

WINTER SKY — LAB NEWS photographer Randy Montoya took this shot of the Power Tower (properly, the Central Receiver Test Facility) against a clearing January sky. In the distance is El Cerro de Los Lunas, west of Los Lunas.



LAB NEWS

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SANDIA NATIONAL LABORATORIES

JANUARY 15, 1988

SEMATECH Effort Profitable

Upshot:

**RHIC-II Occupancy Back on Track
Closer Ties to Industry
Closer Ties to Community
New Center for Compound ICs**

So SEMATECH is going to Austin. What does that mean for Sandia, which had offered its RHIC-II facility, on a temporary basis, as SEMATECH's start-up site?

Essentially, it means reactivating Plan A; that is, move much of the development work of the CRM (Center for Radiation-Hardened Microelectronics) into the RHIC-II (Radiation-Hardened Integration Cir-

in the future — the similarity of Sandia's and SEMATECH's goals make that relationship most attractive."

SEMATECH (SEmiconductor MANufacturing TEChnology) is a consortium of US semiconductor manufacturers who are cooperating to develop the improved manufacturing tools and techniques needed to make the nation competitive in the international semiconductor business. And Sandia is, of course, concerned with improving the "manufacturability" of the unique "rad-hard" chips it develops for satellites and for nuclear weapons.

"We were hoping to exploit the synergism between Sandia's long-term needs and SEMATECH's long-term needs at an affordable cost to us," notes Larry Anderson, VP of Component Development 2000. "Now we'll have to proceed a bit more slowly, but we will certainly push ahead."

Benefits from SEMATECH Effort

"It's disappointing not to have the opportunity to work side by side with the nation's leading group involved in the manufacturability of ICs," adds Arlyn Blackwell, Director of Management Staff 400, who worked closely with the microelectronics directorates in Component Development 2000 and with the state, city, and university to prepare the proposal that put New Mexico among a handful of finalists in the competition to attract SEMATECH. "But our original plan [to occupy RHIC-II] is sound, and we have definitely benefited from our push to attract SEMATECH to locate here."

One of those benefits is that Sandia laid the groundwork for future cooperation with SEMATECH and with the other major association of semiconductor manufacturers, the SRC (Semiconductor Research Corp.). "We've become much more involved with both groups about our work that coincides with their objectives than we would have been without our

SEMATECH effort," says Bob Gregory, Director of Microelectronics Engineering 2700.

"In fact," adds Larry, "some one-to-one partnerships between Sandia and certain semiconductor manufacturers are now in the works."

Another benefit is that Sandia has developed closer ties with its neighbors. "The experience of working with the state, the city, and the university to prepare an attractive SEMATECH offer has been advantageous to all of us," says President Irwin Welber. "We now feel that if similar opportunities present themselves in the future, the state of New Mexico will be in a better position to be successful."

"It really shows that we can all work together," adds Harry. "So the experience will be good for us in any such competitions that arise in the future. Eventually, we'll win the prize."

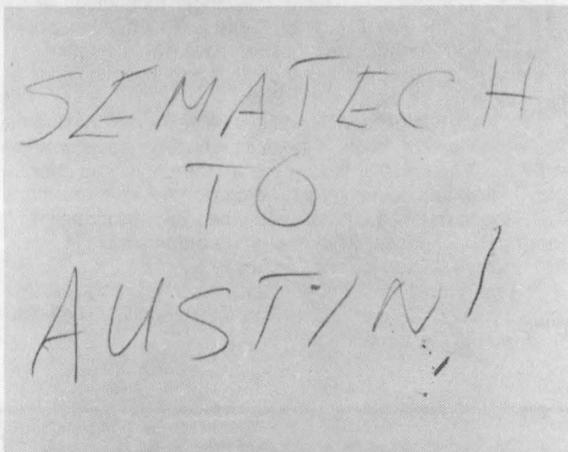
"And the experience of working with the semiconductor industry — specifically, the exposure we've gained with the industry — will enhance our future opportunities for tech transfer," notes Irwin.

New Initiative at Sandia

SEMATECH is funded by the members of the consortium — and by a recent \$100 million appropriation from Congress, which is naturally concerned with the health of the nation's semiconductor industry. The same Defense Appropriations bill that created SEMATECH mandated DOE to establish a program in a national weapon lab to support the push to regain a competitive position in compound semiconductor technology. (Another bill, still in the authorization stage, would establish within DOE a semiconductor technology research excellence initiative.)

The first project to be funded out of the compound semiconductor program legislation is a Center for Compound Semiconductor Technology (CCST),

(Continued on Page Two)



THIS NOTE, with traces of the lead that was broken making the exclamation point, appeared on Arlyn Blackwell's (400) desk early last week. He and members of his staff (and, of course, many others) worked hard on the SEMATECH proposal.

cuit) lab, with its world-class clean rooms, pretty much on schedule.

"Naturally, we're disappointed," says Harry Saxton, Managing Director of Microelectronics 2900. "We had seen advantages, both to SEMATECH and to Sandia, in having SEMATECH on our site during its start-up phase [LAB NEWS, Nov. 6, 1987].

"On the other hand, we now have the opportunity to bring RHIC-II on line just as we'd originally planned," Harry continues. "We're looking forward to working with the SEMATECH organization

Antojitos

When Your Heart Attack's Front-Page News — Bruce Ercole (5143) is a lucky man. Not, of course, to have suffered a heart attack during the second half of UNM's win over No.-1-ranked University of Arizona in the Pit on Jan. 2. Not even to have made the front page of the Journal on Jan. 4. But definitely lucky to have been sitting next to an off-duty Albuquerque firefighter, Gerald Lovato, who knew CPR. "If it weren't for Gerald and his knowledge of CPR, Bruce wouldn't be here," said Ann (2831), Bruce's wife, from his room at Presbyterian last week.

That's not all — but first a word from our sponsor: Sandia makes it easy to get CPR training. If you or your spouse has never had a CPR course, or if your skills are a bit rusty, call Elaine Squyres (3320) on 4-7169; you can probably get into her Jan. 27 basic CPR class. If not, or if you need a refresher course, sign up for a later offering. But do it now — wait till you need it, and you've waited too long.

Bruce? He's facing some heart surgery, but "he'll be OK," said Ann. His progress toward recovery has likely been speeded by the kind of attention a Lobo basketball fan appreciates — a phone call from Head Coach Gary Colson, and a visit by Athletic Director John Koenig and Asst. Coach Larry Shyatt, toting a basketball autographed by the members of the Lobo team.

* * *

First, Wade Through the Course Description of the INTEC course called "Spacecraft Attitudes Dynamics II": Force functions. Generalized active forces, potential energy, generalized inertia forces, formulation of dynamical equations of motion of complex spacecraft. Linearized dynamical equations. Discrete multi-degree-of-freedom systems. Lumped mass models of spacecraft. Spacecraft with continuous elastic components; use of the finite element method in the simulation of spacecraft motions.

Okay. It's open only to those who dream in differential equations, right? Not so. "Course Prerequisites: None. Some math background might be helpful." Charming meiosis that. (Thanks, Don Lewis, 7231.)

* * *

No Wonder It's Undeliverable — The list of undeliverables in a November Weekly Bulletin included "1 ea. disk from Petmar Trilobite Breeding Ranch." Bob Manhart (3151) has heard of old fossils reproducing themselves, but he's never before taken the concept literally.

* * *

Oxymoron of the Month — Maureen Baca (3523) is intrigued by a letter from DOE/AL, which "is requesting unsolicited proposals . . ."

* * *

Incredible Indeed — The TLC Wellness Letter for December had a front page column entitled "Incredible!" One of the items indicates that "90 percent of executive men have had a child by age 40." As I told Don Schubeck (3412), who called this startling fact to my attention, I read in a newspaper that "Somewhere in this country a teenage girl has a baby every 10 seconds." Obviously, what we've got to do is find that girl and stop her. ●BH

* * *

"To be good is noble, but to teach others how to be good is nobler — and less trouble." —Mark Twain

(Continued from Page One)

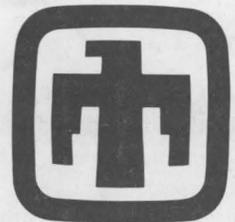
SEMATECH

which Sandia is currently planning. (Compound semiconductors are those built of, for example, gallium arsenide or indium phosphide, rather than silicon. Unlike traditional silicon semiconductors, compound semiconductors can emit light, so they're useful in, for example, diode lasers and other devices needed for photonics-based communication and measurement systems.)

The new Center, which will use facilities located in Solid State Sciences 1100, will be funded at the \$10 million level through FY89, according to Fred Vook (1100). Its purpose is to perform the materials processing science, instrumentation science, and device physics that underlie "generic" compound semiconductor and optoelectronic device technologies.

Sandia will coordinate this joint government, university, and industry effort. "The CCST will complement Sandia's current programs for OMA [Office of Military Application], BES [Basic Energy Sciences], and photovoltaics," says Fred. "We'll begin by using the facilities and expertise of the Compound Semiconductor Lab in Bldg. 806, but we will soon occupy a new clean-room facility in Bldg. 893, which will allow us to expand our initial efforts." (The 2500 organization plans an Interim Prototype Processing Facility, also located in Bldg. 893, that will complement the CCST.)

"It's an exciting new project, one that we proposed several months ago to bridge the large gap between the research and the development of compound semiconductors," adds Fred. "That gap has to narrow — compound semiconductor technology must grow rapidly in the next decade as the combination of high-speed electronics and photonics becomes the dominant means for information transmission. And the inherent radiation hardness of compound semiconductors makes them particularly attractive for defense applications." ●BH



But Does It Take Care of You when You're Old?



You want a baby. But you don't want diapers. You don't want midnight feedings. Technology saves the day. For \$19.95, and just 13 minutes out of your busy day, you can have "the full, rich experience of parenthood without the mess and inconvenience of the real thing." It's called Video Baby.

Let's slip it into the VCR and see. Why, it's a girl! A cuddly, blue-eyed little girl. Look at those little fingers. Isn't she adorable? . . . The narrator invites you to name this little cherub. "You'll know immediately if you've chosen a name your baby likes," the narrator says. "Call your Video Baby by name now." There's a brief pause, while the proud parents say "Melissa" or "Penelope." Then the baby smiles glowingly.

"This is tailor-made for yuppies," says Peter Wild, whose company has brought the video infant into the world. "The enjoyment without the commitment."

Wall Street Journal

Congratulations

To Celeste (8341) and Eric (8353) Rohlfling, a daughter, Margaret Celeste, Sept. 18.

To Joanie and Tim (8142) Eklund, a son, Samuel Dalhart, Dec. 14.

To Mary (8162) and Darrel Shoji, a son, Ryan Mendez, Dec. 23.

Sympathy

To Jan Allen (8532) on the death of her father in Yakima, Wash., Nov. 14.

To Jerry Henderson (8131) on the death of his mother in San Mateo, Dec. 5.

To Bill Winters (8245) on the death of his mother in Livermore, Dec. 23.

To Carolyn Townes (8522) on the death of her mother in Richmond, Dec. 24.

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Deaths



William Paul of Custodial Section V 3426-5 died Jan. 1 after a lengthy illness. He was 57 years old.

He had been a custodian at the Labs since July 1984.

Survivors include his wife and two daughters.



Andres Candelaria of Printing Section 3154-2 died from injuries sustained in a car/train accident Jan. 3. He was 39 years old.

He had been at the Labs since January 1983.

Survivors include his wife, a daughter, and two sons.

Ware Recalls Nearly 40 Years Of Sandia Service

As Bob Ware (8514), Sandia Livermore's fire chief for the past 10 years, prepared to retire this month, he reminisced about his nearly 40 years with the Labs.

His career began in June 1948 when Sandia was Z Division of Los Alamos. Several of Bob's friends had applied for jobs at the new weapon R&D lab in Albuquerque, so he transferred from the University of Maryland to UNM. He combined school with a full-time Z-Division job as a "jack-of-all-trades," while his wife Norma became secretary to the SLE-5 engineering division; she worked for Hilton DeSelm (who later became a director at Sandia Livermore).

"My first assignment was to take a crew out to the mesa where tons of World War II surplus materials and equipment had been brought from around the country. The crew selected equipment useful in Z Division's new machine shops. It was exciting at times," Bob recalls. "Those piles of equipment had become home to lots of desert wildlife — including rattlesnakes."

About 1949, Bob and Bill Jamieson (ret.) began a newsletter, typing the copy on 8-1/2"-x-11" sheets, mimeographing them, and distributing the result through company mail. (*Editor's Note:* That little newsletter, the SANDIA BULLETIN, evolved into the LAB NEWS, the name it's held since January 1954. Copies of the 8-1/2"-x-11" version are rare. If you have any you're willing to donate to LAB NEWS archives, please call the editor on 505/844-1053.)

Bob also participated in forming an employees' credit union, which eventually became the independent institution it is today. "I recall our first bad debt, about \$20," says Bob. "It created a crisis for the small membership — we had only \$25 in reserves."

Firefighters on Float

In the summer of 1949, an ambitious project for Bob and Bill nearly ended in disaster. To help celebrate the 50th anniversary of the Albuquerque Elks Lodge, they designed and built a Sandia-AEC (Atomic Energy Commission) float for a downtown Albuquerque parade. The elaborate float (see photo) featured different aspects of the AEC and Sandia, complete with a hollow, plastic mushroom cloud on the front. To add realism, they placed a mortar, packed with explosive material, inside the cloud. When set off, it emitted a puff of smoke, adding another cloud formation above the plastic model.

"We got a little too energetic packing explosives into the mortar," recalls Bob. "In fact, right there in front of hundreds of people lining the parade route, it set the plastic cloud on fire. Bill and I managed to put it out with hand extinguishers, but our fellow Sandians riding the float nearly 'abandoned ship' before we got everything under control."

It wasn't Bob's first fire protection job, and it wasn't his last.

His next job, however, involved a transfer to Yorktown, Va., in 1956. He and a group of other Sandians taught safe handling of nuclear weapons to the staff at the Naval Weapons Station. When that assignment ended in 1959, he told Sandia he'd relocate wherever he was needed. He ended up in Livermore's procurement group. "The whole family jumped at the chance to live in the Bay Area," says Bob.

He then worked under Leo Gutierrez (ret.) in systems engineering, handling integrated contractor procurement. When Sandia Livermore's first fire chief, Vern McNabney, retired in 1978, Bob took the post — and thus switched back to the field he had enjoyed as a volunteer many years before. (His father had been a volunteer fireman in Takoma Park, Md., in the 1920s, and as a teenager Bob had joined that volunteer brigade.)

In the meantime, his interest had expanded into antique fire trucks, and Bob became active



SANDIA'S FLOAT in a 1949 Albuquerque parade, designed by Bob Ware (8514) and Bill Jamieson (ret.), nearly created a catastrophe when the plastic mushroom cloud caught fire during the procession (see story).

in the Society for the Preservation and Appreciation of Antique Motorized Fire Apparatus in America (SPAAMFAA). He eventually purchased two old trucks and restored them during his spare time.

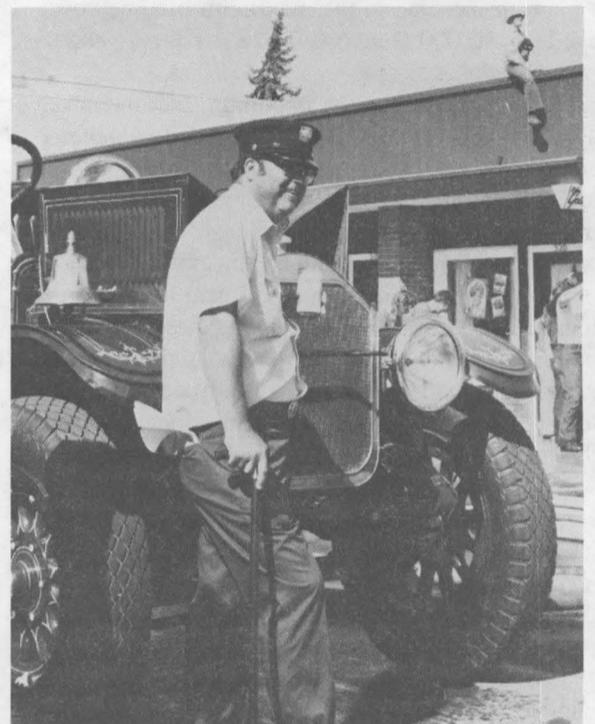
Chief Without Crew

Bob had also been active with local fire departments through SPAAMFAA, so he was a natural for the Sandia post, which involved working closely with fire departments in the Valley. Once on the job, he joined the Twin Valley Fire Chiefs organization and helped in mutual assistance whenever called. He was recently honored by the Twin Valley Chiefs for his years of service with fire protection groups in the Valley.

"I was known as 'Sandia's Single-Resource Unit,'" says Bob, "since I had neither firefighters nor fire truck." He was famous for arriving on mutual-aid alarms in his personal pickup in which he kept his fire hat, coat, and boots.

"Sandia has been able to achieve a degree of fire protection that minimizes the need for a manual fire-suppression force, so we can rely on LLNL firefighters instead of employing our own," Bob continues. "All of our on-site systems are automatic and on the job 24 hours a day." Under Sandia's agreement with LLNL, Sandia finances some of LLNL's equipment, and LLNL fights any fires across the street at Sandia.

Now that he's leaving, Bob plans to seek more classic fire engines to restore. He's even thinking about scouting Mexico for retired vehicles that were once donated by US communities to their southern neighbors. But first, he'll head back East late this month with Norma (who retired last month after 18 years with the Livermore school district) to see relatives. Then they'll trek through southern California and Arizona with other Sandia retirees. They plan to visit Ireland in April and May to trace their family genealogy.



TAKING PART in a firemen's muster in Sunnyvale a few years ago, Bob Ware (8514) stands in front of a 1924 American LaFrance pumper. He's dressed in the fire chief's garb of that period.



But if Bob's at home and hears a fire siren, you can bet he'll grab his helmet, coat, and boots and be out the door before the hose is hooked up to any hydrant in town. And he will always be welcomed by fellow firefighters whose respect he has gained over the years.



JANUARY RETIREES at Sandia Livermore are (from left) Emory Padgett (8284), Bob Ware (8514), George Mincks (8513), and Dick Ballard (8522).

For Your Benefit

Retirees: Medical Care Plan Adds Options

The Sandia Board of Directors has authorized an improvement to the Medical Care Plan for retired employees (and their dependents and surviving spouses) who are eligible for Medicare.

Currently, under the Sandia Medical Care Plan, any retiree or dependent eligible for primary Medicare coverage is subject to a maximum level of benefits of \$50,000 in a lifetime. According to plan provisions, the first \$3500 of covered expenses each year does not apply toward this \$50,000 lifetime maximum. As a result of the \$3500 yearly offset, very few people reach the plan maximum.

Some retirees, however, have asked that the maximum benefit level be raised. Therefore, effective Jan. 1, 1988, Medicare-eligible retired employees and their dependents can purchase additional lifetime maximum coverage under the Sandia Medical Care Plan. These are the choices:

- an increase in the maximum lifetime coverage to \$150,000 at a cost of \$18 per year, per person, OR
- an increase in the maximum lifetime coverage to \$100,000 at a cost of \$9 per year, per person, OR
- continued provision of the existing \$50,000 maximum lifetime benefit at no cost.

Retired employees and dependents over the age of 65 have been mailed an enrollment form in order to make a one-time election among these three alternative levels of coverage. If you, as a retired employee or dependent of a retired employee, are eligible for Medicare and do not elect additional coverage during the January-February enrollment period, you will not be given another opportunity in the future.

If either level of additional coverage is elected, it will take effect retroactively beginning Jan. 1, 1988, and will continue every year thereafter unless cancelled or reduced by the retiree (or the required premiums are not paid).

If you are a retiree or dependent who is not yet eligible for Medicare, you will be given an enrollment opportunity when you reach Medicare eligibility (generally at age 65). At that time (and only at that time), you can increase the amount of your lifetime Sandia Medical Plan coverage for you and your eligible dependents to \$100,000 or \$150,000 as shown above. This coverage becomes effective on the January 1 of the year following the year you become eligible for Medicare. Until that date, you are covered by the "unlimited" lifetime benefits you had before age 65.

feed: feedback

Q. Sandia's Dependent Group Life Insurance Plan provides only \$5000 for death of a spouse and \$1500 for death of a child. These amounts are very small in today's economy. Are there any plans to offer increased amounts of coverage for employees' dependents?

A. The purpose of the Voluntary Dependent Group Life Insurance Plan is to offer inexpensive coverage in nominal amounts to assist with burial expenses for dependents. Unlike Sandia's life insurance coverage for an employee, this plan is not intended to protect a family from loss of income or other economic impacts. There are no plans to offer increased amounts of coverage under the Dependent Group Life Insurance Plan at this time. Sandia's coverage amounts are the same as those offered by AT&T, in accordance with the prime contract between AT&T Technologies and the DOE.

Ralph Bonner - 3500

Tips for Faster Claim Service

Reimbursement for medical expenses under the Sandia Medical Care Plan may be delayed up to sixty days or even denied if necessary claim information is omitted. The following tips will ensure timely processing of your medical claims and inquiries.

Claims Submission

File the first claim as soon as the accumulated charges meet or exceed your deductible (\$100 single, \$300 family). Thereafter, bills should be accumulated and submitted when the charges total \$50 or more. One claim form is needed for each individual family member receiving services. Delaying claims filing until the end of the year could delay processing.

Complete the following items on the claim form:

1. *Front side* — Complete all items. If an item is not applicable, please note "N/A." Be sure to indicate any changes in marital status, spouse's employment, or other group coverage. If the charges result from an accident, item 3 must be completed.
2. *Back side* — Sign the authorization to release information and authorization to pay benefits to provider (as applicable). The physician or supplier information does not need to be completed if the original (not photocopied) itemized bills are attached.
3. An itemized statement must include the following:
 - a. Physician's name, address, and telephone number
 - b. Name of patient
 - c. Diagnosis
 - d. Date of service
 - e. Place of service
 - f. Description and/or procedure code of service rendered
 - g. Charge for service (NOTE: Claims for charges incurred more than two years before the date the claim is submitted will not be reimbursed.)

4. Claims submitted where Provident is the secondary carrier must be accompanied by the primary carrier's Explanation of Benefits form and the itemized statement of the provider of service. The doctor's bill and Explanation of Benefits may be photocopies (except that, in the case of Medicare, the Explanation of Benefits must be the original).

5. Claims submitted for second surgical opinions must be submitted with a second surgical opinion claim form.

Written Inquiries

Indicate policy name (Sandia Medical Care Plan) or number and the employee's, retiree's, or survivor's (not the patient's) Social Security number on all written correspondence.

Telephone Inquiries

1. Tell the Customer Service Representative that you are covered through Sandia and give the insured's (employee's, retiree's, or survivor's, not necessarily the patient's) Social Security number.
2. Please allow 30 days from the date you file the claim before requesting status of the claim.
3. Check your plan booklet for coverage information before calling Provident.

Approximately 90 percent of Sandia claims or inquiries are processed within 10 working days of receipt. However, the 30-day time frame is used for inquiries and to allow for postal delays and other processing delays, such as requests for additional information from your physician.

Reminder

Continue to use the Transamerica claim forms, and send claims to Provident Life and Accident Insurance Company, 1616 East Indian School Road, Phoenix, Arizona 85016. Transamerica has changed its name to Provident Life and Accident Insurance, but has not changed location.

Events Calendar

Jan. 15-16 — Classical Concert Five: New Mexico Symphony Orchestra (conducted by Neal Stulberg) performs works by Ravel, Mozart, and Stravinsky, featuring guest pianist Ivan Moravec; 8:15 p.m., Popejoy Hall, 843-7657.

Jan. 15-24 — "The Gin Game," drama by D. L. Coburn, presented by the Adobe Theatre; 8 p.m. Fri.-Sat., 6 p.m. Sun.; Second Story Arts Center, Albuquerque Little Theatre, 243-1673.

Jan. 15-24 — "Once Removed," New Mexico Repertory Theatre presentation of Eduardo Machado comedy; 8 p.m. Tues.-Sat., 2 p.m. Sat.-Sun.; KiMo Theatre, 243-4500.

Jan. 15-31 — "Pack of Lies," suspenseful spy thriller by Hugh Whitmore; 8 p.m. Wed.-Fri., 6 & 9 p.m. Sat., 2 p.m. Sun.; Albuquerque Little Theatre, 242-4750.

Jan. 15-31 — "The Marriage of Bette and Boo," black comedy by Christopher Durang; 8 p.m. Fri.-Sat., 6 p.m. Sun.; Vortex Theatre (2004 Central SE), 247-8600.

Jan. 17 — Canterbury Concert Series: music for flute and guitar; 4 p.m., St. Thomas of Canterbury Episcopal Church (425 University NE), 247-2515.

Jan. 20 — "Cabaret," bilingual play performed by La Compania de Teatro de Albuquerque; 7:30 p.m., South Broadway Cultural Center, 848-1320.

Jan. 20 — "La Cage Aux Folles," UNM Performing Arts Series presentation of the hit musical comedy; 8:15 p.m., Popejoy Hall, 277-3121.

Jan. 23 — San Ildefonso Pueblo Feast Day: Buffalo, Comanche, and Deer dances; 455-2273 or 843-7270.

Jan. 23 — Exhibit opening, "Hot Off The Loom:

Recent Weavings from the Alamo Navajo" and "200 Years of Navajo Textiles"; 1-4 p.m., Maxwell Museum of Anthropology, 277-4404.

Jan. 23-24 — "Good Night, Snow White," children's play presented by Albuquerque Children's Theatre; 1:30 & 3:30 p.m.; Popejoy Hall, 888-3644.

Jan. 24 — Fine Arts Music Series: The Romeros, concert of guitar music; 4 p.m., First United Methodist Church (4th & Lead SW), 243-5646.

Jan. 28 — "Singin' in the Rain," dance performance, choreography by Twyla Tharp, presented by UNM Performing Arts Series; 8:15 p.m., Popejoy Hall, 277-3121.

Jan. 29-30 — "Dance We Did, A Tribute to Lee Connors," benefit for New Mexico AIDS Services, presented by Danzantes; 8 p.m., KiMo Theatre, 277-1855.

Fun & Games

Bowling — SANDOE Bowling Association October Bowlers-of-the-Month are: Scratch — Bob Barton (3742), 684; and Margret Tibbetts, 604; Handicap — Thomas Archuleta (7482), 635 and 719; and Dora Gunckel (6400), 528 and 649. November Bowlers-of-the-Month include: Scratch — Reggie Tibbetts (7815), 737; and Lil Radtke (3430), 548; Handicap — Reyes Chavez (7412), 682 and 694; and Ellen Semarge (1822), 555 and 672.

Bowlers, don't forget the No Tap Scotch Tournament on Jan. 16 and 17 at Holiday Bowl.

Small- and Minority-Business Coordinator Serves on Advisory Council

James Ortega (3731) is no stranger to the world of "little-guy" entrepreneurs. Before he joined Sandia in September 1984, he directed the overall operations of the State Minority Business Development Program for the Economic Development & Tourism Dept. in Santa Fe.

Now, as a Labs' Small- and Minority-Business Coordinator, James continues his efforts to help and advise people who operate small, minority-owned, and women-owned businesses. "What's most satisfying for me," he says, "is to see hard work — and the willingness to stick with a dream — result in successful business ventures for these people."

James recently became a member of the Small Business Administration (SBA) District Advisory Council for New Mexico. Advisory Council members do what the name implies: advise the district director on ways to improve SBA program effectiveness.

Longtime Supporter

"James has been a longtime supporter of small business," says Phil Ramos, District Director of the US SBA, "and we're looking forward to his help. He, along with Jon Bedingfield [supervisor of Supplier Relations and Purchasing Information Div. 3731], Dick Russell [3700], and others in Sandia's purchasing organization have gone out of their way to seek out qualified — and qualifiable — small- and minority-business people, and to give them opportunities to share in contract awards from the Labs.

"We recognize that Sandia is committed to encouraging small and minority business," continues Ramos, "and we're happy to have a Labs representative on the Council."

James is also a member of the National Advisory Board for the National MBE (Minority Business Enterprise) Procurement Conference, held annually to assist minority entrepreneurs through workshops conducted by nationally known speakers, exhibits, and networking among small-business people and industry representatives. The meeting is sponsored by the Dept. of Commerce's Minority Business Development Agency and the US SBA.

Outreach Program

Sandia's small/minority business outreach program (see "Reaching Out") trains Labs buyers and advises and encourages small, minority, and women suppliers. Jay Hughes (ret.) began the program in the early 70s when he was supervisor of Div. 3731.

"Jay recognized the need for increased awareness on the part of everyone concerned," says James. "That's why he started the outreach program. While he was here, Sandia's contract awards to small and minority businesses increased significantly.

"After Jay retired, the effort continued to expand under the division leadership of both Lew Sisneros [now 3724] and Jon [Bedingfield]. And Dick Russell's enthusiastic support of the outreach program has helped our efforts tremendously."

Those efforts have paid off. In FY87, 65 percent (as compared to 59.4 percent in FY86) of all Sandia subcontract awards for goods and services went to small, minority-owned, and women-owned firms. ●PW

Sympathy

To Larry Johnson (3312) on the death of his wife in Albuquerque, Dec. 1.

To John Garcia (7482) on the death of his brother in Reno, Nev., Dec. 5.



JAMES ORTEGA (3731, left) reviews responsibilities of the SBA District Advisory Council with SBA District Director Phil Ramos.

Reaching Out to Touch Someone

One of the main objectives of Sandia's small and minority business outreach program, coordinated by Div. 3731, is to identify and track small, minority, and women suppliers who meet — or, through additional effort, can meet in the future — Sandia's stringent qualifications for its subcontractors.

The program also includes advising small suppliers on doing business with the Labs, coordinating on-site visits to supplier facilities, arranging supplier demonstrations, identifying business opportunities that match supplier capabilities, and distributing information on suppliers to the appropriate technical and buying staff at Sandia.

"Awareness is the key," says Jon Bedingfield (3731). "Through an ongoing training program, our buying staff learns more about the whys and wherefores of dealing with small firms and gets a better perspective on the advantages of encouraging small- and minority-business people."

Members of the buying staff and Sandia line organizations are encouraged to attend small-business conferences and trade fairs to better

acquaint themselves with potential suppliers and their capabilities. Labs representatives attend 25 to 35 such meetings a year.

Another outreach activity is participation in activities of the New Mexico Minority Supplier Development Council. Currently, Jon serves on the Board of Directors and is chairman of the organization's Trade Fair, to be held in March. Dick Russell (3700) was chairman of the NMMSDC Board in FY84 and 85 and currently serves as its treasurer.

A buyer recognition program, new in FY87, identifies Sandia buyers who do an outstanding job of working with small, minority, and women-owned firms. "We're not just recognizing total dollar amounts on contracts when we name Buyers of the Year," says Jon. "We're also looking at things like time spent — in interviewing potential suppliers, researching and identifying new suppliers, or explaining Sandia buying procedures to small-business people."

FY87 Buyers of the Year are Scott Searls (3718), Louise Britton (3741), Skip Reeder (3722), and Pete Oliver (8534).



JENNIE NEGIN (2629, left) AND MARCELLA MADSEN (6323) participated in a recent discussion, "Networking Through Women's Organizations," sponsored by the Women's Program Committee. Marcella moderated the discussion, which was led by speakers who highlighted the networking in three organizations of particular interest to Sandia women. Jennie spoke on the history and activities of the New Mexico Network for Women in Science and Engineering, Jan Williams (7841) and Margie Whipple (7832) discussed networking by the Society of Women Engineers, and Jan Williams reported on activities of Sandians (an organization for wives of Sandia employees).

Sandian Takes On New Role

Earlier this month, Jim Gover (400) began a year-long assignment as an IEEE (Institute of Electrical and Electronics Engineers) Congressional Fellow in Washington, D.C. He'll be working in Senator Pete Domenici's office as a Congressional staffer — mostly on science and technology issues.

"I'll be doing whatever tasks the Senator asks me to do," said Jim in a LAB NEWS interview shortly before he left. "Since he's concerned about the technology environment in New Mexico, I expect that much of my work will be on technical issues important to the state.

"Also, I'm in tune philosophically with Senator Domenici on the importance of improving this country's competitive position in technology, so I expect part of my assignment will be to investigate how we can more effectively use our science and engineering R&D to reach that goal."

"I'm really excited about the job," Jim continues. "I'm sure it will offer a lot of intellectual stimulation. And I'm looking forward to the Washington scene with its tremendous cultural opportunities and places of historical interest."

Program Began in Early 70s

The Congressional Science and Engineering Fellows Program, coordinated by the American Association for the Advancement of Science, began in the early 1970s. The program was in response to a growing recognition that many of the increasingly complex issues faced by the country and the Congress had significant scientific or technical components.

Several scientific societies — including IEEE, AAAS, American Chemical Society, and American Physical Society — agreed to sponsor Fellows in the program, which places highly qualified scientists and engineers in the offices of individual members of Congress or on committee staffs for a year.

"The program is advantageous, both for Congress and for the people who take on Congressional Fellow assignments," says VP Larry Anderson (2000), who serves on the Operating Committee of IEEE's Technical Activities Board. "It brings new insights in a variety of disciplines to the Congress, and firsthand experience in the legislative and political processes to the Congressional Fellows."

Larry sought recommendations early last year from his fellow VPs for names of Sandians who might want to fill an IEEE Congressional Fellow opening. When Glen Otey (5160) saw the Anderson letter, he called Jim. Jim recalls that Glen said something like, "I've got something here that sounds like it's right up your alley." Jim decided Glen was right, and



JIM GOVER (right) discussed his Congressional Fellow assignment with Larry Anderson (2000) before Jim headed for Washington.

before long Jim was an IEEE applicant and was later selected one of three Fellows.

"Jim should do a fine job on the new assignment," says Larry. "Not only is he interested in the Washington scene, but he'll also be able to contribute knowledge to a wide range of issues because of his broad technical background."

That background stems from the variety of jobs Jim has had since he joined Sandia in 1963 after receiving his BSEE from the University of Kentucky. As a TDP (Technical Development Program) participant, he obtained his MSEE from UNM in 1965. Later, he was a member of the Labs' first DSP (Doctoral Study Program) group and earned a PhD in nuclear engineering — also at UNM.

As a staff member, Jim did research on radiation effects in explosives, concentrating on thermo-mechanical shock and electromagnetic phenomena. He supervised a number of divisions whose activities included radiation effects in subsystems, firing set development, explosive transducer development, radiation effects in microelectronics, and energy subsystems development.

IEEE Fellow

Jim's been an IEEE member for 15 years. He received one of the Institute's highest honors a year ago when he was elected to the grade of Fellow in the organization. (At the time, only 3920 of IEEE's 274,000 international members had achieved the Fellow designation.)

Jim's only the second Sandian to be selected for a Congressional Fellow assignment. In 1974, Willis Smith was an IEEE Congressional Fellow, work-

ing as a science consultant to the House Science and Astronautics Committee. Following his one-year assignment, Willis stayed on in Washington as a staff member, and later staff director, for a committee chaired by the late Senator Henry "Scoop" Jackson. Willis is now director of strategic planning at Boeing Aerospace in Seattle.

A Seller's Market

After a two-week orientation program conducted by AAAS for new Congressional Fellows in September, Jim interviewed some 20 representatives of Congress members' offices and Congressional committees to determine where he thought he could make the biggest contribution. "It was a real seller's market," says Jim. "There were 150 openings available, and only 22 new Congressional Fellows; we could pretty much pick and choose where we wanted to be.

"It became apparent to me that a committee assignment would mean concentrating pretty much on one or two subjects," says Jim. "On the other hand, in the office of a member of Congress, you get exposure to all aspects of the legislative process, as well as to a wide range of issues.

"So I was very pleased when I learned that Senator Domenici and [administrative assistant] Paul Gilman had approved my placement request. As I understand it, my primary assignment will be in support of the Senator's work on the Senate Energy and Natural Resources Committee."

At the end of his year, Jim will return to Sandia for reassignment — enriched by his experience with the legislative process. ●PW

feed back

Q. Sandia hiring policy places extreme emphasis on GPA [grade point average] for staff members. Is it true that a GPA higher than 3.5 is now required for employment? I am an MSEE staff member, and I graduated from Stanford in 1979 with a GPA of 3.25. Why was I hired by Sandia? More important, does management consider me substandard? How did Sandia operate in the 50s with only BS-level engineers? Some of Sandia's best older engineers did not attend graduate school.

A. Sandia hiring policy is for line organizations to establish a best match between qualified candidates and the functional requirements of their staff openings. GPA is only one of many factors considered in determining the most qualified candidates along with evaluations by line organizations and faculty of: (1) competency (analytical, articulate, adaptive, integrative, responsive, practical); (2) approach (teamwork, cooperation, collaboration, honesty, loyalty, service, openness); (3) creative initiative (creativity, technical curiosity, innovative, aggressive, action-oriented, risk-taking in opinions); and (4) accomplishment (high quality, inventions, patents,

publications, getting product out, enhanced productivity, cost consciousness, special accomplishments). Thus, determining the most qualified candidates is an extensive and intensive process.

Extreme emphasis is not placed on GPA. It is only one of many considerations in hiring. It follows, then, that there is no one level of GPA required in determining the most qualified candidates.

Each Sandian was hired because he or she was considered the best match by the hiring organization. Multiple evaluations established that competency, approach, creative initiative, accomplishments, GPA, and other factors *in toto* indicated that the successful candidate would very likely fit in, contribute, and succeed at Sandia.

Once the screening and hiring process has been completed, GPAs drop out of consideration altogether in annual performance reviews. However, most of the other factors that were considered in the selection process move from potential to measured performance; each employee is rated relative to peer group on actual performance.

Ralph Bonner - 3500

Q. Is it correct procedure for one person to enter a MARDIX booth as someone else is exiting? Some security officers seem to allow this while others do not. It becomes a particular problem when long lines form on one or both sides.

A. The correct procedure for entering a Mardix booth is to enter, have your identification certified, and exit, assuring the door closes behind you. The electronic control allows only one door to be opened at a time; thus, when a person exits a booth, the door must lock before the other door can be actuated. We cannot allow a person to enter when another exits as this practice does not allow the system, which provides a permanent photographic record, to reset.

Jim Martin - 3400

If You Can't Drink It, Spray It



In Kitzbuhel, in the Austrian Tyrol, a manufacturer of snow-clearing equipment had the idea of putting the wine contaminated by diethylene glycol in 1985 to good use. Somebody must have hung on to lots of the stuff, for he has been combining it with salt and spraying it on icy roads. It melts ice at a lower temperature than a salt spray would on its own.

New Scientist

How's Your Self-Esteem? A Mental Health Goal for 1988 +

by Arlene Price (3330)



What Do We Mean by Self-Esteem?

Self-esteem refers to the thoughts and feelings you have about yourself — how you value yourself and your performance. Sometimes you respect yourself, sometimes you don't. Sometimes you have confidence in yourself,

sometimes you don't.

The level of your self-esteem depends on the situation you find yourself in and whether you believe you have the ability to handle it.

Where Does Self-Esteem Come From?

You are born with your own potential for self-esteem. Also, you develop different levels of self-esteem as the result of experiences you have with

your parents, your teachers, and any other person (spouse, boss, friend) that you look up to and respect.

How Can You Tell Whether You Esteem Yourself?

You can tell by the kinds of statements you make about yourself and how you feel you perform your daily tasks. For example, you might be thinking, "I did a great job on this project," and feel a sense of pride.

Or you may think, "Oh, brother, I really blew it this time," and feel upset, angry, discouraged. You probably spend most of your waking moments evaluating yourself. So it's important to find out just how you are going about it.

Does Having Self-Esteem Mean Being Selfish or Self-Centered?

Does it, in other words, make you part of the "Me Generation" — one who cares only about personal needs and wishes to the exclusion of others?

The answer is "No." From the point of view of one's mental health, it's been found that people who are selfish and uncaring, people who are depressed and unhappy, people who are anxious and afraid, people who are discouraged and give up easily, and people who discount themselves — all of these are actually *lacking* in self-esteem.

As a matter of fact, what you feel about yourself — whether you respect and esteem yourself — has been found to have a profound impact on your mental health, and influences the quality of your personal relationships, the goals you set for yourself, and the way you handle life's challenges and disappointments.

So What Does All This Mean?

So I'd like to proclaim self-esteem the No. 1 mental health goal for 1988 +. Notice the "+" after 1988 — developing and maintaining self-esteem, self-respect, or self-confidence should be an ongoing process that lasts throughout your life.

I'll be talking to you more about self-esteem and how it affects other areas of your life in the days to come.

UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS

Deadline: Friday noon before week of publication unless changed by holiday. Mail to Div. 3162.

Ad Rules

1. Limit 20 words, including last name and home phone.
2. Include organization and full name with each ad submission.
3. Submit each ad in writing. No phone-ins.
4. Use 8 1/2 by 11-inch paper.
5. Use separate sheet for each ad category.
6. Type or print ads legibly; use only accepted abbreviations.
7. One ad per category per issue.
8. No more than two insertions of same ad.
9. No "For Rent" ads except for employees on temporary assignment.
10. No commercial ads.
11. For active and retired Sandians and DOE employees.
12. Housing listed for sale is available for occupancy without regard to race, creed, color, or national origin.

MISCELLANEOUS

- SEMI-AUTO RIFLE, Browning 300 Win. mag., made in Belgium, \$400. Gibson, 296-3239.
- TIRE CHAIN INSTALLATION AID, "Sno-Blok," plastic, drive-on type, never used, \$7. Schkade, 292-5126.
- PRIDE-TRIMBLE PLAYPEN, 40" x 40", mesh sides, cost \$75, sell for \$35; crib play gym; mobile. Barr, 821-5870.
- QUEEN ANNE-STYLE BEDROOM SET: highboy, 2 nightstands, \$750; metal student desk, \$70; computer chair, \$20. Thornberg, 255-4966.
- DRAFTING MACHINE, Vemco V-Track, left-handed, \$50; Powermatic 12" table saw, cost \$3300, sell for \$1350. Davie, 822-8567.
- MINIATURE HOUSE, Victorian, 21" x 47" x 40", 2 stairways, 10 rooms, w/furniture, \$150. Burnett, 298-1078.
- CARPETING, approx. 100 sq. yds., \$50; storage chest, \$20. Prevender, 296-8586.
- WILSON STAFF IRONS, 3-PW, used once, left-handed, \$330. Calvin, 897-2947.
- EXERCISE BIKE, \$20; Skil 1/4-in. drill, \$12; shop vac, 5-gal., \$12. Denney, 268-0004.
- TWO END TABLES, coffee table, dark wood, best offer; Frigidaire washer, \$50 firm. Ash, 291-0755.
- SMITH & WESSON .22-CAL KIT GUN, 2-in. barrel, round butt, blue, holster, extra grips, \$275. Roth, 344-7060.
- AM/FM STEREO CAR RADIO, in-dash, push-button, without speakers, \$29. Reda, 821-3817.
- CHEV. 250 ENGINE, 6-cyl., totally rebuilt, no mileage on rebuild, \$550. Syler, 299-2941.
- FIVE TIRES, Goodrich 12x15 TA radials mounted and balanced on 8-in.-wide 6-hole Chev. truck rims, \$185

- OBO. Snelling, 294-5751.
- REMINGTON NYLON 66, semi-auto .22-cal., w/case, \$100; wrought iron fence, two 10' x 5' sections, 38-in.-wide gate, \$75 OBO. Bronkema, 821-2119.
- FREE-WEIGHTS, 200kg, full set w/bench, \$60; Apple II components and books, monitor, 16K language card, disk drives, RAM card, software, PS, more, new. Ulibarri, 892-5759.
- ELECTRIC KITCHEN RANGE, Roper, copper color, automatic oven timer, \$95. Coalson, 298-0061.
- BABY CRIB and mattress, teething rail, bumpers, \$80; 8' cab-over camper; 8' camper shell. Falacy, 293-2517.
- IBM PC/AT, 512K, 30Mb, EGA card, RGB monitor, Epson FX286 printer, 6 months old, \$2300 OBO; Octagym rowing machine, \$55 OBO. Davidson, 299-7735.
- CUSTOM DINING ROOM SET, 9-piece, white, w/table pads, table extends to 40" x 88" w/2 leaves, upholstered chairs, \$100. Luetters, 296-3759.
- YAMAHA PIANO, console, walnut, European contemporary, \$1800. Chavez, 881-2711.

- TRAVERSE RODS, adjustable; Heierling cross-country ski boots, size 35; new carpet padding, 10 sq. ft. Wagner, 823-9323.
- TRAK CROSS-COUNTRY SKI BOOTS, ankle-height, for touring and downhill, size 12, worn twice, \$60. Shunny, 265-1620.
- GENERATOR, Ag-Tronic w/Briggs & Stratton engine, 4000W, 1 yr. old., 200 hrs., on wheels, \$400. Douglas, 281-9843.
- AKC CHESAPEAKE BAY RETRIEVERS, 2 males, 4 females, ready now, \$175/ea. Turner, 864-7330 after 5.
- WOOD-BURNING STOVE, Garrison II, w/thermostat, custom soapstone and cast iron kettle, \$450 OBO. Lloyd, 822-8567.
- LUDWIG DRUM SET: white, bass, snare, 2 air toms, 1 floor tom, Ride cymbal, high hats, all necessary stands, hardware, & accessories, \$450. Guthrie, 299-7182.
- MARSHALL 100W GUITAR AMP, channel switching, 60W and 100W operation w/road case, Mitchell 4-10 speaker cabinet, \$650. Lynch, 292-8523.
- YAMAHA AMPLIFIER, 100W, \$275; Technics 3-way speakers, new, 12" x 22", \$125/pr.; two complete cross-country ski packages, for youths to age 12, \$45/ea. Ginn, 883-0004.
- TWO-METER KENWOOD TRANSCIEVER, model TS-711A, new, \$500. Schwoebel, 298-4295.
- JENNY LIND BABY CRIB, mattress, \$50. Cole, 281-9873.
- OAK DESK and swivel chair, \$150; Karlson speaker enclosure w/15-in. tri-axial, \$50; TV/hi-fi cabinet, \$10. Stephenson, 299-3914.
- QUEEN-SIZE WATER BED, side bumpers, \$150; antique wagon wheel, \$25. Peterson, 256-7514.

- VERTICAL BLINDS, neutral color, approx. 9' high by 14' wide, \$200 OBO. Marder, 291-8140.
- CUSTOM SPANISH BAR, w/8 stools; 6' toboggan; Ping-Pong table; boy's bedroom set, w/desk; Lowrey organ; rotary cultivator; table saw. Heames, 293-6550.
- QUEEN-SIZE MATTRESS and box spring, \$50; Maxi Taxi stroller, bounce chair, high chair, \$10/ea. Shrouf, 821-0765.
- PORTABLE BAR, w/storage area and key, cost \$1000, sell for \$450. Santana, 294-0536.
- ELECTRIC WHETSTONE, \$45; sharpening fixture for bench grinder, \$20; 500-amp aircraft generator, \$100. Bentz, 299-3448.
- TRAVEL TRAILER, 23' Prowler Bunkhouse, new refrigerated 13.5-BTU AC, tires, curtains, upholstery, Reese hitch, \$4000. Johnston, 294-4574.
- TWO BOOKCASES, brown, 68" high, 31" wide, 11" deep, bottom sliding doors, \$25/ea. Esterly, 296-9759.

TRANSPORTATION

- '84 DODGE COLT TURBO, new transmission, clutch, tires, AM/FM cassette, 54K miles, \$4500. Rutledge, 268-1405.
- '80 PONTIAC BONNEVILLE, 2-dr. coupe, AC, AT, PS, PB, V-8, AM/FM radio, new Michelin tires, \$2150. Seibrell, 821-4227.
- SCHWINN VARSITY BICYCLE, 10-spd., 24", \$60. Burnett, 298-1078.
- '86 FIERO, sell for balance due, \$7800. Duran, 867-3629.
- '86 YAMAHA TT350 DIRT BIKE, \$1300 OBO. Loescher, 299-9477.
- '78 PONTIAC PHOENIX, PS, PB, AC, AT, tilt, AM/FM 8-track, new paint and battery, \$1400. Ferguson, 292-3824.
- '80 DODGE DIPLOMAT SW, slant-6, AT, 66K miles, AC needs work, luggage rack, \$2000. Herr, 281-9873.
- '87 VOLVO DL, metallic blue, 3-yr. warranty, loaded, \$15,500. Boal, 897-4216.
- '82 BLAZER, full-size, fully equipped, AC, PS, PB, PL, PW, cruise, more, \$6000 OBO; Cardinal trailer, 16', sleeps 6. Kmatz, 299-5978.
- '70 PONTIAC GTO, \$3995. Grosbier, 881-1958.
- '75 FORD MUSTANG II, white, AT, \$550. Sanchez, 292-3852.
- '81 HONDA ACCORD, 5-spd., AC, stereo cassette, tachometer, \$3200. Estrada, 823-1704.
- '79 TOYOTA COROLLA SR5, sport coupe, AM/FM stereo cassette, AC, adjustable seats, 105K miles, \$1400. Meyer-Hagen, 293-7339.
- '82 YAMAHA 650 SECA, 5K miles, \$975. Swahlan, 292-3598 after 6.
- '83 CHEV. SCOTTSDALE PICKUP, AC, PS, PB, AM/FM cassette, cruise, dual tanks, sliding window, 25K miles, \$8900. Falacy, 293-2517.
- '79 THUNDERBIRD, V-8, AT, PS, PB,

- AC, cruise, wire wheel covers w/locks, one owner, \$1900 OBO. deBaca, 892-1139.
- '74 DODGE RAM CHARGER 4x4, 318, 4-spd., positraction, 73K miles, sell or trade, \$2500 OBO. Pryor, 294-6980.
- '55 OLDS 88, newly remanufactured engine, all components updated, needs more restoration, \$3000. Mares, 884-4843.
- '74 GRAN TORINO SW, leather interior, no rust, 351 engine, AT, \$450. Guthrie, 299-7182.
- '71 BUICK ELECTRA, recently overhauled, \$1000 OBO; '79 Cadillac El Dorado Baritz, 350 engine, AT, \$4000 OBO. Marquez, 344-8455.
- MOUNTAIN BIKE, for small adult or youth, one owner, \$150. Ginn, 883-0004.
- '84 CELEBRITY, 4-dr., V-6, fully loaded, \$6500. Graham, 293-7302.
- BOY'S 10-SPD. BICYCLE, \$40. Peterson, 256-7514.
- '79 SUBARU, 4-dr., AT, AC, \$1500. Baxter, 298-1567.
- '76 PLYMOUTH VOLARE PREMIERE SW, AT, AC, PS, PB, slant 6, Roadhandler tires, \$950. Benjamin, 293-5578.

- '86 CHEV. TRUCK, 4-WD, 4-spd., one owner, 8-cyl., \$1000/down and take over payments. Sena, 823-6678.
- '81 FORD E-100 VAN, PS, PB, AC, platform bed, 18 mpg/hwy, 86K miles, starts at -60°, \$2600. Phillips, 898-2565.
- '84 SAAB TURBO, 42K miles, blue interior and exterior, AC, sunroof, 4-dr., stereo. Davalos, 255-2855.
- '84 AMC EAGLE LIMITED SW, 4-WD, loaded, leather interior, wood grain, AT, V-6, 34K miles. Bowman, 299-5799.
- '85 MUSTANG GT, 5-litre, 5-spd., PS, AC, cruise, PW, power locks, T-tops, AM/FM cassette, 35K miles. Garcia, 298-2898.
- '83 CAPRICE CLASSIC SW, V-8, AC, AT, cruise, PS, PB, power locks, AM/FM stereo, tinted glass, new tires, \$3600. Palmer, 831-2865.
- '77 DATSUN 280Z, 4-spd., AM/FM cassette, \$2500 OBO. Rodeman, 821-8623.
- '81 TOYOTA COROLLA SR5, sport coupe, white, AC, PS, 5-spd., 51K miles, \$3500. Andes, 268-8951.

REAL ESTATE

- 3-BDR. HOME, 2 baths, 2-car garage, 1202 sq. ft., NE, new pitched roof, assumable 9-1/2% FHA, \$601 PITI, \$74,000. Nickerson, 299-3101.
- 3-BDR. HOME, Ridgecrest area, 1-3/4 baths, pitched roof, garage/shop, corner lot, updated throughout, storm windows, view, \$84,500. Thornberg, 255-4966.
- 3-BDR. HOME, 1-3/4 baths, 2-car garage, great room w/FP, formal DR, 1630 sq. ft., \$94,900 or reasonable offer. Sepulveda, 299-2805.

- 1-BDR. CONDO, 2800 Vail SE #181, refrigerated AC, pool, original owner, assumable mortgage, \$2000/down, \$25,750 firm. Gregory, 344-1436.
- 3-BDR. HOME, 1 bath, FHA 10-1/2% assumable, \$14,500 equity, \$68,500. Zirzow, 294-7296.
- LOG CABIN on 5 acres, Pagosa Springs, Colo., w/double garage, all-weather road, views, \$70,000. Mares, 884-4843.
- 5-1/2 ACRES, South 14, underground power, water, southern slope w/meadows and trees. Shaffer, 298-8302.
- 5 ACRES, east of mountains, north of I-40, 15 miles from Labs, trees, road, water, will finance, \$7000/acre. Sanders, 298-7734.
- 3-BDR. BRICK HOME, Belen Rio Communities area, FP w/insert, enclosed carpeted back porch, 1 acre of land, 2-car garage, 2 full baths, separate workshop, \$79,900. Claussen, 293-9707.
- 3-BDR. BRICK HOME, 11509 Bar Harbor NE, Baker/Hoover/Eldorado schools, office/study, great room, 1925 sq. ft., \$106,500. Key, 298-7988.
- 2-ACRE LOT, new subdivision, 6 miles from I-40 off South 14, power, telephone, covenants, trees, borders national forest. Linker, 266-4177.
- 2-BDR. PATIO HOME, Towne Park, 2 baths, extras. Hunt, 294-7552.

WANTED

- CEMENT MIXER; Chev. Camino, '64-'84, prefer one that needs repair. Prevender, 296-8586.
- BASSOON. Jones, 299-4776.
- HOUSEMATE, nonsmoker, to rent room w/private bath, near Lomas/Tramway, share garage, laundry, kitchen, \$200/mo. plus half utilities. Robinson, 293-7231.
- CROWN PSA-2/SA-2 AMPLIFIER; Crown UFX-2/2A crossover; Macintosh, Marantz, phase linear power amplifiers, 150+ watts/CH; will consider nonworking. Rathbun, 888-3344.
- SMALL DOG, female, indoor, for my daughters, will provide good home. deBaca, 892-1139.
- PROPERTY at Angel Fire. Key, 292-5770.
- 3-BDR. HOME (TO BUY), NE Heights, 1-3/4 baths, garage, pitched roof, assumable mortgage, high 50s, prefer payments around \$350. Gallegos, 822-0636.
- AQUARIUM, 10- or 20-gal.; outdoor Christmas lights. Romero, 842-9735.

LOST

- PRESCRIPTION SUNGLASSES, LaCoste case, lost in the TTC, business card in back of case. Gwinn, 299-7167.

Fiesta Night = Sure Cure for Winter Blues

A CHANCE TO CHA-CHA and some mighty good eating are in store when you show up at the C-Club this evening for Fiesta Night. Start out at a bountiful buffet, featuring baron of beef, fish, and all the trimmings. Then slip into your samba shoes and dance the night away (8 p.m.-midnight) to south-of-the-border tunes from Together. Along the way (8:45-9:15), there's a flashy floor show from Miguel Caro and the Mexican Fiesta Dancers. Buffet reservations requested (265-6791).

CORONADO SCHUSSBOOMERS (aka Ski Club) get the lowdown on Ski Rio at the monthly meeting next Tuesday, Jan. 19. Free munchies while you socialize from 7 to 7:30 p.m.; the meeting follows (7:30-9:30). As usual, a few lucky people will take home some fantastic door prizes.

Ski trips this month include Keystone (Jan. 16-23) and Ski Rio/Taos (Jan. 29-31).

LAWYERS, GUNS, & MONEY sounds like the title of a rip-roarin' who-dun-it, but that's not the case at all. LG&M is really a band that specializes in sagebrush-shuffle tunes, and it'll do its thing from 8 p.m. to midnight next Friday evening (Jan. 22). Beforehand, choose from two elegant entrees — T-bone steak or snow crab — at the two-for-one special dinner. Be sure to bring along the membership card; as you know, it gets you a dinner discount. Call

the office right now to reserve your two-for-one space.

CARD SHARK SHIMMY is the name of the game for T-Bird shuffle-experts on Thursday, Jan. 28, starting at 10:30 a.m. As usual, there'll be free refreshments and great door prizes along with the gaming. And mark your calendar for next month's wheel/deal sessions on Feb. 11 and 25.

Phone Stocks

What's happening to telephone stocks? Here's your chance to find out: Findlay Edwards and Chris Harper of A. G. Edwards & Sons give a quarterly update on phone stocks during two noon-hour discussions on Jan. 26 in the Eldorado room. Sessions are from 12 noon to 12:30 p.m., and from 12:30 to 1.

WESTERN NIGHT on Thursday, Jan. 28, features free c-w dance lessons from 6 to 7 p.m., followed up by more stomp-time (until 10). Crossover Band provides the music that night. Free munchies from 6 to 8, and special drink prices throughout the evening.

NEITHER RAIN NOR SNOW bog down those Thunderbird Roadrunner RVers — but they *have*

decided to head south rather than north (very sensible, we'd say) later this month (Jan. 26-28). This time, the big wheels gather at Pancho Villa State Park (close to Columbus, N.M., and the Mexican border). More info from wagon masters Bill Minser (299-1364), Duane Laymon (822-1749), or Tom Brooks (344-5855).

DON'T GET AROUND MUCH ANY MORE? You can change all that when you sign up for some tantalizing trips offered by the C-Club Travel Committee:

San Diego Whale-Watching, Feb. 5-8. See SD's world-famous zoo, Sea World, etc. Price per person, double occupancy, is \$411. More info and reservations at Sun Tours (881-5346).

Northern Arizona, March 18-21. Tour Monument Valley, Canyon de Chelly, and Lake Powell. Cost is \$256/person (double). A \$50 deposit is required; final payment due Feb. 26. Reserve space by calling Mary Severns at Travel Scene (292-4343).

Best of Britain, May 17-June 1. London, Stonehenge, the Lake District, Stratford, Scotland, Wales, more. Tab is \$1585/person (double); includes RT air fare, lodging, many breakfasts and dinners, ground transportation, etc. Reserve your space with a \$150 deposit; final payment not due until April 1. Get all the details at a pre-trip meeting next Monday, Jan. 18, at 7 p.m. in the C-Club north dining room.

Take Note

Ron Iman (6415) was recently elected to a three-year term as treasurer of the American Statistical Association (ASA) at the December meeting of the Board of Directors of ASA in Washington, D.C. He also serves on the seven-member executive committee of the Board and heads the Committee on Long-Range Financial Planning for ASA.

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The 24th Annual Symposium of the New Mexico Chapter of the American Vacuum Society is scheduled April 18-21 at the Holiday Inn, Journal Center, in Albuquerque. Randy Creighton (1126) is the 1988 NM/AVS symposium chairman. Papers on surface science, thin films, electronic materials and processing, and vacuum science and technology are being solicited. Submit one-page abstracts to Randy by Feb. 25. For more information, contact him on 4-3955.

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Daniel Horschel (6442) will speak on "The Making and Breaking of a Nuclear Containment Model" at the Jan. 20 meeting of the New Mexico Section of the American Society of Mechanical Engineers (ASME) at the County Line Restaurant. Cost is \$15/person and includes dinner. For reservations, contact Jim Allen (1522) on 4-6764.

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The next meeting of the New Mexico Network for Women in Science and Engineering is on Jan. 20 at 6 p.m. Speakers are Danelle Tanner (2321), "Radiation Effects Testing," and Barbara Allen of X-Ray Associates, "Women's Health Issues." Cost for dinner and the program is \$5. The meeting is open to nonmembers. For information, contact Donese Mayfield (1265) on 4-8811 or Jennie Negin (2629) on 4-6821.

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Look for your dream vacation at Travel Fair '88 and Travel Auction on Jan. 24 at the Ramada Classic Hotel. The Fair opens at 10 a.m. and includes entertainment, one-day trip specials, prizes, a fashion show, and international food booths. The Travel Auction, at 4 p.m., offers cruises, airline trips, clothing, and more. Proceeds of the auction will be donated to the International Balloon Museum and New Mexico Special Olympics. Tickets (\$1) are available at the LAB NEWS office in Bldg. 814.

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If you worry about your pre-schoolers' safety

in traffic, you may want to send for a new set of booklets from AAA. Called "Preschool Children in Traffic," the teaching program helps parents help their kids develop safe pedestrian habits. Order it from AAA New Mexico, Public Relations, P. O. Box 16000, Albuquerque 87191; total cost is \$2, including postage and handling.

Congratulations

To Ileen (7818) and Bjorn Jogi, a son, Christian John, Dec. 9.

To Patty (21-1) and Mark (5161) Dickinson, a daughter, Megan Noel, Dec. 11.

To Elaine Torres (7132) and Jay Cozad, married in Las Vegas, Nev., Dec. 26.

To Shashi and Duane (7263) Bowman, a daughter, Brandi Nina, Dec. 26.

To Marti Cohen (9220) and Ken Butler, married in Albuquerque, Dec. 31.

Welcome

Arizona

Dean Terry (2131)

California

Michael Sinclair (1815)

Indiana

Scott Wold (6451)

Pennsylvania

Sharon Stansfield (1411)

Texas

Mark Diltz (7261)

Rush Robinett III (9142)

But Which 80 Percent?



Fully 80 percent of the gossip you hear around the water cooler is accurate, says recruiter Robert Half of Robert Half Inc. Managers should consider the company grapevine "as much a communication vehicle as the company house organ or employee meetings," he writes in *Management Accounting* magazine. *Wall Street Journal*



WELL-DRESSED PLAYERS, well-lit courts — Appropriately attired or not, Coronado Tennis Clubbers will now be able to use the four courts after dark; a two-year lighting project was completed last month. Stan Ford (left), Director of the Sandia Employee Recreation Program, and President Irwin Welber celebrated the occasion with a little impromptu racquetry. CTC membership dues are: individual or first member of family - \$40/calendar year; second family member - \$20; third family member - \$15; additional family members - \$5; daily guest rate - \$2/day. Coronado Club membership is required to join the CTC.