation time, borrowed some more, and set out June 3 with wife Martha and daughter Becky for Bangkok.

Assisted by Oklahoma State and Ministry of Education people, Paul reviewed the tentative plans for the new program, wrote course descriptions, and then listed the available and needed equipment at each of four schools throughout the country. Since curricula in electronics, electric power, civil engineering, metals and materials, machine tools, and automotive technologies were involved at each of the four schools, a total of 24 equipment lists and enough course descriptions for a two-year program in each curriculum were necessary. Paul was a busy man.

But he wasn't too busy to develop a real appreciation for the country and its people. Canals in Bangkok, elephants in the teak



PAUL ROBERTSON, front and center, at Dragon Staircase of Doi Suthep in Northern Thailand. Daughter Becky's on his left, wife Martha on his right.

forests, priests and temples everywhere. But he was most impressed by the Thais themselves. "First of all, they're beautiful people — lithe, graceful, attractive. But they're charming people too — gracious, warm, a delight to work with."

His feeling about the Thais was reciprocated — they liked him too. They appreciated his learning something of the language (Thais take English in school, but outside Bangkok seldom use it, so they think highly of a foreigner who attempts communication in their melodious tongue.) And they didn't subject Paul to a bi-lingual pun that a certain pompous American scholar, also a visitor, never caught: the Thai word for moron or dolt is (phonetically) "ser." Whenever this scholar was introduced, there was a very strong emphasis on the final syllable of his title — professor.

"Very real people, with a subtle sense of humor, not at all inscrutable," says Paul. He'd go again anytime. •bh

Sandians Find Courage, Optimism at LEAP Agencies



Pauline Kirk (8161) and Walt Dzugan (8212) examine mice used in experiments at the University of California Cancer Research Center.



Bill Pontsler (8168), Jan Inzerilla (8323), Pat Carothers (8433), and Coralyn McGregor (8231), (r to l) watch a University of California student collect mammary glands from mice for cancer research.



Walt Dzugan (8212), Pat Carothers (8433), and Pauline Kirk (8161) (r to l) learn from 16-year-old Debbie at Children's Hospital in Oakland how a life support system helps in her fight against cystic fibrosis.

Congratulations

Theresa Ruddy (8217-1) and Chris Smith, married in Tracy, Aug. 12.
Thora Smith (8411) and Al Yung (8411-1), married in Carson City, Nev., May 26.

Each year before the LEAP campaign starts, Sandia/Livermore employees visit several agencies that will be recipients of LEAP contributions. Here they get a first-hand idea of the operation and learn what their money is supporting. If we need words to describe the two agencies visited this year, they could very well be "courage" and "optimism."

We talked to some of these employees after their visit. Hear what they have to say.

WALT DZUGAN (8212) — Visiting Children's Hospital in Oakland and the University of California Cancer Research Center made me acutely aware again of the devastating effects of disease, and how tormentingly slow and costly is the research for the knowledge to produce a cure. **Our help is needed, and giving is the easy part.**

BILL MCGUIRE (8431) — I was impressed with the industriousness and dedication shown by Dr. DeOme in his cancer research at the University of California and his continuing enthusiasm after 25 years of this kind of effort. The difficulties that he has encountered in nailing down the actual causes of any particular cancer, much less cancer in general, would have turned away the average man long ago. The clinic at Children's and the work that was obviously being done, plus the enthusiasm of the volunteers and their cheerful attitude, were most heartening.

CORALYN MCGREGOR (8231) — The thing that really got to me was the picture of courage and optimism that human beings have even when their chances of success are small. For example, Dr. DeOme has worked for years on determining cancer-producing mechanisms, a field where progress can be extremely slow, but he still hopes. He is even looking forward to continuing this work after he retires. Actually, his chances of success appear to be small, yet what he is doing is contributing to the overall knowledge. Even so, his courage and his optimism are still there. The same is true in a different sense with our little friend Debbie at Children's Hospital. She's spent her entire life battling cystic fibrosis, but is still thinking of the future. She has never lost her courage or optimism. How great it would be to be able to help their hopes and courage become a reality.

PAULINE KIRK (8161) — I was planning to stop my LEAP payroll deduction because of the high rise in the cost of living. But after visiting the agencies, I feel determined to continue and possibly raise it. I'm now very aware that these agencies are not getting nearly the amount of money they need to fight disease. Since I'm forced into such deductions as taxes, I feel it is a privilege to have one deduction that I can honestly say is not mandatory, strictly voluntary. I'm especially proud to give to the cancer fund because it seems they are not nearly as close to a cure as we would like them to be.

PAT CAROTHERS (8433) — The visit showed me that cancer research needs more money. They are working very hard but making only small advances, so it is going to be some time before we see any tangible results. Children's Hospital made me realize how well off I am. **It made me ashamed of some of my complaints.**

BILL PONTSLER (8168) — I was impressed with the hope and enthusiasm shown by Dr. DeOme in the cancer research effort. One must be dedicated to the cause since the visible accomplishments are rare and the proper direction to follow is very hazy. He talked with such excitement about each small breakthrough. It appears that only the bare surface is being scratched and much must still be done before the cancer-causing mechanisms are completely identified and before any controls or cures become real. Little Debbie at Children's Hospital has cystic fibrosis, but her cheery attitude and warm smile would be a tremendous inspiration to anyone under much less serious circumstances. **Her courage made me feel that any contribution would be too small.** •wj

LIVERMORE NEWS

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LIVERMORE LABORATORIES

SEPTEMBER 29, 1972

10% Increase Set as Goal

LEAP Campaign Begins Monday

This coming Monday, Oct. 2, is the kickoff of the 1972 Livermore Employees' Assistance Plan (LEAP) campaign. During the week-long drive, solicitors will contact each person within the Laboratories.

Bill McGuire, chairman of this year's campaign, says he and the employee committee have completed their plans for what they hope to be the most successful community support effort undertaken at the Labs.

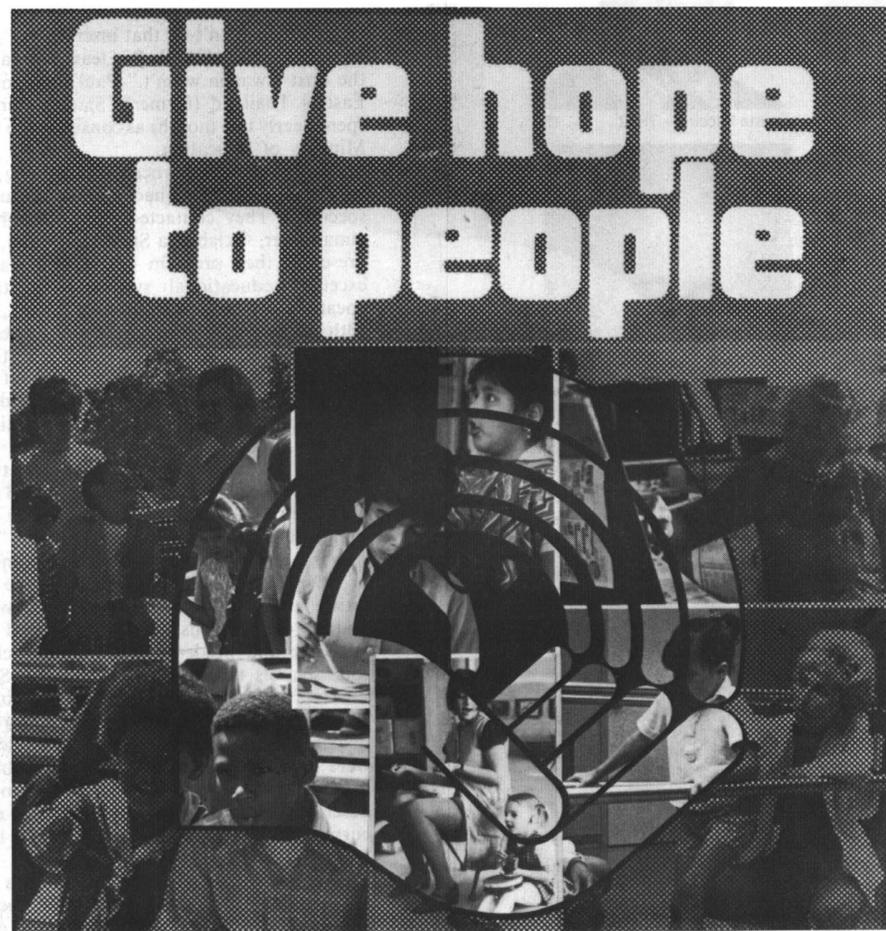
"We've set the campaign goal at a 10 percent increase over last year," he continues. "An additional 10 percent participation or a 10 percent increase in the number of LEAP shares would result in better than a 10 percent increase in total response to the needs of the agencies we support. Members of the committee felt individual employees could consider this a "ONE-ONE-TEN" program, suggesting three alternative ways of giving: ONE percent of earnings, ONE hour's pay

per month — the LEAP share, or a TEN percent increase over last year's contribution."

Through LEAP, Sandians participate in a program which supports local service agencies in addition to the United Bay Area Crusade (UBAC) and national health agencies through the Bay Area Combined Health Agencies Drive (CHAD).

Of funds contributed this year, nine percent goes to five agencies in the local area, 15 percent to CHAD which works with 12 national health agencies, 75 percent to UBAC representing over 200 agencies in the Bay Area, and the remaining one percent is placed in reserve for emergency use or to be distributed at year end according to specific participating agency needs.

Employee group meetings to explain the current LEAP program and allocation of funds are scheduled for Oct. 3rd and 4th.



ISLETON/ANDRUS ISLAND DISASTER — Jesse Burns (8411) who lives at Bethel Island near Isleton in the Sacramento-San Joaquin Delta area explains to Jane Enfield (8177) some of the photos taken when a broken levee caused major flooding early this summer.

Red Cross Aids Delta Flood Victims

Disaster hit close to home early this summer when a levee break caused major flooding in our own Sacramento-San Joaquin Delta area. As a result of the flooding, about 1200 people in the town of Isleton and other parts of Andrus Island were forced to evacuate their homes.

The American Red Cross, which receives funds from contributions Sandians make to the United Bay Area Crusade (UBAC) through LEAP, was on the scene feeding or providing mass shelter for some 8000 people, including those working to replace the broken levee. Additional funds were contributed by Sandians toward the disaster relief through the Red Cross's nationwide appeal.

Over 200 Red Cross people, mostly volunteers, provided emergency care for the flood victims. A Red Cross first aid and feeding station was set up at the Isleton City

Hall. Red Cross disaster teams took to the fields to assist displaced farm workers, and an emergency family assistance center was set up in a tent to help victims unable to go to Disaster Headquarters. Volunteers delivered daily food supplies to families living in clusters on the surrounding levees. Case workers rode with the canteen trucks to register these families.

In nearby Rio Vista, volunteers at Red Cross Disaster Headquarters matched evicted families with the many offers of housing that were phoned in. At one point, Red Cross youth volunteers working in the kitchen were part of a team making more than 1000 sandwiches an hour to feed disaster victims and workers.

The Red Cross continues to help those families who are not able to recover by themselves or with governmental assistance.

Take Note

Jimmie Bauman (8411) has been elected western regional vice president of the American Society of Certified Engineering Technicians (ASCET) for the upcoming year. A member of ASCET since 1967, Jimmie served as the first president of the Eastbay Chapter and then two terms as secretary/treasurer. He was named "technician of the month" in July 1971.

Death

Bill Dawson, a staff assistant in Electronic Design Drafting Section 8431-1, died suddenly Sept. 11. He was 33.

Bill had worked as a draftsman at Sandia/Livermore since Feb. 1960.

Survivors include his widow, two sons, a brother and his mother.

Special Interest Programs Offered by Chabot College

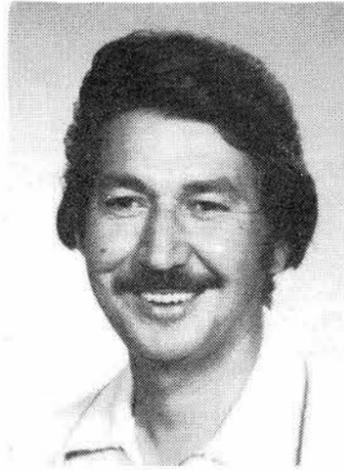
A series of Special Interest Programs is being presented by Chabot College during the coming academic year. Individuals interested may register by contacting the College's Community Services Office, 25555 Hesperian Blvd., Hayward 94534, phone 782-3000, ext. 415. The programs, free to the public, include:

- Career Decisions for Women, Oct. 5, 12, 19, 26; 7-9 p.m.;
- San Felipe Community Center, Hayward
- Photography for Amateurs, Oct. 4, 11, 18, 26; 8-10 p.m.;
- Chabot College Student Center
- Planning for Retirement, Nov. 1, 8, 15, 22, 29 and Dec. 6; 7-9 p.m.;
- Livermore High School
- Consumer Education, Nov. 6, 13, 20, 27; 7-9 p.m.;
- Springtown Community Center, Livermore
- Investment Seminar, Jan. 8, 15, 22, 29 and Feb. 5, 12; 7-10 p.m.;
- Castro Valley Community Center
- Income Tax Seminar, Feb. 6, 13, 20, 27 and March 6, 13; 7-9 p.m.;
- Amador High School, Pleasanton
- Perspectives in Childhood Education, Feb. 7, 14, 21, 28; 7-9:30 p.m.;
- Amador High School, Pleasanton
- Health Care of the Aged, April 18, 19-20; 7-9 p.m.;
- location to be announced
- Art Media and the Mentally Retarded, April 3, 10, 17, 24, May 1, 8, 15, 22, 29, June 5; 7-10 p.m.;
- Castro Valley Community Center
- Bicycle Clinic, May 12, 19; 9 a.m. to 12 noon;
- Harvest Park School, Pleasanton
- Seminar for Parents of Retarded Children, April 5, 12, 19, 26, May 3, 10, 17, 24, 31, June 7; 9:15-11:15 a.m.;
- location to be announced.



Leo Gutierrez — 8100

25



Hilario Garcia — 7123

20

MILEPOSTS

LAB NEWS September 1972



Betty Pickel — 4300

20



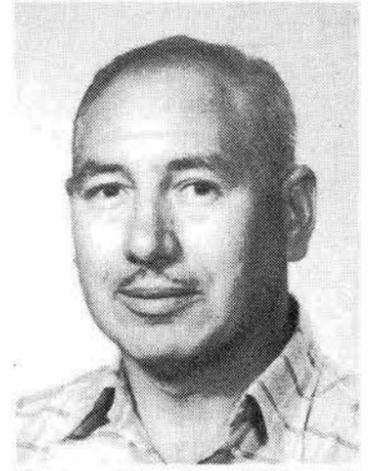
Larry Neibel — 4360

25



Verne Christy — 3513

15



Flaviano Saavedra — 4622

20



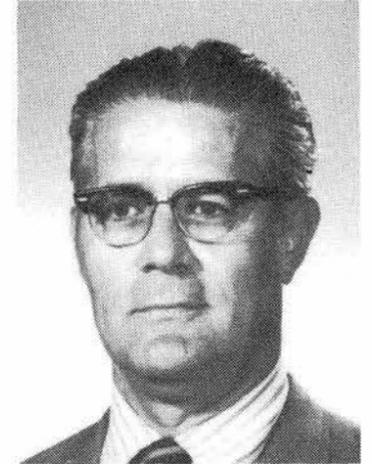
Bob Kehl — 1832

20



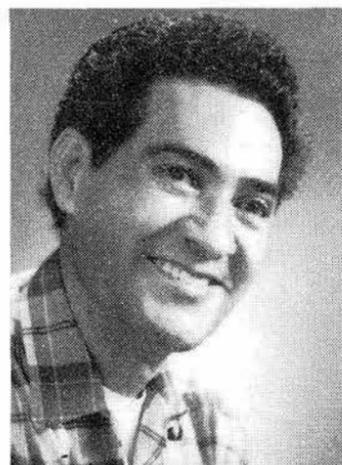
Ron Zottnick — 7433

15



Oreste Puccini — 7512

15



Frank Maestas — 8433

15



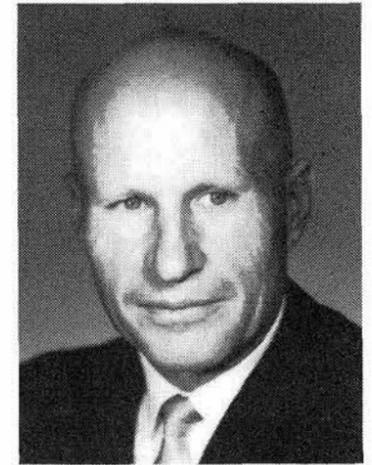
Jane Thompson — 3100

15



Arthur Engquist — 7411

20



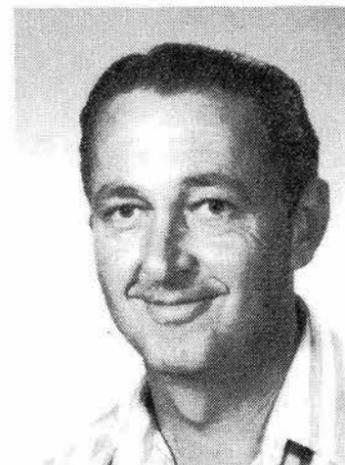
W. C. Scrivner — 8400

25



Andy Anderson — 8264

25



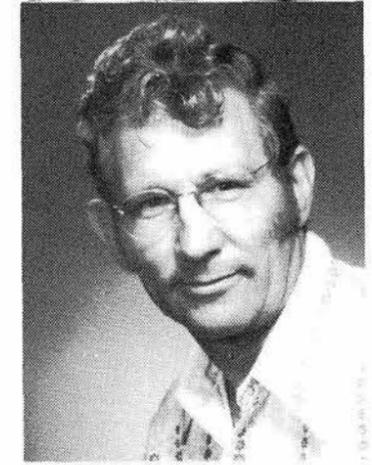
Robert Leighninger — 1423

15



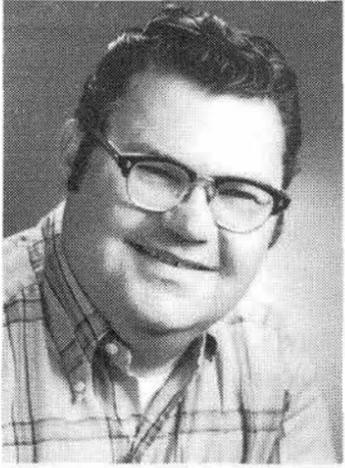
Don Robbins — 5424

20



Fred King — 9323

20



Mel West — 8231 10



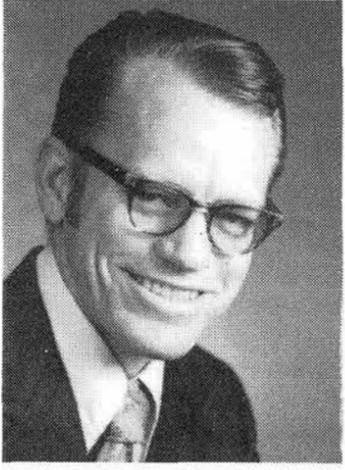
John Hilger — 4512 10



Robert A. White — 1312 20



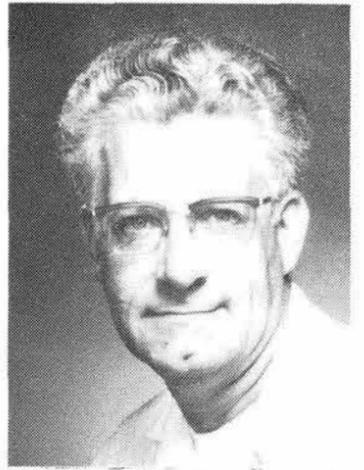
Berman Sanchez — 4553 15



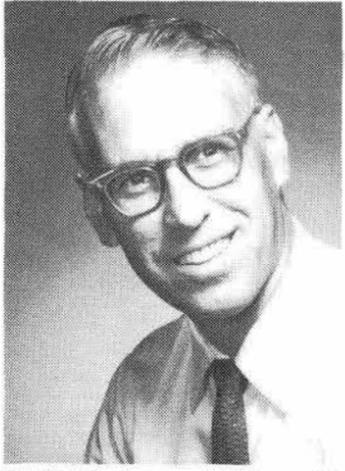
Dewey Farmer — 8434 20



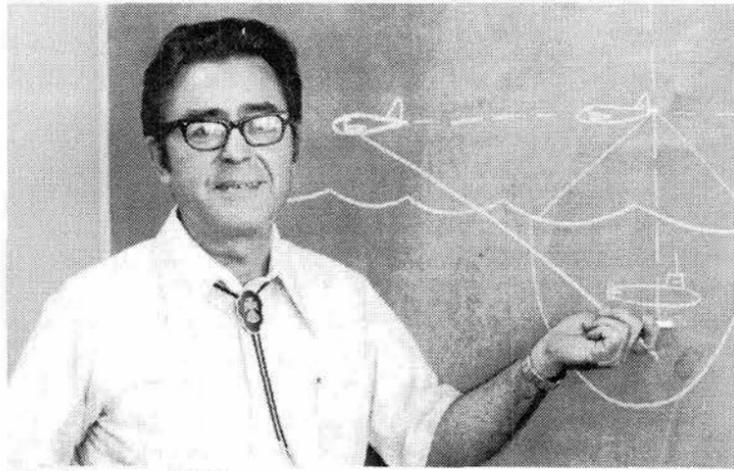
Floyd Elder — 4137 20



Earl Scott — 7452 15



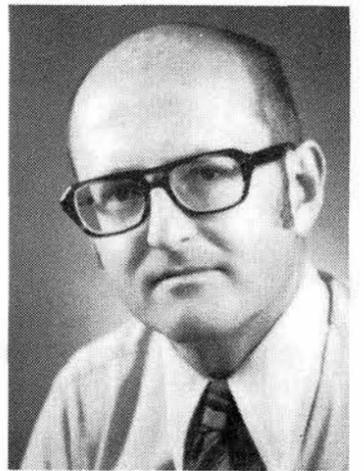
Orelia Montoya — 5332 20



Blitz Krieger — 8131 20



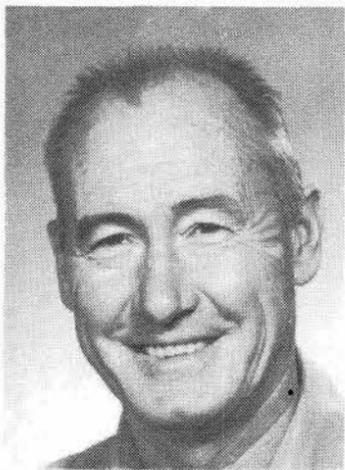
Angie Gurule — 3150 20



Carlton Furnberg — 8175 15



Bill Zinke — 8414 15



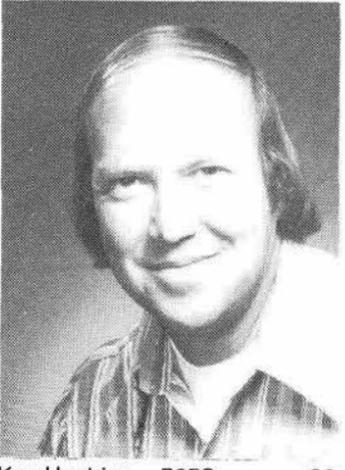
Eugene Lewis — 4614 10



Dee Ellet — 9150 20



Harold Brim — 7431 20



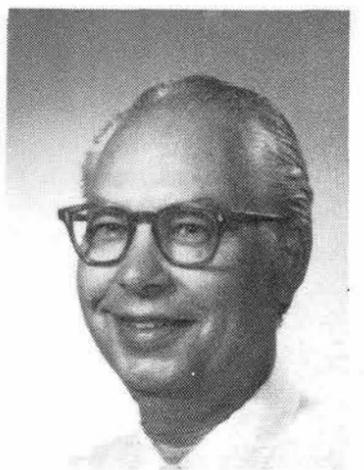
Ken Hankins — 7652 20



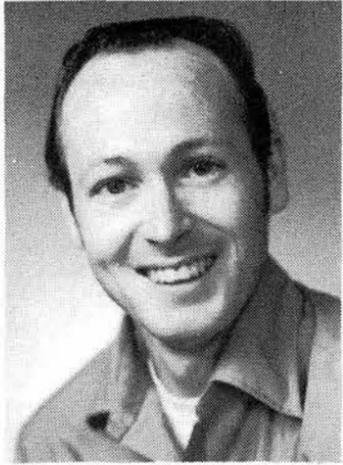
Dorothy Marklin — 7431 15



Donald Hinman — 4316 20



Ralph Fisher — 5538 25



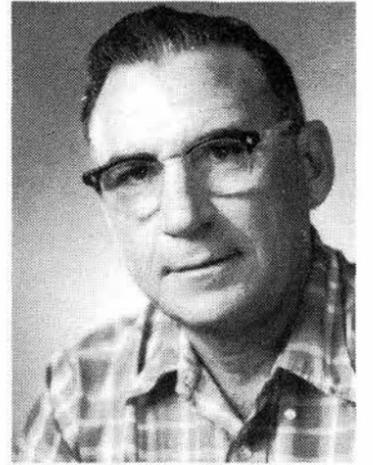
Don Sadler — 8421 10



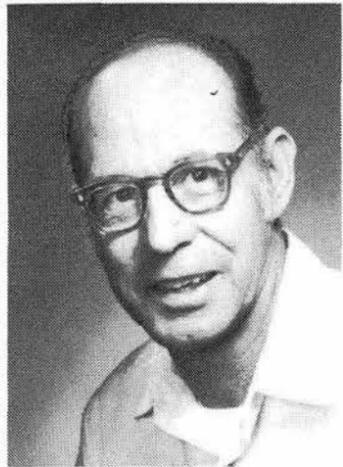
Curtis Unnasch — 7431 10



Louis Yannoni — 4622 20



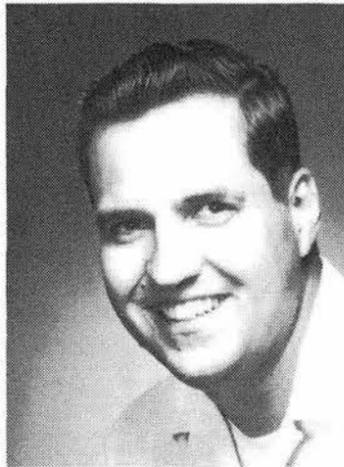
Don Richardson — 8257 10



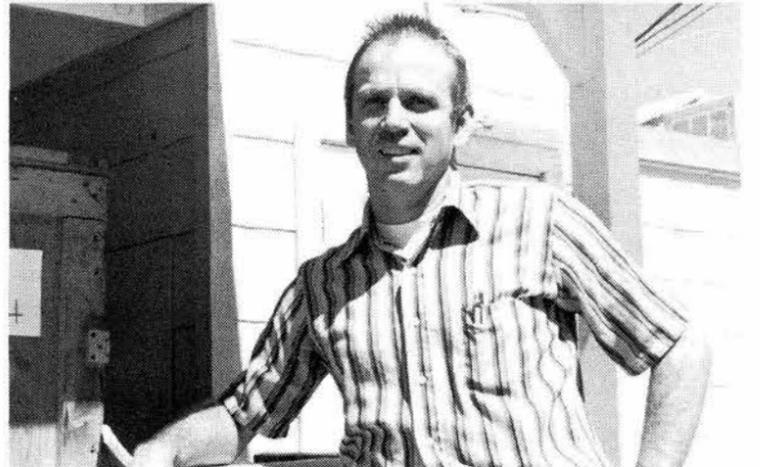
Manuel Martinez — 7154 20



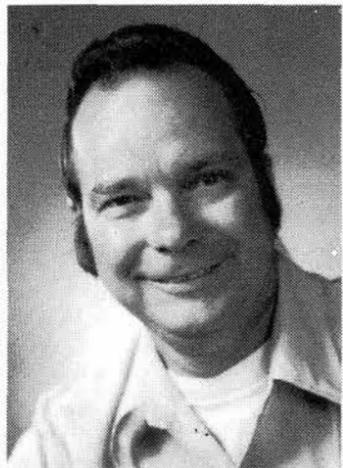
Frank Valencic — 7154 10



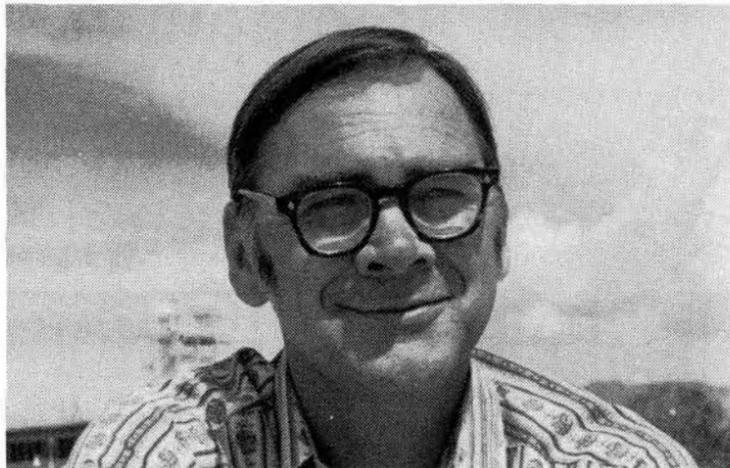
Ronald Domres — 5421 10



Edwin T. Oakes — 9222 15



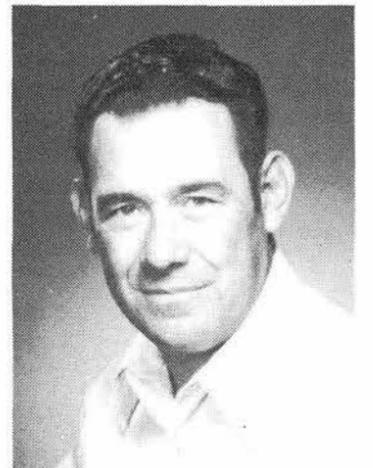
Carl Wackerly — 8421 10



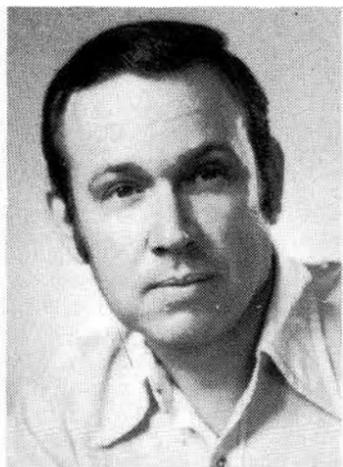
Bob Statler — 9131 25



Elsie Sandy — 7433 20



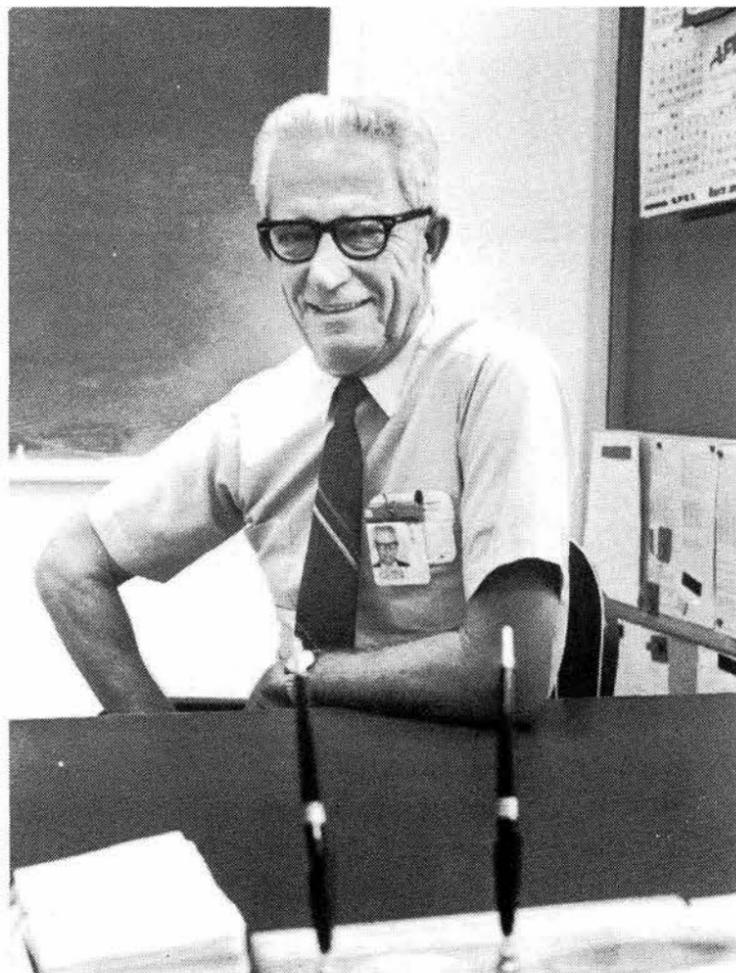
Wilfred Sanchez — 4614 20



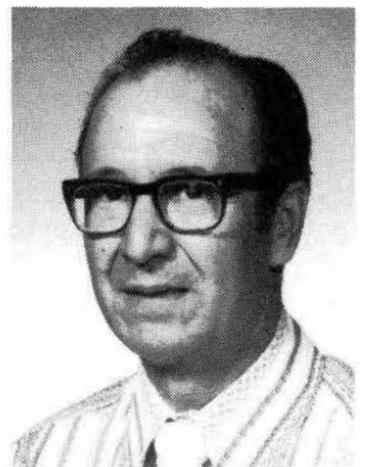
Harry Lauderbaugh — 8182 10



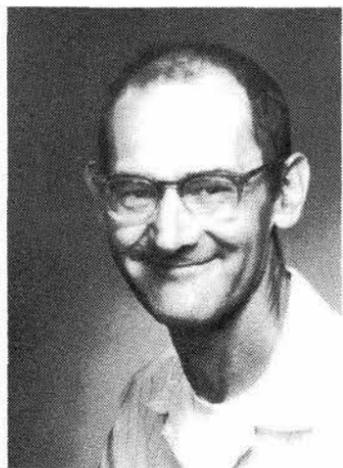
John Ames — 1442 20



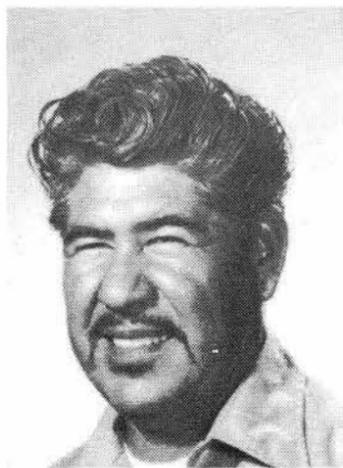
Chenault Davison — 4338 20



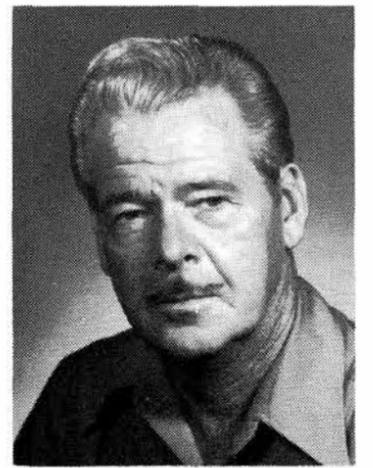
Kelly Montoya — 9424 20



Joseph Schatz — 1722 15



Manuel Sanchez — 4518 10



Jerald Johnson — 4614 20



ELECTRONIC APPRENTICE graduates stand with their mentor Art Cordova (right), head of Electronic Apprentice Section 7131-3. From left: Charles Conley, Gary Kelton, Gary Jones, and Gerald Montgomery.

Speakers Abroad

D.A. Nissen (1913), "A Solid Electrolyte Thermal Battery," NATO Advanced Study Institute on Fast Ion Transport in Solids — Solid State Batteries and Devices, Sept. 14, Belgrate, Italy.

F.M. Bacon (1412), "Plasma Electron Temperature Measurement Near An Anode Spot of a Pulsed Vacuum Arc Ion Source," Second International Conference Ion Sources, Sept. 11-16, Vienna, Austria.

D.C. Bickel (9322), "Sandia Laboratories' 5.8 Meter Blast Simulator," and "Sandia Laboratories' 19-Foot Diameter Blast Simulator," 3rd International Symposium on Military Applications of Blast Simulators, Sept. 19-21, Schwetzingen, Germany.

R.S. Blewer (1413), "Surface Damage and Topography of Metal Films Implanted to High Dose With Inert Gas," 1st International Conference on Ion Surface Interaction, Sputtering and Related Phenomena, Max Planck Institute, Sept. 25-28, Garching, W. Germany.

R.S. Blewer (1413), "Aging Simulation-Implantation," "Film Substrate Interaction," and "Stress Aging Studies," U.K. Generator Symposium, Oct. 2-11, Aldermaston, England.

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.

FOR SALE MISCELLANEOUS

'71 YAMAHA, 200cc w/ windshield & helmet, Griego, 345-1524.

STEREO AM-FM CONSOLE, small size, Delmonico-Nivico, \$40. Lumpkin, 6201 Natalie NE, 299-9179.

RICH 70 LTD. Partnership value \$1300 plus; sell \$1100; 27% increase last year; negotiable. Schulze, 898-2880.

BLIZZARD SKIS, 205 cm; Nevada bindings, \$75; Kastinger boots, size 9½, \$20. Looney, 255-7349.

'71 KAWASAKI Mach III, 500cc, plus extras, \$750. Rodriguez, 265-5192.

SEARS MOPED CYCLE, new tires, 5 hp, 50cc, street license, \$90 firm. Davies, 265-7283.

DRAPES: 2 pr. gold, 84" x 44" @ \$15 each; 1 pr. beige antique satin, 144" x 96" @ \$30; 1 pr. tan, 100" x 96" @ \$25; all custom made. Schnetzer, 298-8255.

COLOR TV, 25" Motorola console. Bierly, 296-6430.

GIRL SCOUT uniform, size 6, \$5; Brownie uniform, size 5, \$5; Honda Mini-Trail bike, \$80. Clem, 296-5204.

GOLF CLUBS, bag, cart, MacGregor reg. clubs, 1-4 woods, 2-9 irons and wedge, \$70. Johnson, 299-8745.

PINTO MARE, registered, 4 years, greenbroke, \$300; dble. reg. 3 year ¾ Arabian Palomino gelding, greenbroke, \$500; new \$320 western saddle, \$100. Nielsen, 255-2045.

DOUBLE BED, recliner, antique dental chair, table lamp, asst. small items. 2936 Santa Clara SE. Benedict, 255-6637.

SAVAGE RIFLE, Model 110P magnum hi-power bolt action, Monte Carlo stock, 24" barrel, caliber 7mm magnum, with scope, \$180. Milesosky, 255-8904

TANDEM BICYCLE, Sears; 14' Larson boat, carpeted, canvas

top and cover; 40 hp Mercury motor; 5 hp trolling motor; Balko boat trailer w/license. Ludeke, 344-9572.

HUNTING BOW, Groves spitfire magnum, 44 lbs. at 28" pull, 60" long, some accessories, \$50. Womelsduff, 299-6269.

TYPEWRITER, Smith-Corona portable, old but working, with case, \$14.50. Laval, 898-0518.

'71 HONDA, SL-175, 2800 miles, adult owned and ridden, w/extras, \$530; 26" Schwinn Collegiate (5-speed) bike, \$65. Hunke, 282-3819.

PIANO, Simpson studio, blond, full keyboard, \$369. Hawley, 294-0094.

JOINTER, Sears 6" w/stand and motor, \$185; Sears bench belt and disc sander w/stand, \$80. Kjeldgaard, 296-2212.

FORD TRACTOR, 8N, 4 speed w/2-way plow, rebuilt engine, good tires. \$850. Clenney, 865-7667.

TWO TV'S both Admiral B&W, one 19" on stand, \$40; one 15" portable, \$35. Grear, 282-3166.

12 GA. SHOTGUN, pump w/adj. choke, \$40. Giddings, 298-6221.

SWEDISH MAUSER (Sako) rifle, 4X scope, American walnut stock, 7 lbs., accurate, extras, \$185. Roth, 877-4997.

FIREPLACE SCREEN, 31" high, 40" wide, w/shovel & poker, \$10. Calvelage, 298-1560.

'70 KAWASAKI trail 90, trail & street sprockets, 1500 miles, \$225 or best offer. Fewell, 268-9084.

BALDWIN ORGANIC organ, fruitwood finish, \$300. Downing, 299-6945.

CAMPER, 8' Travelqueen, gas lite, heater, oven, ice box; make offer. McConnell, 242-7105.

SOFA, aqua. Eads, 296-4660.

SOLID MAHOGANY bookcase headboard & dresser; double bedspring & mattress; round white kitchen table; hi-fi equipment; chairs. Parisi, 255-2933.

'70 SUZUKI, 50cc, \$150. Beeson, 255-3249.

DINETTE SET, 5 piece, avocado, \$30. Booker, 299-3554.

LHASA APSO puppies (small Tibetan palace dogs), AKC reg., championship bkgd. White, 299-6411.

CHILD'S FEED & play table, \$15; 8-bottle Playtex nurser set, \$8. Kobs, 298-9133.

AKC CHAMPION-SIRED beagles; 4-month male, \$50, 1 year female under 13", \$40. Buckner, 898-4390.

TRICYCLE, like new, 10", \$10. Simpson, 298-4749.

TRUMPET, F. E. Olds Ambassador w/case, \$50; Ludwig parade snare drum, \$20. Leighninger, 299-6815.

SKI BOOTS: Tyrol plastic buckle, size 9½, used one season, \$25; Kastinger lace boots with inner boot, size 7½, \$15. Kelly, 255-7226.

TWO SNOW tires, like new, Goodyear, 8:55/14. Carrillo, 247-9700.

'71 HONDA SL350, late model, 4000 miles, best offer over \$550. McCampbell, 298-8211 after 5.

'66 SUZUKI trail bike, 120cc, road & trail sprockets, adult owned and driven, lights & starter need work, \$165. Hawkinson, 282-5239.

WORLD BOOK Encyclopedia, '69 edition, incl. yearbooks, \$165. '69 dictionary and atlas, \$30. Beyatte, 299-6157.

AVOCADO REFRIGERATOR, 15 cu. ft., less than 5 yrs. old, Westinghouse, \$100. Tischhauser, 296-2840.

DEER RIFLE, Military Springfield, 30-06, model 1903A3, leather sling, \$45. Drummond, 299-8606.

GERMAN SHORTHAIRED pointer, liver and white, 2 yr. old male, good markings. Baughman, 299-3785.

KITCHEN TABLE, gray, 6 new pink chairs, \$45. Adent, 299-1905.

KT-500 Lafayette tuner, simultaneous AM & FM, stereo; high sensitivity, \$35. Rekokut, 33 turntable, Audax arm, Empire cartridge, \$30. Minnear, 344-5419.

90cc BRIDGESTONE, \$125; 250cc Maico, \$155; 850 Fiat motor and transaxel, make offer. Mortley, 299-7840.

AQUARIUM, 17 gal., w/light, filter, pump, heater, \$35. Fancy guppies, blue & green cobra delta tail, desc. of state fair winner, \$2.50/pair. Cover, 268-0921.

MISC. HOUSEHOLD items: living room furniture, used; kitchen articles, used; unfinished birch doors, new. Buchanan, 299-7487.

TULSA WINCH, 8000 lb., hydraulic drive, incl. power take-off, \$160. Flowers, 282-3458.

FOR SALE CARS & TRUCKS

'65 CHEVY 9-pass. sta. wgn., PS, AC, AT, R&H, 327 V-8 engine, one-owner. DeVargas, 299-0477.

'68 FORD, ½ ton, 6 cyl., short wide bed w/camper shell, \$1450. Falacy, 3406 Sierra Dr. NE. 344-9548.

'69 FIAT 850 Spyder, new tires, clean, below book. Luna, 298-7337

'65 OLDS 98 2-dr. hardtop, all power, AC, premium tires, \$825. Fifer, 299-3501.

CHEV. STA. WGN., Kingswood Estate, AC, PS, PB, AT, hi-perf axle, luggage carrier, tinted glass, 4000 miles, new \$5561, sale \$3895, may trade. Padilla, 298-4212 or 296-7107 after 5.

'72 DATSUN 240Z, AT, AC, 9500 miles on 12,000 mile warranty, yellow, black interior, \$4560. Mead, 299-2396.

'71 MGB-GT, wire wheels, \$3000 or trade for late 4WD rec. vehicle. Wright, 296-7670.

'66 FORD Mustang, 6 cyl., rebuilt engine, AT. Leyba, 869-2305.

'60 FORD Starliner, 352 V-8, AT, PS, R&H, \$295. Schimke, 299-6375.

'71 VOLVO 164, 6 cyl., 4-dr., leather seats, 4-sp., PS, PB, AM-FM, low mileage. Plomp, 296-2647.

'71 MUSTANG fastback, AT, AC, PS, disc brakes, 16,000 miles. Eagan, 268-6426.

'71 VW SUPER BEETLE, dk. blue, clean. Williams, 298-2671.

'67 MUSTANG, 6 cyl., std., extra wheel & tire, \$845. Stang, 256-7793.

'68 DATSUN sta. wgn., AC, \$900. Johnson, 255-5427.

'70 OPEL GT, 27,000 miles, radio, AT, \$2295. Schmierer, 299-2352.

'70 CHEVY IMPALA, AC, PS. TerMaat, 299-9151.

'61 MERCURY MONTEREY, 2-dr., 390 V-8, AT, power brakes, seats, steering, & windows, AC, orig. paint, \$375. Mitcham, 299-8245.

'67 SPORT FURY conv., AC, PS, AT, radio, 52,000 miles, \$1045. Ray, 298-0408.

'61 CORVAIR GREENBRIAR, R&H, 4-sp., good for camping & hunting, 2 spare wheels; trailer hitch, wiring, \$400. Swain, 265-0098.

'64 FORD COUNTRY Squire sta. wgn., PS, PB, AT, factory air, \$450. Dauphinee, 255-6367.

FOR SALE REAL ESTATE

ACREAGE on north side Lake Heron, near Chama; nearest available property with good view of lake. Baack, 296-2312.

WANTED

MERCHANDISE of any kind for garage sale for Louise Bates (wife of Gene, 3132) Kidney Fund. Will pick up. Riggan, 268-1961; Durham, 298-0733; Westfahl, 298-5087; Jacobs, 344-2534.

BOTTLE CUTTING equipment at reasonable price. Summers, 299-4710.

TRADE LEAR 8-track stereo tape deck & FM stereo car radio for simple AM-FM car radio. Baxter, 344-7601.

FULL LENGTH steel top to fit 65 Scout. MacDougall, 299-8496.

TEEN BEDROOM furniture, double dresser, chest of drawers, mirror, etc. Interior house doors, pref. pre-hung. Garcia, 256-7606.

USED MUZZLE loader, 45 cal. or larger. Roach, 296-5310.

USED 14" radial saw, Delta or DeWalt; used 12-14" metal cut-off saw. Good condition only. Kjeldgaard, 296-2212.

2 STOCK 7 X 14 wheels for Chevrolet. Leisher, 282-5258.

CLEAN COMPACT or std. 64-67 car. Tiefs, 299-2763.

FREE OLD TV receivers, repairable, for classroom use at Emerson Elem. School; will pick up. Malone, 255-9091.

RIDE MORNING from 1310 Alvarado NE (Fair Plaza) to Bldg. 892 and return night. Kopp, 268-4048.

WORK WANTED

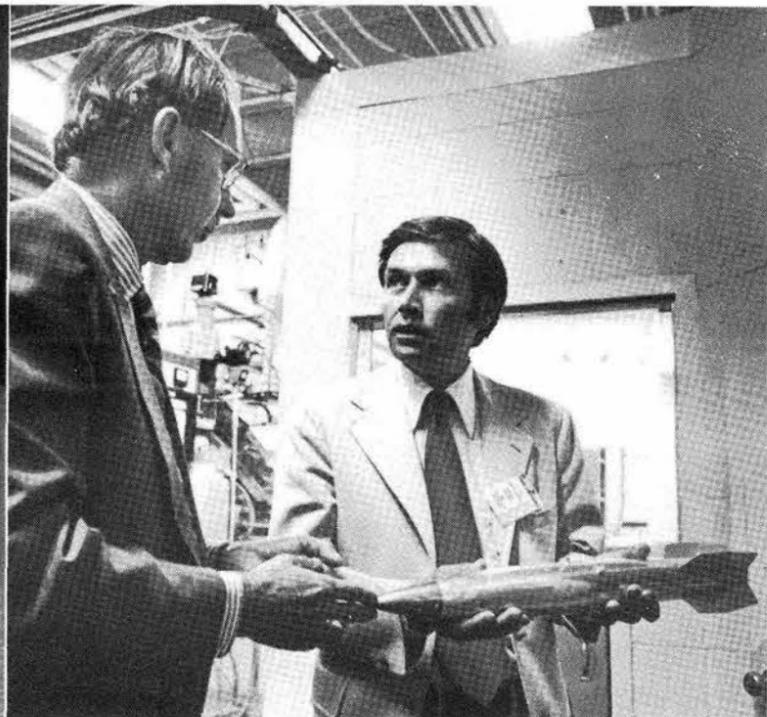
2 SR. HI STUDENTS want misc. jobs & trash hauling after school & weekends. Jim, 255-4093, or Brian, 255-6727.

VICKIE NEEL, babysitting, Fri. or Sat. eves. Live near Comanche & Eubank. Neel, 299-9309.

LOST & FOUND

LOST: Photo Gray prescription sunglasses; gold contact lens case; keys on chain. Lost & Found, Bldg. 832, 264-2757.

FOUND: Keys in leather case; car keys; keys on ring; set of keys. Lost & Found, Bldg. 832, 264-2757.



Politics is tough. A Republican gets chummy with a good looking gal and a Democrat gets to wander around a dratty wind tunnel. So it goes. Peter Domenici explains his platform to Miss NM at the Coronado Club and Ken Smith (3100) who accompanied him. Meanwhile, back at the wind tunnel, Gene

Gallegos gets the word on a different kind of shape from Alan Pope (5600). Earlier, both candidates were briefed on Sandia's mission by members of Small Staff.

Everybody a Big Spender

TONIGHT seafood is the buffet feature at the Club's Happy Hour while Frank Chewiwie plays for dancing. Denny Gallegos will entertain in the main lounge. Next week, Oct. 6, Happy Hour will see the New Mexican food buffet spread and the Country Establishment on the bandstand. On Friday, Oct. 13, Dave Newcomber's quartet will do the music while chuckwagon roast beef is spread for the buffet.

* * * *

TOMORROW NIGHT the Club's ballroom will be converted into a Las Vegas type fantasyland casino where various games of chance will run full blast from 8 to midnight. A bundle of play money will be

issued with purchase of tickets at the door (\$1 members, \$2 guests). Elton Travis and the Westernaires will play for dancing from 9 to 1 a.m. Door prizes include two tickets to the Octoberfest, New England seafood dinner, and New Year's party plus six bottles of champagne. Chet Fornero (4361), pit boss, says he will pay 10 to one on a hard way 10.

"PARADE OF PRESIDENTS" is the theme for the Sanado Woman's Club Fashion Show on Oct. 10 at the Club. Large banners, three-dimensional signs with the names of Sanado's 14 past presidents and their terms of office, and lots of red, white, and blue will turn the ballroom into a political convention hall. Past presidents and members of Sanado will model fall and winter fashions. Wine will be served at 1:15, lunch at 1:30 p.m. Make reservations by Oct. 6 with Mrs. George Horne, 7216 Carriage Rd., NE.

Recreation Notes

FUN & GAMES

Betty Chappell (AEC/ALO) took first flight low gross honors at the recent Sandia Women's Golf Association tournament played at Los Altos. Rosalie Crawford (1) was low gross runnerup and Alma Mischke (4152) was low net winner. Joan Gillon (1200) took the low gross crown of the second flight while Clara Gearhart (3141) was runnerup. Helen Watkins (4361) was low net winner.

The Women's SGA will celebrate the end of season with tournament awards and election of '73 officers at a banquet Oct. 3 at Four Seasons. Dinner will start at 7 p.m. on the covered patio.

* * * *

Ladies, when you're sunning on the beach (mesa), does some bully kick sand (goatheads) in your face? Then take the 3-month judo class being offered at the gym beginning Oct. 3, classes Tuesdays and Thursdays at 7 pm, ten bucks a month or twenty five for the complete course. No, repeat no, males need apply. Bring your own plank. Registration: call St. Mayhue, ext. 5120.

BIG DEAL

CASINO NIGHT TOMORROW

Becky McClafflin (1613)