

ICE, SNOW, & HARDHIP—Carl Smith (1111) recently stood atop this 18-thousand-foot Alaskan peak, Mount St. Elias. Story begins at right; other pictures on p. 5.

Sandian Makes Successful Alaskan Ascent

Carl Smith of Experiments Planning Division 1111 has recently returned from a successful climb of one of North America's most formidable mountains, Mount St. Elias, located in the extreme southwestern corner of Alaska. Although not extremely high, St. Elias is a mountain of truly Himalayan proportions and difficulties because it rises virtually out of the nearby Gulf of Alaska to its 18,008-foot summit. It is sometimes referred to as the greatest ice mountain in all of North America.

Carl completed the climb with four mountaineering friends from different parts of the country. As near as the group can determine, some 25 unsuccessful attempts have been made to climb St. Elias, and their's is only the tenth to succeed. Blizzards and avalanches are the chief deterrent to success. First to make the climb, in 1897, was an Italian nobleman, the Duke of Abruzzi.

The Smith expedition took one month. "After flying out of Seattle," Carl recounts, "we landed at Yakutat, a small community on the Alaskan coast. A Cessna-180 took us and our gear from there to a landing strip farther up the coast near the base of the mountain. Then a chopper carried us to the jump off point for the actual climb."

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LAB NEWS

Vol. 30, No. 19

September 15, 1978

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

VP, Directors Appointed

Editor's Note: The announcement on Aug. 31 of the VP and Director appointments coincided with the LAB NEWS press time; this is the follow-up to our abbreviated page 1 announcement in the Sept. 1 issue.

* * * *

JOHN GALT's appointment to 5000 Vice President is the sequel to his arrival at Sandia four years ago to head Solid State Sciences Research Directorate 5100. He had been with Bell Labs since 1948; prior to joining Sandia he was director of Bell Labs' Solid State Electronics Research Laboratory.

"The work here relates to that which I did at Bell Labs, but is still different," Mr. Galt says. "And I've truly enjoyed the variety of my experiences at Sandia.

"I'm impressed with the level of the technical effort at Sandia and with our research effort in particular. I believe that research is central to Sandia's future, because it is a source of innovative technology. Some past examples of this are: PZT-type ferroelectrics, early photovoltaic work, and the research with ion beams which has found application in the integrated circuit program. Recent research in applied mathematics has opened up the area of asymmetric encryption, and I have a strong conviction that this will be important in our future. Research is one reason Sandia has achieved a position that makes its future look both bright and interesting."

Mr. Galt earned his AB in physics from Reed College, a PhD in

[Continued on Page Four]



Gerry Yonas (4200), John Galt (5000), Fred Vook (5100)

Afterthoughts

The stuff of heroes--Today's Journal carries two letters questioning the hero status of balloonists Abruzzo/Anderson/Newman on the basis that they "bought the title." As one puts it: "1978... the year when three rich businessmen floated comfortably across the Atlantic in an expensive balloon." They then both cite as the genuine article Naomi Uemura, the Japanese adventurer who this year single handedly made the first solo crossing of the North Pole, then proceeded to travel down the length of Greenland. His accomplishment, while recognized, has received nowhere near the acclaim of the balloonists.

I think the letter writers fail to comprehend the public perception of that which the public calls a hero. If you wish to cross the threshold into the realm of the heroic, your deed must exhibit certain characteristics:

- daring, preferably life-risking daring
- firstness or at least singularity of achievement
- success (failed ventures get short shrift)
- personal resolution, i.e., you must have willed yourself to do the deed. If you accidentally stop a bullet intended for someone else, you're a good guy but you're not a hero.

The soldier who throws himself on the grenade to save his buddies meets these criteria and is a hero. Abruzzo & Co. meet them and so does Naomi Uemura. The astronauts who went to the moon are heroes. Elsewhere in this LAB NEWS we describe the exploit of Sandian Carl Smith who successfully climbed an ice encrusted, hazard-ridden mountain in Alaska. Sorry, Carl, your expedition was number 10 to make the top of that mountain--you miss out on "firstness or singularity of achievement."

Lots of courageous people miss out. The paraplegic who wills himself to lead a more-or-less normal life. The young couple who this year completed an 18-thousand-mile walk around the boundaries of the United States. The political protester in a totalitarian state.

The Journal letter writers really have more quarrel with the matter of acclaim than with hero qualifications. The balloonists became the darling of the media largely because they were accessible, visible and made a dramatic landing. And they spoke English. The lonely Japanese adventurer crossing the ice cap is a hard story to cover; and when his journey was over the language difference made for an impossible interview situation. So Naomi Uemura has yet to become a household word. Not fair, you say? That's right, but whoever said that life is fair?

* * *

Such prestige!--A friend reported he had seen it and we smiled and inwardly doubted, but yesterday we actually did see the ne plus ultra of New Mexico prestige plates: YEA - GOD. *js

Labs People Active in Rescue

On a Friday afternoon in late August, a 26-year old hiker in the Sandias fell a short distance, broke both an arm and a leg, and was rendered unconscious. He was in big trouble--alone and lying in a little-traveled area just west of the South Peak.

The next morning, around 10, John Kelly (4423) and a friend were traversing the Three Gun Trail near the South Peak. "We thought we heard a voice," John recalls, "but we didn't pay much attention to it and continued on--probably just some other hikers. We'd gone some distance further when we concluded that we were hearing a call. It came every minute or so. So we yelled back and, after some difficult scrambling through brush, discovered this guy. He'd spent the night out there."

The victim was lucky. No one in town knew where he was going or for how long he'd be gone.

John raced back to town via Embudo Canyon to alert rescuers. The Mountain Rescue Council and the Sandia Search & Rescue Team, both liberally staffed with Sandians, assisted in the helicopter evacuation of the victim. John Goff (1713) was field coordinator for the rescue effort. The fallen hiker is recovering following surgery in a local hospital.

Sympathy

To Robert Altherr (1472) on the death of his mother-in-law in Indiana, Aug. 26.

To Gary Jones (3522) on the death of his brother in Los Angeles, Aug. 18.

To Leroy Thomas (1245) on the death of his mother in Beaver City, Neb., Aug. 26.

To Roger Buehler (2343) on the death of his brother in Ohio, Aug. 10.

To Dottie Jordan (4411) on the death of her father in Albuquerque, Aug. 30.

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LAB NEWS
SEPTEMBER 15, 1978



LAB NEWS

Published every other Friday
SANDIA LABORATORIES
An Equal Opportunity Employer

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LIVERMORE, CALIFORNIA
TONOPAH, NEVADA
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RECERTIFICATION classes for Sandians who had completed previous Labs-sponsored CPR training were held recently with a total of 469 recertifying. Dennis Mangan (1759) was one of the 45 instructors who assisted; Vickie Jaramillo (3144), one in the group who qualified.



ARLYN BLACKWELL to Director of Operations 8200, effective Sept. 1.

Joining Sandia Livermore's structural analysis organization in 1959, Arlyn held positions as section and division supervisor and, in 1967, was promoted to manager of Engineering Analysis Department. From 1969 to 1976 he headed Applied Mechanics Department, during which time he was a technical advisor to AEC on arms control and served on two occasions at the Conference for the Committee on Disarmament in Geneva, Switzerland. Subsequently, his responsibilities focused on energy R&D activities and, since 1977, he has headed SLL's Planning Staff, responsibilities he retains in his new position.

Arlyn earned BS and MS degrees in ME from UC/Berkeley after serving two years in the Army Corps of Engineers. A registered professional engineer in California, he is a member of ASME.

An avid photographer, Arlyn also enjoys boating and looks to good times in his recently acquired motorboat with wife Sharon and their young son. The Blackwells live on Bevilacqua Court in Pleasonton.

LIVERMORE NEWS

Vol. 30, No. 19

LIVERMORE LABORATORIES

September 15, 1978



Luis Garza—to Stanford



Judy Cross—to UC/Berkely



Diane Look—to Stanford

Three Start College Under Labs Program

Students were again on roll at SLL during the summer, and six of them are in Sandia's Work/Study Program, a program under which the students work toward their bachelor degrees under Lab sponsorship while they work during the summer at the Labs. Each has a "mentor" from Sandia to provide guidance and career counseling during the four-year program.

Three of the six are returning students, but new to the program are Judy Cross (8347), Luis Garza (8313) and Diane Look (8341), all college freshmen this fall. Judy, a Granada High School graduate who will attend UC/Berkeley to major in electrical engineering, has been assisting in pressure, volume and temperature experiments in SLL's hydriding lab.

Luis is performing experiments involving corrosion and molten salts in the Exploratory Chemistry Division. A Dublin

High graduate, Luis will attend Stanford University. Diane, who graduated from Foothill High in Pleasonton, will also attend Stanford University. Working in SLL's Theoretical Division, she's been learning Fortran computer language and computer routines.



UNDERSECRETARY OF THE ARMY Walter LaBerge visited Sandia last month to discuss Sandia's role in the Army's nuclear engineering effort and to be briefed on SLL's war games systems study for the Fifth Corps in Europe. Here, he and VP Tom Cook (8000) pause with a booklet describing Sandia's solar program.

Congratulations

Mr. and Mrs. Pat O'Brien (8256), a daughter, Katie LaVaughn, Aug. 5.

Donna Bustos (8214) and Roger Gonzales married in Livermore, Aug. 5.

Sympathy

To Ray Smith (8352) on the death of his daughter in Oakland, Aug. 8.

To Ken Foster (8256) on the death of his mother-in-law in Los Angeles in Aug.

Retiring



Charlie Quillen (8161)



Fred Hohmann (8257)

VP, Director Appointed

physics from MIT, and was a National Research Council Fellow at the University of Bristol in England. He is a Fellow of APS and of IEEE, and serves on the Air Force Science Advisory Board as well as a number of government agencies.

John, his wife Marguerite and their son Tony live in the SE Heights. "Since moving to Albuquerque, I've been reading some New Mexico history," he says, "and we're looking forward to more local travel."

* * *

FRED VOOK to Director of Solid State Sciences 5100. Since coming to Sandia in 1958 as a staff member in the Physical Sciences Research Department, Fred has been supervisor of Radiation Effects Division and, for the past seven years, has been manager of Radiation and Surface Physics Research Department 5110. Fred earned BA and BS degrees from the University of Chicago and MS and PhD degrees in physics from the University of Illinois.

"Research in this directorate," Fred says, "is aimed at the discovery of new physical properties. We're oriented toward the future. I believe our mission of technical leadership lies in three areas: what we don't know but need to know to solve present problems, new discoveries that go beyond the solution to present problems, and discerning the impact of these discoveries on our weapons and energy policies."

"In the weapons area, Sandia pursues a policy of direct support of research to complement development activity. A goal for the future is to provide similar research funding for energy projects as well."

Fred is a Fellow of the APS, has published 60 journal articles, and is a member of the Editorial Boards for the journals *Radiation Effects* and *Crystal Lattice Defects*. He serves on numerous international advisory committees concerned with radiation effects in semiconductors and ion implantation. He is a member of the DOE-Office of Fusion Energy advisory committee on Plasma-Materials Interactions and, for three years, has been a member of Sandia's Education Committee.

Fred, his wife Freddie, and their two sons live in the NE Heights. Away from work, Fred enjoys tennis, skiing and hiking.

* * *

GERRY YONAS to Director of Pulsed Energy Programs 4200. Gerry came to the Labs in April 1972 as a supervisor of the Electron Beam Physics Division. Before joining Sandia, he headed the E-Beam Research Department for Physics International at San Leandro, Calif. Since 1973 he has been manager of the Fusion Research Department. Gerry earned a BS in engineering physics from Cornell University and a PhD in engineering science from the California Institute of Technology. He is a member of the American

Physical Society, has authored numerous papers on intense particle beams and has served on several government committees.

"I now have two new areas to work with," Gerry says, "laser physics and nuclear weapon effects simulation. And I find it exciting to have this opportunity to broaden my outlook and to contribute to these subjects. It creates the opportunity for unification of efforts as well as for expansion and movement toward more ambitious projects similar to those we've pursued in our particle beam work. However, Everet Beckner is a tough act to follow!"

"I am excited about EBFA which is being constructed in our new facility. The accelerator should be completed by the end of next year and should permit us to carry out significant fusion experiments. Particle beam fusion has been of increasing international interest and, as a result, I've had the opportunity for much world-wide travel. It's given me a broader perspective about people as well as physics and technology. In fact, learning about other people and other places, photographing them, and reading their history has become my favorite hobby."

Gerry also enjoys model building, "inept skiing," gardening and jogging. He and his wife Jane and their two daughters live in the SE Heights.

* * *

Fun & Games

Hockey & skating—DOE's Bob Walton called to report that the 30 & Older Ice Hockey League begins play on Sunday, Sept. 24, at 10:30 a.m. at the Iceland rink. Also, the Albuquerque Figure Skating Club has practice and learning sessions in the graceful art every Saturday at 5:15 p.m. at Iceland. Call Bob on 296-0372 if you need further information.

* * *

Running—LAB NEWS (4-1053) has entry blanks for New Mexico Tech's 4th Annual "M" Mountain 9-Miler, set for Sunday, Oct. 1, at 11 a.m. in Socorro. The course begins and ends at the base of "M" Mountain on the NM Tech campus; elevation gain is 300 feet. This well-run event gains more entrants every year.

The Albuquerque Marathon is set for Oct. 15. As yet, we have no further information and we'd appreciate an entry blank that we can duplicate for distribution to interested runners.

The Roadrunners meet on Sunday, Sept. 24, at 1:30 p.m. at Kit Carson Park. One, 2 and 4 milers are scheduled for men, boys & girls, and women. Show up if you're interested.

* * *

Horseshoes—In the recent C-Club tournament, Leo Bressan (2552) was the singles winner and Bill Sweatman (retd.)



TOUCHUP, PAINTUP TIME. A few weeks back, LAB NEWS staff was treated to a couple of days of preventive maintenance while the men of Painting, Sheetmetal and Wood Shop Section 3613-3 scraped away the loose putty in the windows and sealed them up again, good as new. Jose Jojola, 28 years a painter for Sandia, primed the new putty, later put the finishing touches on frame and ledge.



The *Washington Post* recently reported that the citizens of St. Lucie, an island in the West Indies, have drilled seven wells into an active volcano to tap live steam as a source of energy. The plan is to link generators to the wells to provide an apparently endless supply of cheap electricity. It's such a fine idea we hope the project doesn't blow up on them.

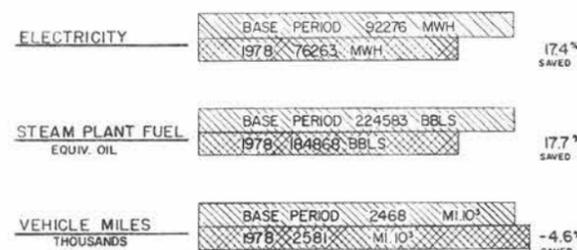
was runner-up. Lou Eversgerd (retd.) took the Class B, while Bill Sweatman and Jim Fisher (2635) teamed up to take a first in doubles. The Horseshoe Club meets at the C-Club on Thursday, Sept. 21, at 4:45 p.m. to present awards, partake of refreshments and elect officers.

* * *

Triathlon—Los Alamos is holding its version of the Albuquerque Triathlon tomorrow, Sept. 16. But it's a pale version. There's a 10-mile bike phase (same as the AT), a 3-mile run (vs 5 in AT) and a 200-yard swim (vs a quarter-mile). And the events are not run one after the other without pause but, rather, separated from each other by an interval of at least an hour. Activities start at 9 a.m. in the U of C Admin. Bldg. parking lot.

ENERGY SAVINGS

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



Alaskan Ascent

At 3000-foot elevation, the jump off point was sited in a heather meadow just below the snow line. Four higher camps had to be established, the highest at 13,400 feet. The modus operandi consisted of climbing and locating the next higher camp, then shuttling equipment from the lower to the higher camp in repeated trips. "We'd make these shuttle trips in fair weather and foul," Carl says, "though sometimes the foul was so foul we just had to sit in the tents and wait it out. Ever sit for two or three days in a small tent? Then there were the whiteouts, but we had wands to stick in the snow to help us define the trail under those conditions."

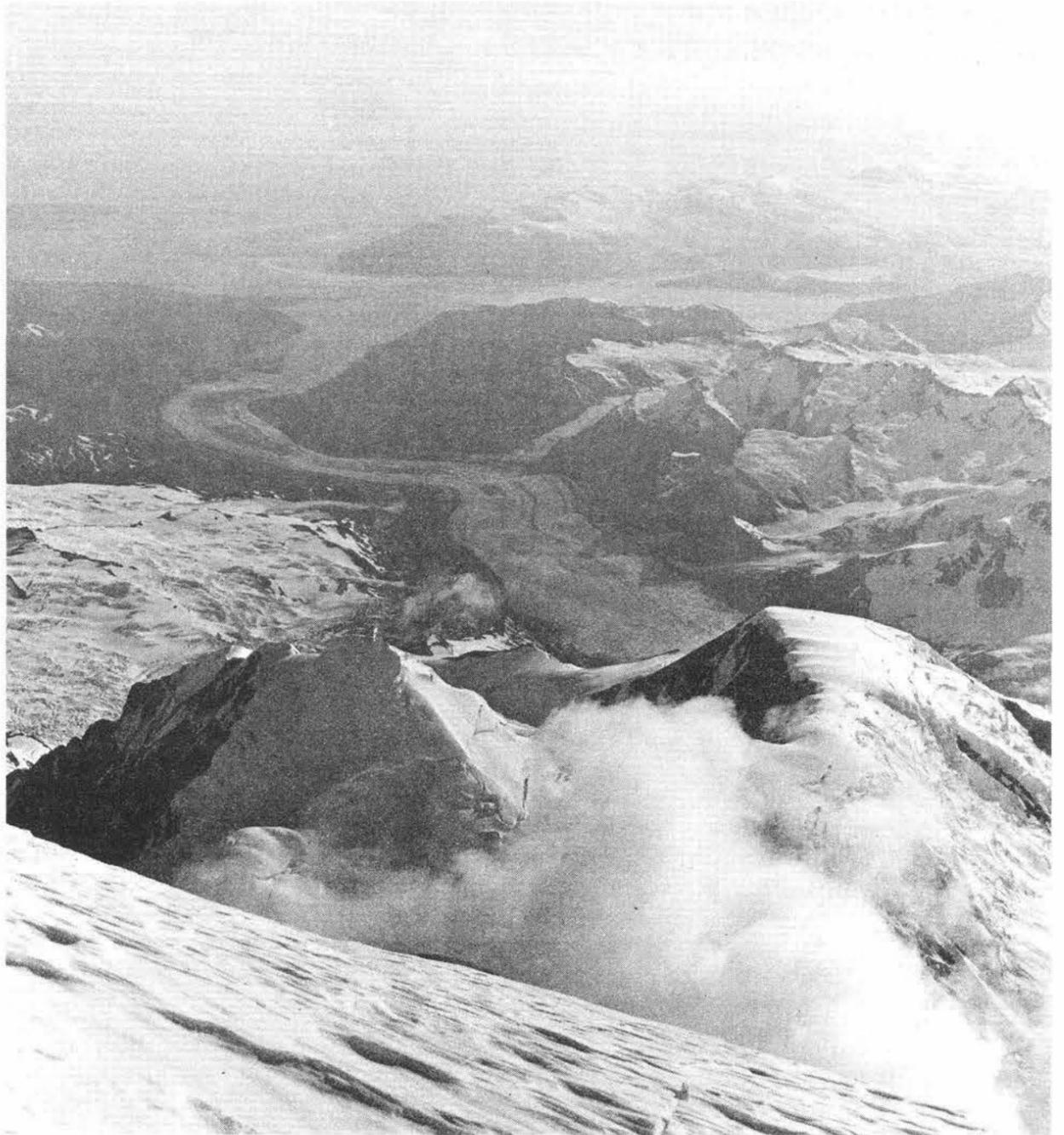
As a safety precaution, chiefly to guard against falls into snow-covered crevasses, the five men always traveled roped together. The single predominant activity was for the lead man to kick steps in the snow and ice of the steep slopes. Because this was physically taxing, the men alternated in this chore. Avalanches were common, but fortunately none threatened the climbing party.

Carl relates that their highest camp, at 13,400 feet, was something of a gamble. "Previous expeditions set their final camp higher, above 15 thousand. But we were running out of time and food, so we hoped for one day of clear weather and we lucked out. Monday, Aug. 21, dawned windy but clearing. We charged out of camp by 9:30 and headed for the summit. At 16 thousand, Bill developed stomach cramps and had to drop out. We continued on and made the peak by six that afternoon and celebrated. It took us four hours to get down, back to our camp at 13,400, but in that part of the world you have ample daylight until ten or eleven at night."

They were fortunate. The one clear day was followed by several of inclement weather.

Mount St. Elias, says Carl, was not his highest but was one of his more difficult climbs. In 1972, he scaled a 21-thousand-foot peak in the Hindu Kush in Afghanistan and, in 1975, the 20-thousand-foot Chimborazo in Ecuador.

What's next? "Maybe I'll just settle for a little ski touring this winter."



BELOW the summit, looking westward, the Tyndall Glacier winds toward Icy Bay which empties into the Gulf of Alaska. With snow line starting at 3,000 feet, the remaining 15,000-foot ascent is thought to present more snow and ice than any other mountain in the world.



ON TOP of Mount St. Elias after three week effort, climbing party had brief celebration. That's Carl Smith (1111) on the left. Group had to hustle down mountain to avoid being caught in darkness before reaching camp.



TYPICAL CAMP was long on snow and bad weather, leading to restive days in tents waiting for better conditions.

Events Calendar

Through Sept. 24—NM State Fair.

Through Oct. 8—"The Owl and the Pussycat," The Barn Dinner Theater, 281-3338.

Through Nov. 17—"Navajo Weaving and Pueblo Pottery," Maxwell Mini-Museum, Plaza Galleria, 11:30-2:00 M-F.

Sept. 15, 16—"The Oldest Living Graduate," Performing Arts Collective, Convention Center, 8:15 p.m., 898-7310.

Sept. 15-17—Fiesta de Santa Fe.

Sept. 16, 17—"Sleeping God," a legend at Volcano Park by the SW Masque

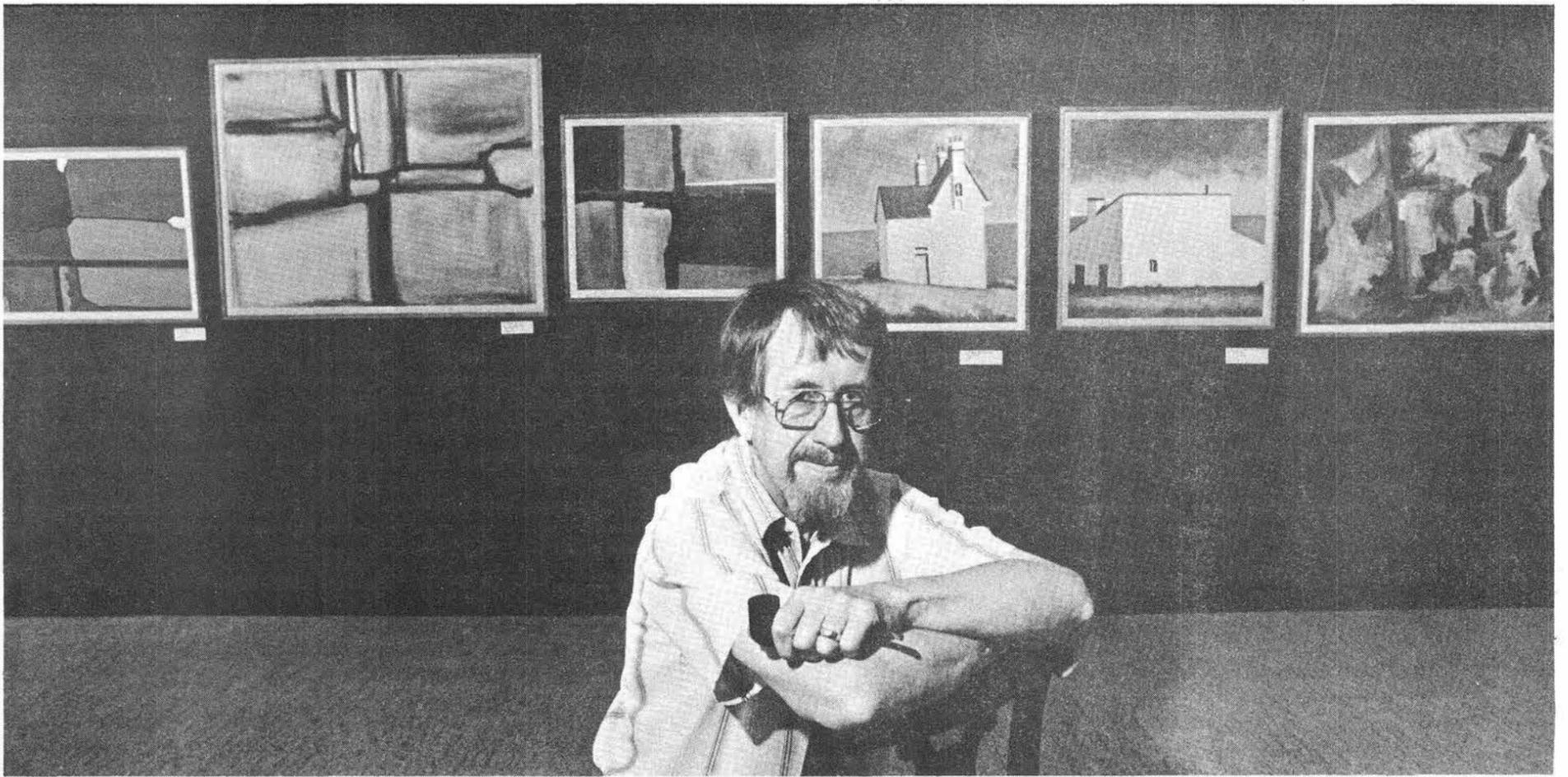
Makers. A caravan will leave the U of A at 7:30 p.m.

Sept. 19—"A World of Illusion," Blackstone Magic Show, UNM Cultural Entertainment Series, Popejoy, 277-3121.

Sept. 22, 23—Pianist Horacio Gutierrez performs with the New Mexico Symphony, Popejoy, 8:15 p.m.

Sept. 23, 30—Lobo football home games.

Sept. 27—Neil Simon's "California Suite," UNM Cultural Entertainment Series, Popejoy, 8:15 p.m., 277-3121.



IN A BURST OF PRODUCTIVITY, Dave Berry (2345) has painted 25 pictures since April of this year. These and others are on display at the Canterbury Episcopal

Chapel, 425 University NE, through Sept. 30. A second one-man show is scheduled later in the year at UNM's Jonson Gallery.

A Case of Commitment

Dave Berry: A Painter

For years, Dave Berry (2345) was a closet painter. Everything he painted either went into a closet for storage or was given away. But no more. His pleasure in painting remains; it's his attitude that's changed.

"I used to think of myself as someone who painted," Dave explains. "Now I think of myself as a painter. The difference is a matter of dedication, of admitting to yourself what you really are."

A widower, Dave remarried last April—and he's done 25 paintings since, most of which are on display through September 30 at the Canterbury Episcopal Chapel, 425 University NE.

"My wife, Janee, has obviously been a strong new force in my life," Dave says. "She's the one who keeps paintings out of the closet—who insists that I not give any of them away. I've already got a second

one-man show lined up later this year, and Janee and I are going to California soon to try to line up a gallery to handle my work."

Like many of us, Dave's educational and professional lives have often gone in opposite directions. After WWII (on the GI Bill) Dave intended to become a chemical engineer. His grade point average soon convinced his counselor that Dave was in the wrong field. A battery of tests and some soul-searching later, Dave switched to fine arts, concentrating on painting and drawing. His grade point skyrocketed and Wittenberg College (now University) in Springfield, Ohio, granted him a B.F.A. in 1949.

Dave then came to UNM for graduate work with Raymond Jonson (then and now a nationally recognized non-objective painter). Raymond is now Professor Emeri-

tus at UNM and heads the Jonson Gallery.

When funds ran out short of a Master's, Dave came to work at Sandia as a draftsman in 1951. That same year he had a one-man show at the State Museum in Santa Fe. Ironically (at least Dave finds it ironic), he switched in 1964 from drafting (which at least had a tangential bearing on his training as an artist) to electronics—a field in which his old college counselor would have told him he had no aptitude.

As an ESA, Dave has worked for about 15 years helping build prototype radars, and at production control with the Bendix engineering staff. During the 1960's, as Dave phased into his new profession at Sandia, he also worked at his art. There were a few shows at the Cinema East theater and, in the early 1970's, a few more at the old Coach and Six on San Mateo. Then came a period of little or no production, an artistic hiatus that came to an end with this past spring's explosive re-entry into the field of art.

"I don't have a set schedule for painting even now," Dave says. "But I usually have three or four paintings going at any one time—and I've found I can paint ten or twelve hours at a stretch with only short breaks."

Dave describes himself as something of an artistic loner. "I pretty much follow my own instincts," he says, "and I don't have a mentor." Dave did invite Raymond Jonson to his exhibit at Canterbury, however. "I wasn't even thinking about an exhibit at his gallery," Dave says. "What I really wanted was his opinion, his comments, his assessment of my new work."

As it turned out, Raymond made the most eloquent comment of all—an offer to rearrange his gallery schedule to include a showing of Dave's work later this year.

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WINNER & RUNNER UP of the Sandia Tennis Assn. tournament, women's singles bracket, are Martha Gonzales (left, wife of Jose, 1481) and Chris Morgan (5641). Other results are not yet complete.



Speakers

G. R. Dalphin (3144), "Acquisition/Deacquisition: The Library Pipeline"; C. A. Pepmueller (3140), "People: Finding and Training Them"; D. K. Seager (3144), "What's Going On? - Statistics and Surveys," DOE Librarians Western Regional Workshop, July 11-12, Albuquerque.

S. L. Daniel (5412), "A Model to Predict Radiological Consequences of Transportation Accidents Involving Dispersal of Radioactive Material in Urban Areas," 1978 Summer Computer Simulation Conference, July 24-26, Newport Beach, Calif.

A. Owyong (5214), "Stimulated Raman Spectroscopy: A Survey of a New Analytical Technique for Coherent Raman Spectroscopy," IBM and United Technologies, July 25-26, Yorktown Heights, NY, and Hartford, Conn.

A. F. Veneruso (5736) and H. M. Stoller (5730), "High Temperature Instrumentation for Geothermal Applications"; S. G. Varnado (5735) and H. M. Stoller (5730), "Geothermal Drilling and Completion Technology Development"; J. A. St. Clair (5735), H. M. Stoller (5730) and S. G. Varnado (5735), "Continuous Drill Bit Development"; J. Polito (5742), "A Simulator for Sensitivity Analysis of Geothermal Well Cost—Progress Report"; H. M. Stoller (5730) and J. L. Colp (5731), "Magma As A Geothermal Resource - A Summary"; C. Arnold (5811), "Evaluation of Seals for a Geothermal Logging Tool"; J. L. Colp (5731) and R. T. Okamura (Hawaii Volcano Observatory), "Drilling into Molten Rock at Kilauea Iki," 1978 Annual Meeting, Geothermal Resources Council, July 25-28, Hilo, Hawaii.

G. T. Noles and M. G. Thomas (both 5731), "Chromatographic Evaluation of Coal Derived Liquids," Confab '78, July 25-28, Saratoga, Wyo.

R. R. Eaton (1261), R. L. Fox (5731) and K. J. Touryan (1260), "Modeling of Disparate Mass Mixture Flows," Von Karman Institute for Fluid Dynamics, Lecture Series 10, July 27, Brussels, Belgium.

J. C. Swearingen, E. K. Beauchamp and R. J. Eagan (all 5846), "Fracture Toughness of Reinforced Glasses," International Symposium on Fractured Mechanics of Ceramics, July 27-29, Penn. St. Univ., University Park.

J. L. Colp (5731) and H. M. Stoller (5730), "The Utilization of Magma Energy"; T. M. Gerlach (5831), "Fuels from Magma - A Potential Energy Resource?," 2nd Circum-Pacific Energy & Mineral Resources Conference, July 30-Aug. 4, Honolulu.

R. E. Jones (2613), "The SLATEC Common Mathematical Library Error Handling Package," Second DOE Workshop on the Operational Aspects of Mathematical Software Libraries, Aug. 1-3, LLL.

D. S. Ginley (5154), "Observations on the Flatband Potential in Electrochemical Cells with Semiconductor Electrodes," Bell Labs, Aug. 4, Murray Hill, N.J.

D. F. Cowgill (2353), "Dynamic Deuteron Bombardment Studies Using Low-Energy D(d,p)T Spectroscopy"; D. M. Follstaedt and S. M. Myers (both 5111), "Studies of Sb Trapping in Fe-Ti-Sb-C Alloys," NATO Advanced Study Institute on the Physics and Applications of Ion Beams Interactions with Solids, July 24-Aug. 5, Albany, NY.

L. D. Buxton (5411), "Steam Explosion Efficiency Studies"; L. S. Nelson (5333), "Explosive Interactions Between Liquid Water and Molten Oxides," Safety Specialists Committee Meeting, The Aluminum Association, July 28, Chicago.

H. C. Monteith (5411), "UFO's and Their Mission to Earth," July 5, Albuquerque Exchange Club; "The Influence of Ethics on Human Success," July 12, Sunport Optimist Club, and July 21, Breakfast Exchange Club.

R. M. Jefferson (5430), "The Nuclear Power Dilemma," July 19, Heights Optimist Club.

M. H. Worstell (5715), "Wind Energy Research," July 26, Northeast Lions Club, and July 28, Downtown Optimist Club.

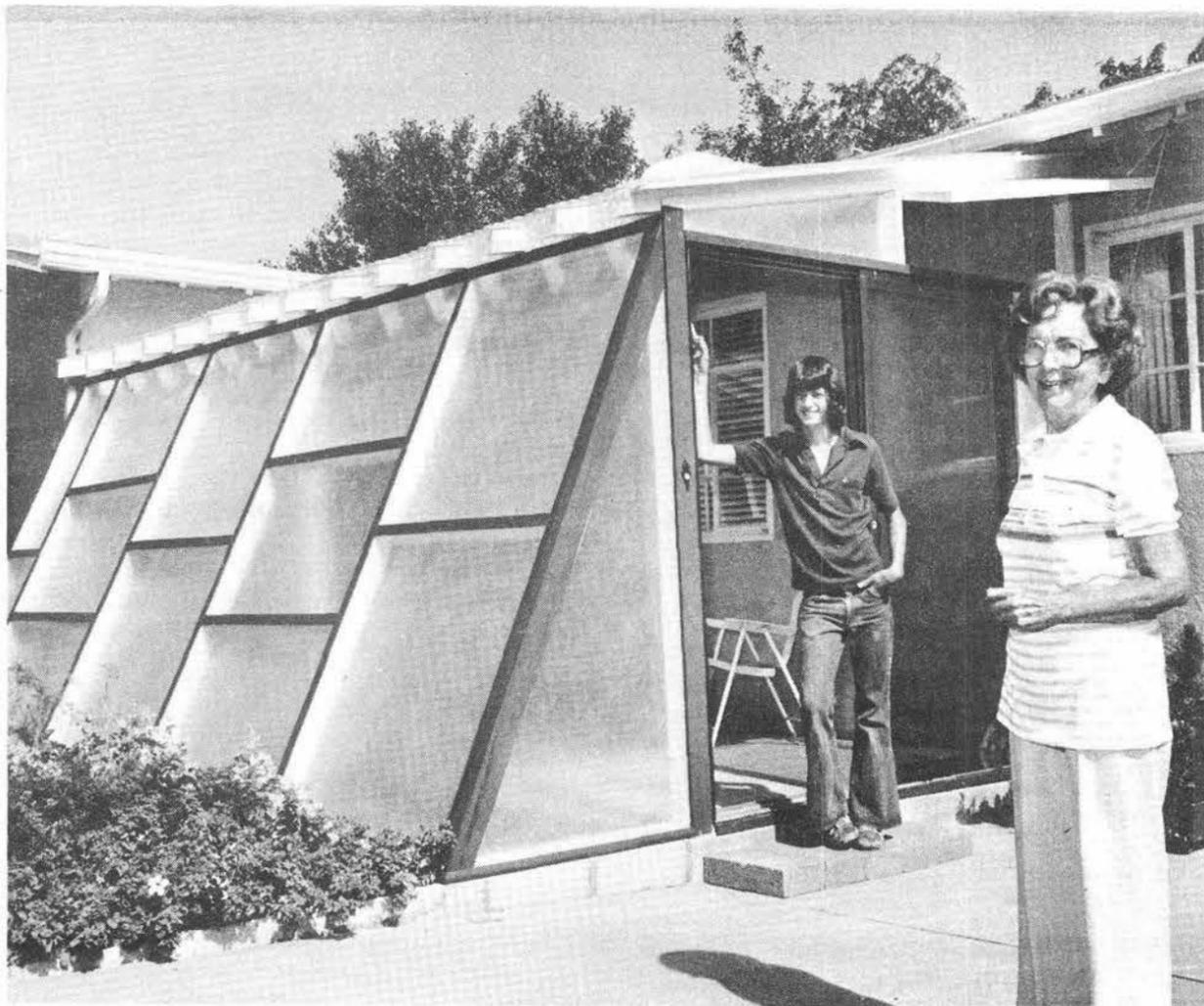
H. R. Shelton (3521), "What Does Your Bumper Sticker Say?" July 29, Breakfast Exchange Club.

R. L. Alvis (5715), "The Department of Energy/Sandia Laboratories Solar-Powered Irrigation Program," Turfgrass Sprinkler Irrigation Conference, June 9-11, Lake Arrowhead, Calif.

H. D. Sivinski (5335), "Beneficial Uses of Nuclear Fission Wastes," Inter-agency Review Group on Nuclear Waste Management, July 24, Denver.

J. M. McKenzie (1761), et al., "Surveillance Instruments for Spent Fuel Safeguards," 1978 INMM annual meeting, July 27-30, Cincinnati.

R. A. Assink (5811), "The Study of Phase Separation in Block and Segmented Copolymers by NMR," 20th annual Rocky Mountain Conference on Analytical Chemistry and Spectroscopy, Aug. 7-9, Denver.



RETIREE Helen Smith and grandson Barry Holt built this attached solar greenhouse at her home in southeast Albuquerque. The addition will provide heat during winter months and vegetables throughout the year.

Retiree Builds Greenhouse For Gardening, Winter Heating

[Ed. Note: This is the fourth in a series about home solar systems of Sandians. If you have an operating system, call the LAB NEWS, 4-1053.]

Helen Smith, who retired from Sandia in March 1973, recently completed construction of an attached solar greenhouse at her home in southeast Albuquerque. The addition provided a source of heat for her home in winter and a place in which to grow vegetables all year long.

"I know it works," Helen says, "I helped a friend design one last year and she didn't turn on her furnace at all during the winter. She built a fire in a wood stove on some cold mornings to take the chill off. That's all that was needed."

Helen and her 16-year-old grandson Barry Holt (father David works in 1242) did all of the construction for the 12'x18' greenhouse, including removal of a large tree in the area. The greenhouse is formed

Take Note

Ever wonder how the money Sandians give to United Way is used? Here's your chance to see for yourself before the annual campaign takes place Oct. 6-13. The ECP Committee has arranged morning tours on three successive Tuesdays, Wednesdays and Thursdays (Sept. 12-13-14; 19-20-21; 26-27-28). Tours will depart by bus from in front of Building 800 at 8:30 a.m., visit three agencies and return about noon. More details are upcoming in a letter to employees that will list the agencies to be visited on specific days and give instructions on how to sign up.

of conventional 2 x 4 studs with transparent fiberglass attached to both sides of the studs. Double pane sliding glass doors allow entrance; vents—high on one side, low on the other—provide ventilation.

"The idea is that the sun heats the air in the greenhouse and then circulates it into the house through the original doorway and window," Helen says.

Helen loves to garden, and she's looking forward to winter vegetables grown in the greenhouse. Six 55-gal. drums filled with water inside the greenhouse act as heat storage units and, according to calculation, should keep the interior 30° warmer than the outside air.

Helen researched the project thoroughly before starting construction. She found the people at the New Mexico Energy Extension Service, 3018 Monte Vista NE, extremely helpful. "They gave me encouragement and free literature," she says. "Now that it's finished, I want everyone to know that if a grandmother and a teenager can build a solar greenhouse, anybody can. I expect it to make a big difference in my heating bills."

Helen worked at Sandia 23 years as a directorate secretary and as a computer programmer in Personnel. She says her retirement is "busier than ever." She teaches jewelry making once a week at Palo Duro Senior Citizens Community Center and is actively engaged in jewelry making as an avocation. She uses the lost wax process casting silver. Currently, she is working on an intricate belt with 20 inset kachina figures cast in silver.

"Retirement is great," she says, "there's so much to learn and do."

Rx: Salt & Active People

Ed. Note—If you run, or bike, or swim, you lose water and salt through sweat in quantities that reflect the activity and the temperature. Check your weight before and after a workout. It's not unusual to drop two or more pounds during an hour of vigorous exertion, equivalent to a quart or more of fluid. We asked nutritionist Susan Brammer, now associated with Sandia Medical, to give us her thoughts on the place of salt in the diet of the active person. Questions are those most frequently asked on this subject.



When is additional salt needed to replace that lost in sweating?

Our usual daily intake of salt is about 10-15 grams, or about five grams of sodium (salt is about 40% sodium and 60% chloride), and this to cover the loss that occurs with most physical work or moderate heat exposure. Five grams is equivalent to one teaspoon.

Sweat contains up to one gram of sodium/quart, so the usual sodium intake of five grams/day allows for at least a gallon (8.3 lbs.) of sweat after all other sodium needs of the body are met.

Athletes and active people should thus replenish their water loss at the rate of one pint/pound of weight loss and can be concerned with salt replacement only when weight loss exceeds six-eight pounds.

If necessary, how should salt be replaced?

The best way is by drinking a very dilute salt-water mixture (1/3 teaspoon salt/quart water). Or slightly more salt could be

added to food; the disadvantage here is that you may acquire a taste for heavily salted foods which may persist beyond your need, leading to increased risk of high blood pressure. Salt tablets could be used; the caution here is that water intake must be sufficient, the recommended proportions being one pint of water per salt tablet.

What about sport drinks such as Gatorade, Energade, Instant Replay?

These drinks are all designed to help restore the normal electrolyte (sodium, chloride, potassium, magnesium) levels and provide a little glucose (sugar). Their increased potassium content may be helpful, although convenience may be the main appeal. Potassium losses through sweating are quite small and can easily be replenished by a normal diet; foods especially high in potassium are bananas, tomatoes, and citrus fruits.

What is the recommended salt intake for the non-athlete?

The current recommended salt intake is five grams/day; this is much lower than the average intake of 10-15 grams/day. The lower intake of salt is urged because the sodium content of salt is implicated in the development of high blood pressure. A diet within this five gram limit could include: fruit, lightly salted grains, cereals, vegetables, cheeses, milk, meat, moderate amounts of margarine and baked products. But keep the salt shaker off the table and use it only sparingly in cooking. And those highly salted items such as potato chips, pickles, olives, and cured meats would have to go. If you must have that dash of salt to make it palatable, try a salt substitute—most of these are variations of potassium chloride.

Noon Lectures on Diet, Health Offered

Elsewhere in this issue, nutritionist Susan Brammer from Sandia Medical writes about the place of salt in the diet. That's not all—Susan will soon give a series of three lectures on diet and health during the noon hour in Bldg. 815. Sandians and their spouses are invited to bring their lunches, hear about practical applications of nutritional information, and get a few ideas on eating out, brown bagging and snack food. All lectures start at 12 noon. The schedule:

- Sept. 28 The rating game—a short course in nutrition and weight control
- Oct. 3 Fatty foods and heart disease
- Oct. 5 Sense and nonsense in nutrition

The sessions last 45 minutes, with time allowed after each lecture for questions from the audience.

Boating & Sailing Courses Offered

The U.S. Coast Guard Auxiliary has two courses underway: "Boating Skills and Seamanship" and "Sailing and Seamanship." The boating skills class meets Tuesday, Sept. 19, 7:30-9:30 p.m., at San Pedro Village, San Pedro and Montgomery NE, and is designed for both new and experienced boaters who wish to improve boating knowledge and to become familiar with federal and state regulations. The sailing course begins Sept. 21, 7:30-9:30 p.m., in the U.S. Coast Guard Reserve Building on KAFB-East.

Successful completion of either of these 13-week courses will, in some cases, reduce insurance premiums. A textbook charge of \$6 for each course is required. For more information, contact Ben Gardiner (1471), 298-0116.

TELEPHONE CONFERENCE FACILITY—When the LAB NEWS staff wants to hold a story conference with its counterparts in Sandia Livermore, they use this telephone conference room setup in Bldg. 802. It's available to all Sandia organizations for telephone conferences with parties at installations throughout the country. There are eight microphone positions around the table; fidelity is excellent. Call Jo Sena (2000) on 4-4554 to reserve the facility.



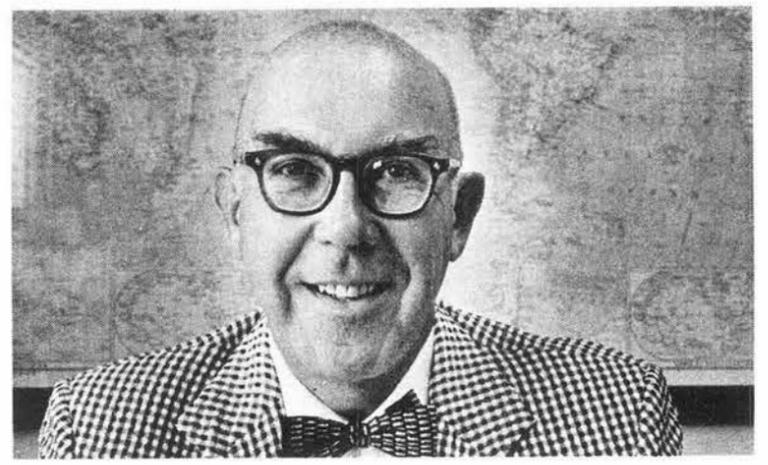
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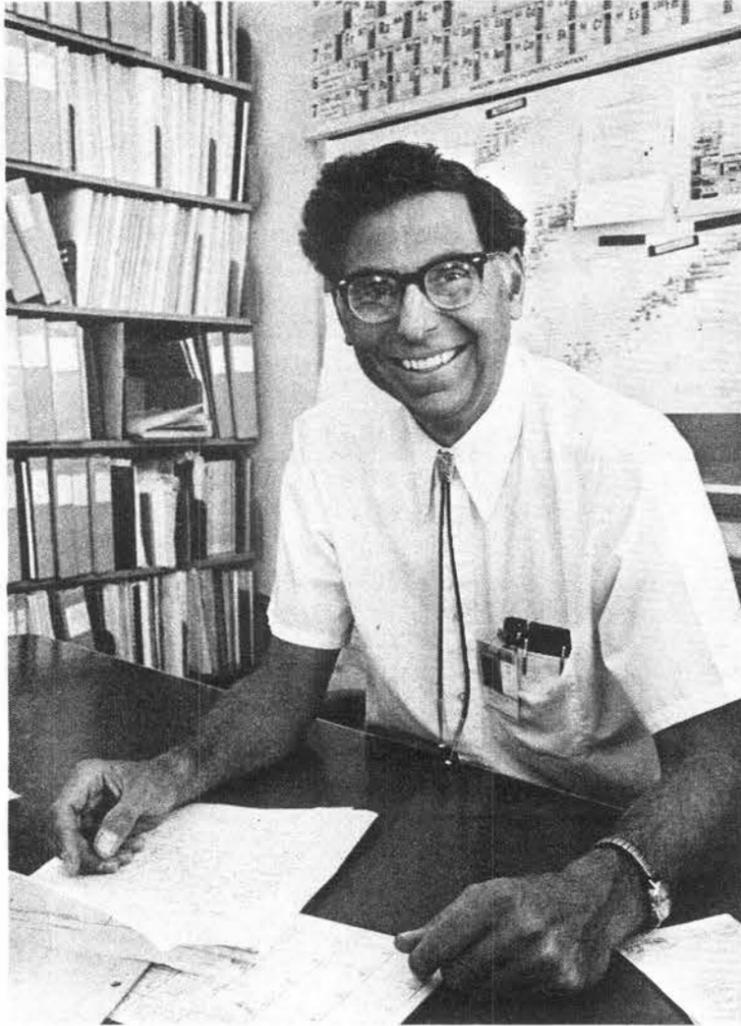
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Jim Solberg - 1554 15



Gordon Miller - 1127 30



Fred Vook - 5100 20



Eli Perea - 5844 10



George Burnside - 3155 30



Joe Cowham - 1474 10



Jim Harris - 2524 15



Bob Carrell - 8254 20



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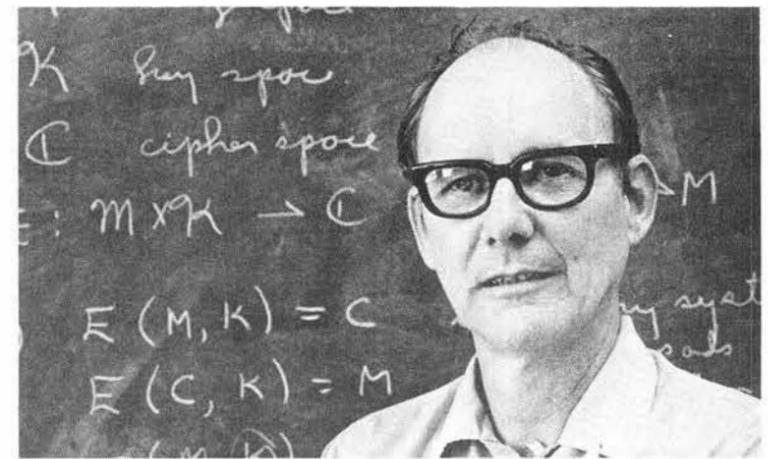
Edna Harper - 4322 25



Pat Sanchez - 2631 20



Blanche Matter - 8161 15



Bob Thompson - 5641 20



James Kannolt - 2533 20



James Craig - 2515 30



George Kinoshita - 4711 25



Al Riedel - 2354 20



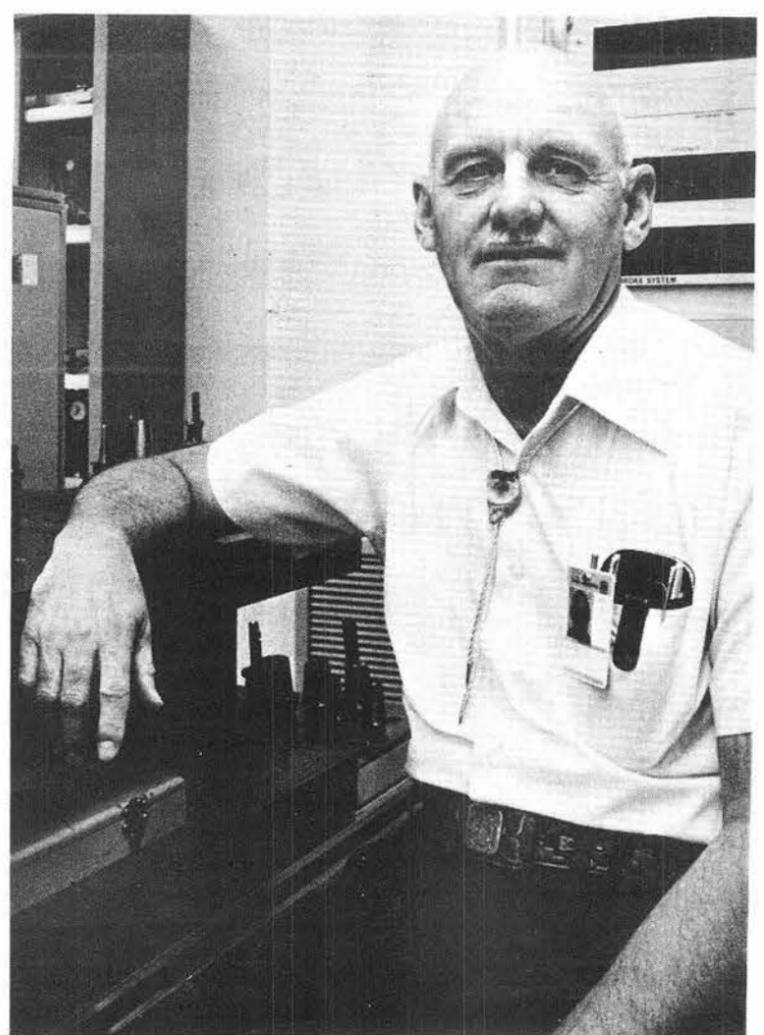
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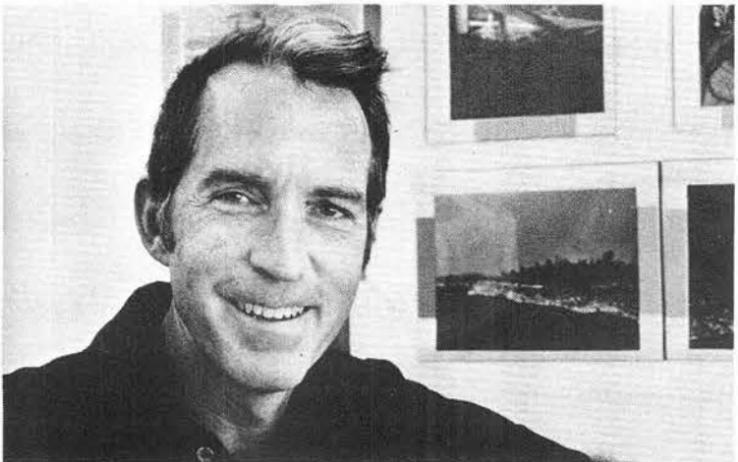
Mike Heck - 2326 15



Sharon Husa - 2451 10



Harold Riley - 1485 30



Harry Hardee - 1262 15



Jack Burkhart - 4715 20



Bruce Worden - 8465 20



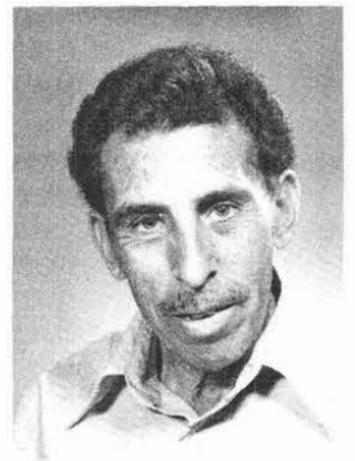
Raul Sanchez - 3423 30



R. N. Schowers - 1172 30



Grant Lockwood - 4232 15



David Tafoya - 3171 30



Gordon Hansen - 1126 20



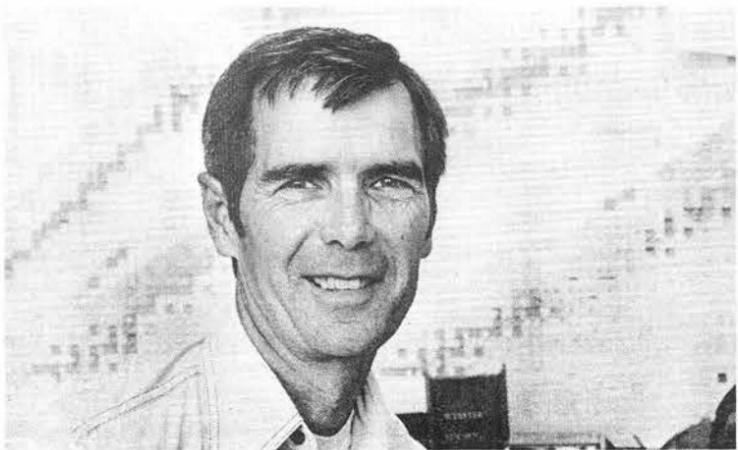
James Drake - 2552 25



Robert Armstrong - 1212 30



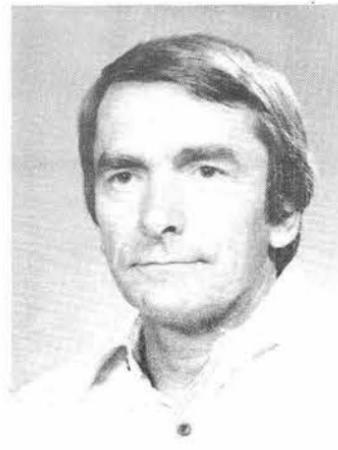
Floyd Stake - 2456 25



Charles Spencer - 2351 20



Raymond Perry - 1483 10



Gene Shipley - 2436 20



Roger Campbell - 2631 25

ECP at Work

Retiring

Six new agencies have been added to United Way this year—four of them specifically aimed at helping young people, one the elderly, one the victims of rape. Here's a brief rundown on the new agencies that Sandias will help support through ECP (our campaign runs Oct. 6-13):

• **Hogares, Inc.**, 1218 Griegos Rd. N.W.

Counseling and treatment for 13-to-18 year olds and their families. Temporary living quarters for teenagers who can no longer live at home. Priority to those who have had, or seem headed for, trouble with juvenile authorities.

• **Youth Development, Inc.**, 129 Hartline S.W. - Ultimate goal: reduce juvenile crime and arrests through rehabilitation. Provides counseling for alternative school placement, employment, court representation, tutoring. Special activities emphasize skills and activities. Emergency care shelter for runaways.

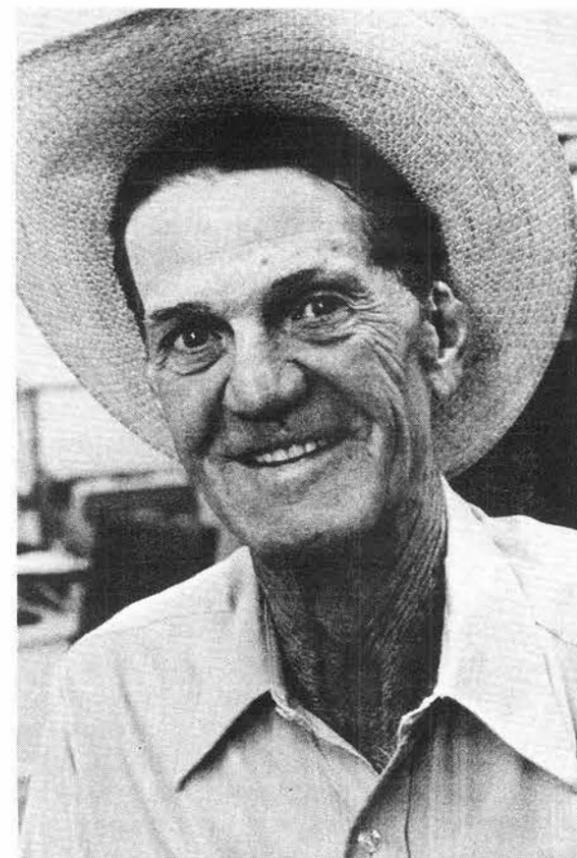
• **Jemez House Children's Home**, north of Espanola. - Most of the 50 boys and girls (7

to 17) have been referred by Bernalillo courts or state agencies. Residential living in home atmosphere for delinquent children. Concentrates on programs like Wilderness Experience which help develop maturity and social awareness.

• **Youth Activities Program, Kirtland AFB.** - Recreational programs and projects for 6-to-19 year olds (dependents of military and civilian employees). Special recreation summer camp for disadvantaged youth from Bernalillo County.

• **Share Your Care** - Serves the "frail elderly," dependent adults and their families. Staff of 14 plus 20 volunteers offers daily program of gentle exercise, reality orientation, a noon meal and other activities.

• **Rape Crisis Center**, 602 3rd S.W. Immediate and on-going help to victims of sexual assault; 24-hr phone service; community-wide educational seminars on how to help victims, how to prevent and eliminate sexual assault.



Charles Punn (3432)

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

CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication unless changed by holiday. Mail to: Div. 3162 (814/6).

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. Include name and organization.
8. Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.

MISCELLANEOUS

- TRASH BAGS, city approved, \$4/box, \$20/case of 6, South Hwy. 14 Project. LAB NEWS office, Bldg. 814.
- AKC Reg. Sheltie, 1-yr.-old male, obedience trained, \$100; whelping box, 30"x33"x14", wooden, linoleum lined, \$25. Anthes, 293-0926.
- CHEVY Van seats, 2 ea., \$50; 110-lb. weight set, \$20; Zee motorcycle helmets, \$8 ea.; port. stereo record player, \$20. Hawn, 299-7835.
- VIOLINS, 1/2 size, \$75, 3/4 size, \$175. Magnuson, 821-5330.
- GUITAR, solid body electric, Travis Bean, \$475; amp Fender twin, \$300. Lenz, 298-9121.
- DUCKS, chickens & some fancy roosters & Top Knot chickens, \$4-\$5; need lg. incubator, will trade for hay or grain. Lackey, 898-6638.
- GARAGE DOOR OPENER, screw drive, receiver & 2 remote control transmitters, \$100. McConnell, 255-2488.
- GOLF CLUBS: Citation irons #3 through pitching wedge, Wilson Staff woods 1-3-4-5, heavy plastic bag, white, make offer. Scales, 296-9295.
- CUSTOM MADE lined drapes, blue, 94" long, 208" wide, \$60. Hills, 293-7936.
- 19" B&W TV w/stand, Sylvania. Nance, 296-8255.
- 4 WHEELS, hub caps & lug nuts for Chev. 3/4 ton pickup; used tires mounted on wheels are free. Hardin, 293-5679.
- MODEL 94 Winchester 30-30 rifle, antique styling, \$95. Elliott, 294-1785.
- EVETTE clarinet w/case, used 1 yr., \$90. Iman, 299-6500.
- KODAK Instamatic, Trimlite 48: Ektar 28mm, f2.7 lens, coupled rangefinder, film, flip-flash, carrying straps, \$75. Cocklebas, 256-7570.

- NEW MAGNETIC-CARD programmed scientific calculator, TISR52, including statistics & financial program packs, was \$350, sell for \$195. Mitchell, 296-4106.
- BUNK BEDS w/mattresses, walnut colored, \$50. Garcia, 255-3201.
- GE 19" B&W TV, sim. wood grain case, use as home computer monitor, \$89. Stuart, 265-7315.
- THERMOGRATE convective air fireplace heater, 8-tube model; half-circle wrought fp screen. Preverder, 299-5253.
- KELVINATOR 16 cu. ft. refrig/150-lb. freezer, frost-free, can have ice maker, avocado green, \$200. Berry, 268-0697.
- WROUGHT IRON fireplace set, 5-piece, \$7. Lambert, 344-9012.
- FLUTE, Gemeinhardt, 1/2 off new price. Fisher, 881-8072.
- WHEELS, brand new steel, painted, 5-hole rims, fit Dodge/Plym. van, full set of 5, \$40. Dobecki, 293-9748.
- LOUDSPEAKERS, 1 pr. Crown ES-212, each has 12 electrostatic tweeter panels & 2 10" woofers, \$900/pr. Jones, 298-8492.
- BUNNY clarinet, \$50; 22 auto. palm-size handgun, \$95. Herrera, 836-1768 after 5.
- COMET SPORT TRAILER, 15', sleeps 4, \$950 or best offer. Sheaffer, 255-9473.
- CLARINET, Bundy B-Flat, complete, recently rebuilt, \$75. Carroll, 296-0256.
- NEW RUGER .22 cal. (long rifle) auto. pistol, std. model, \$60. Baca, 296-8474.
- '78 17 1/2' TRAVEL TRAILER, self contained, single axle, \$4495, might take 8 1/2' pickup camper in trade. Ludwick, 296-6447.
- 18 CU. FT. FREEZER, \$25; 19" B&W port. TV, Perea, 255-7831.
- CARL FISHER French Horn, 3-valve, gold color, used 3 mos., \$350. Luhrs, 281-3875.
- TRAILER, 1-wheel utility, plywood sides, extra tire, hitch included, \$75; used beige carpet, 39 yds., will deliver, \$60. Landry, 296-1784.
- FIVE 13" rims for Vega, 4-bolt pattern, \$10 ea. Merle, 294-0482 after 5.
- YAMAHA clarinet w/music stand. Wilson, 299-1480.
- DYNACO PAT-5 pre-amp. Adams, 266-9568.
- DISHWASHER, port. James, white, full size, w/all attachments, \$75. Burbank, 299-1460.
- RECLINERS, 2 matching gold color Strataloungers, \$250. Buss, 298-1589.
- RUGER pistol, super single six, .22 cal., LR & magnum cylinders, \$110. VanDomelen, 299-3674.
- YORK Olympic weight set, 310 lbs., \$300; Lady Elgin 14 carat gold watch & band; amethyst & diamond birthstone ring. Kadlec, 299-2034.

- 15" RIM w/5 holes for an older Ford, \$5; G78x15 tire, \$3. Hall, 298-8617.
- CAIRN TERRIERS, 10 wks., spunky, small but effective watchdogs, champion bloodlines. Walkington, 842-1938.
- CANARIES, yellows, whites, red factors, crested, singers, \$30-\$40; hens \$15-\$20, cages, \$5-\$15. Riggan, 268-1961.
- WHITE, cast iron, porcelain, wall-mounted bathroom sink w/attaching bracket, \$5. Peterson, 256-7514.
- CAMPER, 10' Travel Queen, heater, Port-O-Let, ice box, side-dinette. Zottnick, 299-6339.
- POODLE-CROSS, 5-yr.-old small house pet needs loving adult home. Munson, 299-1400.
- CRAFTSMAN bench mount drill press, \$80. Jelinek, 898-3442.
- WINCHESTER Model 1400 semi-auto 12 gauge shotgun w/vent-barrel & 3 Win-choke tubes, \$170. Brammer, 266-5158.
- DOG SHIPPING CRATE, medium, 24"x16"x18", \$17; canvas tent w/floor & alum. pole frame, 7'x7'x6', \$20. Hendrick, 296-2163.
- '64 FORD 292 V8 engine, 20,000 on rebuild, out of F-100, \$250. King, 281-3186.
- CRIB, bassinet, other baby furniture; bike; lawn mower. Clauser, 296-1948.
- COUCH, 90" long, blue/green pattern, \$40. Falacy, 293-2517.
- TWO Netherland dwarf rabbits, buck & doe, 7 wks. old, \$5 ea.; clarinet, \$95; guitar, \$30. Carter, 296-8709.
- 3 EA. new Delta bathroom style faucets, single handle, \$30 ea. Bartlett, 299-4861.
- PARAKEET & cage, \$18; lg. lovebird cage, \$15. Oberst, 299-1224.
- '77 JAYCO 28' travel trailer, rear bdr., 8 cu. ft. refrig., AC, \$6995. Dahlgren, 898-1269 after 6.
- GARAGE SALE: Sept. 16-17, 10-5 p.m., misc. items; children's books, puzzles, games & toys; infant feeding table, play furniture. Lieberman, 1316 Paisano NE, 299-7739.
- RADIAL ARM SAW, 2 hp, Black & Decker, 8", \$150. Sparks, 898-1252.
- COMBINATION pool table/ping pong table, complete set of cue balls, reg. size board & paddles, best offer. Villarreal, 298-7124.
- ROTO-TILLER, Sears, 5 hp, gear drive, used 1 season, \$165. Tucker, 869-3469 after 5.
- 73 FIAT sedan, same as '78 cars, trade for larger American car. Smitha, 881-1001.
- '64 PONTIAC GTO, 4-spd. trans., re-

- built tri-power engine, new paint, \$1500. Preverder, 299-5253.
- '72 HONDA 175, new seat & battery, 10,000 miles. White, 299-6411 after 5.
- '76 HONDA Accord, AT, AC, gold w/vinyl top. Plummer, 296-4327.
- '75 DATSUN B210 hatchback, AC, luggage rack, "Z" type rear window, sun screen, white. Schubeck, 294-5666.
- '74 VOLVO 164E, white exterior, tan leather interior, fully equipped. James, 298-0709.
- '77 FORD Bronco, part-time 4wd, AC, AT, 10,000 miles. Lee, 821-2302.
- '64 TRIUMPH Spitfire, needs work, \$400 or best offer, cash only. Krone, 266-7246.
- '41 PLYMOUTH Special Deluxe 4-dr. sedan, orig. paint & upholstery, recently overhauled engine is flat head 6-cyl., approx. 221 cu. in. Noel, 298-2142.
- '71 PONTIAC LeMans, PS, AC, 3-spd. manual, \$1150. Jakowatz, 299-9271.
- '71 VW 411 4-dr. sedan, AT, 50,000 miles, install-it-yourself AC (cutouts provided), under book at \$1000. Pilkington, 883-0223.
- '68 KARHANN GHIA convert. Blaine, 299-1036.
- O'DAY JAVELINE sailboat, 14', many extras, \$1400. Maloney, 821-6661.
- '75 MARK IV, full power, low mileage, \$7500. Perryman, 294-6113.
- '70 WINNEBAGO, 22', orig. owner, low mileage, all extras, \$9000. Falacy, 293-2517.
- '71 VW Super Beetle, \$1200. Humberstone, 264-2564.
- '69 FORD Galaxie stn. wgn., R&H, PS, PB, AC, \$575. Peterson, 256-7514.
- '68 THUNDERBIRD, 4-dr. classic. McIlroy, 8907 Los Arboles NE, 299-4977.
- '63 RAMBLER stn. wgn., 6-cyl., \$200. Wayland, 299-2587 after 5.
- '75 RABBIT, 4-dr., reg. gas, auto., AM-FM stereo tape, extras. Asking \$2650. Atkins, 298-5762.
- '76 TRIUMPH, 750 Tiger, 8000 miles, has had reg. maintenance, \$1000. Schaefer, 294-0862 after 5.
- '70 MAVERICK, 6-cyl., AC, recent complete engine job, make offer. Dees, 869-6949.
- '77 PINTO, 3-dr. runabout, AM-FM, 6800 miles. Stephens, 265-5341.
- '71 VW fastback, AM-FM radio, new 5-yr. battery, \$1250. Sparks, 898-1252.
- '77 DODGE Ramcharger, 4-wd, SE pkg., fully loaded, extended warranties, many extras, below retail, 7500 miles. Villarreal, 298-7124.

- 7988.
- 4-BDR. HOME, new Holiday Park, prof. landscaped, sprinklers, corner lot, wet bar, many other extras, \$68,500. Etter, 294-7758.
- 2-BDR. HOUSE, 1500+ sq. ft., den, 1 1/2 baths, refrig., stove, washer, fenced yard, \$37,500. Morano, 296-2248 after 6:30.

FOR RENT

- 3-BDR. HOUSE, unfurnished, 1 1/2 baths, near KAFB & Lenkurt, available Oct. 1, \$300/mo + DD. Humberstone, 264-2564.
- UNFURNISHED 2-bdr., 1 1/2 baths, curtains, stove, refrig., avail. Oct. 1, \$350/mo. + dd, 400 block Morning-side NE. Miller, 255-1324, 266-9168.
- MOUNTAIN CABIN, 1 bdr., fp, secluded, 13 miles to Sandia, snow covered road in winter, \$150/mo. Souder, 281-3121.

WANTED

- ANYONE INTERESTED in sharing private aircraft expenses to Roswell over weekends, RT \$40 1/2 persons, approx. 1 1/2 hrs. flying time. Paul, 296-6500.
- SHOP MANUAL for '72 or '73 Oldsmobile Delta 88. Reed, 268-7484.
- LADIES' 120/bass accordion, prefer Italian make. Wojick, 298-2074.
- BANJO, good condition. Moss, 298-2643.
- BIOFEEDBACK temperature trainer or instructions on how to build. Harrel, 293-8057.
- ONE OR TWO TICKETS to magic show at Popejoy, Sept. 19. Hessel, 296-9124.
- MAGICIAN for children's party. Thalhammer, 298-8521.
- BOAT TRAILER suitable for Laser or Sunfish sailboat. Souder, 281-3121.
- CHAIN LINK FENCE gates or material for 4' fence. Dees, 869-6949.

LOST AND FOUND

- LOST—Silver bicycle lock cable, silver needlepoint earrings.
- FOUND—Gold stem from Acutron watch, Rx glasses w/dark brown frame in case w/lettering Eye Clinic Optical, Timex watch on leather band, silver ID bracelet. LOST AND FOUND, Bldg. 832, 264-1657.

TRANSPORTATION

REAL ESTATE

- '73 FIAT sedan, same as '78 cars, trade for larger American car. Smitha, 881-1001.
- '64 PONTIAC GTO, 4-spd. trans., re-

- GLENWOOD HILLS lot, city view, \$29,500, flexible terms. Key, 298-

Prime Rib Tonight; Jug Tomorrow

TONIGHT'S HAPPY HOUR buffet features a special prime rib dinner by Club manager Pat Corcoran and staff. Natural Persuasion is wired into the bandstand. Next Friday will see a seafood platter as the buffet menu special with Shalako on the bandstand. Special Happy Hour entertainment next Friday will be a sneak preview of selections from upcoming shows by Albuquerque Civic Light Opera singers. Several performers will start their act at 6:45 p.m.

* * *

TOMORROW ticketholders will enjoy a T-bone steak and the antics of the Watermelon Mountain Jug Band, a Club favorite. Call the Club office right now—265-6791—and see if there are any cancellations.

* * *

ANNUAL MEETING of the Coronado Club membership is set Monday, Sept. 18, at 7:30 p.m. Candidates for the board of directors are Robert Dougherty (2351), Preston Herrington (1758), Bernard Kenna (5824), Frank Loomis (ret.), Max Newsom (1320), Nancy Sanchez (3725), Lewis Sisneros (3731), and Luke Stravastnik (1713). Free refreshments after the meeting.

* * *

SKI CLUB meets Tuesday at 7 for a social hour and group exercises in preparation for the coming season. A pair of skis is the door prize for some lucky member.

* * *

TRAVEL—Singles wing it to Las Vegas Nov. 10-12. Mazatlan—seven nights starting Oct. 28—is still open; so are air fare only trips to Hawaii, Disneyland Oct. 25-28 and an Oct. 14 excursion on the scenic Cumbres and Toltec Railway.

* * *

UPCOMING EVENTS—Disco and Squaredance lessons start in October.

Sept. 16 Sandia Night At Dance Theater Show

Sandia Labs night at the Albuquerque Dance Theater is Saturday, Sept. 16, with a \$1 per ticket discount from regular ticket prices. The purchaser should show his or her Sandia ID at the Rodey box office, UNM Fine Arts Center. Reservations may be made in advance, and tickets may be paid for at performance time. The concert is ADT's first in its home town since its enthusiastic reception in New York in its debut in August. Reservation: 242-2656 or 277-4402.

Congratulations

Olivia Salisbury (3521) and Samuel Harris (DOE), married Sept. 2.



SINGER KATHY IVES-CLAWSON of Albuquerque Civic Light Opera will be one of the performers at Happy Hour Sept. 22. Father Gene Ives (4330) is an ACLOA regular, having starred in many past productions.

Feeling Physical?

Breaking and entering, scaling, digging, cutting, crawling, busting, running—and getting paid for it—this is what you sweated ME209 for at Podunk U? Yes, the 1700 (Safeguards) recruiters are out again, looking for Sandians to be the Black Hats in their good guy/bad guy scenarios. Marty Kodlick (1711) describes the personal characteristics needed: "Participants—male or female—should be in good health, enterprising, energetic, aggressive, supported by his or her supervisor, agile and enthusiastic."

If you're all of this, interested, and suffer no constraint of false modesty, then contact Barrier Technology Division 1711 to sign up. You'll be told that you'll have to pass a physical and, possibly, a stress test and that you'll probably have to put in about four hours every few months. Contact Lorraine Cook on 4-1663 or Marty on 4-3447.



This past summer, students at Bowling Green University's Center for the Study of Popular Culture earned academic credit for a class called, "Coastermania - A Conference on Coaster Culture." Tuition was \$65 with a \$10 roller coaster fee. And it wasn't all fun and games, either. Students had a reading list, attended lectures by sociologists, architects, art historians and engineers and wrote an end-of-course paper. Ours would have been titled, "The Cultural Ups and Downs of Roller Coasters."

