

WORKING with a special tool, Ken Bolt (5451) inserts fuel rods into the ACPR core at the bottom of the 30-ft. shielding pool of water. Ted Schmidt (5451)

uses binoculars to read numbers of fuel rods and core grid. The new ACPR went critical last week.

New ACPR Reactor Goes Critical

Sandia's upgraded Annular Core Pulsed Reactor (ACPR) went critical April 27 as the 160th fuel rod of uranium dioxide/beryllium oxide was lowered through the 30-ft. shielding pool of water and placed in the core grid.

This was the culmination of a three-year effort to upgrade the reactor to make it the principal experimental tool in the Advanced Reactor Safety Research Program. Also, with the output of the reactor essentially tripled by the fuel and core redesign, ACPR will provide an expanded capability to conduct weapon effects simulation experiments for DOE and DoD programs.

The reactor has been dismantled since last October. In addition to the new core and fuel design, a new control system, cooling system and bridge has been installed. The new controls incorporate a flexible system of programmed operational modes and all modern safety features.

"This is a totally new design," says Jack Walker, manager of Advanced Reactor Research Department 5420. "We have been very close with our predictions of the critical mass as well as other core nuclear parameters, but we will now go into the initial phase of testing. These will be extensive operational tests from zero to maximum operating power in both steady state and pulsed modes up to 100,000 MW.

We expect to be fully operational about the first of August." Ted Schmidt's Operations Division 5451 will conduct these tests and operate the reactor.

As tests progress, additional fuel rods will be installed in the core. About 215 fuel rods will complete full core loading.

The core is designed to accommodate a slotted open viewing channel into the experimental chamber area located in the center of the core. As the core loading progresses, a new diagnostics system will also be installed.

"We're very excited about this," Jack says. "Jim Powell's Radiation Physics Division 5423 has developed a coded aperture imaging system which uses gamma rays to produce three-dimensional pseudoholograms of emplaced experiments. This will revolutionize the business. For the first time, we will be able to 'see'

into a core experiment with good spatial and time resolution."

When the ACPR and new diagnostic systems are operational, Jack expects work to progress rapidly in the performing of weapon effects tests as well as in the Advanced Reactor Safety Program which Sandia is conducting for the Nuclear Regulatory Commission (NRC). Research in the latter, which concentrates on safety aspects of the breeder and other advanced reactors, includes study of fuel motion phenomena, core accidents, transition phase analysis and molten core phenomena.

"I'm delighted with the ACPR progress," Jack says. "We've developed a totally new kind of fuel element, a sophisticated and flexible control system

[Continued on Page Five]



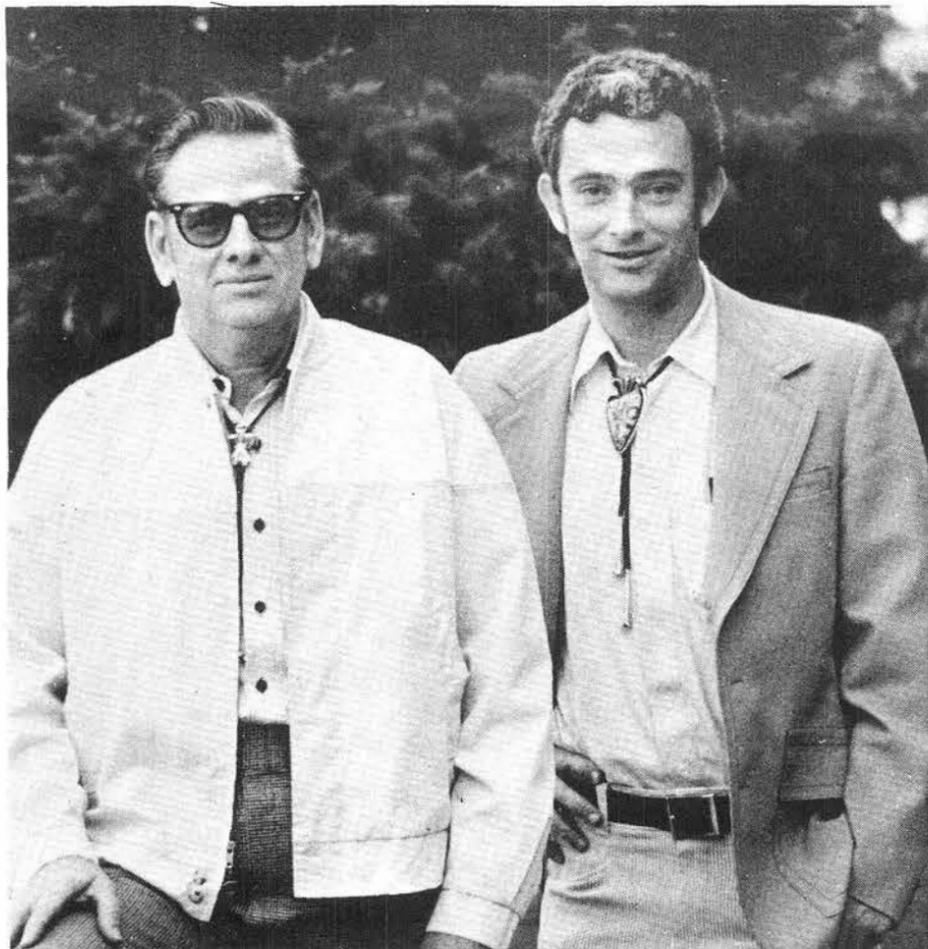
LAB NEWS

VOL. 30, NO. 10

MAY 12, 1978

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

BOB BOYD (9712) and
JIM BORDERS (5825)



Supervisory Appointments

BOB BOYD to supervisor of Plant Maintenance Division 9712, effective May 1.

In December, Bob will observe his 30th anniversary at the Labs. Beginning as a time keeper, he worked for seven years with the electrical maintenance group. Next, he was an electrical construction inspector and then, in 1964, became supervisor of the Building Maintenance Section 9712-2. Bob's new responsibilities include operation and maintenance of buildings and equipment in Areas I and II and other locations.

Bob attended UNM, studying mechanical engineering. He saw action in Italy in the Army during WW II and is a retired Reserve officer. Bob has a private pilot's license and, in addition to flying, enjoys skiing and camping. He and his wife Katie have a son who is a graduate student at Duke University. They live in southeast Albuquerque.

JIM BORDERS to supervisor of Materials Analysis Division III 5825, effective April 1.

Jim joined the Labs in July 1968, and his initial assignment was the construction of Sandia's first ion implantation machine. Using this machine and other more recent additions, he has studied physical effects accompanying ion implantation in semiconductors, metals and insulators. Jim was also instrumental in developing ion backscattering and nuclear reaction analysis techniques to study surface layers in solids. Results of these studies have had application in various weapons programs, such as the Radioisotopic Thermoelectric Generator (RTG) and neutron tube development as well as energy programs such as SYNTHOIL catalyst development. In Jim's new division, surface analyses are performed for other Laboratory organizations and new surface analytical techniques are being developed.

Jim has earned a BA in physics from Reed College in Portland, Ore., and his MS and PhD, also in physics, from the University of Illinois. He is a member of the American Physical Society and the Electrochemical Society. Jim enjoys gardening, running and skiing. He and his wife Deborah live in the NE Heights.

Death

Richard Young of Computer Software Division 9323 died May 8 after a long illness. He was 39.

He is survived by his two children.

He had worked at the Labs since February 1963.



AT&T Studies Retirement Bill

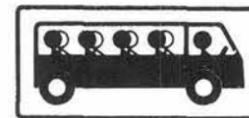
[Ed. Note—Following is reprinted as received from AT&T.]

On April 6, 1978, President Carter signed a bill into law which changes the acceptable mandatory retirement age from 65 to 70. The law's effective date for collectively-bargained-for employees is January 1, 1980.

While the law bans involuntary retirements before age 70, it is not without exception. Certain key executives may still be retired at 65, provided they are entitled to an employer-provided retirement income of at least \$27,000 per year. This exemption will enable AT&T to continue its policy of management development, by providing upper level vacancies at periodic intervals.

The Bell System's experience in recent years has been that the majority of its employees retire before age 65. AT&T does not anticipate any significant change in that picture as a result of the new law. AT&T is currently reviewing its Personnel Policies and Benefit Plans to determine what, if any, adjustments may be necessary.

Future bulletins will be issued to apprise employees of any plan changes as they occur.



Bus Notes

The new bus system has had a few growing pains and Jeff Gammon (3725), Sandia's contact man with SUN-TRAN, reports that the bus people are trying to get the bugs out. They have advised Jeff that the San Pedro, San Mateo and Ridgecrest/Carlisle buses will make connections with the evening Gibson/Sandia bus, waiting if necessary. Further refinements are being made in all the schedules to be effective May 15. Watch your city newspapers for details.

At the Labs, the Eubank/Sandia bus will depart from Gate 1 into the Tech Area at 4:35 p.m. The Chelwood/Sandia bus will originate at Candelaria and Chelwood at 7:15 a.m.; this bus will also depart from Gate 1 into the Tech Area at 4:35 p.m.

Retiree Picnic

The 13th annual Retiree Picnic will be held Tuesday, May 30, on the patio at the Coronado Club from 4-7 p.m. In addition to the C-Club parking lots, the NCO Club parking area on "B" St. may be used; a shuttle bus will operate between the latter area and the C-Club patio entrance.

Members of Large Staff will be joining retirees and their spouses. More than 800 attended the picnic last year. Retirees now number over 1650 and reside in 39 states.

Sympathy

To Eleanor Sluts (6010) on the death of her husband in Albuquerque, May 2.

To Carol Hamzy (3533) on the death of her mother in Caledonia, Minn., on May 2.

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LIVERMORE NEWS

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LIVERMORE LABORATORIES

MAY 12, 1978



ROXANNE SILVA (8266), a library helper under Sandia's Work Experience Program graduates from Granada High School this June. She has received a Bank of America award for academic achievement and for being the outstanding student in the school's business department. We think she should also be named graduating senior with the prettiest smile!

Take Note

Leo Gutierrez (8400) was recently appointed to the board of directors of the Sandia Laboratory Federal Credit Union. He replaces Don Wagner (9212) who resigned.

* * *

Douglas Pewitt, budget examiner with the Office of Management and Budget, and Richard Conaway and Anthony Lane of DOE headquarters visited SLL in March to discuss Sandia programs in both weapons and energy. President Sparks introduced the programs and then escorted the visitors to Albuquerque for similar briefings there.

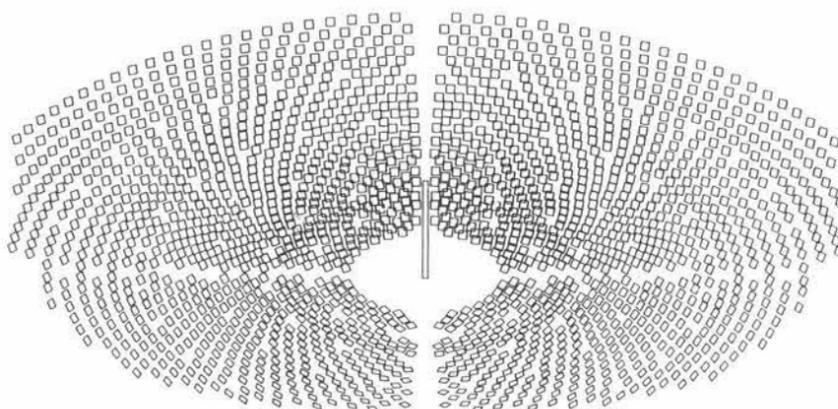
Sympathy

To Gene Simpson (8413) on the death of his father-in-law in San Leandro, Calif., Apr. 18.

To Blitz Krieger (8115) on the death of his father in Hollywood, Fla., Apr. 3.

To Jim Duggar (8354) on the death of his father in Livermore, Mar. 24.

To Jim Gibson (8115) on the death of his father in Roseville, Calif., Apr. 23.



AS VIEWED FROM THE SUN at noon on Dec. 21, this is a field of 1760 heliostats looking at a central receiver. An output of MIRVAL, the plot indicates this deployment's shadowing problems—note overlap left and right above the receiver.

A Reflective Approach

MIRVAL Determines Mirror Performance

Evaluating a mirror may be a minor step if you're redecorating your bathroom, but when you're a Sandia engineer dealing with 400-square-foot heliostats, it's a major task. That's why Joe Hankins (8326) and Pat Leary (8322) of Systems Studies Department 8320 developed a computer code called MIRVAL (MIRror eVALuation).

MIRVAL began a couple of years ago as a means to compare the optical performance of the heliostats being constructed by the four companies associated with Sandia's Solar Central Receiver Program.

It's since been updated and expanded, so that now the computer code accommodates a wide variety of mirror performance data. Output ranges from detailed performance statistics to graphic depictions of the entire mirror field in operation.

The performance data that go into the program include such variables as the reflectivity of the mirrors, their size and shape, their contour (flat or concave), the standard deviation of mirror imperfections, tracking system errors, the type of receiver (round or flat surface, for example), the precise location of the

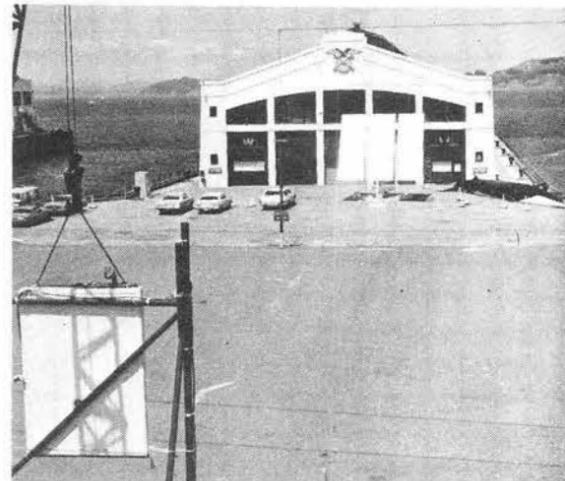
heliostat (including height above ground) with respect to the receiver, and the atmospheric attenuation (the farther the mirror from the receiver, the more light likely to be scattered or absorbed by the atmosphere).

Thanks to Joe's skill with geometry and Pat's with programming, the code can provide insight into some potentially difficult heliostat field problems—the development, for example, of a 22,000-heliostat field. "The code could handle more," notes Pat, "but we'd overload the computer we're using."

"MIRVAL is a Monte Carlo code," says Joe. "as opposed to an analytical code, it's easy to change, easy to debug, and handles details well. It does require more computer time, and it's not as good at design work as an analytical code. But it's an excellent tool for evaluating existing designs."

"Therefore," adds Pat, "it's a good complement to Albuquerque's HELIOS, an analytic code used as a design tool."

(The output from MIRVAL provides input to other codes used for solar performance cost analysis, e.g., STEAEC and BUCKS—see LAB NEWS, March 31, 1978.)



SUN DAY in SAN FRANCISCO—At Fort Mason Park on the waterfront, Dick Houser (8451) describes operation of heliostats supplied by SLL for the occasion. With Bay in background, the heliostat redirected the sun's rays to a flat-plate collector (foreground) and turned water into steam. Heliostat is Martin-Marietta design.

INTEC Courses To Be Announced

The new catalog for INTEC (In-Hours Technical Education Courses) will be mailed next week to all Sandians on the technical staff. So reports John Crawford, 2500, newly appointed chairman of the On-Premises Education Committee. He succeeds Orval Jones (5300) in that capacity.

John is enthusiastic about the new course offerings. "This is our most ambitious INTEC program. The catalog lists 27 courses. They are scheduled over the two semesters, fall and spring, with some 22 courses set for each semester. The new curriculum represents the response to a survey conducted earlier this year among technical people. We are trying to offer those courses that people said were most needed. For example, we've added Advanced Numerical Analysis, Computer Graphics, and Vacuum Technology."

John emphasizes this about INTEC: "We're trying to accomplish several things through INTEC. For one thing, all of our courses should be designed to meet current

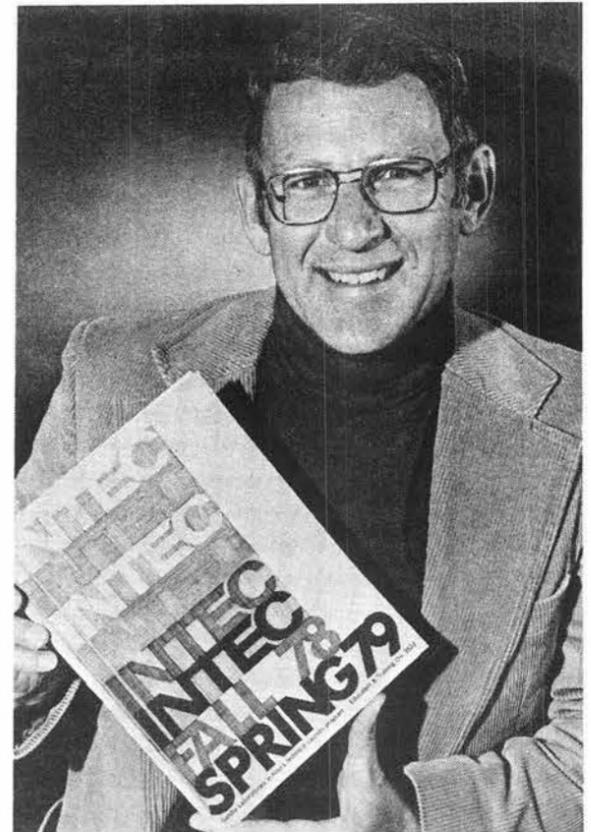
technological demands. For another, we recognize that technology is moving fast and that many of our people completed their formal education several years ago, so we are trying to make it possible for them to keep their skills up to date.

"In the past few years we've seen a lot of new kinds of work coming into Sandia. Who would have guessed, for example, that we would have the interest in geology that we now have? So we hope that INTEC will make it possible to expand the Labs' capabilities through training of on-roll people in these new fields."

Many Sandians have the belief that an INTEC course has to be closely job-related in order to enroll. Such is not the case. The criteria is "mission-related," that is, related to the overall mission of the Labs. Also, approval to take an INTEC course is now at the department rather than the director level. And TSA's and ESA's are now eligible to enroll in more INTEC courses than heretofore.

The complete triad of the Nuclear Science and Technology series will be offered this fall, with Dick Brodie (4371) teaching Weapons Technology. All MTS's are encouraged to complete the three courses in this series within some reasonable time.

INTEC courses, most of which start



JOHN CRAWFORD (2500) and the INTEC catalog, to be mailed to technical people next week. John is chairman of the On-Premises Education Committee.

September 5, are scheduled once a week for two hours, and each session is videotaped for makeup purposes. The semester lasts 16-18 weeks. Most courses are taught by Sandians, the rest by outside experts.

Vista New Mexico

The Merry (Historical) Month of May

May has been an historical month in our state. Here are a few occurrences that took place in May, gleaned from Hammond's *Don Juan de Onate*, Bancroft's *A History of Arizona and New Mexico*, Twitchell's *Leading Facts of New Mexico History*, and the American Guide Series on *New Mexico*.

* * *

May 1, 1917 [61 years ago]—The State Legislature met in special session today providing for the defense of the state and assistance to the government in the World War. (The Congress had declared war on Germany on April 6.) The State Council of Defense was created and \$750,000 appropriated for war purposes.

* * *

May 12, 1916 [62 years ago]—The New Mexico National Guard was mobilized at Columbus to help combat raids along the border by Pancho Villa and his followers.

* * *

May 19, 1906 [72 years ago]—Land owners near Bloomfield organized the Citizen's Ditch and Irrigating Company, aiming to convert 6000 acres of desert into farm land by means of a 30-mile-long canal, fed from the San Juan River.

* * *

May 12, 1892 [86 years ago]—The new capitol building in Santa Fe burned today, destroying many public documents (note drawing).



STATE CAPITOL building burned May 12, 1892.

May 10, 1850 [128 years ago]—Dr. H. White, with his wife and child, was returning to Santa Fe after a visit to the east when the party was attacked by Indians near Wagon Mound today. Dr. White and 11 others were killed. His wife, child and nurse were kidnapped.

May 20—The Legislature, outraged over the death of Dr. White, today appropriated \$1500 for use in recovery of the prisoners. (Volunteers joined members of the regular army in the pursuit. The Indians were overtaken near Taos and, after a brief fight, escaped. The arrow-riddled body of Mrs. White was found; she had been killed during the fight. The nurse and child were never recovered.)

* * *

May 13, 1846 [136 years ago]—President Polk signed a proclamation today declaring war with Mexico. The U.S. plans to invade New Mexico, Chihuahua and

California.

* * *

May 21, 1792 [186 years ago]—Pedro (Pierre) Vial, the French frontiersman who found a trail to link San Antonio with Santa Fe, left Santa Fe today under orders from the governor to find a direct route to St. Louis in Spanish Louisiana. (Vial reached St. Louis and returned, the first person to make a complete circuit along what was to become the Santa Fe Trail.)

* * *

May 13, 1614 [364 years ago]—Don Juan de Onate, former Governor and Captain General of New Mexico, was charged and sentenced today in Mexico City for crimes committed in New Mexico. Charges included refusal to obey royal decrees, lack of respect for the friars and mistreatment of the Indians. He was banished forever from New Mexico and fined 6000 ducats.

Take Note

Chamber music buffs will be pleased to learn that the Fine Arts Quartet will again be resident quartet for the June Music Festival. Six concerts are scheduled, all at UNM's Woodward Hall. A season ticket purchased by Monday next, the 15th, cost \$15; after that date, the cost is \$18. Single admissions are \$4. For program and ticket information call 265-3689.

* * *

Not a bad idea: the State Highway Dept. plans to set up a "Highway Hot Line," a toll free telephone line into their Santa Fe office for citizens who have complaints or inquiries regarding the highways. So when you hit that chuck hole at 60 you can do more than grumble. The number is 1-800-432-4269, but don't call before May 15th, its first day of operation. The Santa Fe line will be manned five days a week, 8 to 5.

* * *

Physical chemist Barry Granoff (5731) has been named to the Advisory Board of the New Mexico Energy Institute at NMIMT. Barry will serve with 12 other specialists in fossil fuel research and production who advise the Energy Institute on applications for state-funded research with coal, oil, gas and enhanced oil recovery.

* * *

The New Mexico Symphony Orchestra is giving its 8th annual Mother's Day Zoo Concert on May 14 at 2 p.m. at the Rio Grande Zoo. An added feature is Mick McCormick and his Matchbox Circus presenting a Punch and Judy show at 1 p.m. The NMSO will play works by Bernstein, Handel, Beethoven, Rodgers & Hammerstein, and others. Concert goers are encouraged to pack a picnic, bring a blanket or folding chair, and munch with fine music. Adults pay a buck to get into the zoo, children 50 cents.

* * *

Couple of issues back we suggested that our new cafeteria really needed a name. Alas! Company cafeterias, even those that are new and untried, rarely have adherents and most of the suggestions we've received fail somehow to evoke a vision of delectable food served in an atmosphere of charm and grace. The suggested names have been, by and large, just a little too—ah—direct. But we did like Barbara Stearns' (5432) sort of ambivalent entry: "Food for Thought."

* * *

Lena Valerio (2002) has been elected president of the new Albuquerque chapter of the International Word Processing Association. The chapter has 30 members from Albuquerque and Los Alamos and eventually will become the state chapter of IWP. Monthly meetings feature speakers from the word processing field. Persons who manage or supervise word processing systems or who have equivalent responsibility are invited to join the chapter. For more information, contact Lena at 4-9511.

The Albuquerque Police Dept. and the Sickle Cell Council of New Mexico are sponsoring a ten-mile walkathon on Saturday, June 3. It begins at 8 a.m. at the Western Skies Motel and ends at Dennis Chavez Park, just west of I-25 at Kathryn, where a community picnic will be held. Packets for the walkathon are available at any McDonald's location, and the top fund-raiser wins a trip to Disneyland. Further information: the Sickle Cell Council, 842-9850.

* * *

Leo Cordova (3411) reports that the annual Viva La Joya Day is being celebrated this year on May 28th with a barbecue at the La Joya gym. If "La Joya" doesn't strike a familiar note, it's a small village a few miles south of Belen on the east side of the Rio Grande. There will be live music and dancing, and Leo says that Senator Domenici will be there but it's not political. Purpose is fund raising for the community. You can get tickets and more information from Leo on 294-2510.

* * *

The "Downtown Saturday Night" for tomorrow, May 13, has a motif, so says the release, that is "Scandinavian, Scotch, English, German, Welsh, etc." We're not sure what the et cetera includes, but all those others constitute a large order. The festivities start in the late afternoon.

* * *

The Albuquerque Philharmonic, conducted by Willy Sucre, will present a concert on Monday, May 22, 8:15 p.m., on Stage II of the UofA's Fine Arts Learning Center. Victor Firlie, cellist, is the guest soloist. Music by Haydn, Beethoven, and Bizet will be played. The public is invited and there is no admission charge.

* * *

Japanese students will be visiting Albuquerque this summer and need places to stay. Entitled the Homestay Program and sponsored by the Pacific American Institute, the program brings in students ages 15 to 18 for a month-long stay of study, travel, and participation in American family living. Dates are July 26 to Aug. 17. The students attend English classes while here, make tours in and around Albuquerque, and get a good look at the American way. Host families are asked to provide a place for the young person to sleep, to furnish meals and to transport him or her to the academic center. Dorothy McDonald on 881-8257 is trying to line up host families by May 20, so call her if you're interested.



A friend who smokes called to tell us about an article he'd just read in *The American Journal of Psychiatry*. The only trouble was, he couldn't remember what it was about. We finally located the article and understood why: a UCLA psychologist has determined that nicotine has an adverse effect on short term memory. The effect from one cigaret lasts up to two days.



A TURQUOISE T-BIRD on a rug probably isn't all that unusual, except that this one comes from the remote Himalayan mountain kingdom of Nepal. Mountainman Don Mattox (5834) paused in Kathmandu, capital of Nepal, long enough to explain to Tibetan rug-maker what he wanted, recently received completed rug through mail. Don and companions spent six weeks hiking in Himalayas.

20 Years Ago

An increase of almost 200 percent in payroll purchases of U.S. Savings Bonds was seen this week as a result of the "Share In America" campaign.

L. M. "Jerry" Jercinovic, 7240, chairman of the drive, reported that the number of new subscribers will be close to 600, including Livermore Branch, compared with about 300 subscribers at the start of the drive.

Publicity chairman was John Leslie, 4112. Other committee members were T. B. Sherwin, 3125; Helen Wolf, 4362; Webb Schafer, 2742; and Marion Scott, 2232.

Continued from Page One

ACPR Reactor Goes Critical

and some remarkably advanced diagnostic instrumentation. We slipped only seven weeks in our projected time target, and we are within budget—\$7 million for the ACPR upgrade funded by DOE and NRC. This was made possible only through the cooperation of many Labs organizations and the work of a dedicated staff."

Major contributing organizations were Engineering Applications Department 1130, Advanced Reactor Research Department 5420, Reactor Development & Applications Department 5450, Metallurgy Department 5830, Quality Assurance-Acceptance & Evaluation Department 9510, and Plant Engineering Design Department 9740.



DIRECTOR OF MANAGEMENT STAFF 400, Charlie Winter (standing), meets with his staff to discuss future visits of high level government officials. From

left: Jim Mogford, Vic Engel, Gladys Rowe, Bob Esterly, Charlie, Dick Craner, and Jeff Lawrence. Seventh staff member, Howard Stump, was in Washington.

The Directorates

400: Management Staff

Most of us are content to have a reasonable grasp on what we'll be doing at work tomorrow, or next week—or, at most, next month. Charlie Winter, Director of Management Staff 400, leads a group (seldom more than 10) which spends its working life looking to the far-off future.

"We don't have a mandate or a charter," Charlie explains. "Our work cuts across organizational and project lines, and our role is tied directly to the role of the Labs. As any long term employee knows, that role changed significantly as the AEC became ERDA became DOE. And the changes certainly aren't over yet."

Because Sandia's problems and projects do change, Management Staff 400 is a volatile organization. Five years ago the staff was heavily weighted in favor of budgeting expertise. Now it's more technically oriented. "As the needs change, so does the composition of the staff," Charlie explains. "Most staff members are with us from one to three years."

When the forerunner of 400 was formed in the early 1960's, it was called the Systems Planning Department. "One of our first projects—a joint one with LLL and LASL— was to take a hard look at the missile reentry vehicle/warhead design philosophy," Charlie told us. "We found that the customary approach of separating warhead design from fuzing and firing design, and from structural and heat shield design, simply didn't make much sense. So we proposed integrated designs (a revolutionary idea at the time) and successfully argued that properly designed internal components would save weight and add structural strength, thus making them a part of the hardening process itself. That design approach was adopted for the MK3 Poseidon.

In 1969, the Systems Planning Staff was made an adjunct of the Small Staff. "Things were getting more complicated in

Washington and worldwide," Charlie explains, "and Small Staff felt the need for a group to study Sandia's options for the future. The planning staff studied the Labs' ability to take on new areas of research in energy and energy related fields. Recently we studied the impact a Comprehensive Test Ban might have on Sandia. Our conclusions were that such a treaty would not have much direct effect here but indirectly it could bring about an overall change in emphasis on the weapon stockpile."

What effect has energy related work had on Sandia?

"For one thing," Charlie says, "it has made Sandia much more visible. And changes in organization have also made it mandatory that we maintain a close relationship with a number of departments in DOE and other agencies. There's no lobbying—just a determined effort to keep key people informed.

"As part of this effort, we schedule twice-a-year briefings for the New Mexico Congressional delegation as a matter of course. And we help with visits from other high level government officials like Vice President Mondale. One point we always stress is that Sandia has a large, competent engineering staff—and that our work in the energy field strengthens our expertise in weapons. The annular core pulsed reactor (funded by DOE/MA and NRC) is a good example of what I mean, since experiments in this facility contribute both to our knowledge of reactor accidents and our knowledge of weapon effects."

Raised to Directorate level on Feb. 1 of this year (reporting directly to E-VP Jack Howard), Management Staff 400 will continue to develop long-range plans and study lab-wide problems for Small Staff. They will also prepare annual reviews for DOE and respond to special management requests.

"One final point," Charlie said: "We're not a line management directorate. Our goal is research and recommendations—suggesting options we hope will make it possible for the technical staff to achieve their engineering and scientific goals."

What about job satisfaction and a sense of accomplishment?

Charlie smiles. "They're both vicarious. But you'd be surprised how much satisfaction there is in having a recommendation accepted and implemented—especially one that works."

Mother's Day Program Set At Pueblo Cultural Center

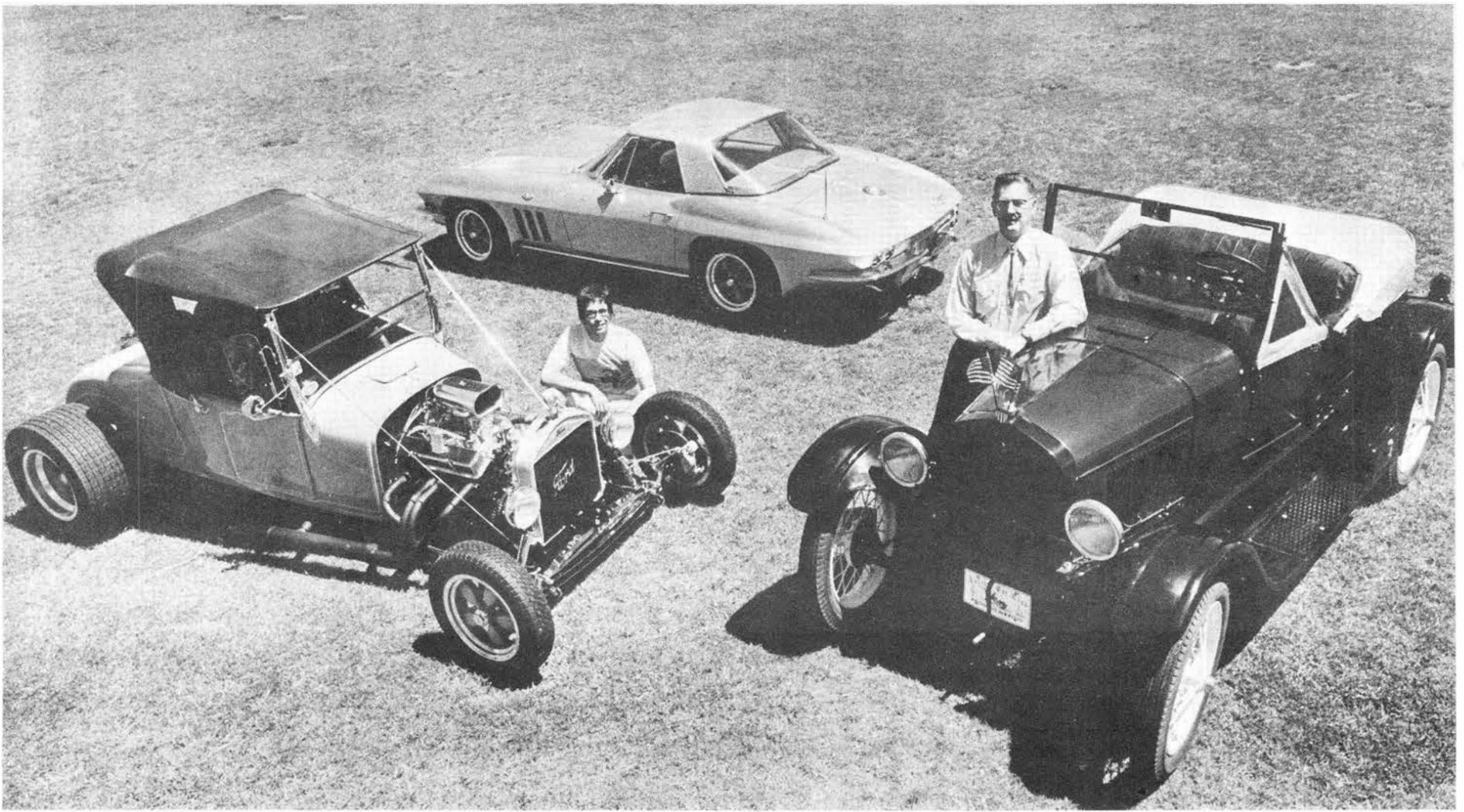
Dancing, a feast and fashion show will highlight a Mother's Day program at the Indian Pueblo Cultural Center on May 14. It begins at noon, Sunday, with continuous entertainment offered in the grass-covered patio.

The San Juan Pueblo dancers will perform ceremonial dances; a traditional Pueblo feast, featuring bowls of green and red chili, posole, burritos, fry bread, oven bread, Sandia salad, beef and many other favorites will be set out on long tables; and several different fashion shows will be held. The Institute of American Indian Art will feature young Indian men and women modeling traditional and contemporary clothes from various Indian tribes throughout the country.

Ample seating will be provided in the patio, and admission is free. The Center is located on 12th Street, near Menaul Blvd., and can be reached by the freeway.

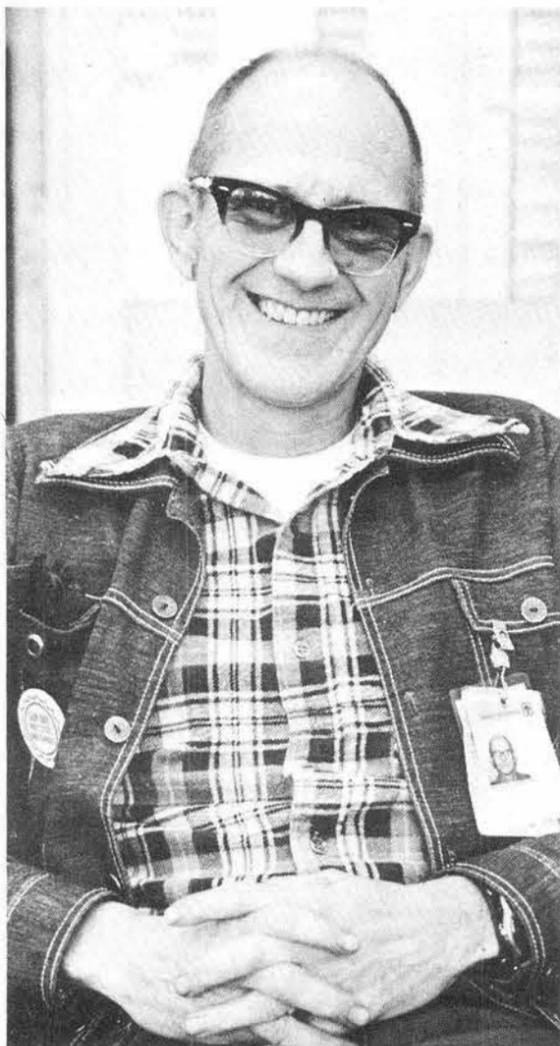
Congratulations

To Mr. and Mrs. Ronald Cheek (9571), a son, born May 1.



THE NEW MEXICO CAR COUNCIL, representing 15 auto clubs, is sponsoring a car show at the State Fair Grounds from 10 a.m. to 4 p.m. Sunday, May 28. Among the 150 hot rods, classics and antiques on display will be this street rod

built by Don Marchi (2515) and his '65 classic Corvette. John Birdson (1116) is entering his restored '26 Ford roadster. Admission to the show is \$1.



BOB MILLER (3422) completed a refresher course in Cardiac Pulmonary Resuscitation (CPR) last week. The next evening, while finishing a dinner at a local pizza place, a young woman collapsed. In the ensuing panic Bob took command, determined that the woman's breathing and pulse had stopped, and quickly began closed chest massage and mouth-to-mouth resuscitation. She had revived somewhat by the time the rescue squad arrived. They credited Bob's quick action with saving her life. "Instructor Woody Woodward (9321) had drilled us so well that everything was automatic," Bob says. "Never did find out the woman's name or what her problem was."

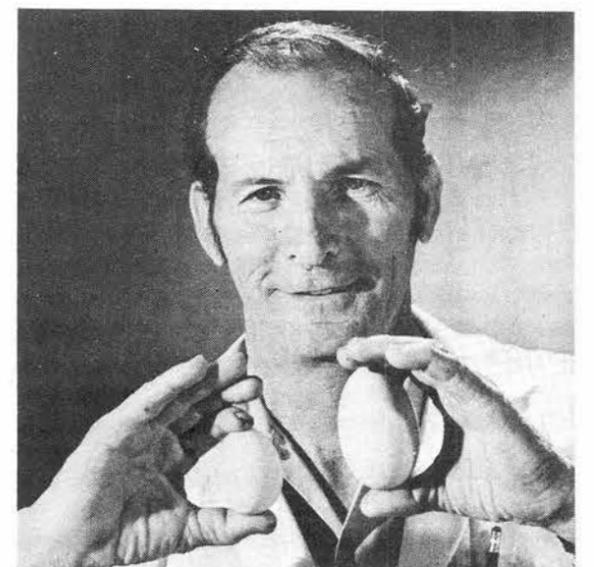
sandia PEOPLE Report



SOME RACKET—Instructor Bob McCannon says "This is how" to Sue Caroon (DOE). They're getting ready for the Sandia Tennis Assn. clinic on Saturday, May 20, at the Albuquerque Academy. Clinics are set for 2:00, 3:30 and 5:30. Pro Darrell Gage will also instruct. Cost, \$2 for members, \$4 for non-members, and free for people joining STA after May 1. Come dressed to play and with racket. Contacts: Anita Solberg, 298-9248; Lanita Geers, 293-0700; and Margaret Richer, 298-6304.



DR. JACK FITZPATRICK returned to the Labs' medical organization May 1. As an Army physician, he was stationed at Sandia Base in 1950-52 and 1967-70. Retiring from the Army Medical Service in 1970, Dr. Fitzpatrick entered private practice in San Benito, Texas, until he joined Sandia for a year (1974). From 1975 until the present, he again practiced medicine at the same clinic in his home town of San Benito. Dr. Fitzpatrick's specialties are nuclear medicine and internal medicine.



WHEN Perry Marshall (9572) proudly showed us the giant egg, we figured there was a simple explanation: he has (a) a giant hen or (b) a sore hen. But Perry says no—just an ordinary Rhode Island Red who, according to Perry, scarcely raised an eyebrow over her accomplishment. Now that's class!

feed **liback**

Q. A few years ago, our fire protection group offered fire extinguishers for sale to employees at a good price.

I suggest that a similar offer of smoke detectors for the home be made.

A. Our experience with the fire extinguishers was not completely satisfactory. Even though we made arrangements with a reliable manufacturer, one or two extinguishers had defects, and the Sandia employees wanted Sandia to make all the contacts with the supplier. Shortly after our sales campaign was over, Montgomery-Ward advertised an extinguisher for 7 cents less and we got several complaints that our price had not been competitive. We do think that smoke detectors are a good idea and Ray Cohrs, Vern Duke (9751), or Verne McNabney (8252) will discuss the various types with you and can indicate which models have been listed by The Underwriters Laboratories.

R. E. Hopper—9700

Q. Reviewing my computerized personnel record, I was amazed to find that there was nothing on previous employment or professional achievement beyond those attained at Sandia or educational institutions. Why is this?

A. Sandia does retain previous employment and non-Sandia professional achievements. It is not computerized and was not on the Personnel Record you were asked to review. But it is made available to selecting supervisors considering employees for lateral transfers and promotions.

The jobs and salaries given employees at time of hire reflect both the type and amount of relevant past experience. If, within a year or two of hire, a person bids on a job quite different from the one hired for, the selecting supervisor may review the original application; the bidder is expected to explain any relevant prior experience during interview; and the bidder's supervisor is expected to know and mention any special qualifications when asked for a recommendation.

After two or three years, however, prior experience becomes almost wholly irrelevant; and employees are judged by their performance since joining Sandia. This isn't provincial; it simply recognizes the fact that recent experience and direct observation are more reliable indicators of a person's worth or potential than any record of pre-Sandia experience. If the old experience doesn't qualify employees for better jobs at time of hire, it is very unlikely to qualify them at any later time. Records of past experience are available, but computerizing them would serve no useful purpose.

J. R. Garcia—3500

Q. How come we aren't getting completion certificates for INTEC courses?

A. Using current enrollment figures,

providing completion certificates to all INTEC students who successfully complete a course requires approximately 450 separate pieces of paper. In the past all this paper would have been processed by hand—a task the Education and Training Division, 3522, is not staffed to accomplish. The Division has now developed a computer program and printout form which permits completion certificates to be generated by computer. The program is currently being tested and debugged; it should be ready at the end of the current semester to provide INTEC students with completion certificates. The certificate will be sent directly to the student.

J. R. Garcia—3500

Q. I understand Medical does not allow a basic first-aid kit to be kept and used as needed by Sandia employees. Surely we should be allowed to use a band-aid or a sterile dressing to cover a wound before proceeding to Medical?

A. Medical is directly responsible for supplying and refurbishing first-aid kits for certain areas of the company; especially those areas where after-hours shifts are worked, or in remote locations.

It is not our policy to routinely furnish first-aid supplies to other areas. However, it is the prerogative of any supervisor to order whatever supplies he or she deems necessary. Approval for such supplies requires Medical Department signature.

Paul B. Mossman, M.D.
Medical Director—3300

Q. The property search request [PSR] procedure seems unduly complex and time-consuming. Can't the process be streamlined?

A. The philosophy of the property search request system is, basically, don't buy what you don't need to buy, and we are concerned that it operates efficiently. It is a fact that the PSR system must be as streamlined as possible if it is to provide benefits exceeding its cost of operation.

We have been developing a computerized listing (catalog) of Sandia property (some 100,000 items). Some work remains to be done, but our intentions are to have the catalog distributed on microfiche to certain central locations within the next few months. While use of the catalog is not intended as a substitute for PSR routines, it should be helpful in determining whether suitable items are available for use within the Laboratories prior to issuance of a purchase requisition. Perhaps a certification that the catalog had been reviewed could be incorporated into the PSR procedures.

With respect to PSR paper flow, as we complete work on the catalog, we will review the PSR system to ensure that no actions are taken which cause unnecessary delays.

D. Tarbox—3400

Fun & Games

Verboten—In the Base gym, shoes with black soles and cut-off shorts. The black soles mark up the gym floor, the cut-off shorts... well, we're not sure what the problem is. You're not supposed to smoke in the gym either, but the staff isn't quite so zealous here because of their own penchant for cigarettes.

* * *

Running—Next Saturday is the 3rd annual minimarathon (13 miles) in Thorau, New Mexico (west of here, about half way between Grants and Gallup). This is a fun run according to Sandians who have taken part in it, well organized, and laid out over an interesting and scenic course. Entry and other info: LAB NEWS, 4-1053.

* * *

"Good Times Day"—That's the name the County has attached to a May 21st congress of fun-seekers on UNM's athletic field east of Johnson Gym. It starts at 10 a.m., it's for kids and adults, and here are some of the diversions offered: Tug-o-War, Clench a Wench (sic), Tweezle Whop, Slaughter, Pie Throwing, Skin the Snake, People Pass, Dho Dho Dho, Hunker Hawser, etc. Last but obviously the grabber is Blob. Good Times Day declares a truce at 4 p.m.

* * *

Biking—Cyclist Walt Joseph (1713) states that if enough bikers show interest in biking-by-bus, then the city might respond and add bike racks to selected buses. The racks would be like those added to the rear of buses in San Diego; each rack holds six bikes. When the bus stops to pick you up, you slip your bike into the rack; when you arrive, you take it off. If you think you might be interested in such a mode of transportation, give LAB NEWS a call on 4-1053.

* * *

White Water—If watching people taking a dip in cold water is your thing, then head north for the weekend of May 13 and 14 to watch the 21st annual Rio Grande White Water Boat Race. The kayak slalom race starts at 10:30 a.m. on the 13th, while the downriver race for kayaks and inflated rubber rafts is set for 11 a.m. on the 14th. The competition runs along the 4½-mile stretch of the Rio alongside the highway south of Pilar (about 23 miles south of Taos). The river has three major rapids good for spectating: the Narrows, about one mile south of the starting point; Big Rock rapids just below the ramshackle wooden bridge; and the Sausehole turn, half a mile below Big Rock, where a submerged rock makes a depression or "hole" in the river's surface. If you wish to make a weekend of it, there are good camp sites along the dirt road three miles north of Pilar.



Poor old Ptolemy may not have told the Ptruth. As a matter of fact, he probably pfudged his pfigures like any anxious student, working backward to construct plausible mathematical progressions leading up to the results he needed to prove his theories. A John Hopkins prof reported it this way in *Time*: "Ptolemy is not the greatest astronomer of antiquity, but something more unusual—the most successful fraud in the history of science."

MILEPOSTS

LAB NEWS

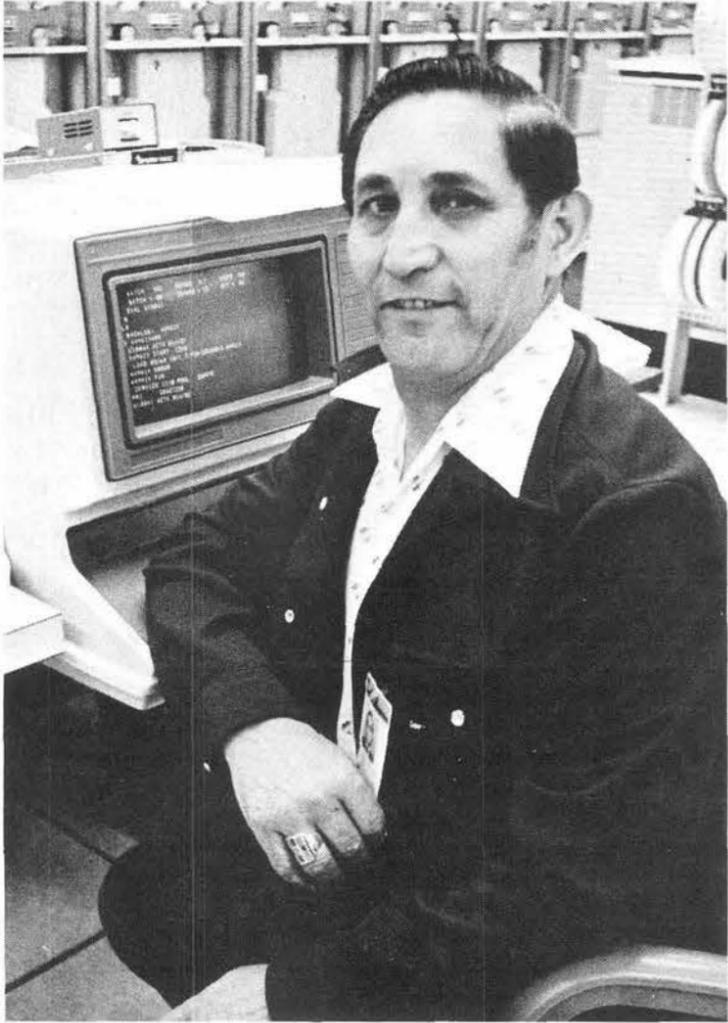
MAY 1978



Emory Padgett - 8423 15



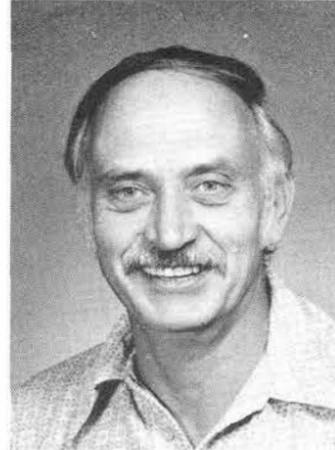
Ray Brin - 9410 30



Jose Ortiz - 2631 15



Jim Banas - 5711 10



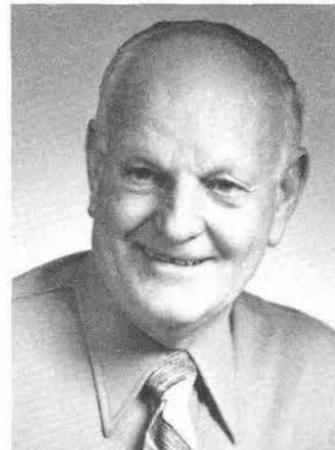
Robert Sallach - 5831 15



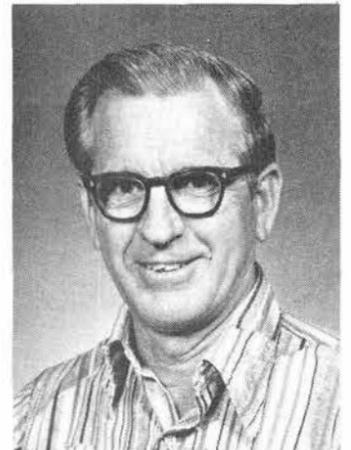
Nina Clark - 9561 20



John Cawfield - 9332 10



Verne McNabney - 8252 30



John Ransom - 3425 30



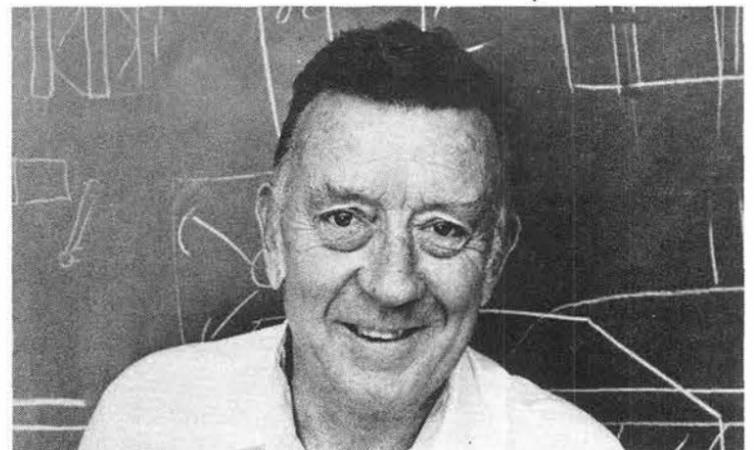
Donald Wade - 3422 20



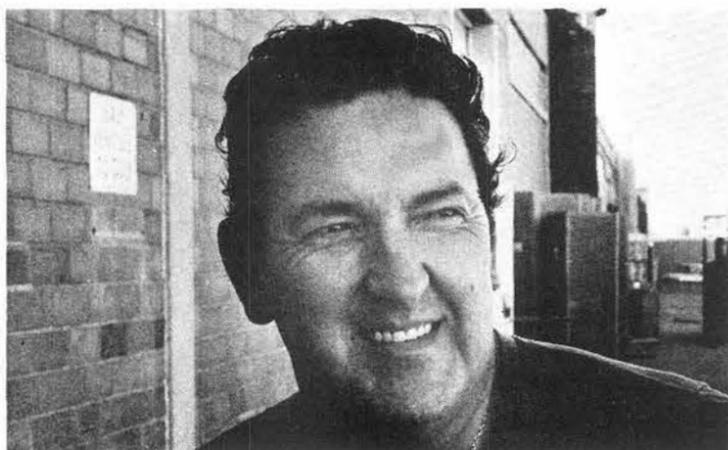
Ellis Heustess - 9481 15



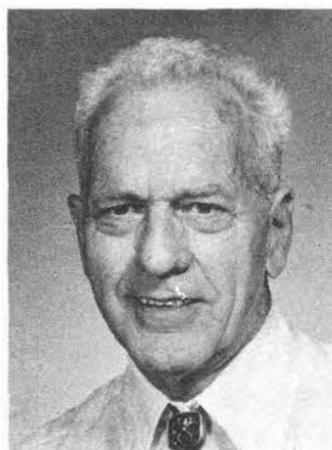
Orval Wallen - 8412 25



Leo Dunn - 5341 30



Tony Garcia - 3411 30



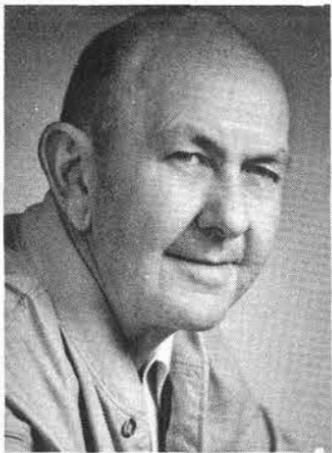
Charles Gumley - 2153 25



Julian Lovato - 3533 15



William Bedwell - 3432 25



Jim Sheley - 8161 15



John Banister - 1101 25



Edward Roche - 9573 20



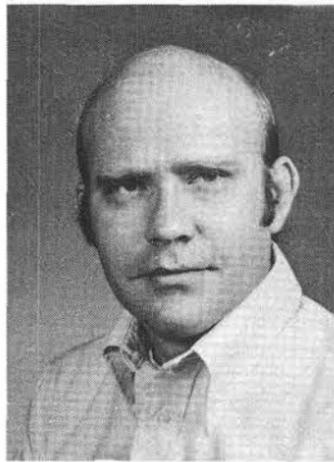
Bill Caldes - 9340 35



Roy Smith - 2632 10



Ken Bennett - 8261 25



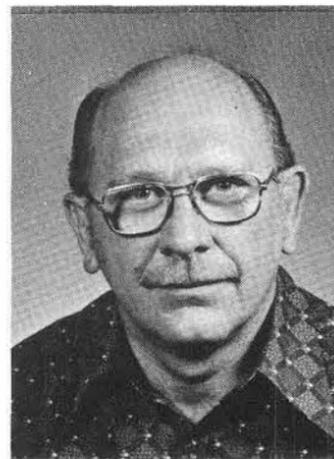
Thomas Downey - 9344 10



Jack Bahlman - 1324 25



Ralph Davies - 3714 25



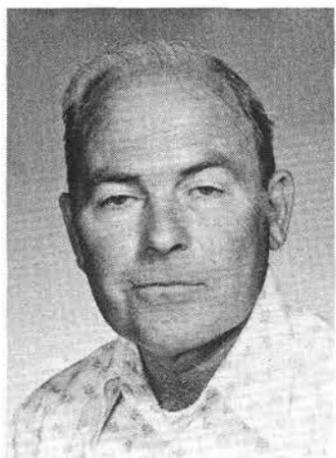
Jerry Kennedy - 1110 15



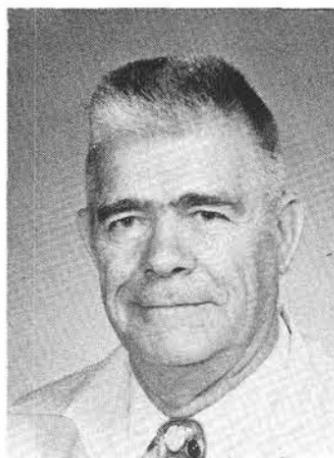
Hilario Montano - 3727 10



Albert Dennis - 5341 20



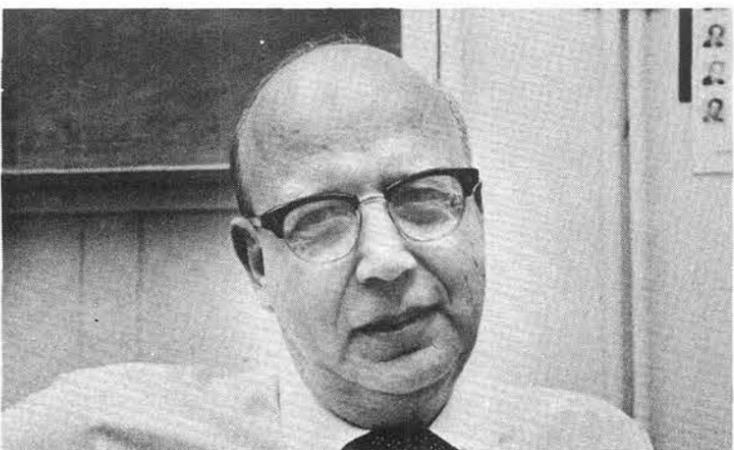
Gene Anderson - 5713 15



Woodrow Hunt - 9657 25



Sid Gasser - 2614 25



Hank Neues - 9512 20



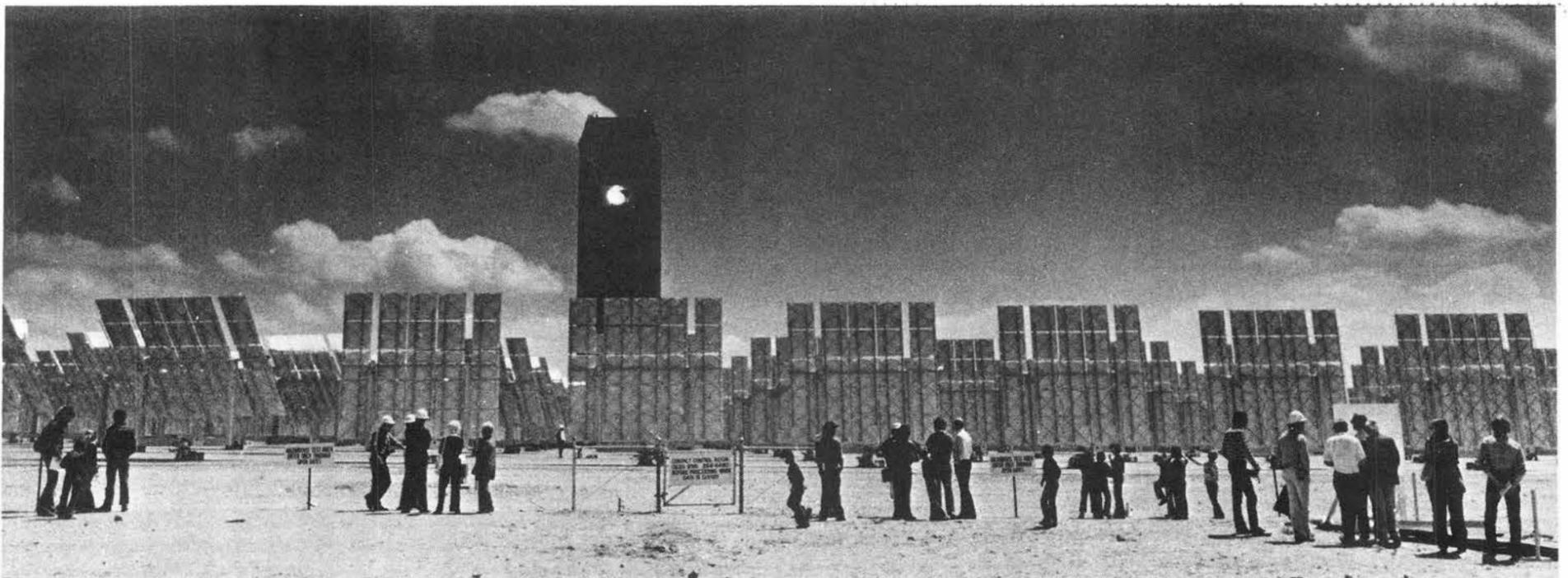
Blanche Ottinger - 1327 10



Arthur Jacobs - 3422 15



Ben Gardiner - 9571 25



THE SUN did shine on Sun Day, at long last. About 900 people toured Sandia's solar facilities. LAB NEWS photographer Bill Laskar caught this dramatic shot

at the Solar Thermal Test Facility as heliostats focused on tower.

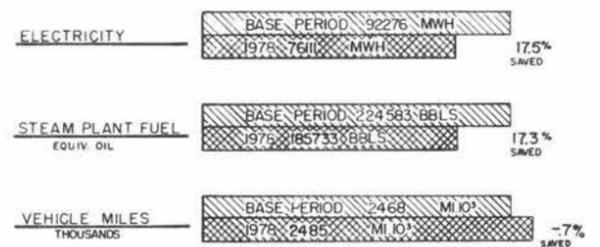
Events Calendar

May 12, 13—All Indian 4-H Fair, Win-rock Center.
 May 13—"Downtown Saturday Night," Scandinavian, Scotch, English, German, Welsh, etc., night.
 May 13, 14—Rio Grande Kennel Club Dog Show, Ag. Exhibit Hall and Tingley Coliseum, 242-9864.
 May 13-14—111th Annual Fiesta de Santa

Isadora, Mass and procession, Our Lady of Belen Church.
 May 13-14—21st Annual Rio Grande Drowner Race from near Pilar.
 May 14—New Mexico Symphony Orchestra Mother's Day Concert, Rio Grande Zoo, 2 p.m.
 May 22—Albuquerque Philharmonic plays at UofA, 8:15 p.m.

ENERGY SAVINGS

COMPARED WITH USAGE IN BASE PERIOD—JULY 1972 THRU JUNE 1973
 CURRENT REPORTING PERIOD ENDING MAR '78



JUNK • GOODIES • TRASH • ANTIQUES • KLUNKERS • CREAM PUFFS • HOUSES • HOVELS • LOST • FOUND • WANTED • & THINGS

CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication unless changed by holiday. Mail to: Div. 3162 (814/8).

RULES

1. Limit 20 words.
2. One ad per issue per category.
3. Submit in writing. No phone-ins.
4. Use home telephone numbers.
5. For active and retired Sandians and ERDA employees.
6. No commercial ads, please.
7. Include name and organization.
8. Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.

MISCELLANEOUS

BLACK naugahyde recliner & ottoman, \$15. Stirbis, 299-5363.
 FISHER PRICE PLAY FAMILY TOYS: passenger jet, village, school, camper, mini bus, playhouse, Goldie Locks & 3 bears; Weebles marina. Robertson, 299-7561.
 4-POSTER dbl. bedframe, \$45; dbl. bedframe, \$12; coffee table, round, \$15; trundle bed frames, \$15. Byrne, 292-2813.
 GE 19" B&W port. TV, sim. wood-grain finish, \$105; M.S.R. bike helmet, \$15. Stuart, 265-7315.
 GEESE, ducks, top knot chickens, 10-week-old rare breed chicks, & bantam chicks; need young bull for breeding. Lackey, 898-6638.
 IRONS, 1974 Haig Ultra, 2-P.W., S.S., \$90. Longcope, 821-8423.
 TWO living room chairs, high backs, \$30 ea.; 2 step end tables, fruit-wood color, \$10 ea. Smith, 299-7151.
 GOLD foam back curtains w/white sheers, \$25/pr.; decorator rods, wrought iron style, 100" max., \$20 ea. Shrouf, 821-3816.
 GAS RANGE, 40", best offer; lawn edger, heavy duty, \$35 or best offer. Liguori, 256-3613.
 TEA SERVICE for 4, fine old registered Noritake from Japan, \$25; Nikon cine 8mm movie camera, \$22. Smitha, 881-1001.
 PORTABLE sewing machine, Penncrest zigzag, built-in buttonholer, 24 decorative cam stitches, \$60. Cox, 293-5518.

WEAVING LOOM: 45" Loomcraft, 4 harness, solid white maple, sectional warping beam w/counter. Instruction included if needed, \$500. Miller, 344-7725.
 DISHWASHER, built-in type Waste King, for repair or parts, free for hauling. Edwards, 299-5578.
 TWO CRYPTS, Sunset Mausoleum, best offer. Neuhaus, 268-1444.
 MINIATURE DACHSHUND puppies, black & red, AKC reg. Puccini, 255-0568.
 CAMPER SHELL for long wide bed pickup, \$150; youth saddle, \$50. Oravec, 281-3667.
 AMERICAN PITT BULL female dog, papers; 22 auto. gun, palm-size; 2 tires & rims for Datsun; accordion, Hohner Corona brand. Herrera, 264-6771.
 8' CAMPER for pickup, w/butane stove, icebox, sink, etc., \$450. Romme, 299-8765 or 293-4551.
 COMPLETE set of auto mechanic tools w/new roll-away tool chest, \$1000, individual tools available. Baca, 245-4897.
 MATTRESS & box springs for twin bed, \$35. Gatto, 298-8493.
 SINGER Touch & Sew sewing machine, \$75; girl's 20" Spyder bike, \$30; wooden head & foot boards & bed-frame, \$25. Keltner, 298-7888.
 GE 30" elec. range, white, new oven element, \$60; cast iron white dbl. kitchen sink w/single lever faucet, \$15. Travis, 255-9295.
 ROYAL typewriter w/17" carriage; typing stand & chair, \$100. Garcia, 836-1172.
 CAMPER SHELL for LWB, lights, insulated, paneled, \$225. Jelinek, 892-3442.
 PIANO, spinet by Kohler & Campbell w/distressed pecan finish, \$550. Johnson, 298-9926.
 SEARS best compact auto. washer & matching elec. dryer, 3 yrs. old, both for \$150. Moore, 298-2019.
 REMINGTON elec. typewriter, \$75 or best offer. Montoya, 255-8437.
 SNARE DRUM; saddle; cash register. Montoya, 877-1779.
 KENMORE washer, needs timer. Negus, 299-9232.
 GOLD COUCH & matching chair, \$95. O'Malley, 821-0196.
 3 1/2 REFRIGERATED air conditioning w/A-type coil or 3 1/2 HP lawnmower for \$30. Dees, 898-8049.
 AIR CONDITIONER, window, 10,000 BTU, \$125; 19" port. B&W TV, \$60; 9'x12' rug w/backing, black/red, \$50. Tallant, 299-0862.

—FREE mountain top soil; '71 Honda CB350 for parts, low mileage engine shot, \$100. Williams, 281-5586.
 COMPLETE high frequency amateur radio station. Harrington, 296-8208.

TRANSPORTATION

'70 FORD pickup, 3/4-ton w/10 1/2' camper w/jacks, \$3000 or best offer. Armijo, 268-7645 5-10 p.m.
 '71 VW Super Beetle, \$900 or best offer. Alvarez, 293-4195.
 BOAT, 18' mahogany Lapstrake; 50HP outboard Evinrude; alligator trailer, extra tire & wheel; equipment as is, \$850. Dancy, 299-8223.
 15' LARSON tri-hull boat w/105 HP Chrysler, H.D. tilt trailer w/new 15" tires. Peoples, 877-3942.
 '71 CHEVY camper van, LWB, 1/2-ton, 307 V8, dbl. bed, icebox, sink, cabinets, radio, split rims, \$1695. Burns, 345-5836 after 7.
 5th WHEEL TRAILER, 3/4-ton International pickup, both loaded plus dishes, linens & many extras, \$8950. Knapp, 281-3192.
 '70 BUICK Electra 225, \$1200. Griego, 877-6842.
 '69 PONTIAC Catalina, 4-dr., AT, PS, AC, new tires, battery, rebuilt carb., \$650. Tidmore, 298-9164.
 '71 VOLKSWAGEN super beetle, auto. stick shift, radio, extras, \$1250 or best reasonable offer. Conrad, 299-6568, 9601 Haines NE.
 '73 CHEVY 1/2-ton pickup, 350 cubic inch engine, 4-spd. trans., \$1700. Prevender, 299-5253.
 '70 FORD 3/4-ton, AT, PS, PB, AC, recently overhauled, Coachman, '73 11 1/2', shower, sleeps 5, 5 cu. ft. refrig., Mitchell loader, \$4700. Simonson, 298-1735.
 FLYING EIGHT CLUB seeks responsible individual to purchase existing full membership. \$20/mo. wet rates: C-150, \$12/hr.; C-182, \$22/hr. Schkade, 293-7453.
 '66 LINCOLN Continental, white vinyl top over '75 Ford yellow body, \$500. Bennet, 296-8041.
 '73 TOYOTA Corona, 4-spd., 2-dr., vinyl top. Markey, 293-5358.
 BICYCLES: girls standard 26", girls 20" Spyder, boys 20" Spyder, \$20 ea. Snow, 296-5148.
 '76 TOYOTA Corona wagon, AC, 5-spd., low mileage, new tires, \$4100. Moshenrose, 821-7633.
 GMC PU, 3/4-ton, new shocks, \$700. Souder, 281-1321.

'73 DODGE Dart (compact), 4-dr. custom 6, manual tr., factory air, AM/FM, 60,000 miles, steel-belted radials, \$1750. Smith, 255-5662.
 '74 BUICK Century deluxe, PS, PB, AC, \$3000. Ripi, 298-5170.
 MOTORCYCLE, 3-wheel, RUPP, commercially built, AT. Bennett, 281-5386.
 MOTOR HOME, Travco, 27', self-contained, 2 roof air, PB-S, KW generator, \$1500 below book. Gall, 1-834-7307.
 '66 PORSCHE 912, one owner, always garaged in Albuquerque, \$4500 or best offer. Hughes, 265-1698.
 '77 GMC 3/4-ton van, AT, PB, AC, stereo, carpet, paneled. O'Malley, 821-0196.
 '70 TORINO, 250 CI 6-cyl. engine, best reasonable offer. Dees, 898-8049.

REAL ESTATE

'77 MOBILE HOME, \$9000, 12x60, 2-bdr., 1 bath, skirted & parked in SE near Base. Ortiz, 242-7202.
 2 LOTS, Rio del Oro in Belen, approx. 1 acre. both lots for \$2500. Russell, 268-9023 after 6.
 SCENIC 18 acres, wooded, adjacent Highway 66 & City of Tijeras, near N14 Freeway exit. Snow, 296-5148.
 LOT in Taos ski valley approx. 500 yards from No. 1 lift, \$11,400. Cropp, 296-1877.
 INEZ BRICK, 2310 sq. ft., lg. den, fp, screened patio, lg. lot, low seventies. Ray, 299-1253.
 ADOBE HOME, stream, low taxes, vigas, custom cabinets, HW floors, city water, HW zone heat. Gall, 1-834-7307.
 10 ACRES at Sedillo Hill, north of I-40 on 217 north 1 1/2 miles, \$2000 per acre. O'Malley, 821-0196.
 14x60 SKYLINE mobile home in excellent park; will consider leaving all new furniture. Dees, 898-8049.

FOR RENT

MOUNTAIN CABIN on Hondo River, near Taos ski valley, deluxe, has everything, sleeps 8, \$35/day-3-day minimum. Peet, 294-1250.
 4-BDR. unfurnished, NE, tri-level, den,

LR, FP, built-ins, sprinklers, gardens, dbl. garage, carpeted, on cul-de-sac, \$340. Hessel, 296-9124.
 CONDOMINIUM, Purgatory ski area, 2-bdr., 2 baths, fully furnished, complete kitchen, summer rates. Carson, 898-8847.
 NEW 1-bdr. unfurnished apartment, carpeted, AC, off-street parking, \$150 plus utilities or \$180, no pets. 544 Charleston SE. Montoya, 255-8437.

WANTED

GRASS CLIPPINGS, preferably packaged, will pick up. Korak, 296-1165 after 6.
 RIDE from 312 Graceland SE #11 (2 blocks south of Central) to Bldg. 800. Weiss, 266-2278 after 5.
 PERSONS interested in organizing Bible study & fellowship group. Hayden, 292-3194.
 SET OF DRUMS. Hymer, 298-2232.
 TO BUY 2-bdr. or small 3-bdr. house, area bounded by Girard, San Pedro, Central, Indian School. Schamaun, 298-5192.
 CASE for a 43" long rifle equipped w/scope. Stuart, 299-9190.
 TWO USED TIRES, size 4.40x4.50/5.00x21. Garcia, 881-4296.
 CANARY, preferably young, male, but any fine if less expensive than in pet stores. Olman, 298-5024.
 ASST to KAFB Credit Union auditor, weekends only, 30 hrs./mos., gen'l acct. skill, some typing, \$3.40/hr. Hanna (Sandia ret.), 266-6733.

WORK WANTED

APS substitute teacher will tutor after school hours. Miller, 268-5992.

LOST AND FOUND

LOST—Orange make-up kit w/lip rouge, misc.; men's wire-frame Rx glasses in black case, silver Kachina doll earring w/turquoise, Rx glasses w/dark plastic rims in black case.
 FOUND—Long black ski glove w/buckle. LOST AND FOUND, Bldg. 832, 264-1657.

Coronado Club Activities

BBQ Tonight, Opanci Dancers Tomorrow

TONIGHT at Happy Hour, barbecued ribs top the buffet menu while Jeanne Rich and Friends play for dancing. Next Friday's Happy Hour features a dual buffet with lasagna and fried chicken on the menu, Los Malcriados on the bandstand.

TOMORROW at Variety Night, a lively troupe of Balkan folk dancers called Opanci will entertain followed by a family comedy movie, "That Darn Cat." It's free to members and families.

THE BIG EVENT this month is Prime Rib/Nostalgia Night Saturday, May 20. The 14-piece Seasonaires orchestra with the Phil Lenk Trio will play for dancing. Tomorrow is the deadline for picking up tickets.

TRAVEL DIRECTOR Ed Neidel (2166) has tour packages open to Las Vegas, Europe, Hawaii, the Mediterranean, Spain or a raft down the Colorado River. He will be in the Club lobby tonight between 6 and 7 with the full scoop.

Also, coming up are pre-trip meetings for the Rio Grande one-day raft trips and the excursions on the Cumbres and Toltec railroad. Rio Grande group meets May 15 at 7:30; railroaders on May 16 at 7:30.

Ed is pushing the Rio Grande raft trips saying they're great one-day adventures for the entire family. One trip set June 4 will drift down the Taos Box Canyon. The second trip from White Rock Canyon near Santa Fe to Cochiti Dam is scheduled June 10. Each trip costs \$35 per person and includes lunch.

Retiring



Elias Gabaldon (9714)



Kermit Nixon (9471)



Ruth Johnson (9743)



Jesse Williams (9581)



CORONADO GRAND-SQUARES do a lot of ale-man lefting and star righting during sessions every Monday night at 8:30. Here, Mary Lou and Mike (9632) Michnovicz, Faye and Tom (KAFB) Joy do a little dosey-do...or something. The group (now numbering 24) invites new members. Call Mel Olman (1233), membership chairman, 4-7701, for details.

FRIDAY	SATURDAY
12—HAPPY HOUR BBQ RIBS BUFFET Adults \$3.75 Under 12 1.92 Jeanne Rich And Friends	13—VARIETY NIGHT Opanci Folk Dancers "THAT DARN CAT" Supper-6 Show-7
19—HAPPY HOUR LASAGNA AND FRIED CHICKEN BUFFET Adults \$3.50 Under 12 1.92 Los Malcriados	20—PRIME RIB NOSTALGIA NIGHT Cocktails 6, Dinner 6:30 PHIL LENK TRIO with THE SEASONAIRES Members \$6.50 Guests \$7.50

Speakers

R. S. Berg (5842), "Dust Buildup and Cleaning of Solar Reflectors"; R. B. Pettit (5842), "Survey of Solar Reflector Materials Properties"; R. E. Allred (5844), "Environmental Testing of Solar Reflectors," Solar Reflectivity Materials Technology Workshop, March 28-30, Denver.

P. H. Holloway (5825), invited presentation, "Chemical Characterization of Coatings by Surface Sensitive Analytical Techniques"; H. O. Pierson and E. Randich (both 5834), "Titanium Diboride Coatings and Their Interaction with the Substrates"; D. M. Mattox (5834), "Surface Cleaning in Thin Film Technology," International Conference on Metallurgical Coatings, April 4-8, San Francisco.

D. E. Amos (5122), "Numerical Inversion of Laplace Transforms," DOE Labs NASIG meeting, April 12-13, Albuquerque.

R. W. Hunke (5711), presented by W. H. McCulloch (5712), "Solar Total-Energy Large-Scale Experiment at Shenandoah, Georgia," International DFVLR Symposium on Solar-Thermal Power Stations, April 12-13, Cologne, Federal Republic of Germany.

L. C. Bartel (5732), R. P. McCann and L. J. Keck (both 5733), "The Mapping and Characterization of Massive Hydraulic Fractures Using an Electrical Potential Technique," 1978 IEEE Region 6 conference, April 12-14, Alamogordo.

M. A. Butler (5154), "The Photoresponse of Semiconductor-Electrolyte Junctions," Optical Sciences Center, Univ. of Ariz., April 13, Tucson.

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