

THE STATE OF THE LABS was the subject of a closed circuit TV address given by President Sparks last week to all employees. In his message, Mr. Sparks reviewed the present status of weapon programs, discussed ERDA, the Labs and energy-related work, and detailed staff changes chiefly at the Large Staff level. Latter

portion of address dealt with EEO and recent compliance review. Mr. Sparks indicated that CCTV may be used more frequently in the future, by him and other management people, to enhance communication.

Laboratories Budget For Fiscal '75

The federal Office of Management & Budget (OMB) has endorsed a Sandia Labs budget for fiscal '75 of \$217,740,000, of which some \$204 million is slated for operating expenses, up 6% from FY '74. The OMB budget is next submitted to Congress for its consideration.



LAB NEWS

VOL. 26, NO. 4

FEBRUARY 15, 1974

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

Bob Garcia, Larry Conterno Join Large Staff



To Large Staff: Larry Conterno and Bob Garcia.

President Sparks used the occasion of his State of the Labs TV address to announce the promotion of Bob Garcia to the Large Staff as Special Assistant to the President for EEO matters. Currently manager of Employee Relations Department 4230, Bob will have director rank in the new assignment, which is effective March 1.

Bob's long association with Sandia began in 1952 and, since that time, he has had a varied career. As a loaned executive for Plans for Progress in Washington, D.C., he was cited by the vice president for his efforts in seeking equal opportunities for the disadvantaged. He was also selected by the Secretary of Labor to head a trade mission in Venezuela. And, for a period of time, he was a management consultant with Peat, Marwick, Mitchell and Co.

In New Mexico, Bob has been chairman of the State Personnel Board Advisory Committee and a member of the city's Personnel Board. He is active in community affairs and is currently chairman of the Albuquerque Human Resources Council. He gained his bachelors and master's degrees in Industrial Management from UNM.

Bob's activities at Sandia have also

prepared him well for his new assignment. He has been responsible for the Affirmative Action organization since 1969 and has also had experience in personnel testing, internal movement of personnel, manpower planning and personnel research.

In the same TV message, President Sparks also announced the appointment of Larry Conterno as director of Purchasing.

He has been Assistant Manager, Operating — Crossbar PBX at the WE Denver plant since 1972. Prior to that time, Larry worked at WE installations, usually in a managerial role in purchasing activities, in Jersey City, Atlanta, Charlotte (N.C.), New York and San Francisco. He completed Western's Management Training Program at the Corporate Education Center in Princeton in 1970. A graduate of San Jose State in 1957 (AB, Bus. Ad.), Larry joined WE after graduation. His Western service was interrupted for a two-year stint in the Army, from 1958 to 1960.

Larry and Mrs. Conterno (Sally) have three children and, until this change in assignment, have been living in Lakewood, Colo.

Credit Union Reporter

The Credit Union board has named chairmen of the various governing committees, following the annual meeting. Clarence Sandy (9535) heads operations; Vince Arroyo (7551), credit committee; Otis Cox (4113), supervisory; Bill Prekker (4154), education; Joe Maldonado (7513), Albuquerque building; Don Wagner (8212), Livermore building; and Red Turner (CU), data processing.

IRS Offers Advice

Now that Form 1040 time is here, the IRS has passed along some helpful advice about claiming some deductions.

For instance, the IRS says you may deduct the wages you pay a housekeeper if you provide more than one-half the cost of maintaining a household for a dependent child under 15, a disabled dependent of any age, or a disabled husband or wife. You may deduct household expenses such as the amounts paid for the services of a maid, cook or other domestic help, subject to certain limitations. See your Form 1040 instructions.

If you itemized deductions, you may deduct in full one-half of the amount you paid for medical insurance, up to \$150. The balance of your premiums is added to your other medical expenses. Only your medical expenses in excess of three percent of your adjusted gross income are deductible.

Sympathy

To Ray Leri (8265) on the death of his father-in-law in Albion, Calif., Jan. 25.

To Bill Putnam (9341) on the death of his father in Albuquerque, Jan. 24.

Computer Colloquium

Feb. 26 —

"Uses of Minicomputers at Sandia Laboratories"
Panel Discussion, D.C.
Jones (2634), moderator.
Bldg. 815, 10 a.m.; video replay Feb. 28, 1:30 p.m.

LAB NEWS

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as does Norma Taylor while
Bill Laskar takes/makes pictures
&

In Livermore Lorena Schneider does all

CU Bulletin Board

Gasoline Mileage — In the latest *Consumer Reports* an investigator describes how he drove a Dodge Coronet V8 "... carelessly for 18 miles . . . over secondary roads, traffic-clogged city streets and a stretch of expressway," in short over just the sort of route that most Sandians follow coming to work. By accelerating rapidly from the stop light, by braking abruptly, and by going a little faster than was necessary, he managed 8.9 miles per gallon. Next he retraced the route, this time going slow and steady on the accelerator, looking far ahead in order to anticipate the need to slow down or speed up, and kept his speed down on the expressway. His thoughtful driving gained him 16.6 mpg. The message is clear: be philosophical if other cars beat you away from the stoplight or pass you on the road. With gas pushing 50¢ a gallon, you'll have the last laugh.

Statements Mailed

As part of its normal audit procedure, the Supervisory Committee recently mailed statements to members with account numbers from 1 to 2999. If your account number is in this series and you have not received your statement, please notify Otis Cox (4113), ext. 4-1179.

Events Calendar

- Feb. 15** — Audubon Film Series, "Australia — Then & Now," Popejoy, 7:30 p.m.
Feb. 15-17 — Greater NM Sports Show, 6 p.m. Fri., 11 a.m. Sat.-Sun., Tingley Coliseum.
Feb. 16 — Moving Pictures, Ltd. "The Passion of Joan of Arc," (1928), 10 a.m. Guild Theater.
Feb. 16-17 — NM Ballet Theater Concert w/Houston Ballet guests, 8:15 p.m., Popejoy.
Feb. 16-17 — Arts and Crafts Fair, Convention Center.
Feb. 17 — NM Mt. Club, snowshoe hike in Sandias, Western Skies, 8:30 a.m.
Feb. 18-24 — Third Annual Alb. International Balloon Fiesta, 7 a.m., State Fairgrounds.
Feb. 19 — "Prisoner of 2nd Avenue" w/Imogene Coca and King Donovan, 8:15 p.m., Popejoy.
Feb. 20 — Travel-Adventure Film, "John Muir's High Sierra," 7:30 p.m., Popejoy.
Feb. 21 — Minority Business Trade Fair, 8 a.m., Industrial Bldg., State Fairgrounds.
Feb. 22 — Performance Series: UNM Jazz Band, 8:15 p.m., Keller Hall, UNM.
Feb. 22-24 — Shrine Circus, 8 p.m., Fri.; 3 p.m., Sat.; 1:30 p.m., Sun.; Tingley Coliseum.
Feb. 22-24 — Rio Grande Pottery & Sculpture Exposition, Convention Center.
Feb. 23 — Albuquerque Symphony "Pops" Concert: "A Night in San Francisco," 8:15 p.m., Convention Center.
Feb. 23 — Ski Touring Club, call Dave Saylor, 299-9006 for tour info.
Feb. 24 — Museum of Albuquerque, "Women in Poetry & Song," 2-5 p.m.
Feb. 24 — Coronado Ski Club, Angel Fire bus, \$7.50. Call Ron Husa, x-7042 by Feb. 20.
Feb. 28-March 1 — Western Athletic Conference Track Meet, 8 a.m., Tingley Coliseum.



BARON Solly Zuckerman addressed a Labs colloquium audience last week on his view of the current concern with energy and pollution. He is a prominent figure in British science, the author of many books including *Scientists and War*, and was chief scientific advisor to the British Government from 1964 to 1971. President Sparks was host for Lord Zuckerman during his visit.

Surveying State Resources

Energy Task Force Meets Feb. 22

At the invitation of President Sparks, the Governor's Energy Task Force will meet at Sandia Laboratories Feb. 22. Following the business meeting, the group will be briefed on energy programs Sandia is investigating.

Don Shuster (4700), Sandia's energy coordinator, will provide an introduction to Sandia's major energy-related programs, and Bill Snyder (4760) will follow with a discussion of the nuclear fuel cycle, reactor safety and radioactive waste management.

Al Narath (5000) and Everet Beckner (5200) will discuss fusion technology including electron beam and laser fusion, and the Area V facilities for conducting fusion research will be toured. Following the tour, Jim Scott (5700) will discuss Sandia's solar community and conduct a tour of the solar collector area.

Returning to Bldg. 815, the group will hear a talk by Wendell Weart (1111) on Sandia's in-situ shale oil processing proposal. A spark gap demonstration and a discussion of advanced oil drilling technology by Max Newsom (5724) will conclude the program.

Governor King created the Energy Task Force in January 1973 so that the scientific, technological and academic talents in the State could be directed to study the social, economic, political and environmental implications of our fuel and energy resources. The Force is currently preparing a series of policy papers on these subjects, and a number of Sandians are contributing to the effort. They are:

Bill Snyder (4760), Nuclear Energy and Power Plant Siting; Glen Brandvold (5710), Geothermal Energy; Virgil Dugan (4734), Energy Conservation; Ken Touryan (5640) and Ralph Johnson (5155), Energy Conversions; Bob Stromberg (4736), Solar Energy; Herman Levine (5824), Material Waste as an Energy Source.

Randy Maydew (5620) and Benny Blackwell (5628), Wind Energy; Howard Stephens (5823), Synthetic Liquid Fuels from Coal; Jim Schirber (5150), Hydrogen; and Dick Meyer (5824), coordinating New Mexico Academy of Science efforts on Task Force papers.

ASME Meeting Scheduled Feb. 21

In observance of National Engineer's Week, Bay Area sections of the American Society of Mechanical Engineers each year sponsor a Technical Divisions Conference. This year's 23rd Annual, to be held Feb. 21 in San Mateo, is the first hosted by the local Mt. Diablo Section.

Pat Gildea (8335), Mt. Diablo Section chairman, says the conference will focus on energy and environmental problems. "We are convinced," he adds, "that engineers must play a key role in solving these problems."

Other conference committee members include Technical Program Chairman Alec Willis (8111), Hospitality Chairman Roger Barody (8160), Energy Session Director Arlyn Blackwell (8110), and Sessions Aids Chairman Lou Tallerico (8332).

During the first part of the conference Gerald Johnson, recent Director of AEC's Division of Applied Technology, will present "Thoughts on the National Energy R&D Program." Other speakers will discuss geothermal power, the hydrogen economy, coal's role in the energy picture, and solar energy (by Glen Brandvold, 5710).

Ernest Starkman, a VP at General Motors and an authority on combustion and air pollution, will speak at lunch on "Vehicle Emission Control and the Energy Shortage."

Speakers from the Environmental Protection Agency and Bay Area Air Pollution Control District will conclude the conference.



SANDIANS involved in ASME's upcoming Technical Divisions Conference are (from left) Arlyn Blackwell (8110), Alec Willis (8111), Pat Gildea (8335), Roger Barody (8160), and Lou Tallerico (8332), together here for a planning session.

LIVERMORE NEWS

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LIVERMORE LABORATORIES

FEBRUARY 15, 1974

Game of Chance?

Pat Leary — Near Top on National Bridge Scene

"My goal is to play on the American women's bridge team in the world championships," says Pat Leary, a computer programmer in Numerical Applications Division 8441, who has been playing duplicate contract bridge in local, sectional, regional and national tournaments since 1969.

Last year Pat was one of the top 10 women bridge players in the country, and she and her husband Jim, a mathematician at LLL, have set the third best record of any married couple in the nation's tournament bridge world. These ratings are based on the "McKenney List" which has been published annually since 1937. William McKenney was a pioneer in bridge administration and helped organize the American Contract Bridge League.

"I started playing bridge when I was dating my husband because he liked the game," comments Pat. "Now I enjoy it even more than he does."

A good percentage of Americans have encountered rubber bridge at one time or another, but there is a smaller group who play a more serious form known as tournament bridge. Here the factor of luck is minimized because all the competitors play exactly the same cards. In rubber bridge, if a weak player is lucky enough to be dealt good cards then he will win. But in tournament bridge the aim is to do better than the others who hold the same cards.

"It's this intellectual challenge that makes competitive bridge so fascinating," Pat explains. "People need to compete — the Russians have chess, we have bridge. And the game has no age or sex barriers."

Tournament players are ranked by the number of master points they win. Highest title is Life Master, requiring the player to win



Will Pat Leary (8441) hold this hand when she attends the national duplicate bridge tournament in Vancouver in March?

300 master points, of which 50 must be won in regional or national competition. Of the half million players with some master points, about 17,000 are Life Masters. The McKenney List acknowledges those players who amass the magic number of 300 in one year. Pat has been on the list for two consecutive years — in 1972 with 372 points and again this year with 525. Jim qualified this year with 440 points.

These figures place Pat about 65th and Jim about 110th on the McKenney List for the most individual points won during 1973.

Although most of those who ranked higher than the Learys are professional bridge players, this isn't true of the top winner. Pat says Barry Crane, producer of TV's "Mission Impossible" and "Mannix," shattered the record by winning 1575 master points.

"I've met and played against almost every good American player — including 'Mr. Bridge,' Charles Goren," she continues. "One of my most exciting experiences, however, was playing with Mary Jane Farrell, the reigning women-pairs world champion and the third highest master point holder in the United States."

Pat is convinced that the Italians always come up winners in international competition because they just are much better than anyone else. "It's not their bidding system. When they retired after 10 straight world championships, they were using a unique Italian system while the Americans were playing a bidding system of their own. When the Italians returned five years later, they had adopted the American system and the Americans had adopted the Italian system. Italy won anyway, and by a huge margin!"

How to become good, or at least to improve in bridge? Pat advises "Work. I don't feel my mathematics background helps me particularly. More of the best players are lawyers than anything else, but education seems to have little to do with it. Many of the better players, former movie star Omar Sharif for instance, have given up their professions to play bridge full time."

Pat and husband Jim spend many free evenings discussing the game, as well as bidding and playing hands for practice. Last year, their weekends were largely devoted to tournaments all over the western states.

ASME Section Hosts Conference

"Engineering for the Materials/Energy Challenge" is the theme of a symposium to be held Feb. 28 and March 1 at the Hilton Inn. "Engineers provide solutions to all kinds of problems," says Steve Benzley (1541), symposium chairman. "Engineering solutions depend on the identification and the innovative use of engineering materials. With today's social and economic problems relating to energy and medicine, this symposium is particularly relevant."

The 14th annual symposium is sponsored by the New Mexico sections of the American Society of Mechanical Engineers and the American Society for Metals, the College of Engineering at UNM, and the New Mexico Orthopedic Association.

Session III will be devoted to "Biomechanics — Engineering of Materials for Human Implant." Marvin Beckett (5200), chairman of the session, notes, "The extension and continued fulfillment of human life through use of artificial 'spare parts' has become a reality. Continuing research for and



LOOKING OVER THE PROGRAM for the upcoming ASME Symposium are (l to r) Larry Bertholf (5162), program chairman; Jerry Freedman (1542), administrative chairman; and Steve Benzley (1541), general chairman.

development of materials to be used as human implants has strengthened the interest and coordination of efforts between the engineering and medical professions."

Session I, "Energy Conversion," features the keynote address by Frank DiLuzio, assistant to the Governor. Karl Schuler (5162) will chair Session II on "Geologic Materials." Session IV, "Metals and Composites," will be chaired by Jack Swearingen (5847), and

Session V, divided into two parts — "Potpourri I and II" — will be chaired by Frank Gerstle (5847) and Olden Burchett (1541).

Other Sandians working on the symposium are Jerry Freedman (1542), administrative chairman; Larry Bertholf (5162), program chairman; and Jim McClure (1541), publicity director.

Sandian's Balloon It'll Blow Over

Hot air ballooning is one of those sports that gives the practitioner a thinner pocketbook, less time for the garden — and a sense of pure exhilaration. Take Chuck Ray (9484). Other Sandians know him as a mild-mannered staff assistant in mechanical design. But put him in the wicker gondola suspended beneath Mercedes (that's his blue and orange Piccard balloon), and he's the scourge of the skies.

The appeal — and the frustration — of the sport lies in its almost total dependence on the elements, especially the winds. We planned a balloon trip for a Saturday: arrived on the mesa west of Rio Rancho at sunrise and found a gentle breeze just right for the short

hops we were after, poured the balloon out of its gondola, laid it flat and dead along the road for it seemed like a quarter of a mile, then started inflating (we cheated, used a motorized fan rather than holding the envelope open and billowing in air).

Nearly inflated and ready for burn (the application of a spark to a propane burner and subsequent heating of the air inside), the balloon suddenly came alive. Simultaneously the gentle breeze lost its gentility. We (Chuck's family of five, a couple of chasers, all of us) sat on the ropes, grabbed handfuls of balloon, anything to keep it from skidding down the road.

Like slow motion ocean waves 30 feet

high, the air inside was pushed back and forth by the wind outside. A magnificent sight, but it meant no short hops were possible — the first people up would be the only people up, and they'd face a rough landing miles downwind. Spirits deflated, and the balloon followed suit. And we went home. "We'll meet tomorrow same time, same place. It can't happen two days in a row."

But it did. Not a breath of breeze on the mesa Sunday morning — until we were ready to lift the balloon out of Chuck's pickup. Then, comparative gale, worse than Saturday's. We waited, eating rolls and drinking coffee and cursing winds, until we accepted our fate — give up and go home and try the following weekend.

The following weekend: repeat above scenario — twice — with tears. We never did get up into the air, thanks to the vagaries of the winds.

Chuck's balloon will be one of 120 or so in the competition beginning Feb. 21. Charley Hines (3141), who will coordinate the ground (i.e., inflation) crews for the event, gave us some particulars: "It's not a World Championship event like last year's; that'll come up again in '75. This year we'll have few balloonist-as-instrument-reader competitions and more fun ones. We'll have another coyote and roadrunner race. We'll have one in which two people and a bicycle will fly for 45 minutes or so, then land and one will race back to the Fairgrounds on the bike; we'll have another in which each balloonist tries to hit a ground target with a tumbleweed. Still another will involve all the balloons racing to, say, Montgomery (given a south wind, of course). No special event like last year's see-how-close-you-can-come-to-the-Tech.-Area-without-forcing-a-guard-to-draw-his-pistol, is planned. But the winds may have other ideas. • bh

NOT "TOO LITTLE too late" — it's too much (wind) too early. Moments later Chuck Ray (9484) pulled the rip cord (the black one under the balloon) and deflated Mercedes to keep her from dragging gondola and crew across the mesa.



feed_{back}

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

Q. Our retirement program has not been updated since 1957. Why? Also, the 3-1/2% interest on our investment is not applied to the principal unless we draw our entire investment out of the fund. Correct? Such a large fund as we Sandians have accumulated could undoubtedly be invested with a much higher rate of return and probably no more risk of our own investment principal.

A. Retirement plans use a variety of ways to determine the employee retirement annuity. These include fixed dollar amounts for varying service, employee contribution, career average or final salary. Each is designed to provide a portion of the retirement income of employees who remain on roll until retirement.

The Sandia retirement plan provides an annuity which is based on the career average earnings of an employee, not directly on the level of contribution by the employee. The level of benefits, retirement or disability amounts, vesting and spouse's benefit determine the cost of the retirement plan which is funded by employee and employer contributions and the interest earned on these funds. The Retirement Income Plan costs must take into consideration several factors:

1. The maintenance of a proper balance among the various individual benefit programs.
2. Continuing an appropriate relationship between compensation paid in the form of salary and that paid in the form of benefits.
3. The budgetary constraints of both the Laboratories and the employees.

Sandia's Retirement Income Plan is designed to provide a base for the retirement income of employees who remain with the Laboratories until eligible for retirement or vesting. As such, it is not an investment plan for employees who terminate prior to vesting or retirement.

Both employer and employee funds earn competitive rates of interest based on the year the funds were deposited. The differences between the interest earned and the interest guaranteed employees who terminate is used to help pay for current costs and future plan improvements.

If going rates of interest on employee funds are guaranteed to all individuals who terminate, then either the level of benefits would have to be reduced or the cost of the plan would increase. If an employee stays until retirement, the return on investment from the retirement plan will be far in excess of what his or her contribution actually earned.

Sandia's Retirement Income Plan was changed in both 1967 and 1973. The following benefits were added or changed:

1. A non-actuarially reduced early retirement benefit for all employees age 60 or older.
2. A non-actuarially reduced early retirement benefit for employees age 55 but less than 60 with 20 or more years of service.
3. A Spouse's Pension for surviving spouses of qualified employees.
4. A Disability Retirement Benefit.
5. A Variable Annuity Option.

6. A reduction in employee contribution.
—D. S. Tarbox - 4200

* * * * *

Q. Couldn't we save a considerable amount of energy by providing fluorescent desk lamps and removing the bulbs from at least 2 out of 3 of the overhead fixtures?

A. Your suggestion was considered some time ago, and we have studied the use of desk lamps with less overhead lighting. Here are our findings:

a. A desk lamp can be adjusted to illuminate a single section of desk without glare or ceiling reflection, but the shadows produced when writing are disconcerting.

b. When adjusted to this position it is difficult to read at other areas of the desk such as the in-basket or in a drawer, and glare and reflected light are often severe in these locations. Visitors also have difficulty reading.

c. Contrast between the light and dark areas is extreme and caused eye discomfort.

We therefore conclude that this proposal would cause eye strain to too many persons. Also, the cost of providing outlets and desk lamps would be significant.

—R. E. Hopper - 7500

* * * * *

Q. (from SLL) Would it be possible to consider a medical plan — optional and in addition to either Equitable or Kaiser — that would include unlimited major benefits for an unfortunate but prolonged illness? Such illnesses do not always necessitate hospitalization during their length.

A. The Kaiser Foundation Health Plan is by most definitions an unlimited major medical health plan with benefits subject to designated exclusion areas. Presently the Equitable Health Care Plan does have a major medical coverage benefit maximum; however, that maximum benefit is doubled effective January 1, 1974, from \$20,000 to \$40,000. The automatic annual reinstatement provision for dependents is also increased as of January 1, 1974, from \$1,000 to \$2,000.

Both plans operate on the principle that benefits will be provided whether incurred while hospitalized or on an out-patient basis.

Thus, employees now have the opportunity to choose between an unlimited plan with Kaiser or a major medical plan (w/\$40,000 limit) and provision for reinstatement with the Equitable Health Care Plan. Supplemental plans through private carriers are available on an individual basis when further protection is desired by the employee.

—D. S. Tarbox - 4200



NO. 2 In DOD, Deputy Secretary of Defense William Clements visited Sandia last week for briefings. President Sparks shows him a component in the display area. Tour made unscheduled visit (see story).

The Secretary & The Machine Shop

When someone of the rank of Deputy Secretary of Defense William Clements visits Sandia, that person is generally accompanied by an entourage of VIP's, and a fine grain schedule is drawn up that accounts for every minute of the group's visit. And so it was with Mr. Clement's visit.

After briefings in Area I, the Secretary toured Areas III and V and, according to the schedule, was due back at 4:45 in the afternoon so that the group could head out to the 4 Hills Country Club for a dinner party. But somewhere along the line, the Secretary was impressed by some Sandia hardware and, told that it was fabricated in-house, decided he wanted to see some of our shops.

So the schedule was pocketed and, at quarter of six in the evening after what must have been a long day, the Secretary and company showed up at Bldg. 840 to take a look at our machine shop and some displays of items fabricated in various specialty shops. Charley Bild (7100) was there, and he's still exclaiming about the Secretary's enthusiasm over what he saw. Says Charley, "He asked good questions, he knew what he was talking about, and at the end of the tour said he's seen shop activities all over the world but that ours was the finest he'd encountered."

Mr. Clements stopped briefly to chat with machinist Bob Crotzer (7146) who was working at the time in the miniature precision shop.

From all reports, the Secretary is returning to Washington with a pretty good notion of what Sandia is all about.

Engineers' Week Event

One of the highlights of National Engineers' Week, Feb. 17-23, is the annual luncheon on Thursday, Feb. 21, at the Four Seasons Motor Inn. Sandia's President Morgan Sparks will be the luncheon speaker, discussing topics related to the energy crisis. All engineers, engineering technicians and interested persons are invited. The luncheon begins at 12 noon; tickets are \$4.25 and can be obtained by calling Mike Emery, Allan Whitesel or Tom Montoya at 345-2681.





POWER of electron beams is shown by hole punched in 3/8" aluminum plate held by Gerry Yonas, manager of Plasma and Electron Beam Physics Research Dept. 5240. Gerry reported on Sandia's significant progress in electron beam fusion research at American Physical Society's recent conference on energy.

Take Note

There are more diabetic conditions undiscovered than discovered. That's the estimate of the NM Diabetic Ass'n. which is sponsoring a talk by Dr. Philip Eaton of the UNM med school on recent research in diabetes. It will be held next Thursday evening, the 21st, at 7:30 at the Central Methodist Church, 215 Pine St. NE (near University and Copper). The public is invited and the talk will be followed by a question/answer period. The month following is "Beat Diabetes" month with education and fund-raising events (including chances on a \$1000 bond and on balloon rides over the city).

A five-session "Stop Smoking Clinic" starts Monday at the Savage Auditorium (in the Presbyterian Hospital office building adjacent to the hospital). Sponsored by the Seventh-Day Adventist Church, the clinic is non-denominational. Participants will meet at 7:30 p.m. Monday through Friday. A \$5 fee covers cost of materials. Additional information is available from Herman Griffin, minister, tel. 294-8620.

Similar clinics will be held May 6-10 and Oct. 7-11.

Retiree Orbra Phelps (9481) thinks a lot of his former colleagues. And they think a lot of him. He was odd jobbing after retiring last March when he fell off a roof and broke a wrist, an arm, and assorted vertebrae — pretty bad shape physically and financially for awhile.

But 9480 came through — nearly sent Orbra into shock all over again by collecting \$250 to help him meet expenses. He's one happy, and very grateful, guy.



Educational Policy

Courses — and Counseling

Sandia ranks high in terms of the educational opportunities it offers its employees: Educational Aids Program, In-Hours, Out-of-Hours, Doctoral Study Program, Apprenticeship — the list could go on.

"Our goal is not more courses and programs," says Klaus Bowers (2000), head of the Education Committee; "our goal is to encourage people to make more effective use of the existing educational opportunities."

That's the message of a recent presentation on educational policy by President Morgan Sparks, LVP Jack Howard, Hank Willis, manager of Education and Training Department 3130; and Bowers. (A similar presentation at Livermore on March 4 will feature Sparks as principal speaker.) President Sparks shared his views on the functions of education at Sandia. Summarizing the programs available, he noted that the costs, some \$250,000 per year, are "not too much, considering the importance for Sandia and for the employee of education."

"Sandia," he continued, "is continually involved in new areas of weapons and non-weapons technology. Our job is to create and apply new technology. And here's the irony — the more successful we are, the more we have to change our ways. That means education and training — it's the best way to prepare us to adapt to continuing change."

"We want to make wide use of our

**'The more successful
we are, the more
we have to change'**

educational programs to help our people perform their jobs better and be better prepared for new challenges and responsibilities. Certainly, I'm talking about technical fields — we're a technical lab — but I'm also talking about new knowledge and skills for our administrative, crafts, and clerical people.

"I also encourage job rotation when it can benefit the employee and the job — in spite of the logistical difficulties, especially in timing, that rotation involves. It's important in finding the best 'fit' for the employee and for the Labs.

"It should be obvious that many of our people need counseling as well as courses. That's primarily the role of supervision — we expect all levels of supervision, technical and administrative, to take an increasingly active role in employee development. Supervision must know the programs available. That's easy enough; the new booklet 'Educational Opportunities at Sandia Laboratories' summarizes each one and provides phone numbers to call for more information.

"The hard part of counseling is to develop a feel for each employee's most probable career path — which in turn demands a sincere interest in each employee and a knowledge of his or her capabilities, interests, ambitions.

"We want all our people to grow — both personally and professionally, both in depth and in breadth of knowledge. But I must emphasize that participating in an education program — by itself — does not lead to automatic promotion. Education may help qualify an employee for promotion, but

**'Many of our
people need counseling
as well as courses.'**

performance on the job is the primary criterion for a higher position."

Jack Howard spoke on special assistance for minorities and women: "We have to recognize that all schools are not equal, and that the educational backgrounds of our employees are therefore not equal. So we have a broad responsibility to help correct the deficiencies. We can assist by simple measures, like offering courses in better English and basic math. And we can assist in more complex ways — encouraging employees to discuss with their supervision possible changes in career goals, for example. It's not an easy task, but it's one we're committed to. We intend to do a good job, but we need the cooperation of both supervision and employees."

Willis summarized his department's involvement in the effort to match employees to opportunities. "We are not saying that everyone ought to go out and sign up for a course, and we're not saying that any supervisor should in any way pressure

**'We expect all levels
of supervision to
take an increasingly
active role in
employee development'**

employees to take a course. What we are saying is that, ideally, each supervisor would do some serious thinking about what his or her organization is likely to be doing in the next few years; then there should be a discussion with each employee as to the organization's needs in relation to the interests and abilities of the employee. In other words, counseling is necessary."

It's a word, a concept, an activity that we're all going to be involved with on one level or another. •bh

Recreation Notes **FUN & GAMES**

Coronado Ski Club — Few years back Taos lift tickets, currently \$8, were sold for \$5. They were good through this season and, as it turns out, some skiers didn't use them all. Good ol' Walt Westman has volunteered to perform brokerage services — if you've got some to sell or if you wish to buy a few of the five dollar goodies call Walt at home on 255-6048 or in his office on ext. 7063 between 12 and 12:30 p.m.

River Runners — Down the Grand Canyon of the Colorado River, 310 miles, from Lee's Ferry to Temple Bar on Lake Mead — that's the eight-day trip planned by the Coronado Club for early July, @ \$325/head, which includes bus transportation to and from Albuquerque. The trip is not limited to Club members nor to Labs employees. A minimum number of sign-ups is needed by March 1 if the trip is to be mounted. Call the Club at 265-6791 if you are interested.

Sandia Bicycle Ass'n. — Where is the promised spotlight at the southeast corner of the parade grounds? Well, the installation at the southwest corner isn't a misplacement, as some have suggested — after all, they know how to read a map . . . We are now told that

the southeast corner installation will/may (take one) occur in March.

Your next SBA newsletter will be largely devoted to the annual change-over in the executive committee of the Association. If you have a serious interest in cycling, then think about volunteering to be on the Committee — SBA needs constructive ideas.

Don Mattox (5834) is the guy who wants to make a bike tour of New Zealand early next year. Call him if you're interested.

Golf — The Sandia Women's Golf Association membership drive ends March 8, and women interested in joining the group should send their \$2 membership dues to Edwina Kira (5623). SGA(W)'s first tournament will be played at the Sunport Golf Course on Feb. 18.

Sports Car Club — The Albuquerque Sports Car Club's first event for this year will be an autocross at the Bellas Hess parking lot (east of store) on Feb. 17 at 11 a.m. The next club meeting is Feb. 21, 8 p.m., at Sambo's on Central. A short rallye will follow the meeting. Interested sports or economy car fans are invited to call Charlie Clark (1643) at 294-3112 for more information.



TWO WHITTLERS — The big one without a mustache is Chuck Miller (7515) and he's created a whole society of carved figures. Here he holds Whittlin' Whitmore while Marshal Marshall stands tall in the valley.

Our Town

Ballet Company Premieres at Popejoy

Tomorrow and Sunday at 8:15 p.m. the New Mexico Ballet Company will be onstage at Popejoy Hall, with premiere performances of a vigorous new organization on the Albuquerque cultural scene. Incorporated last year, the non-profit company is dedicated to excellence in the performing arts.

The two shows this weekend will feature the ballet company with guest artists Soili Arvola and Leo Ahonen, principal dancers with the Houston Ballet. Not only classical ballet but also modern dance and jazz selections are part of the programs.

In the lineup of beautiful ballet dancers, a vivacious dark-haired girl may catch your eye.

She's Kathleen King, 17-year-old daughter of Jim King (2500), and one of the reasons why Jim is involved with the New Mexico Ballet Company. He serves as vice chairman of the board of directors.

"My other two daughters are also interested in dancing," Jim says, "but Kathleen is the most dedicated. She may be heading for a career as a professional."

Sons and daughters of several Sandians are also members of the ballet company.

Professionalism is the hallmark of the organization. Last October the troupe was evaluated by the American Association for Regional Ballet and accepted into the

Southwest Regional Ballet Association as a performing company. An honor rarely awarded to a fledgling company.

"We have an objective," Jim says, "to create in Albuquerque a quality performing company. We have the talent and we have the opportunity. We see a modern center for the performing arts with a strong regional flavor which combines the highest standards of classical ballet with elements of our three blending cultures — Indian, Spanish and Anglo. Some of these elements as dance themes will appear in this weekend's performances."

In addition to programs for the public, the Ballet Company is giving special lecture-demonstrations at schools throughout the state, sponsored by a grant from the New Mexico Arts Commission. In Albuquerque the company has appeared at several schools including the Indian School and the Southwest Polytechnic Institute. Other lecture-demonstrations are planned for Santa Fe, Roswell, Gallup, Carlsbad, Grants and Window Rock.

"The esthetics of ballet are not my forte," Jim says, "but I know exciting entertainment. From the rehearsals I've watched, I know that the troupe is primed for the coming performances. They will be performing outstanding new material — the work of our artistic director, Suzanne Johnston."

"Mostly, as a member of the board, I contribute some management judgment about budgeting, financing and the like. I leave the dancing to Kathleen."

Tickets for the ballet performances are available at Popejoy box office, tel. 277-3121.

MIRROR IMAGE reflects Jim King (2500) observing daughter Kathleen working out with exercise bar. Kathleen will be one of 50 members of the New Mexico Ballet Company presenting performances Saturday and Sunday at Popejoy Hall. Jim is vice chairman of the non-profit organization.





GEORGE DALPHIN displays samples from Sandia's Technical Library map collection.

George Dalphin Guilty of Cartophilia

A couple of years ago, Dean Harvey of UNM's Zimmerman Library was perplexed about the school's map collection. New Mexico voters had approved a bond issue, and money was available to augment the collection; however, Dean Harvey had no map specialist on his staff and no money to hire one. The obvious solution was to find a qualified volunteer and he did: George Dalphin (3144), a reference librarian in the Labs Technical Library.

Before joining Sandia in 1963, George had been a long-time member of the library at Dartmouth College. Work there had been focused on the earth sciences and the school's map collection; and his 10 years here included similar work. Last year after agreeing to help, George prepared recommendations which were accepted, and he is now concentrating on listing those maps to be ordered by the library.

"Zimmerman Library had a map collection consisting mostly of topographic quadrangles of New Mexico and Arizona, deposited there by the U.S. Geological Survey and of Europe and Japan deposited by the Army following WWII," George says. "For a university with graduate research programs, the map collection was weak. It has only 75,000 maps, pretty inadequate when you consider that it will take 60,000 map sheets just to cover the US with topographical quadrangles."

Comparison with other collections indicates the work ahead for UNM: U. of Ariz.-105,000; U. of Ill.-275,000; U. of Kans.-140,000; U. of Wash.-200,000; UCLA-250,000; and the Library of Congress-4,000,000.

"We're hoping to add 10,000 maps a year," George continues. "We're acquiring topographic maps for all areas of the world and special maps covering such subjects as geology, soils, vegetation, population, economics and history of all countries are being added just as fast as they can be selected. A graduate student in any of the earth sciences or in history, biology, or sociology has to have good resource materials. A sociology student, for example, who wants to become a city planner may need detailed city maps from everywhere in the world.

"In addition to maps, the library should

have catalogs of material available elsewhere and records of special collections." George adds that the collections of Zimmerman Library are available for use by all citizens of the State. Sandia has borrowed maps on interlibrary loan.

George has his own collection of 5000 or so maps. He started when he was in grade school by clipping maps from newspapers. "I've a good collection of maps of New Mexico and the southwest," George says. He also has maps from all over the world, Civil War maps, and the very colorful 17th and 18th century European maps. His preference is for early American maps. "Map collecting leads to atlas collecting," George says, "because before 1850 almost all the original plates were bound into an atlas. Unfortunately, dealers and second hand bookstores find it to their financial advantage to take an atlas apart and sell the plates separately." George adds to his collection by browsing at print shops and estate auctions.

P.S. Cartophilia: an inordinate (but not excessive) fondness for maps. • nt



ALBUQUERQUE HIGH students were given the word about Sandia's secretarial, clerical, and summer jobs by Emma Hollingsworth (left), head of Personnel Operations & Secretarial Services Division 4256, and Mary Woods (standing center) of Medical Administration Division 3321. Teacher Donna Denton (standing at right) is wife of Sandian Dave Denton (1251).

Vista New Mexico

The Chili Line — A Footnote

In the last LAB NEWS, we described the Chili Line railroad and the station at Embudo on the Rio Grande: "When we visited it (Embudo) recently, its new owner — a small woman with red hair who had spent many years with United Press — talked enthusiastically of her plans to refurbish Embudo Station, making of it a museum/lodge."

The new owner's enthusiasm wasn't matched by her checkbook. We've had a call from Dolly Dollahon in Purchasing:

"Hey, that's my railroad station!"

"How come?"

"Been in the family for years. This gal came along, made us a good offer. But her check turned out to be slightly warm. She skipped, now all we have to show for it is her Siamese cat. Nice cat though."

Anyone like to buy a slightly used, cat-equipped railroad station?

Symposium on Energy Today

Dick Claassen (2400) is chairman of an Energy Research in the Rocky Mountain States symposium now underway at the Airport Marina Hotel. This morning Don Shuster (4700) reviewed energy-related programs being investigated at Sandia Laboratories. Charles Tapp (2430) was chairman of the session. Last night President Morgan Sparks addressed the attendees informally at a social hour.

New Mexico Senators Joseph Montoya and Pete Domenici spoke at the opening session yesterday.

Sponsored by the Rocky Mountain Science Council, the meeting is attended by representatives of government, industry and universities of eight states. Purpose is to stimulate more cooperative research throughout the Rocky Mountain region.

Sympathy

To Marcy (7517), Tex (9473), and J.H. Samuelson (ret.) on the death of their mother Feb. 1 in Albuquerque.



UCF AWARDS were presented last week by President Morgan Sparks to 17 Sandia organizations that participated in the recent ECP campaign at the 75% Fair Share level or higher. Here, Rose Gonzales accepts an award for 4210. Others receiving awards are 1640, 1650, 2300, 2310, 2320, 2340, 3160, 4140, 4110, 4201, 4230, 5250, 5710, 9510, 9520 and 9540. With 10% fewer employees this year, Sandians pledged 2.2% more than last year. Average gift per contributor is \$83.60.

\$1790 to 11 Agencies

'73 ECP Reserve Fund Distributed

The 1973 reserve fund of the Employees Contribution Plan — some \$1790 — was distributed recently among 11 participating agencies. The money was used to purchase specific needed items not provided for under the agencies' operating budgets.

Here's the distribution:

Albuquerque Boys Club (Old Town), ping-pong table and other games, \$100; Albuquerque Hearing and Speech Center, cassette tape recorder and radio, \$125; Chaparral Home and Adoption Services, new carpet for stairs and hall, \$150; Christina Kent Day Nursery, chest-type freezer, \$200; Cystic Fibrosis Society, ultrasonic nebulizer, \$200.



AMONG GIFTS purchased with 1973 ECP reserve fund were a chest-type freezer (left) for Christina Kent Day Nursery and a cassette tape recorder and radio for the

Employees Urged to Vote

New City Charter Proposed

On Feb. 26, Sandia employees will have the opportunity to vote on five propositions relating to a new system of government in the city of Albuquerque. The propositions are as follows:

Proposition No. 1 — Establishes a Code of Ethics to apply to all officials of the City. The Code defines and prohibits conflicts of interest, and provides for the disclosure of any financial interests in City matters. The Board of Ethics also enforces the election code. Violators may be reprimanded, fined, or upon recommendation to and action by the Council, be removed from office.

Proposition No. 2 — The Election Code establishes procedures and rules for the conduct of City election campaigns. Campaign expenditures are limited in amount. Contributions from any one contributor are restricted, and contributions are to be reported and made public.

Proposition No. 3 — Establishes a nine member districted council as the governing body of the City. Provides for a full-time, elected Mayor having broad executive responsibilities. The Mayor shall be paid

\$34,000 and Councilors \$3,400 per year. The Mayor, with approval of the Council, shall appoint a Chief Administrative Officer.

Proposition No. 4 — In addition to the districted Councilors, there will be four Councilors elected at large. (To be effective only if Proposition No. 3 passes.)

Proposition No. 5 — If Propositions Nos. 3 and 4 pass, the Council shall adopt an ordinance permitting candidates to run for city offices on the basis of political parties such as Democrats, Republicans, or other parties. This proposition is to be effective for the October 1975 election.

All eligible employees are encouraged to vote at their designated polling places. The local papers will have details.

Sandia to Sponsor Microelectronics Meet March 6-8

The rapidly advancing technology of microelectronics will be reviewed at a symposium at Sandia Laboratories March 6-8. Participants will be representatives of the leaders in the field — AEC laboratories, NASA, NSA and major DOD facilities.

Organized by Bill Spencer (2100), Charles Tapp (2430) and Jerry Hood (2110), the symposium purpose is to provide an overview of the agencies' microelectronic facilities, to review technology being developed in hybrid circuitry, and to discuss semiconductor research.

Five invited papers will be presented by recognized authorities on the state of the art in silicon integrated circuits, surface wave devices, ion implantation, application of charged coupled devices and tantalum thin-film circuitry.

President Morgan Sparks will speak on "Microelectronics" at the evening banquet.

Attendance is limited to government laboratory representatives and invited university personnel. Additional information is available from Frank Keene (2100).



Albuquerque Hearing and Speech Center, used in classwork by Mrs. John Formea.



Gail Barton - 4762

10



Elwin Chestor - 9522

25

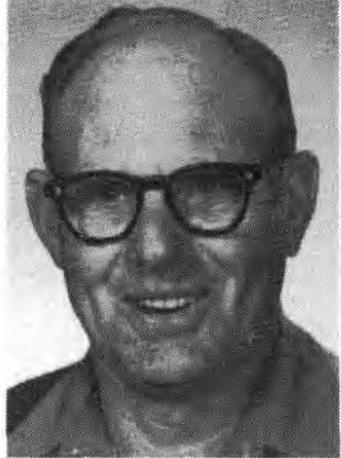
MILEPOSTS

LAB NEWS February 1974



Marcellia Samuelson-9443

25



Lorin Furrow - 7513

10



John Patrick - 9471

15



Helen Watkins - 9443

10



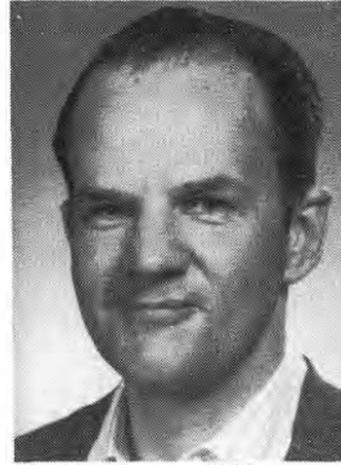
Brad Shaw - 9443

25



Art Jones - 3147

25



Harold Roberts - 1132

15



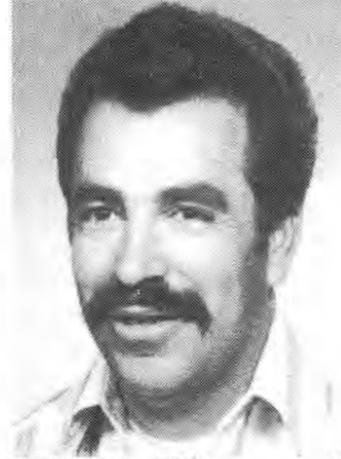
John Williams - 4113

15



Gladys Lydic - 1535

10



Ernie Vigil - 7554

10



John Milloy - 1111

10



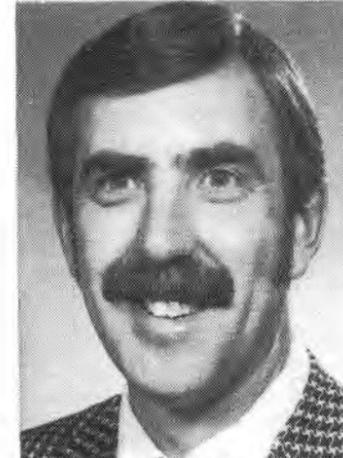
Oscar George - 5645

10



Wynona Durham - 7540

20



Joe Stiegler - 9480

15



Lyle Hake - 9471

25

Deaths



John Hutton of Test Engineering Division 1133 died suddenly Feb. 11. He was 57.

He had worked at Sandia Laboratories since January 1956.

Survivors include his widow, two sons and four grandchildren.



Ruben Molina of Plant Modification Division 7513 died Feb. 1 after a brief illness. He was 46.

He had worked at Sandia Laboratories since September 1964.

Survivors include his widow and two daughters.



"HEY — that's John Wayne. . ." and Lou Jamme (left), Sandia retiree and president of the Albuquerque Coin Club, takes another look. Jack Reed (5644) points. Occasion was club's Annual Coin Show at the Convention Center.

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

TIRE CHAINS for 14" wheels, \$13; wood skis, 185 cm, Cubco bindings, \$10; window fan, \$8. Haaland, 266-8516.

WINDSHIELD for '70 Chevelle. Sanchez, 877-0326 after 5.

ELECTRIC range, 30", w/oven timer, pigtail, \$60. Young, 268-0489.

FURNITURE: couch, 2 chairs, 2 end tables, \$35. Pearlman, 299-8032 after 5.

EXPOSURE METER, GE, PR-3, \$10 (new \$32). Oliver, 299-5512.

HOOVER upright sweeper, \$25; brass colonial floor lamp, \$20; tools; ammo; old doll buggy, \$10; GI can. Smitha, 266-9977.

AKC GERMAN SHEPHERD puppies, sire: frequent Best of Breed winners; shots, terms, sound temperament. Shay, 299-2255.

DRILL PRESS stand for Craftsman 1/2" drill, \$15. Reynolds, 296-9370.

GAS WALL heater, 35,000 BTU, \$20; gear-head motor, \$15; oxygen & acetylene regulators w/gauges, \$10-\$15. Bentz, 299-3448.

HEAD COMP SKIS, 215 cm, \$20. Souder, 281-3121.

REG. toy poodle puppies, 1 white male, 1 white female, 1 cream male. Stanfill, 255-6652 after 7.

AQUARIUMS, complete setups (less stands), 20-gal., \$50; 29-gal., \$75; 55-gal., \$125; 125-gal., \$250. Roginski, 296-6535.

SIMMONS box springs & mattress, full size, clean, \$25; tire/4-hole rim, 300 miles, 5.30-4.50x12, for boat/tent trailer, \$20. Fry, 298-1613.

LARGE picture; Sunbeam portable hair dryer; tweed sofa; Regina floor polisher; refrig.; Burke fiberglass molded chairs; Smith Corona port. typewriter. May, 299-2624.

SKI RACK, \$15; snow tires, 14" rims, \$15 pair; 14" chrome wide rims, \$15 pair. Blaine, 299-1036.

DINING TABLE, Drexel, mahogany, drop-leaf, pad, chairs, open 66"x42", closed 26"x42", free delivery, \$285. Sims, 293-6153.

REGULAR 8mm movie camera & Elmo projector w/screen, \$50; '72 360cc motorcycle, 960 miles, 60 mpg, \$695. Larsen, 265-0004.

BLACK vinyl sofa, 2 matching swivel chairs, chrome pedestal bases, \$160. Paul, 299-6387.

GO KART, 1896 auto design, full size, needs 5hp engine, \$50. Foster, 299-2778 after 6.

SKI BOOTS, man's buckle, size 9-1/2, Rieker, \$15. Anderson, 299-5447.

BABY ITEMS: high chair, car bed, elec. sterilizer, Hula coupe walker, auto. swing; 8x10 Coleman cabin tent. Wickesberg, 298-3593.

SKI RACK for Porsche or Volks, \$15. Laskar, 299-1024.

RABBITS, solid white. Hickman, 298-3804 after 5.

1/5 SHARE Mooney 20A, complete IFR, 165 mph IAS. Parmley, 821-2006.

OAK roll top desk, 1895-1900, 14 small drawers, 8 lg. drawers, S curve. Vigil, 256-9112.

TWO chairs, brown upholstery, 1 w/ottoman, \$35 & \$25. Hubbard, 299-7818.

'70 10-1/2' DREAMER PU camper, sleeps 6. Gonzales, 821-2166.

CAMERA & accessories: Mamiya C330; 65mm f3.5, 80mm f2.8, 135mm f4.5 lenses w/cases;

prism finder; etc. retail \$1046, sell for \$700. Brady, 294-0059.

MAYTAG gas dryer, \$50. Worley, 298-4039 after 5.

TURQUOISE, high grade polished for silversmiths. Westman, 255-6048 evenings.

HIGH CHAIR, safety proof, cost \$30 new, sell for \$15. Lewis, 296-7896.

REFRIGERATOR, Sears frostless, \$150; port. TV, \$60; camper for pickup, \$395. Lackey, 898-5175.

KENMORE washing machine, almost new, \$100; alfalfa hay, never wet, \$2/bale. Shock, 877-3728.

15' GLASPAR ski boat, 75hp Evinrude, full convert. top & side curtains, trailer, skis, \$1100 or make offer. Bland, 298-8459.

UTILITY TRAILER, 5'x7', high sides, \$80. Sallach, 298-5366.

CONVERTIBLE: baby carriage, stroller, & car-bed all in one, Sears best, \$30; HI-FI phonograph w/auto. changer, \$20. Miyoshi, 298-0666.

AUTO luggage carrier, 33" x 33", metal without cover, \$10; adjustable ironing board w/cover, \$5. Stewart, 268-2786 after 5.

SLIDING glass door, 8' wide, 1 glass cracked in lower corner, \$25; VW parts from '67 bug. Wilkinson, 299-8327.

35mm SLIDE projector, Bell & Howell, 500 watt, remote control, 21 slide trays, \$55. Lawrence, 296-3058.

REAL ESTATE

4.92 ACRES near Chama, ponderosa pine, oak, 8200 elev., view of Heron Lake & Chama river, \$6800. Allen, 299-8747.

4-BDR., formal DR, den, rec. room, Chelwood & Indian School Rd. area, priced in low 40's. Montoya, 293-3611.

LOT, next to Ernie Pyle & Kit Carson school & Health Center. Sanchez, 877-0326

after 5.
3-BDR., 1-3/4 baths, lg. den w/fp, newly recarpeted, drapes, cfa heat, AC, 11005 Phoenix NE. Syme, 298-9167.

TRANSPORTATION

MAN'S 26" bike, \$15; woman's 26" 3-spd. bike, \$22; 2 new rear heavy duty shock absorbers for Mustang, \$6. Aragon, 266-8597 after 3:30.

TRAILER, trail bike, sturdy, full-size tires, tire-securing chains, handlebar straps, hold 3, \$125. Fox, 299-9031.

'72 OPEL 1900, under Book; '65 Valiant 4-dr. West, 281-3460.

'70 FORD pickup, 4-spd., 37,000 miles, \$1650. Puccini, 294-1704 or 255-0568.

'70 YAMAHA 125MX, set up for fun, \$300. Bailey, 296-2097.

'56 PONTIAC, 4-dr., low mileage, \$275 or trade for pickup. Arning, 256-9229.

ENGINE, Renault 956cc, 4-cyl., 48 hp, completed — radiator, starter, generator, clutch — model R.1130, running condition, \$125. Bassett, 898-1840.

500 BSA, street & dirt bike, very light, many extras, \$685 or best offer. Albright, 344-0296.

'64 DODGE pickup, 3-spd., w/camper, 6-cyl., new paint. Peabody, 296-6239.

'72 FORD pickup, 1/2-ton, 4-spd., lwb, heavy duty springs, \$2200. Reed, 299-7425.

'64 VW Squareback, 2 new tires, new battery, \$550. Martin, 869-2049.

'72 PINTO, 2-dr., radio AT, 2000 engine; need lw camper shell. Workhoven, 281-3246.

FOR RENT

3-BDR., 1 bath, den, AC, disposal, walled yard, \$225/mo., water paid, \$100 cleaning deposit, references. Stoval, 299-6080.

RENT OR LEASE: furnished 3-bdr., 2-bath mobile home, 14'x78' on 1/2 acre, not in

mobile park. Richardson, 865-9505.

UNFURNISHED 3-bdr., w/bfp, view, no traffic, trailer access, 2-car garage & extras, \$300/mo. lease, NE location. Gallo, 296-0112.

SMALL furnished 1-bdr. house, single person, no pets, utilities paid, \$90/mo., \$25 deposit. Dodson, 204 San Pablo SE, 255-0265.

WANTED

SMALL camp or travel trailer, will consider all types. Parmley, 821-2006.

HEN TURKEY, buy or trade ducks/rabbits. Holloway, 898-2110.

WOULD like to rent outboard powered boat 15-18' long, for Mexico trip of about 2 weeks duration. Hughes, 299-6674.

WORKSHOP MANUALS for Chevrolet 6-cyl. truck circa 1957. Camp, 268-8700.

USED study desk for school-age boy. Swearingen, 255-5881.

REFERENCE BOOKS: Morse & Feshbach, Carslaw & Jaeger, Goldstein's Classical Mechanics. Woods, 296-4741.

ELECTRONIC flash unit & either Kodak carousel or B&H cube slide projector. Allen, 296-6453.

BABY EQUIPMENT: folding padded playpen, car seat, johnny-jump-up. Sundberg, 299-2134.

LOST AND FOUND

LOST — VW key-3 on ring, small fetish earring, turquoise stone from man's ring, gold button w/crown design, black leather fur-lined glove. **LOST AND FOUND,** tel. 264-3441, Bldg. 832.

FOUND — Bi-focal glasses, Rx sunglasses in brown frames (found in Finance), old Cadillac hub cap, pearl & gold button. **LOST & FOUND,** tel. 264-3441, Bldg. 832.

MARDI GRAS • C-CLUB • HOUSE OF WAX • TYROLIAN ALPS • KIDDIE CARNIVAL

FRIDAY	SATURDAY
15 — HAPPY HOUR ITALIAN BUFFET Adults \$2.25 Under 12 1.50 SHILOH Lounge Barbara (See Below)	16 — MARDI GRAS FRENCH CUISINE Cocktails 6:00 Dinner 7:00 Dancing 9:00 Members \$3.50 Guests 4.50 (See Below)
22 — HAPPY HOUR GERMAN BUFFET Adults \$2.45 Under 12 1.50 ERNIE & THE SAINTS ADULT TALENT NIGHT (See Below)	23 — KIDS CARNIVAL 10 tickets — 35¢ 11:00 - 2:30 (See Below) TEEN DANCE BLUE SNOW KQEO DJ 7:30 - 10:30



A MERCEDES and a couple of Murphies, John (3148) and Jan (9512), ready for an Italian buffet — maybe the German too.

Fat Tuesday —

It's a capsule Mardi Gras with Louisiana French food, "Hurricane Specials" made famous by Pat O'Brian's place in New Orleans, prize for best costume, dixieland during cocktails, Freddie Williams and the Keynotes for dancing. Reservations were due on the 13th. If you miss this one, put it on your calendar for '75.

Hams —

Adults with talent or just plain hams (or those who'd like to enjoy): be at the Club on the 22nd, 10:30 - 11:15. Denny will provide guitar backup. Prizes to winners.

Tots —

It's your time at the Club, 11:00 - 2:30 on the 23rd. Games and prizes and clowns and free balloon animals and snacks and you've got to be a member. Ten games for 35¢, and the bar is open for Mom and Dad.

Horrors —

Vincent Price's *House of Wax* is a classic movie. C-Club does not assume responsibility for those who arrive alone and don't dare to go home in the dark. The *Three Stooges* flick may lessen the terror — slightly. 7:30 on the 20th, and free to members.

Travel —

The Tyrolian Alps! They're in Austria, and

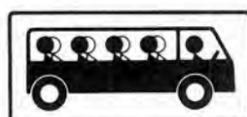
you can be too from Aug. 14 to 22. \$417 double, \$467 single. Watch for more info — like a sign-up party on March 12.

And More Travel —

Just a few more spaces left on the Grand Canyon raft trip in July. For more info, see page 7.

MORE INFO — 265-6791.

SHILOH • AUSTRIA • ADULT TALENT • COLORADO RIVER • HURRICANE SPECIAL



Bus Notes

Next Tuesday, Sandians from the Corrales/Paradise Hills area get commuter bus service. Those who responded to the recent survey have been sent info on the new route, but if you live there, didn't respond, and are now interested, leave your name and organization with Commuter Info, at 4-RIDE.

Van service is now operating for Sandia commuters from the Bernalillo/Placitas area. Call Rich at Albuquerque Limousine Service, 266-5367, for more info.

A breakthrough of sorts for the two Mountain Buses — each can now carry commuters other than Sandia-Kirtland types. The buses stop at Gulton, Western Skies, Lomas/Wyoming, and Central/Wyoming for connections by bike, car, hitchhiking, or city bus to other points. Call 4-RIDE or John Southwick (9532) at 4-7700 or Bob Lucas (9322) at 4-7970 for more info.



Car Pool Notes

Car Pool listings should be distributed to those who asked for them by the end of the month. Just in time, in other words, to reduce the need for gasoline.

One word of caution as you begin to form new car pools: if you plan to be the only driver in a pool, check with your insurance company first. Or get a reprint from Commuter Info (4-RIDE) which details some of the possible problems. If you're trading riding and driving, there's no problem.