



LAB NEWS

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MARCH 19, 1982



PARTIALLY INFLATED with helium, the experimental balloon stands poised for a dawn launching. When inflated, the 20.5-million-cubic-foot balloon rose to

an altitude of 25 miles, stayed aloft for 24 hours.

Gamma Ray Astronomy

Alice Springs—Giving New Meaning to Far Out

For Crawford MacCallum of Theoretical Division 4231, Alice Springs—smack in the middle of the Australian outback—is the gateway to the galactic nucleus. By itself, however, this is not sufficient reason to make Alice Springs a tourist resort, but it is nonetheless.

“We asked ourselves why,” says Craw-

ford. “There’s some great scenery, but otherwise it’s just there. The area is the center of aborigine country—many agencies that deal with the aborigines are located there. The aborigines’ living conditions are terrible by my standards. But I was fascinated by their rich and complex religion and the art it inspired.

They create very abstract paintings that embody mnemonic techniques to recall complex legends.”

Why go to Alice Springs to launch a balloon? Why not Farmington? “First of all,” explains Crawford, “one has to be in the southern hemisphere to view the galactic core. We could have gone to Argentina or South Africa but Alice Springs has the advantage of being in flat country far removed from large bodies of water. And the Australian government until recently maintained a scientific installation there expressly for experimental balloons.”

Late last year, Crawford returned to Australia to measure gamma rays originating in the nucleus of our Milky Way galaxy. “The observations are a vital part of Sandia’s gamma ray astronomy program,” he says. “I’ve been in the project for six years, and our original hope was to detect gamma rays that indicate the process of explosive nuclear synthesis—in other words, the formation of nuclei in supernova explosions. In gamma rays one can see tell-tale radiation from such ‘freshly made’ nuclei. In 1977, however, we detected something else—a gamma ray line at exactly 511 kiloelectronvolts, which meant that positrons and electrons were annihilating each other. Later, in 1979, satellite instruments detected the same 511 keV radiation—ditto in 1980, but at a

EVP Jack Howard Retires March 31

W. J. “Jack” Howard, executive vice president at Sandia National Laboratories, will retire March 31 after nearly 36 years at the Labs.

Jack, now 59, served as a delegate to the Strategic Arms Limitation Talks in Geneva in 1976. From December 1963 to June 1966, he was chairman of the AEC’s Military Liaison Committee and Assistant to the Secretary of Defense for Atomic Energy.

A graduate of New Mexico State University in mechanical engineering, Jack joined Sandia in 1946 after Army service in the Pacific. He participated in many of the early nuclear weapons tests and, in 1956, transferred to Sandia’s new Livermore Laboratory where he was manager, the first at SSL, of the Engineering Department. Later in 1956, he was promoted to director, also the first such at SLL, of Systems Development.

Following his service in the Pentagon, Jack was awarded DoD’s Distinguished Public Service Medal by then Secretary of Defense Robert McNamara. He returned to Sandia Albuquerque in 1966 as director of Advanced Systems Development. He became vice president of Components and Systems later that year and assumed his present position as executive vice president and member of the Sandia board of directors in 1973. In 1979, he was elected to the National Academy of Engineering.

Commenting on the retirement of the EVP, President George Dacy stated: “It’s hard to imagine Sandia without Jack Howard. His involvement in and knowledge of the nuclear weapons business goes back to the early beginnings. I am sure that the tradition of dedication and excellence, which he did so much to foster, will continue to make Sandia the kind of place of which he can be proud.”

[Continued on Page Four]

Events Calendar

- March 19*—Art auction sponsored by Amigos de las Americas, International Ballroom, Albuquerque Hilton Inn, 8:15 p.m.
- March 20*—Sports Car Club of America regional convention, Four Seasons Motor Inn, seminars starting at 9:30 a.m., banquet 7 p.m.
- March 20-21*—Rose pruning demonstration, Prospect Park Library garden (bring tools), 10 a.m.-3 p.m.
- March 21-May 23*—The Moving Image: The Art of Film Animation, Albuquerque Museum.
- March 24*—Chamber Orchestra of Albuquerque, 8:15 p.m., Albuquerque Little Theatre, 224 San Pasquale SW.
- March 24*—Lecture, "Early Man, Hyenas, Leopards and the African Heritage," 8 p.m., Maxwell Museum (Univ. & Ash).
- March 25-28*, 31, April 1-4**—Albuquerque Civic Light Opera, "West Side Story," 8:15 p.m., *2:15 matinee only, Popejoy.
- March 31*—"Holy Week: The Opata Indians of Northwestern Mexico," illustrated lecture in conjunction with Fiestas of San Juan Nuevo, 8 p.m., Maxwell Museum.

Congratulations

- Raymond (1762) and Rosemary Patrick, a son, Brian, Feb. 26.
- Kent (5114) and Karen Hoffman, a daughter, Andrea Marie, March 5.
- Kathleen Graham (3416) and Barry Marder (2646), married March 7 in Albuquerque.
- Wilfred (5613) and Judy Ju, a son, Nathaniel, Feb. 23.
- Mary (1411) and Jimmy (3313) Atkins, a son, Brian, March 9.
- Clyde (3332) and Dorothy Jo Sanchez, a daughter, Emily Lynn, Feb. 24.



... Saturn is being described "as a world of moons and rings in continuous collision with one another, grinding away in a process that makes Saturn look like a giant Mixmaster one billion miles away. 'We see so many rings circling the planet that it's conceivable the same particles are colliding every five to 10 hours,'" Voyager Project scientist Edward C. Stone said.

—Washington Post

LAB NEWS

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JOE RUGGLES (3661-1) and TOM HOBART (1481-5)

Supervisory Appointments

TOM HOBART to supervisor of Project Machining Section 1481-5, effective March 1.

Joining Sandia in October 1963, Tom worked in the mail room and later enrolled in the machinist apprentice program. Since graduating from that program, he's worked in a number of organizations in the machine shops.

Before coming to the Labs, Tom served three years in the Navy. He enjoys shooting, camping and fishing. Tom and his wife Linda have two sons and live in the SE heights.

* * *

JOE RUGGLES to supervisor of Project

Management Systems Section 3661-1, effective March 1.

Joining the Labs in 1958, Joe worked as a draftsman for 11 years and then transferred to the engineering information group in the Computer Directorate. He received his BBA degree from UNM in 1972 under the Educational Aids Program. Since that time, he's worked in the financial organization and with the assets management group. Most recently, he's been project leader in the redevelopment of the property management system.

Joe enjoys tennis, water skiing, boating, hunting and fishing. He and his wife Nancy have three sons and live in the NE heights.



PETER HERMES, Ambassador to the US from the Federal Republic of Germany, visited the Labs last month and took the occasion to meet with visiting scientists from Germany who are working in Jack Walker's Advanced Reactor Research Dept. 4420 on reactor safety research. The group includes, from left, Wolfgang Breitung and Guenter Fief (4420), Ambassador Hermes, Herbert Meister and Gustav Schumacher (4420) and Lannie Messersmith, FRG Consul for the State of New Mexico.

CRF Hitting On All Cylinders



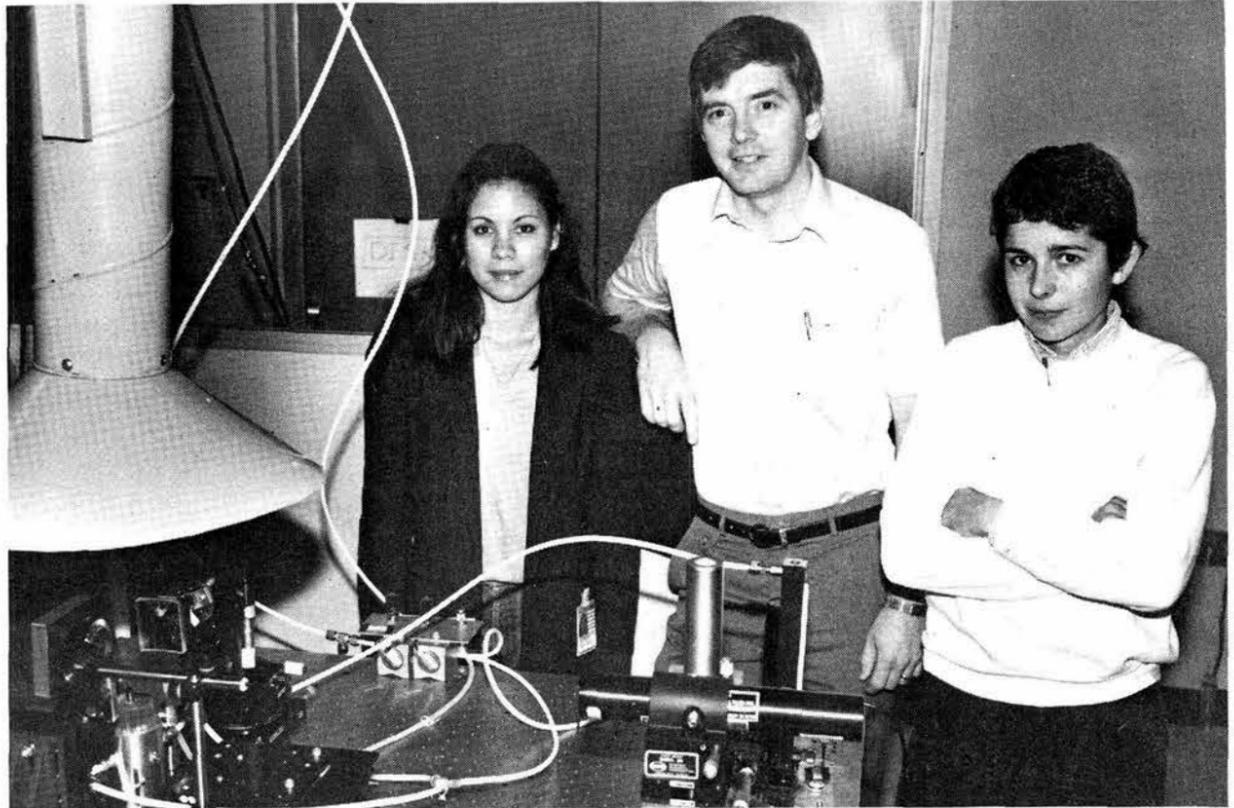
More than a thousand visitors and users have crossed the threshold of Sandia's Combustion Research Facility (CRF) since its official opening a year ago.

And, despite cutbacks by DOE, the combustion program is thriving and looks forward to modest growth over the years ahead. Director Dan Hartley (8500) attributes this to the magnitude of outside attention and use CRF has received as well as to recognition by the scientific community and the government of the technical content of the program.

On the first score—usage—some 480 visitors came for one- or two-day visits with a specific technical issue in mind; another 145 stayed for the better part of a week to accomplish a small project; and 27 more came for one to six months for a major research experiment. The researchers represented equally the university and industrial sectors. Dan reports that "everybody we've dealt with to date has been pleased with the results and how their hosts have accommodated them. On that score I feel very good, and so do our sponsors at DOE."

Looking at the second aspect, following a recent visit by a peer review committee composed of professionals from industry, universities and the government, the committee declared that the facility and program have "outstanding technical qualities, and the potential to do even more in the months and years ahead."

The growth of the staff in basic energy science programs at CRF has nearly reached its steady state, with 40 people this



ONE of the many outside research teams to utilize the Combustion Research Facility during its first year is this one from Yale University, working on a turbulent diffusion flame experiment. Clyde Layne (center, 8511) was host to students Carla Escota and Dominique Fourquette from Yale.

year, moving up to 50 over the next few years. A parallel applied research program has also been developed relating to fossil energy and conservation; this accounts for some 40 percent of the total CRF activity, with 30 people in the program. While fossil and conservation programs may face a modest cut in 1983, the belief is that the programs will continue to grow as planned. "Overall, we probably won't experience

any decrease because our research is in an area that the present Administration wishes to foster—as opposed to the big demonstration programs, none of which we have," Dan reports.

In addition, Sandia has assumed new activities, adding to the CRF role. For example, an NRC program now under way deals with modelling the propagation of hydrogen flames over obstacles, a phenomenon associated with reactor incidents. And CRF even had some business in the weapons area. "We are able to use our central laser system to study an important weapons-related problem that could not have been analyzed otherwise," Dan explains. "In fact, much of the technology in use at CRF ultimately derives from the weapons programs."

CRF has already filled its new quarters. Two of the 14 labs are reserved for visiting researchers. And 12 combustion experiments remain scattered around the Labs for want of space at the new facility.

What's ahead? Says Dan, "We'll continue to grow because our research is recognized for its value in the industrial and university communities."

Sympathy

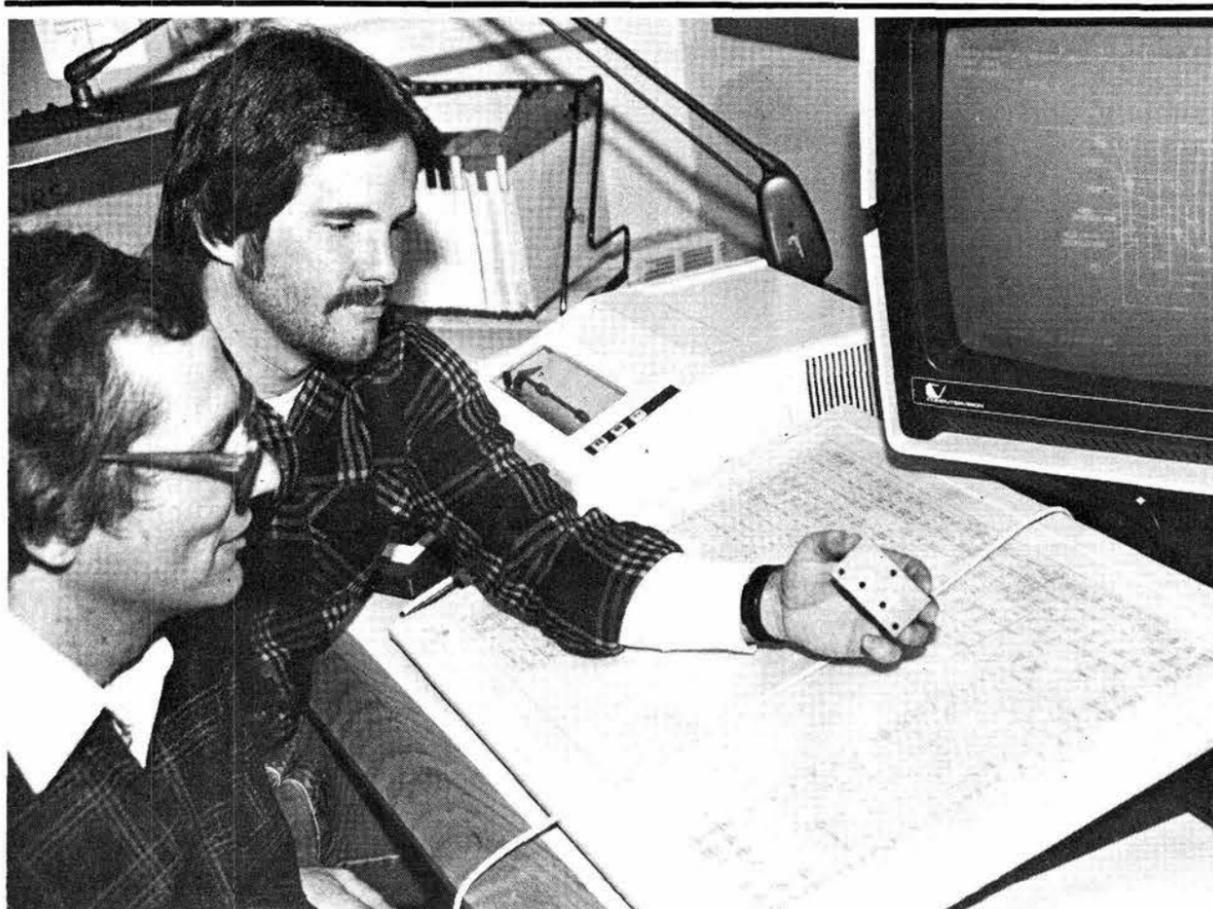
To Lester Diemler (8257) on the death of his sister in Savannah, Ga., Feb. 16.

To Steve Gray (8342) on the death of his brother in Oakland, Feb. 18.

To Leo Gutierrez (8400) on the death of his mother in Los Lunas, N.M., Feb. 28.

Congratulations

Roger and Donna Gonzales (8212), a daughter, Allyson Janelle, Jan. 4.



CAD/CAM Systems Link demonstrated—Jack Jones, left, and Jim Hackman (both 8274), examine the first part produced to demonstrate a data exchange between dissimilar CAD/CAM systems via a neutral format. The neutral file is a recently adopted National Standard called the Initial Graphics Exchange Specification (IGES). IGES is intended to provide data transmission between any pair of CAD/CAM systems without the need for locally supported translators. This step in electronically transmitting the design of weapon parts between two DOE facilities was featured in the January 8 LAB NEWS.

Continued from Page One

Alice Springs

much reduced flux. Last fall, we measured zero.

"I thought the positrons were being produced in a large number of supernovae hidden in the dust of the galactic center. But there's no way they could have all turned off together in such a short time. Only a black hole could do such a thing because material falls into its gravitational field sporadically. After getting caught in its accretion disc, the matter spins very fast, gets hot, and nuclear reactions take place. The positrons produced in this manner are thrown out and annihilate with electrons in surrounding hydrogen clouds, producing the 511 keV gamma rays. Our findings strongly suggest that our galaxy—and perhaps most others—has a black hole in its center literally eating it up."

Gamma ray measurements are obtained with a gamma ray telescope, really a pointable spectrometer built around a large single germanium crystal. The 1650-lb. package was lifted by a 20.5-million-cubic-foot, helium-filled balloon to an altitude of 25 miles. The balloon stayed aloft for 24 hours gathering data, the payload was then parachuted to the ground, and recovered 450 miles from the launch site by a truck-helicopter expedition.

Getting all this equipment from the United States to Australia was the job of Al Hutters' TM Development and Remote Fielding Division 1587. Building the instrument and fielding the actual experiment was also their responsibility. Among Al's retinue were chief engineer Paul Stang and Don Sayers who described their none-too-easy task:

"We assembled the gamma ray package and shipped it in mid-September by both surface and air with hoped-for arrival in Alice Springs by October 9," says Paul. "First off, there's a longshoremen's strike in Sydney so the shipment is routed to



THE PLENTY RIVER in the Australian outback, which according to Crawford MacCallum (4231) "had plenty of sand," was as far as the payload recovery team could get by truck. The helicopter is being refueled while the recovery team reviews plans for finding the gamma ray telescope.

Adelaide where customs holds it up because the paperwork is missing. Finally, because of the shipment's urgent scientific nature, customs agreed to let it go. However, a local rail strike further delayed the package—but finally it was on its way to Alice Springs 800 miles distant.

"Our instrumentation trailer arrived in Alice Springs on October 19, the air shipment on the 20th, and Crawford on the 24th. And October 29 was 'turnaround'—the calm period between shifts of upper atmospheric winds which normally blow at over 100 mph. This happens only twice a year and usually last from a few days to two weeks. And it's the only time when experimental balloons can be launched and not be quickly blown out of telemetry range. After an intensive assembly and calibration period we were ready. And then we sat on the ground and waited through three long weeks of bad surface weather.

"Finally the rain and wind let up enough for launching," says Don. "Inflated, the balloon has a diameter of 700 feet—twice as long as a football field. It's a spectacular sight at twilight, looking like a brilliant star.

"When its flight was done, the balloon was 'cut down' by a plane—a radio signal from the aircraft activated explosive bolts which tore the balloon and deflated it. The parachute, which went up with the balloon, then billowed out. At this point, the recovery team—two of us and two Aussies—took off in a four-wheel drive truck and a flatbed. It took us three days to get to the payload's landing site 450 miles from Alice Springs over 'tracks'—what Australians charitably call trails. The entire area is an aboriginal preserve and the only settlement we came across was an aborigine community called Papunya. It consisted of a few dilapidated frame houses built by the government and a 'cantina' where the aborigines, who generally live in the open, purchase the bare essentials. Anyway, Papunya was our last chance to get water and fuel.

"We spent Thanksgiving under the truck since it was the only shade available. One of the Aussies asked me what Thanksgiving was. When I explained, he said, 'OK mate, tonight we feast,' and he whipped up a large pot of stew which was a nice change from the canned spaghetti we ate all the time.

"The Aussies are very religious about tea time. We'd be driving along in the heat of midafternoon and suddenly the truck stopped. 'It's tea time, mates,' they'd tell us and start boiling water in a 'billy' or pot and throw in some tea leaves.

"We came up against sand ridges 20 to 30 miles long, which extend east and west and drift from north to south. Finally, conditions deteriorated even more and we had to turn back and wait for a helicopter to retrieve the payload. Discarded pieces of the payload were stacked up in the desert as a monument.

"The most exciting aspect of the trip was that the experiment worked. We celebrated by preparing a taco dinner made with assorted cans of Old El Paso taco shells and green chiles I found in various Alice Springs groceries. We wiped out their supply of taco fixin's."

Also participating in the taco dinner were scientist Marvin Leventhal from Bell Labs, who conceived the original experiment, and the rest of the engineering team: Jerry Lochtefeld, Larry Gillette (both 1587) and Norm Corlis (1584).



AT THE balloon test facility in Palestine, Texas, the Sandia team prepares for the expedition to Australia. Standing, l to r, are Crawford MacCallum (4231), Paul Stang (1587), Bobby Fambro (EG&G), Al Hutters (1587), José Pacheco (2455), and Jerry Lochtefeld (1587). Kneeling, in the front, Lynn Kissel (4231), Marvin Leventhal (Bell Labs), Gene Hauser (1587), and Norm Corlis (1584).

Tony Taig Loves the Mountains

[Ed. note—This is the first of a series of articles on foreign scientists working in Jack Walker's Advanced Reactor Research Department 4420 under various agreements between DOE, NRC, and international agencies.]

A cheerful young man who laughs readily, Tony Taig arrived at Sandia last September on a two-year assignment, part of a technical exchange agreement between the Nuclear Regulatory Commission and the United Kingdom's Atomic Energy Authority. Tony is studying the fission product chemistry that takes place in a hydrogen burn during a simulated severe reactor accident. This work is being done in Dana Power's Reactor Containment Safety Studies Division 4422.

Results of the work will be used in assessing the safety of light water-cooled nuclear reactors. "England is preparing for a public inquiry into whether to build its first pressurized water reactor," Tony says. "There are 12 commercial reactors generating power in England now, and they provide about 12 percent of our power needs. England's commercial reactors are gas cooled," Tony continues. "The first Magnox reactors started operating in the mid-50s, but new reactors are of an advanced design. Three or four new ones—all gas cooled—are under construction and are scheduled to be operational in the next couple of years."

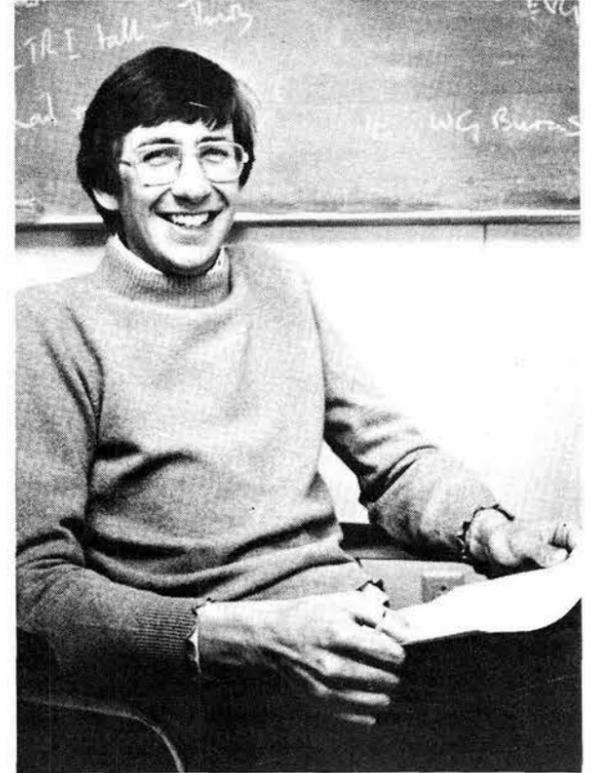
Tony is also interested in breeder reactor

safety and Sandia's research for the CRBR reactor here in the U.S. "We have an advanced breeder prototype reactor operating on the rocky coast of far northeast Scotland—a bleak, wind-swept site—which has been generating power while producing more fuel than it burns since the mid-70s. It is liquid sodium cooled, and some very interesting safety experiments have been conducted there. For instance, the coolant pumps have been shut down completely while the reactor was operating at 80 percent capacity. Even with the pumps shut off, natural circulation of the liquid sodium coolant provided safe cooling of the nuclear core—a convincing demonstration. Plans are now under consideration to try it at full power, which would correspond to deliberate starting of what is often regarded as one of the worst imaginable fast reactor accidents!"

Tony reports that England has its share of vocal anti-nuclear groups, some of which are well-organized and becoming increasingly technically competent. He enjoys the challenge of communicating technical information to an often skeptical public.

Tony has worked for the UKAEA Safety and Reliability Directorate since earning his chemistry degree from Oxford in 1977. He considers it an interesting job and particularly enjoys the travel. He visited Austria, Germany, Hong Kong, and New Mexico before being assigned here.

"I love the mountains," Tony says. "I've



TONY TAIG of the United Kingdom's Atomic Energy Authority, now on a two-year assignment in Division 4422.

been skiing in Telluride this year and plan to spend plenty of summer leisure time hiking and camping. I'm also looking forward to running and playing soccer in the finer weather."

An accomplished musician, Tony plays piano and bassoon and has done some choral directing in a local church.

"Nothing gives me more pleasure," Tony says, "than a convivial evening around a piano with friends, stretching the old vocal cords in a hearty song and soothing them afterwards (and during) with my home-brewed beer."

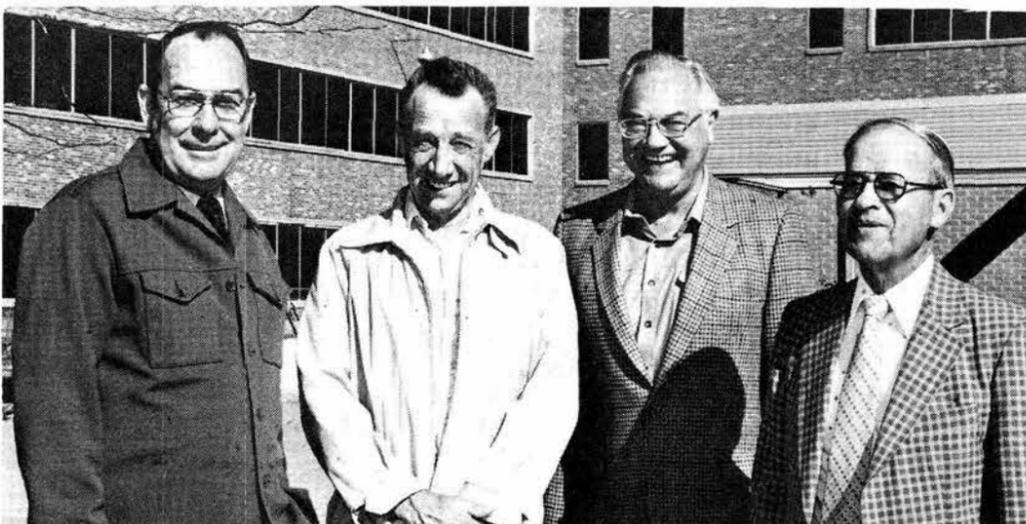
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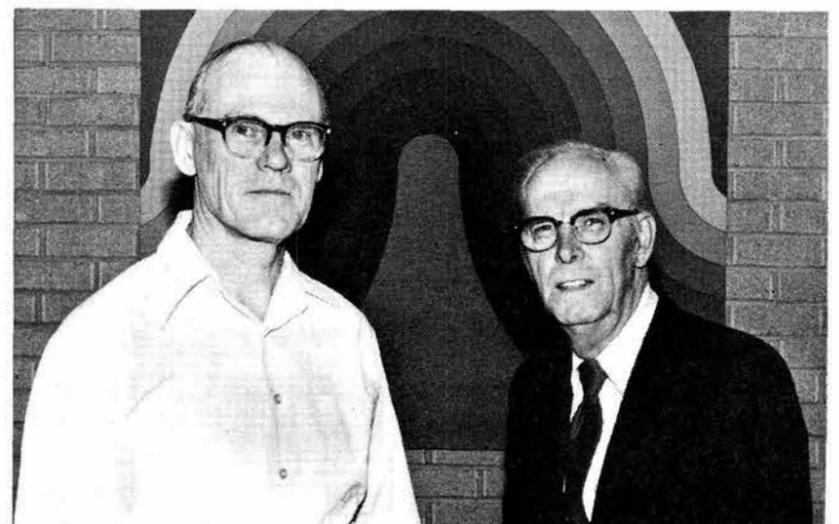
Gene Copeland (1543), Leo Dunn (4531) and Joe Mickey (3155)



Juan Ortiz (3417) Glenn Guist (2456) and Truman Daniel (3415)



Mack Deaton (3651), George Vaughan (2444), Walt Treibel (1414) and Ray Pino (1471)



Hugh Lewis (2334) and Dale Massey (1137)

When You Wish To Talk With Someone . . . Not Your Boss

Communication. Perhaps the most over-exercised word in management seminars, it's become the Holy Grail of corporate life. Everyone agrees it's desirable, everyone wants more of it, everyone seeks it, yet . . .

Yet you learn through the *Albuquerque Journal* that your program at Sandia has lost its funding, or a friend tells you over coffee that your group is about to be moved, or your department manager stares at you blankly as you pass in the hall. So in a progressive outfit like Sandia, where is all this communication we're supposed to have?

As it turns out, the Labs offers many avenues of communication, some formal, others less so. For example, once a year, Sandia sets a time for performance review. Sometime in the next few months, you and your supervisor will meet privately to discuss you and your place in the corporate structure. This is (or can be) communication. If you want to know more about where you stand and why, one way to find out is to ask your supervisor during these meetings.

But performance review consists of two people and, given human nature, the two may not hit it off, and communication does not really take place. You've got something to say, but it doesn't get said. What then?

When you came to work at Sandia, you received a booklet, *Here at Sandia*, that contains this passage:

"Questions regarding your work or employment conditions should be discussed with your immediate supervisor. If he or she cannot resolve the question, it

may be brought to the attention of the successive levels of supervision. This 'open door' policy works best if each level is given the opportunity to consider the question before arranging for discussion with the next level of supervision."

This says to you that if you and your division supervisor can't or don't communicate, then call upon your department manager and, if necessary, continue up the chain. You may or may not get the solution you wish, but communication will have been achieved.

There are other avenues of communication if you choose not to go up through your supervisory line. Each of us has a personnel representative, available for job counseling, accepting complaints, or simply listening to how you feel Sandia should be run. See page 35 of your phone directory.

In the Personnel Directorate, there's an entire department—Equal Opportunity &



"In Roman times it was common to 'kill the bearer of bad news. That may, in part, account for the decline of the Roman Empire. Here at Sandia we need to assure that free flow of information is encouraged, for only in that way can we maintain a healthy organization, and a well motivated and productive staff."

—George Dacey, President
Sandia National Laboratories

Affirmative Action Department 3510—with the functional responsibility of employee counseling. You don't have to be a member of an ethnic minority to avail yourself of their services; and like all counselors, they will protect the confidentiality of anything you discuss with them.

Suppose you have one discreet question that no one seems able to answer; for example, "When will the Labs have its next Family Day?" *Feedback* is a good way to go with such questions, and Feedback forms are available next to most bulletin boards. If the question is sensitive and you prefer not to reveal your identity, your anonymity is guaranteed (only the Feedback coordinator will have your name so that your answer may be mailed to you).

Many other avenues exist for Sandians wishing to communicate. There are psychologists in Medical and Personnel, and counselors in Labor Relations, Training, and Benefits. (See chapters C, H, and P of the Personnel Manual.) You can call Frank Gallegos, head of Personnel Division 3533—he's on 4-3650. Or simply write a letter to someone in management (that's how this article got started). If a problem is getting to you, stewing over it won't help—there are a lot of people at Sandia willing to listen . . . but you have to take the first step.

My Favorite Old Photo



THAT'S Granddad at 17 and tomorrow, March 20, at 100. His name is Tranquilino Padilla and he lives on Tranquilino Ct. (named after him) in Martineztown. As a young vaquero, he herded sheep south of Santa Fe, punched cattle in Amarillo, and came to Albuquerque in the early 1900s. He had several jobs here, finally went to work for the Santa Fe. Grandmother Padilla died in '54. Together they had five daughters and three sons. At Granddad's 99th last year, 79 descendants helped him celebrate. I asked him the secret of longevity . . . "no drinking, no smoking," he replied. He didn't mention his life-long habit of chewing tobacco. (Henry Martinez—1482)

Fun & Games

Running—First annual "Feel Nutrific" 3-mile fun run, sponsored by the Albuquerque Dietetic Assn., takes place Sunday, March 20, at 10:30 a.m.

* * *

Aerobic dance—Next 12-week session of this begins Monday, March 29. Classes meet Mondays and Wednesdays at 9:30 a.m. or 5:30 p.m. at the C-Club. Instructor Donna Ness presides. Signup: 293-0316 or 255-6314.

* * *

Golf—First tournament of 12 scheduled this season by the Sandia Employees Golf Association (SEGA) is set April 3 at Los Altos. Scratch and handicap leagues are forming to play 9-hole evening competition matches. Membership, open to all Sandia and DOE active and retired employees and their adult dependents and Sandia and DOE contractor employees, costs \$4. Contact: Cecil Johnson (4542), 4-1143, or Tom Lenz, 4-8486, for a SEGA newsletter and application form.

Take Note

During the APS spring recess, April 5-9, Tierra del Sol Council of Camp Fire offers an instructive recreation program for children 5-13. "Discover Our City" is the theme of the program, and it includes visits to several city agencies and organizations in addition to arts, crafts, games and a swimming party. For the convenience of working parents, children may be dropped at St. Mark's on the Mesa Episcopal Church, 431 Richmond Place NE, from 7:15 to 8:30 a.m., and picked up each day from 4:30 to 5:45 p.m. For more information, call 265-8786.

* * *

Sadie Hesselden (1540) was a recent winner in a promotion of *Southwest Secretary* magazine. She was named one of the "secretary winners of the month" by the magazine and received a bouquet of flowers and a free weekend in a La Quinta Motor Inn of her choice. She and her husband Don are thinking about a visit to Flagstaff and a tour of the Grand Canyon.

* * *

Learning about grief and sharing one's experience can be beneficial during a period of grief. To this end, a bereavement group counseling course is being offered by Presbyterian Hospital. The six sessions, held in March and April, run from 5 to 6:15 p.m. at Presbyterian Hospital. Cost is \$20. To register, call 841-1634.

* * *

The "Master Gardener" program begins its second season this month. Sponsored by the Bernalillo County Extension Service



ANOTHER new structure got under way last week on the grounds of PBRF, the Pulsed Power Office & Light Laboratory. Presiding at the groundbreaking were Gil Cordova (left), head of DOE's Sandia Area Office, President Dacey and Gerry Yonas, director of Pulsed Energy Programs 4200. The new building is scheduled for completion in mid-'83.

and the Council of Albuquerque Garden Clubs, the program provides a "Horticulture Hotline" to answer your gardening questions. Some 90 Master Gardeners—volunteers who are experienced gardeners, but who have undertaken an additional 40-hour training course to prepare for this program—answer the calls, and also conduct gardening clinics at various shopping centers during the summer. The program runs from March 1 through Sept. 15. Last year, volunteers answered

13,000 calls. The numbers to call are: 292-7144 or 292-7145.

* * *

Ah, wilderness . . . the Sierra Club holds its '82 Wilderness Workshop tomorrow, March 20, from 8:30 to 5:30 at the Albuquerque Garden Center, 10129 Lomas NE. Their flyer says it's ". . . designed for newcomers and oldtimers to wilderness . . . to show you existing and potential wilderness, to explain the issues . . ." For five bucks you get the workshop and lunch. Contact: Bob Howard, 268-8185.

* * *

Next at the Albuquerque Museum is an exhibit, "The Moving Image—Art in Animated Films," running from March 21 to May 23. There's a "Gala opening night reception" on Saturday, March 20, that runs from 5:30 to 7:30 p.m. with a special performance by the New Mexico Dancemakers at 6:30. This office has two tickets for that—you want them? Come to the LAB NEWS trailer next to Bldg. 814.

* * *

The Chamber Orchestra of Albuquerque presents its final concert of the season on Wednesday, March 24, at 8:15 p.m. in the Albuquerque Little Theatre at 224 San Pasquale SW. With David Oberg, conductor, the COA will perform the Concerto for Oboe in C minor by Cimarose. Soloist is Don Plesnicar. Works by Dvorak and Schubert will also be played. Tickets: at Ticketmaster outlets, at the ALT box office 30 minutes before the performance, or by calling COA on 247-0262.

* * *

Retiring this month and not shown in LAB NEWS photos are Monroe Blaylock (3423), Vaun Atkins (3612) and Gene Moore (3153).

QUALIFYING for the Royal Order of the Jet Set are Sandians Al Brazda and Lance Wilson, both Tonopah Test Range veterans. Al is the first TTRer to complete a million miles commuting between Las Vegas and the range, while Lance represents the 50,000th passenger to make the trip. One-way distance is about 200 miles. Range people have a four-day, ten hours per day, work week.



New Collector Hits Record Efficiencies

A parabolic trough solar collector, 70 percent efficient in converting sunlight to 600°F thermal energy, has been tested at Sandia. Collector performance increased to 75 percent efficiency at 400°F and 77 percent efficiency at 300°F.

This record performance (50 to 60 percent efficiency at 600°F had been the previous maximum) was achieved at the Labs by combining improvements in the collector structure, reflecting surface, and receiver tube.

Parabolic trough solar collectors have a linear reflecting surface that concentrates sunlight on a specially-coated receiver tube mounted along the axis of the collector. An oil or some other working fluid is circulated through the tube to transfer the heat to a load. Because the receiver tube diameter can be made approximately 1/80 of the collector aperture, collector heat losses are greatly reduced.

The collector structure is a fiberglass sandwich formed into a 9 x 60-foot trough. The reflecting surface, made of glass panels formed to the parabolic contour, concentrates a high percent of the sunlight on the 1.25-inch-diameter receiver tube. The silver-backed, low-absorption glass reflects 95 percent of the sunlight upon the receiver tube.

The mild-steel receiver tube is covered

with a black-chrome coating that absorbs 96 percent of the solar energy received while re-radiating less than 25 percent of the energy in the infrared spectrum.

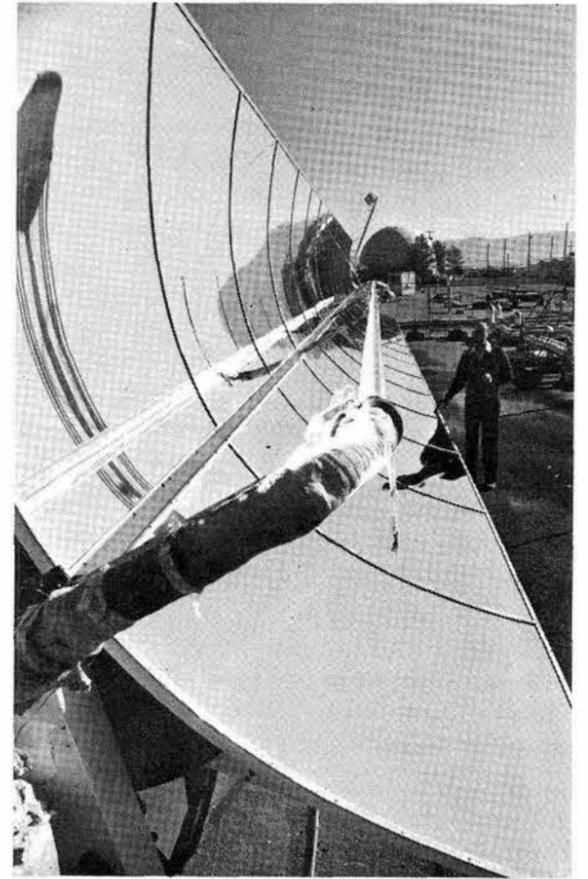
The improved coating, which will handle 600°F temperature for an estimated 20 years, was produced by precise adjustment of the plating bath and by careful quality control.

The receiver tube fits within an outer glass tube. "O" rings mounted on special collars create a dead-air space between the two tubes that minimizes convection and conduction losses and protects the black-chrome surface and interior of the glass sleeve from dust or moisture.

Anti-reflective surfaces on the sleeve increase energy transmission to 98 percent, compared to 91 percent for untreated surfaces.

The reflector structure was built by Custom Engineering of Englewood, Colo., and used Corning Glass Company silvered glass that was thermally formed by Standard Bent Glass of Butler, Pa. The receiver electroplating was done by Highland Plating in Los Angeles, and the Pyrex tubing was purchased from Corning Glass in Corning, N.Y.

This effort has been centered in Sandia's Solar Collector Technology Division 4716 under James Banas.



PARABOLIC TROUGH collector developed at Sandia offers highest efficiencies yet attained.

Our Town

Gray Gladiators Help Our Town

"Albuquerque is a good place to live."

"This is our community, and we want to do our share to keep it a good place to live."

"We want to contribute."

These were the themes of many discussions among a group of retired citizens who gathered at the Palo Duro Senior Citizens Center. The upshot of those informal get-togethers is an organization called the Gray Gladiators. Formed seven years ago, the group has 150 active members. Retired Sandian Dan Wood is the Gray Gladiator president. He explained that although their membership consists primarily of retired people, many young people also help. "The organization has no dues and no age limit," Dan says. "The common denominator is simply an interest in volunteer work."

The Gray Gladiator formula for community support is simple: free labor. One of their largest projects is staffing the souvenir stand at the Albuquerque International Hot Air Balloon Fiesta. "Seven years ago," Dan says, "we supplied seven people to work at the Fiesta. Last year, we had 19 people each day for 11 days." Many hours of time and labor have helped other community projects: Heart Fund, United Way, Cancer Society, the annual Health Fair for the Elderly, and many others.

In addition to their volunteer work, the group makes cash donations to community-oriented organizations. Operating without outside funding, they earn all funds by their own activities. One of their major money-makers derives from work with the New Mexico High School Activi-

ties Association at state swim meets and track events, basketball, volleyball and soccer tournaments, and at drill team and cheerleader championships. "The money that we're paid for this work—ushering and ticket taking—is earned as a group and goes into our treasury," Dan says. "Then the membership votes on how we dispose of the money."

The beneficiaries of these cash donations are a mixed bag of worthy causes: Crime Stoppers, PAL, Los Lunas Training School, Peanut Butter and Jelly School, Red Cross, Boy's Ranch, Girl's Ranch, South Highway 14 Village Project, and United Way.

"We do not solicit donations and, in fact, will not accept donations," Dan says. "The money we ourselves donate is earned by our own labor. Last year we granted a total of \$6000 to various organizations. The largest cash gift—\$500 to the Eldorado High School Orchestra—helped finance their trip to Vienna."

One other Gray Gladiator project is management of the city's Senior ID Card Program. More than 7000 cards have been issued to citizens age 62 or older. The cards are acceptable identification, in lieu of a driver's license or other ID; in addition, the city bus company honors holders of the cards with reduced fares.

The Gray Gladiators meet on the second Wednesday of each month at 2 p.m. at the Palo Duro Senior Center and invite all interested persons. Other retired Sandians who are members of the Gray Gladiators include Greg Abeyta, Ray Smelich and Al Fields.

Boat Inspection March 20-21

Boating—You can get your boat inspected this weekend, March 20 and 21, at the northeastern corner of the State Fairgrounds. Use the Lomas gate. The State Park Division's Boating & Safety Section will conduct the inspections. All motor and sail-powered vessels must be registered with the agency, and all must have safety inspection stickers to operate on state waters. If you're registering for the first time, bring bills of sale or invoices documenting your purchase.

Sympathy

To Mildred Mellen (1545) on the death of her brother in Minneapolis, March 7.

To Chester Weaver (2522) on the death of his mother in Denver, Feb. 20.

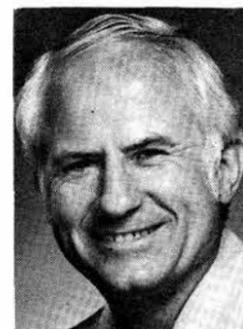
Deaths



Dora Friedman, a composer / photolithographer in Division 3154, died March 12 after a long illness. She was 57.

She had worked at the Labs since May 1949.

She is survived by a daughter.

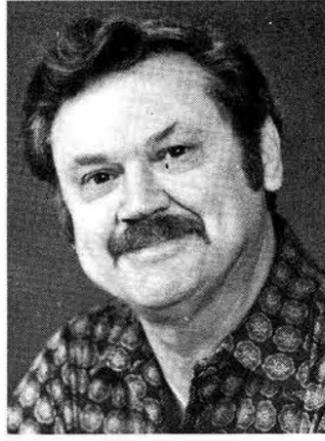


Dick Brooks of Static and Shock Testing Division 1541 died March 5 after an illness. He was 52.

He had worked at the Labs since July 1956.

Survivors include his widow, two sons and a daughter.

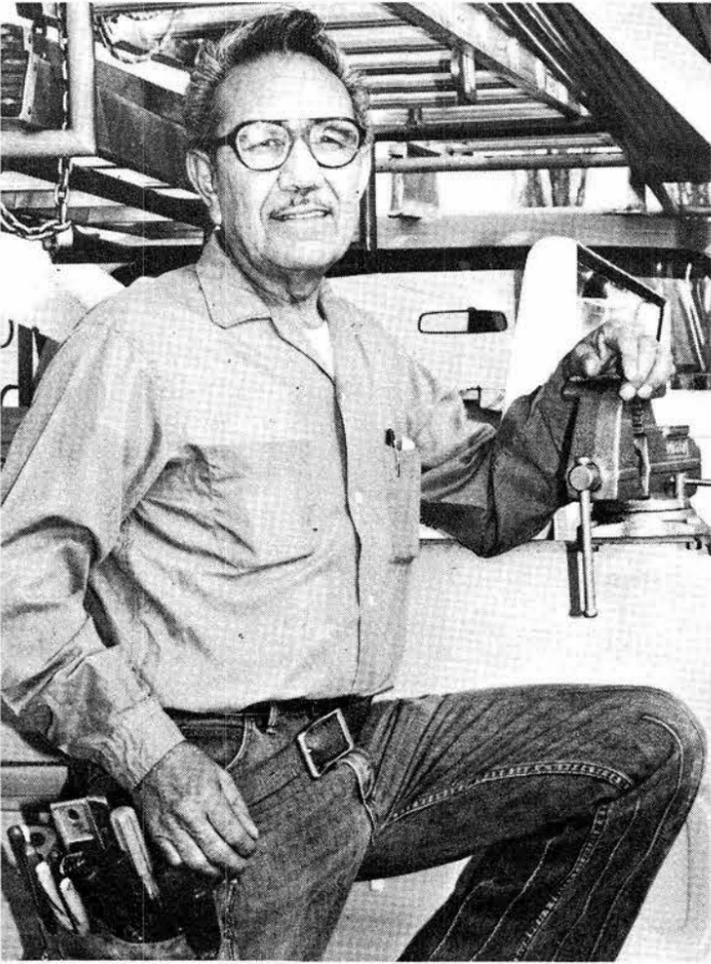
MILEPOSTS
LAB NEWS
MARCH 1982



Ron Hoffman - 8275 15



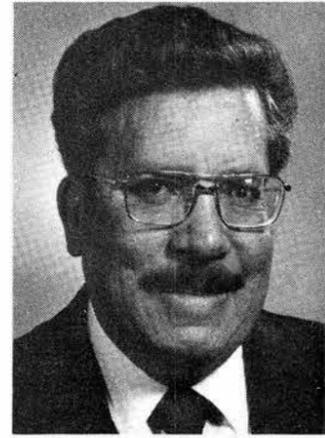
Jim Davis - 3423 25



Roger Gonzales - 3613 25



Don Wright - 1222 15



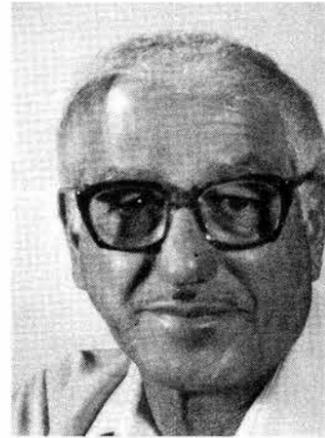
Felix Almaraz - 3211 30



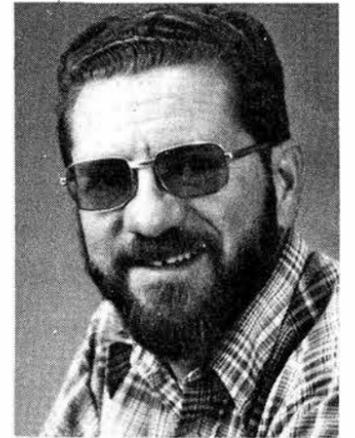
John Loukota - 1125 15



Ron Bump - 1412 25



Robert Jaramillo - 1474 30



Tim Roudebush - 8262 15



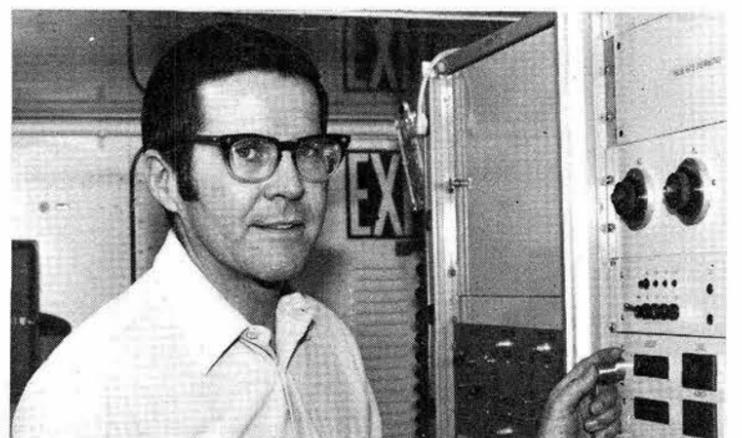
Paul Schuster - 8310 15



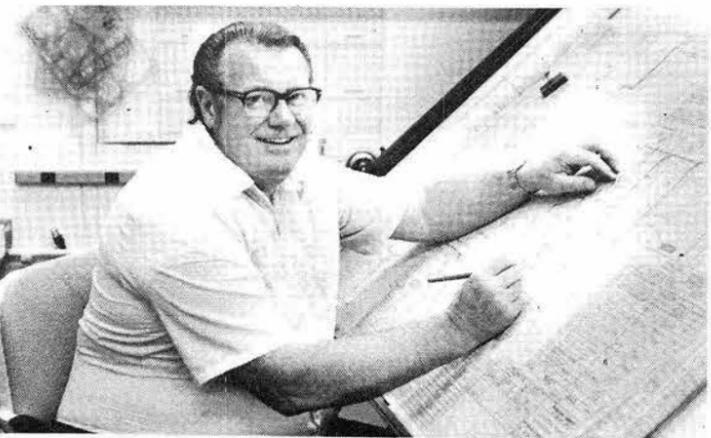
Frank Ross - 1426 25



George Duke - 1768 30



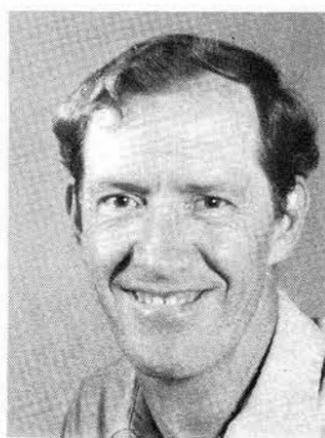
James Clemons - 1171 30



Harvey Thiermann - 2451 30



Wallace Green - 4332 30



Franklin Ezell - 1715 15



Glen Fowler - 1714 20



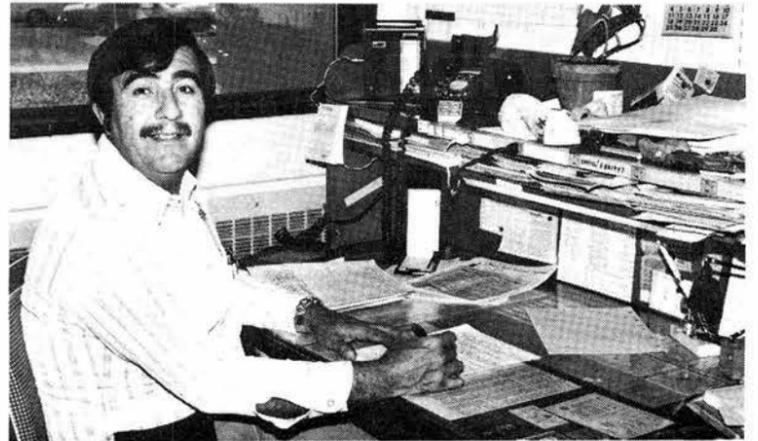
Mary Fisher - 3154 30



Ralph Hamilton - 3435 25



Clifford Elson - 2553 20



Louis Nogales - 1714 20



Rudy Martinez - 3155 20



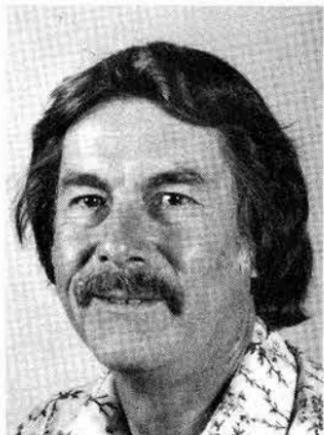
Glen McFall - 2553 30



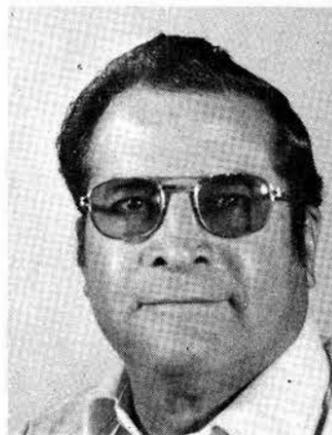
Billie Self - 1754 15



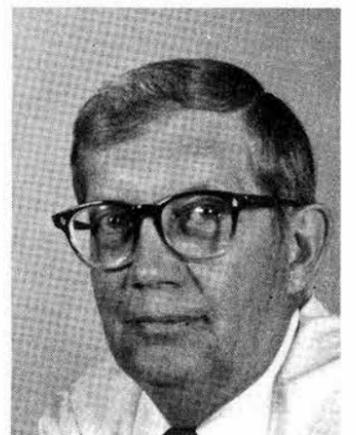
Alton Anderson - 2565 30



Bob Perryman - 3643 15



Frank Gurule - 5811 20



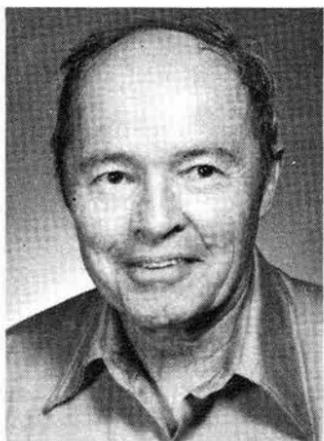
Sanford Erickson - 5821 25



Bruno Navalesi - 3241 25



Paul Field - 2541 30



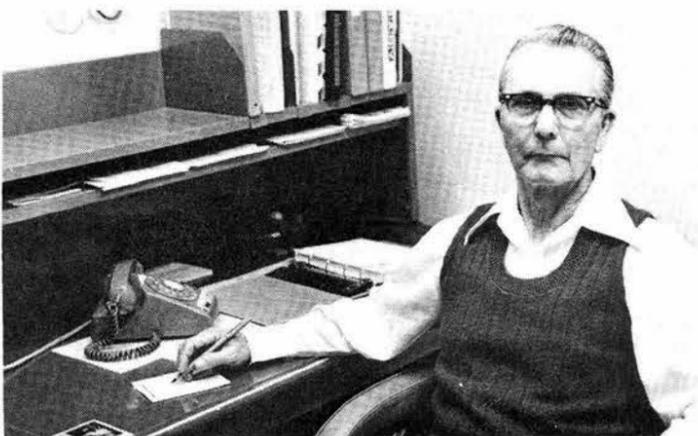
Don Bunten - 1482 30



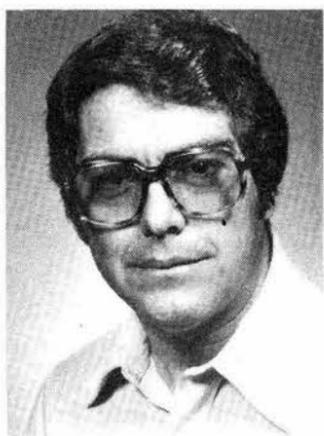
George Wayland - 3544 25



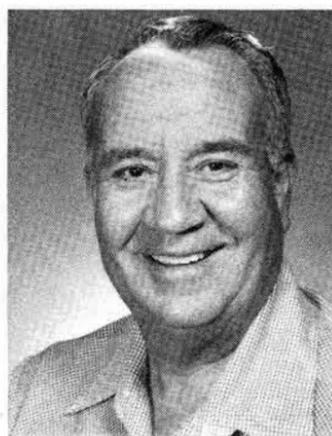
25



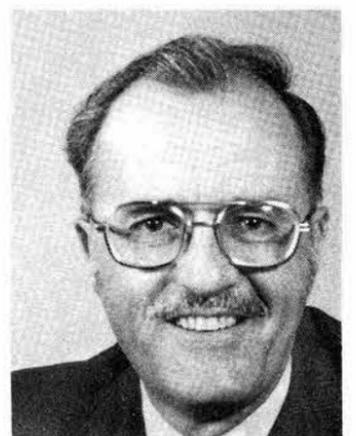
Hadley Rowe - 3613 30



Al Manzanares - 2457 15



John Armijo - 1474 30



Hugh Church - 4544 25

Chaco Canyon Needs You

The first substantive report on the Chaco antiquities came at the opening of the American era. In 1849, in pursuit of marauding Navajos who continued to harass isolated farms and haciendas, a young officer of the Army . . . First Lt. James H. Simpson, found himself in a fascinating world of jumbled, jagged walls projecting above mounds of fallen debris and windblown earth the likes of which he had never seen. Nothing in his past experience had prepared him for the hundreds of contiguous rooms of beautifully shaped and coursed stonework piled one on top of another . . . —Chaco Canyon, *Lister & Lister*.

The young Army lieutenant was the first of many non-native Americans to come to Chaco and to wonder at its architectural extent and level of sophistication. Located on the high desert in northwest New

Mexico, Chaco Canyon National Monument is our state's ultimate ghost town, and within its borders the remains of several communities, each of which probably had several hundred inhabitants, may be visited.

Recently, the Labs received an interesting request in a letter from Scott Adler, MD, who is vice president of the Museum Association at the Maxwell Museum of Anthropology at UNM. The letter stated that the Museum is putting together a traveling exhibit that would reveal the architectural advancement of structures in Chaco Canyon. Question: could Sandia with its materials knowledge and skill somehow replicate architectural details in Chaco structures, e.g., doorways, stone masonry, roof construction, and the like?

Hank Willis, manager of Public Affairs Department 3160, did some checking around and established that the Labs does

indeed have such a capability, born out of weapons technology, but there is a slight hitch: replicating door frames and other artifacts at Chaco Canyon is not exactly our line of work. But perhaps a few interested Sandians would be willing to do the work on site on a volunteer basis, say for a weekend or two?

On March 23, next Tuesday at noon, Jim Judge, head of the Research Project for the Chaco Canyon National Monument, and Jerry Brody, director of the Maxwell Museum, will discuss Chaco and the work that needs to be done. They'll make their presentation in Bldg. 815 outside the Tech Area. If you'd like to take part in this interesting project, which is likely to involve one or more overnight camps at Chaco Canyon, then come to this presentation. Even if you possess no special materials skill, a need exists for unskilled persons to perform sweat-type chores.

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 (M0125).

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 DOE employees.
6. No commercial ads, please.
7. No more than two insertions of same ad.
8. Include name & organization.
9. Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.

MISCELLANEOUS

- SINK, cast iron, w/attached operating Waste King disposal, single lever faucet, some hardware, all \$55. Stang, 256-7793 after 5.
- RB-67 CAMERA system; girl's white provincial bedroom set. Burd, 884-9133.
- SLIDE TRAYS, carousel 80's & 140's, most are new, \$3 to \$5.50. Glaser, 293-8110.
- 1954 ROLLEICORD IV w/Xenar 3.5 lens, case, instruction book, \$80 (half of Blue Book). Taylor, 294-5300.
- LIFT PASS for Red River Ski Area, \$10. Davie, 296-3950.
- HO TRAIN equipment, 4'x8' table, track, switches, transformers (one new dual control), make offer. Burnett, 298-1078.
- GREEN ALFALFA HAY, barn stored, \$4/bale, 200 bales. Casaus, 867-5443, Bernalillo.
- FLOOR LAMP, chrome w/glass table, \$60. Dippold, 821-5750.
- PRESTO hot air popper, used once, \$5; twin size single bed, \$40; ski boots w/clamps, size 11, \$25. Risse, 869-2037.
- U.S. GRAND PRIX motorcycle boots, black, men's size 6 1/2, worn once, steel toe, \$75. Brewer, 831-6897 after 5.
- STAINED GLASS LAMP SHADE, wine connoisseur design, grape vines on light beige background, 20 in. diameter, \$325. Kravnik, 294-1043.
- POLAROID Polarvision movie outfit: camera, lights, projector (new). McDaniel, 299-6189.
- RIFLE, 30-06 w/2.5 scope, \$225; rifle, 30-30 Win. model 94, \$100 or will trade. Luna, 293-4674.
- CALCULATOR, H-P 34-C, 1 yr. old, \$110; deluxe bench press set, 110 lb. w/accessories, \$130. Coalson, 293-9179.

- 3-BIKE motorcycle trailer, \$150; Sears free standing elec. room heater, never used, \$25. Bland, 265-6286.
- ANTIQUA COUCH, two chairs, reupholstered by Newberrys. Marder, 268-9463.
- 16 CU. FT. freezer, frost free, upright Sears best Coldspot, 6 yrs. old, white, \$295. Holton, 844-1716.
- GE ELEC. DRYER, \$125; Wards Signature microwave oven, \$100; Royal Medallion I elec. typewriter w/case, \$150. Connor, 293-2952.
- HOUSE support jacks, 20,000 lbs. cap., \$9 ea.; bike wheel, 27", w/extras, \$10. Graham, 864-1960.
- ORCHIDS: cut blooms, corsages & bouquets. Swanson, 884-8650.
- DELTA-GRAPH 10-band stereo equalizer, \$80; Akai 8-track player recorder, \$40; 8' long sofa, \$50; RCA 19" B/W TV, \$60. Turner, 292-6819.
- MAG WHEELS, turbine style, 14x6, 6-hole for mini truck, w/useable tires, \$200 or trade for motorcycle trailer. Sena, 881-2224.
- PIANO, Baldwin Aeronomic, walnut, w/bench, one owner, \$1900 or make offer. Cupp, 298-9710.
- ATARI TV GAME, 2 1/2 mos. old, w/3 cartridges, \$170. Gunckel, 255-4325.
- AKC Pomeranian puppies, 1 male, 1 female, ready for good home by March 25. Sanchez, 294-3476 after 5.
- TRAVEL TRAILER, 1970 Holiday, 27', AC, self-contained, \$7200. Scranton, 299-8801.
- 2 ALLOY, 6-hole mags 8.5"x15" w/tires, \$80; 8' purple, oval rug, \$15. Rejent, 293-8554.
- TWO large male dogs, 1 yr. old; 2-burner elec. stove, \$10. Blechinger, 299-4890 after 3.
- SKIS, Atomic 180 w/Salomon 222 bindings, \$75 firm. Strassel, 298-3816.
- TRIPLE DRESSER, French provincial style, genuine hickory furniture, \$145. Blewer, 268-9019.
- AMATEUR transceiver, Yaesu FT-101ZD, \$650. Nogle, 299-3863.
- LOVE SEAT & couch, Herculan material. Baca, 881-4184.
- COCKTAIL TABLE, 61"x21"x15" walnut, one drawer, \$75. Stoever, 296-3717.
- REAR SEAT for Chevy Blazer, \$25. Lewis, 255-3316.
- GENERATOR, Onan 2500 watt 120 VAC, elec. start, portable, mounted on 2-wheel cart, \$495. Erni, 268-1721.
- HD Westinghouse washer, 5 months new, \$300. Lewis, 255-3483.
- HOTPOINT no-frost 14.2 cu. ft. refrigerator/freezer, 6 months new; Gestetner duplicating machine, model 260. Benson, 268-9727.
- ZENITH 19" color TV, needs repair, \$50; SCM port. typewriter & case, \$50; kitchen cabinet, all wood floor unit w/separate formica top, \$35. Sprankle, 822-0326.
- FURNITURE: living room, bedroom, dinette set, Magnavox stereo, paintings, refrig., Sears duo vac sweeper. Dyckes, 298-8380, 892-5840.
- MAMIYA M-645 1000S w/LED meter finder, 2 lenses, pistol grip, case &

- filters, \$1200 or possible partial trade. Gleicher, 292-6467.
- KENMORE washer, old, working but needs repair, free. Chorley, 296-1454.
- SAVAGE 110E .30/06 w/rings & mounts; Smith & Wesson model 29 .44 magnum; Colt Trooper .22LR. Haaker, 293-1077.
- FURNITURE: gold plain corner group, \$100; 4" jointer w/stand & 1.25 HP motor, \$250. Wrobel, 255-3062.
- FORMAL, matching lace bolero, lilac, flowing design, size 7, paid \$90 in '81, asking \$38. Priddy, 884-8392.
- HAYNES shop manual for '78-'79 Yamaha XS1100, never used, \$4; Dunell 3-spd. English bicycle, 26 x 1-3/8, \$15. Schmale, 293-0784.
- 2 EACH, E-78 14 recap tires, \$20 ea. Marquez, 345-0731.
- ELECTRIC PIANO w/case and expression pedal, Hohner, \$175. Reynolds, 265-0383.
- SCOTTS TURF BUILDER Plus 2; 4 champion sprinklers; concrete stepping rounds; bee equip.; galvanized chicken feed & water containers. Bailey, 294-4218.
- PICNIC TABLE, handmade, heavy wood, wind can't blow this one away, benches connected, redwood color, \$30. Paul, 296-6500 after 3.
- ELECTRIC kitchen ranges: Frigidaire 40", coppertone, \$175; 30", harvest gold, \$75. Wilson, 299-3046.
- ENGINE stand, 1000 lb. capacity, \$80; BMW 4-cyl. smog control system, complete for pre-1972 models, free. Murata, 881-8459.
- LAWN MOWER, 3 hp, 22", \$45; bicycles: 26" 3-spd., \$20; 24" girl's 3-spd., \$40. Bertram, 294-8350.
- RADIAL TIRES, 2 Michelin ZX 185SR-14, \$15 ea.; 2 185-14, \$10 ea.; 1 185/70-13, \$10; mechanic's floor creeper, \$8. Horton, 883-7504.
- AKC Lhasa Apso female puppy w/ shots, 8 wks. old & nearly housebroken, \$250. Sheldahl, 299-4077.
- SCHOBER concert organ w/full pedal clavier, bench, speaker, Reverbatape, and music lamp, \$2000. Bateman, 298-9502.
- IBM Selectric, 10 pitch pica, service contract, \$350. Chavez, 881-2711.
- '69 FORD Fairlane 500, 302 V8, AT, PS, AC, 69K miles, \$575. Stang, 256-7793 after 5.
- 13' MACH II SAILBOAT, 82 sq. ft. sail, Coralite hull, three life jackets included, \$400. Graham, 293-7302.
- '78 DODGE van, 300 Tradesman, extra long bed, 1 ton. Padilla, 345-7660 after 6.
- '73 VW Beetle, AM-FM, new tires, \$2800. Garcia, 292-8287.

TRANSPORTATION

- '74 FORD Torino, 4-dr., PS, AT, AC, AM-FM cassette, SB radials, short block w/15,000 mi., \$1100. Luna, 293-4674.
- '77 22 1/2' MOTOR HOME, 440 Dodge motor, 21,000 miles, Cruise Control, CB, AC, awning, AM-FM radio w/tape player. Kroesche, 299-1258.
- '75 CORVETTE conv., two tops, low mileage, \$8700. Perryman, 281-3020.
- '80 TOYOTA Corolla 3TC, PS, AC, AT, AM-FM, 16,000 miles, SB radials, puncture proof tires, \$5495. Brooks, 255-1498.
- '70 PORSCHE 914, \$3500; 19' Nordic ski boat, big block Chevy, V-drive, tandem trailer, \$6500, might trade. Sena, 881-2224.
- '77 MOTORCYCLE, KZ400 Kawasaki, 13,000 miles, many extras. Miller, 299-6067 after 5.
- '78 DELTA 88 2-dr., low mileage, PB, PS, AC, Cruise, new radials & shocks. Harrison, 883-5411 after 5.
- '79 HONDA CB650, windshield, less than 2300 miles, adult ridden, helmets included, \$1800 firm. Menschel, 892-6475.
- LADIES' 3-speed English bicycle, Churchill deluxe, 26" wheels, low mileage. Taylor, 294-5300.
- '77 GMC/MIDAS 24' motorhome, fully self-contained, AC, AT, PS, PB, generator, roof air, low miles, one owner. Allen, 296-6453.
- '76 FORD Courier, 4-cyl., 5-spd., radials, Curtis, 281-3519 after 6.
- '79 YAMAHA motorcycle XS-400, 6300 miles, 50 mpg, tools, shop manual, hiway bar, fiamme horns, black & gold, \$1100. Gubbels, 884-3711.
- '79 BOBCAT, air, AM-FM, mags, louver, below book. Himes, 869-6559.
- '74 HONDA CB360, 11.3K miles, electric start, shield, rack, two helmets, new tires & air filters, repair manuals, etc. Bateman, 298-9502.
- TOWNHOUSE, NE Hts., 1 bdr., den, garage, fp, wet bar, tennis & pool, 1200 sq. ft., below appraisal. Burd, 884-9133.
- WILL TRADE lg. 4-Hills home for smaller residence, creative financing available. Hymer, 293-6029.
- 3-BDR., 1 1/2 bath, hardwood floors, pitched roof, corner lot w/access, assumable 7.5% loan, REC on equity, \$15,000 down. Sena, 881-2224.
- MOBILE HOME, 2-bdr., 12x60, furnished, carpeted, front kitchen, storm windows, trees, adult park. Adams, 292-6857.
- McINTOSH LAND, 45 miles east Albuquerque, 9 acres, \$15,000, corner location, electricity, U.G. telephone, terms. Eglinton, 256-1921.

REAL ESTATE

WORK WANTED

- LAWN MOWING, roto-tilling, deep raking, light hauling, etc., free estimates. Tom Edrington, Jr., 881-2395, and Paul Holt, 294-6928.
- YARD WORK, light hauling. Paul Prew, 296-3815.
- PAINTING by UNM Student Paintshop, references, estimates. Peter Shunny, 266-0266.
- SHARE-A-RIDE
- RIDERS WANTED FOR S.C.A. van-pool. The van starts in Belen and travels north on 85. Graham, 864-1960.

Biggie Buffet Set Tomorrow

TONIGHT at Happy Hour, song stylist Marci and the danceable Talkabouts make things easy and relaxed from 5 to 7:30. Then Jeanne Rich and Friends take over to play country western until midnight. In the meantime, special prices are in effect, the dining room serves fine steaks and seafood and a couple of chef's specials—beef ribs for \$4.75 and beef burgundy for \$4.50.

TOMORROW is the biggie buffet of the month—it's a rib eye steak, salad bar, vegetables and assorted dessert spread from 6 to 8. A powerhouse show band, Spinning Wheel, plays for dancing. No reservations required. Members pay \$7.75.

MIDWEEK HAPPY HOURS include Mondays with 25-cent drinks for women, Tuesdays with special prices for everyone and a free spread of munchies and goodies at 5:30, and Wednesdays with three drinks (well drinks and draft beer) for a dollar.

THURSDAYS feature a free movie on the big TV screen. On March 25, it's *The Wild Bunch* with William Holden. On Thursday, April 1, it's *Animal House* with John Belushi.

HAPPY HOUR on Friday, March 26, sees Youngblood playing early and The Scotsmen playing late. Special prices are in effect and the dining room serves *a la carte*.

RETIREES from Sandia and DOE are invited to the Coronado Club's retiree dinner dance on Saturday, March 27. A super buffet of roast beef will be spread from 6 to 8 p.m. and the Mellotones, one of the most danceable groups in the city, plays from 8 to midnight. Admission is \$5.95—make reservations by noon Wednesday, March 24. All Sandia and DOE retirees were mailed an invitation this week together with an announcement of a new dues structure for retiree Club membership. If you were inadvertently left out, call the Club office, 265-6791.

REDONDO ROUND DANCERS are offering a new series of lessons starting Thursday, April 1. Charlie Clendenin



SPECIAL EVENT for all Sandia and DOE retirees is the Club's retiree dinner dance scheduled Saturday, March 27. Helping promote the affair are Frank and Marie Loomis, Evangeline Marquez and Rick Torres. More than 800 invitations were mailed last week—make reservations by noon Wednesday, March 24.

(2633), a fast man on his feet, says the lessons run each Thursday for three months in the Club ballroom, starting at 7 p.m. "You don't have to be a qualified dancer," Charlie continues, "if necessary, we'll start with foot identification and proceed from there. It's great fun, great exercise and a great group. Round dancing is for all ages." Call Fred or Kay Haury, 298-5050, for more details.

A SWIM TEAM sponsored by the Coronado Club is a possibility. Interested parents who want their children to participate in competitive swimming this summer should call recreation manager Tom Lenz, 4-8486.

TRAVEL DIRECTOR Frank Biggs (4231) announces two scenic railroad/charter bus travel packages. The first, on June 26, is a one-day tour that includes charter bus from the Club with treats and refreshments on board and a ride all the way on the Cumbres-Toltec between Chama and Antonito. Cost is \$42, adults; \$30 for kids 11 and under. The second tour is a two-day trip July 10-11 to ride the narrow gauge train from Durango to Silverton, and to visit the Aztec ruins and

the Purgatory Alpine slide. The package includes treats on the bus and lodging in Durango. Cost is \$88. Deposit \$50 at the Club office now to reserve seats.

The Club offers two packages to Las Vegas, Nev. The first, by air, is set April 4-7 and costs \$185. The second, by charter bus, is scheduled May 30-June 2, and costs \$130. Both groups stay at the Maxim Hotel.

Other scheduled trips are:

Chaco Canyon, April 24, \$20.

Mazatlán, April 18-22, \$345, or April 18-25, \$420.

Cozumel, various dates, before May 15, \$459; thereafter, \$409.

See Frank in the lobby tonight between 5 and 7 p.m.

Fun & Games

Skiing—This season started off with a limp but now seems to have pulled itself together with good spring skiing around the state. For cross country skiers, Art Arenholz, 298-1724, leads a trip into the Sandias tomorrow, March 20. Meet at the Aladin at 8 a.m. If you'd like something a bit more ambitious, Kathie Hiebert, 299-5392, is running the Crested Butte bus trip next week, March 25 to 28.

Also on the X-C scene, the first annual Miller Lite Loppet is scheduled for March 27. It offers a 100-metre sprint, a mixed relay (3k and 1.5k), a 5k and a 20k. The entry form doesn't say, but we assume this all takes place on Sandia Crest. And, if enough Sandians take part, a special bracket will be set up for them. Pick up entries at the LAB NEWS trailer and return them to Tom Lenz at the C-Club. (PS—We have no idea what a loppet is. Maybe it's what you say after a draft of Miller Lite . . .)

The final session of the X-C ski clinic does its things in Chama on Sunday, March 28. Call Tom Lenz on 4-8486 by March 24 to sign up.

"Martha, this is wrong. Guaymas is just wrong."

