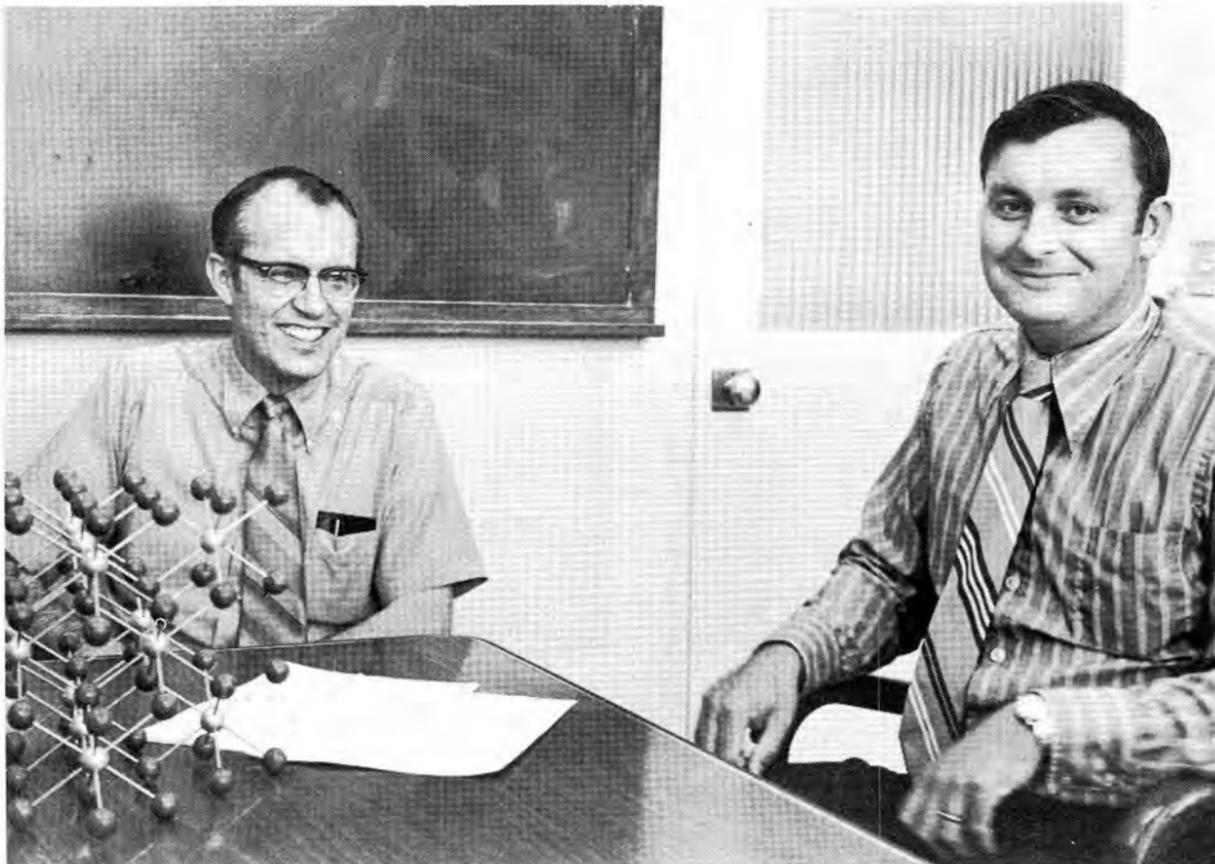


LAB NEWS

VOL. 23, NO. 10

MAY 21, 1971

SANDIA LABORATORIES • ALBUQUERQUE NM • LIVERMORE CALIF • TONOPAH NEV



ORVAL JONES
to Director, Solid State Sciences Research

ALBERT NARATH
to Managing Director, Physical Sciences



ONE of them is saying, "New Jersey is a great place to visit. . .," but which one? President Hornbeck dropped in to bid good-bye to Sol Buchsbaum, Sandia VP returning to BTL as an Executive Director.



KLAUS BOWERS

Managing Director, Component Development

Sandia Laboratories Reorganizes

A general reorganization of the Laboratories takes effect on June 1. Organization numbers will be changed, and a number of appointments to new rank have been announced.

Albert Narath, Director of Solid State Sciences Research 5100, is appointed Managing Director, Physical Sciences, and will report to Mr. Clogston, Vice President, Research. The position of Managing Director, one level above that of Director, is a new rank at Sandia.

Klaus Bowers, Director of the Solid State Device Lab at BTL, is also appointed a Managing Director, and will head Component Development. He will report to Vice President Howard.

Other promotions: Orval Jones (5130) to Director, Solid State Sciences Research; George Samara (5132) to Manager, Physics of Solids Research Department; Fred Vook (5111) to Manager, Radiation Physics Research Department; and John Crawford (5153) to Manager, Electron Tube Development Department.

Reporting to Mr. Hornbeck will be Mr. Kraay, Executive Vice President, and the following vice presidents: Mr. Howard, Systems and Components; Mr. Clogston, Research; Mr. Fowler, Special Programs and Testing; Mr. Partridge, General Attorney, Secretary and Treasurer; and Mr. Cook, Sandia Livermore Laboratories.

Reporting to Mr. Kraay will be these vice presidents: Mr. Campbell, Administration; Mr. Bice, Personnel; Mr. Henderson, Design and Quality; and Mr. Powell, who will be concerned with external affairs.

Numerous changes on the director and department level are also included in the reorganization.

Vista New Mexico

By Juan Abeyta and Richard Griego
Chicano Studies Center, UNM

Why Are So Many So Poor? The Chicano Demography in New Mexico

"Demography" may be briefly defined as the vital statistics of a people — births, deaths, average income, population spread, land ownership, etc. In the case of the Chicano in New Mexico, many of their vital statistics are melancholy indeed. Consider just these:

—two-thirds of rural non-farm Chicanos earn less than \$3000 per annum (the government established poverty figure)

—three-fourths of Chicanos on farms live in "official" poverty. Average annual income is \$2325.

—average annual income for urban Chicanos is \$3400.

Clearly, hundreds of thousands of the descendants of our state's early settlers are finding New Mexico something less than the promised land. Merely to survive, many young Chicanos must leave their traditional home to find employment elsewhere. In a culture in which land has a special emotional content, this separation from the land becomes tragic for those who must move on.

A look at fairly recent history reveals some explanations for the social and economic problems of the Chicano. Until 1848, New Mexico was a province of Mexico, and the Spanish colonials — who had been here by then for over 200 years — were Mexican citizens. At that time the Treaty of Guadalupe-Hidalgo ended the Mexican War, and the 60,000 Spanish colonials became a conquered people. In the context of that time, the belief that "to the winner belongs the spoils" was highly respectable, and the Mexican people and their lands became fair game for land-hungry immigrants from the East. It is true that the take-over of the land was "legal," but the courts were dominated by the new arrivals and for the Mexican, the intricacies of a new legal code, conveyed in a foreign tongue, made court struggles an uneven contest.

Thus began the uprooting of the Chicano and the social and economic disintegration of the fabric of Chicano society. For at the time that he began to lose his land, the Spanish speaking New Mexican had already



YOUNG CHICANOS in rural New Mexico grow up in poverty. As adults, they leave the countryside — their traditional home — to seek employment in the cities, but are ill prepared for all but menial jobs.

developed, over the previous 200 years, a stable economy based on farming, mining, sheep herding, cattle raising and horse breeding. Now these economic mainstays were to be increasingly denied to the Chicano, and the economic depression which followed persists to this day.

Then as now, a Chicano seeking a living is faced with unpleasant choices. Some remain in the villages of their forefathers, eking out a bare subsistence. Others leave to become migrant farm workers or to seek jobs in our cities where they find themselves, ill prepared, competing in an alien environment.

The lands continue to slip from their hands — and from the hands of other small land-owners — because of the seemingly inexorable economic imperative that small agricultural units cannot make a go of it in today's market. Between 1949 and 1964, the acreage under crops in New Mexico declined 45 percent. In the seven northern "Spanish counties" the total number of farms dropped from 4302 to 2614 in the five years from 1954 to 1959. One immediate result of this decline has been the marked lengthening of welfare rolls in these counties. When the alternative is hunger — the proud person must accept welfare.

It is evident that Chicanos have not entered the mainstream of American life. The reasons for this are many and complex, but the root of the matter derives from the history of the last century — they are a conquered people. Starting from that point, the pattern of discrimination, of educational deficiencies, of appropriated lands and of generations of poverty has led to the tragic conditions under which many, if not most, Chicanos in New Mexico must live today. Hopefully, our society will recognize the plight of this group of Americans and will work with them to gain their better future.

Gene Haertling Named Fellow of Ceramic Society

Gene Haertling, supervisor of Ceramics Division 2317, was recently named a fellow by the American Ceramic Society. The honor was presented during a banquet at the group's national convention in Chicago last month. He was cited for his "notable contributions to the ceramics arts and industry."



In his work at Sandia Gene has developed a new family of lead lanthanum zirconate titanate electrooptic ceramics which has since had great impact in the fields of electrooptic information storage, display, and imaging systems. Using Gene's materials, researchers at Bell Telephone Laboratories have developed high resolution image storage devices which may eventually be used for document transmission over Picturephone channels. The material has applications in television and in optical memories for computers.

Gene has been at Sandia Laboratories since 1961. He is a member of IEEE, American Ceramic Society, National Institute of Ceramic Engineers and serves on the editorial board of the technical journal FERRO-ELECTRICS.

He earned his PhD degree in ceramic engineering in 1961 at the University of Illinois.

Supervisory Appointment

ED BEAUCHAMP to supervisor, Ceramics Development Division 5334, effective May 1.

Since joining Sandia in March 1964, Ed's work has been with ceramics and surface science research — dielectric strength, fracture and mechanical properties of glass and glass ceramics, and permeation of gases in glass. Before his employment with the Laboratories, he had worked for the Corning Glass Works in New York for three years.

His degrees in physics were awarded from these schools: BS, University of Nevada; MS, Northwestern University; and PhD, University of Utah. Ed served two years in the U.S. Army. He is a member of the American Ceramic Society, and the American Physical Society. He is married and has six children.



Promotions

Roger Aden (7371) to Technical Staff Associate
Paul Beeson (5514) to Technical Staff Associate
Sandra Chrisman (8131) to Secretarial Typist
Isaac Griego (4152) to Member of Laboratory Staff
John Kinney (2333) to Technical Staff Associate
William Lemmon (9132) to Technical Staff Associate
Richard Lingle (5163) to Technical Staff Associate
Jerry Moore (8272) to Technician (Plastics)
Joan Nakano (8353) to Secretarial Steno
Hanloy Quock (8321) to Technical Staff Associate
Jack Stewart (7371) to Laboratory Staff Associate
Elaine Volk (8313) to Secretarial Steno
Reuben Weinmaster (2315) to Technical Staff Associate
Gerald Williams (8322) to Laboratory Staff Associate
Louis Wittkopp (8121) to Technician (Instrument Repair & Calibration)
Catherine Tinsmith (9411) to Computer Facilities Operator

LAB NEWS

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An Equal Opportunity Employer

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Norma Taylor/All The Rest

Touring Northern California

The June schedule planned by the naturalist staff of the East Bay Regional Park District includes a number of special events.

The annual sand castle contest is June 12 at Alameda Beach Regional Park, starting at 10 a.m. There are three categories: families, groups of 11-year olds or above, and groups of 10-year-olds and under.

On June 19, starting at noon, the third annual Farm Fair at the Tilden Regional Park nature study area will feature such special activities as sheep shearing, wool spinning, and square dancing. Wear farm clothes.

Camp Ohlone is being sponsored at Sunol Valley Regional Park for those interested in nature study. Four five-day sessions begin June 23. For further information, phone 862-2244.

A weekend camping trip devoted to marine biology will take place June 26 and 27, starting Saturday morning at Alameda Beach Regional Park. A \$4/person charge includes chartered bus transportation to the ocean and two meals. Bring sleeping bags and lunch. For reservations and further information, call 524-1034.

Sunday afternoon programs during June at Alameda Beach from 1 to 2:30 p.m. are: June 6, "Of Whales and Men"; June 13, "The Water's Edge"; June 20, "What Was the Bay Like 50 Years Ago?"; and June 27, "Turn of the Tide." Following these programs, from 4 to 5:30 p.m., a naturalist will present particular wildlife interests: June 6, snakes; June 13, plants; June 20, birds; and June 27, bugs and creepy crawlers.

Each Sunday in June from 1:30 to 4 p.m., Sunol Valley Regional Park will feature "The First Californians." A naturalist will discuss and lead a walk, turning back the clock to investigate the plants used for survival by the Indians and Spaniards who shaped the destiny of the area. Meet at the Old Green Barn.

Take Note

John Schipper (8341) and Bill Wilson (8331) swam in the recent Walnut Creek-hosted regional Masters Swimming Championships as members of the newly formed Swaybacks team of the Livermore Aquacowboys. The team took second in the men's division and third in over-all competition. The swimming event is open to men and women over 25 years of age, either professional or nonprofessional. Other Sandia team members are Walt Bauer (8331) and Bob Schultz (8124). The Swayback team is holding a marathon swim at Livermore's May Nissen Pool from 8 p.m. Tuesday, May 25, to 8 p.m. Wednesday, May 26 as part of the Livermore Aquacowboys aquathon fund raising drive.

Sympathy

To Dick Demo (8175), for the death of his father in North Adams, Mass., April 22.

To Charles Mauck (8175), for the death of his mother in Birmingham, Ala., April 28.

To Hazel Willyard (8322), for the death of her father in San Bernardino, Calif., April 19.

LIVERMORE NEWS

VOL. 23, NO. 10

LIVERMORE LABORATORIES

MAY 21, 1971



INFORMATION EXCHANGE during Metal Hydride Symposium at Sandia/Livermore.

Livermore Symposium Brings Together Metal Hydride Researchers

Sandia hosted a recent Metal Hydride Symposium at Livermore in which about 80 representatives from various research laboratories both within and outside the AEC complex, exchanged information. A hydride is a compound or solution of hydrogen, where the amount of hydrogen present is a significant portion of the atomic composition. Knowledge of the properties of hydrides can be applied to a wide variety of interests ranging from use of moderators in reactors to the mechanical integrity of structures.

Rick Wayne (8331) and George Perkins (2613), who conceived the idea for the symposium and have been its prime movers, served as co-chairmen for the event. Introductory remarks were presented by Jim King (8300).

Initially, about a year ago under the direction of George Anderson (8330), several of the staff at Sandia/Livermore began a study of the literature of metal hydrides. It soon became apparent that there was a need for better communication or interaction between researchers in the field. A survey tour of the laboratories involved in such research not only supported this conclusion but

revealed a number of significant programs there were virtually unknown to other groups studying the properties of metal hydrides.

As a result of the survey, a productive information exchange between researchers and technologists was envisioned in the form of the Metal Hydride Symposium.

Speakers from Sandia/Livermore were: W. Bauer (8331), W.D. Wilson (8331), M.C. Nichols (8311), and L.N. Talerico (8331).

Sandia/Albuquerque speakers: L.C. Beavis (2613), C.J. Northrup (5322), A.C. Switendick (5151), G.J. Thomas (5522) and H.T. Weaver (5154).

Other speakers included: R. VanHouten, Atomics International; R.L. Heestand, Batelle Memorial Institute; J.J. Reilly and R.H. Wiswall, Brookhaven National Laboratory; C.E. Lundin and C.B. Magee, Denver Research Institute; M. Louthan and T.J. Warren, DuPont/Savannah River; C. Biver and W.C. Brown, General Electric/Pinellas; J.D. Farr, LASL; F.J. Ackerman, J.F. Lakner, H.R. Leider and A.D. Pasternak, LRL; R.C. Bowman and C.M. Love, Mound Laboratory; and H.M. Smith, Y-12.



MOTORCROSS: Freeway driving it ain't.

Motorcross—For a Nice, Quiet Sunday Afternoon

Take equal parts of dust, noise, and physical punishment and you have some approximation of a fun time for the half dozen Sandians who are members of the New Mexico Motorcross Club. The fun (and it really is) consists of racing a motorcycle around a one-mile dirt course that must have been constructed by the same people who built all those obstacle courses that GI's endured in training. Dips, bumps, jumps, water hazards, soft sand, hairpin turns and some trailside cactus are a few of the course offerings.

Dorothy Mannahan (1733) states that the 100-member club has about 30 gals. Some race, but most prefer the club's outings where the group tours back roads, picnics, and enjoys the countryside. Dorothy owns a 175cc Yamaha which she once raced, but no longer—“... just a little too hairy.”

The bikes themselves are impressive

machinery. The smallest, minibikes, run about 50cc and are raced by 11- and 12-year-old kids, usually children of members. Biggest run to the snorting, highly-tuned, 500cc jobs specially designed for motorcross racing — lots of power, very little weight, with components ruggedized for a beating.

The club holds its races about once a month on a course northwest of the Volcano Cliffs addition on the West Mesa. Other Sandians include David Chavez (5165), an officer of the group, Chuck Peeples (4221), Delmar Gronseth (4512), Terry Otero (4231), and Dave McCloskey (1715).

We asked Dorothy if the club had terrorized any citizens lately, a la Hell's Angels. “Not yet,” she replied, “but given enough dumb questions like that, who knows. . .” The air seemed a little heavy with menace, so we backed out before things deteriorated further.



You need a high dust threshold in this sport.



Notice the nice features on this machine. Dorothy Mannahan (1733) can be seen in front of it.



Said he worked in 5000.



One way to learn to fly.



PRESIDENTS and potentates have visited Sandia, so why not someone in kilts? Strolling down the corridor in the reactor area where he worked for a few days is Robert Stewart of Stewart Research Enterprises in Los Altos, Calif. Sandra Kaufman (5221) gives outfit the once-over.

Recreation News

FUN & GAMES

The Sandia Women's Golf Association played their season tournament opener in Socorro on May 8. Low net winner was Ann Michele (4500). Low gross honors went to Pat Anderson (7225) and Betty Chappel (AEC) was low gross runner-up.

* * * *

Emma Hollingsworth (3256) and daughter, Marsha, teamed up to win low net honors with a 41 in the Mom-Daughter Scotch Foursome golf tourney during "Mom's Weekend" at the University of Oklahoma.

* * * *

The 1971 slow pitch softball season opened May 10. All games will be played on city fields. Anyone interested in participating should call Frank Lucero, ext. 3001.

—Norma

Sympathy

To Roni Russell (4612), for the death of her father in Superior, Wis., April 15.

To John Hart (4316), for the death of his father in Albuquerque, May 11.

To Lillian Bowers (4152), for the death of her mother in Alton, Mo., May 6.

To Bernice Sanders (3232), for the death of her husband, May 8.

Take Note

The Pennsylvania Club's annual picnic will be held at the Fraternal Order of Police Boy's Camp (west end of Candelaria N.W.) at 2 p.m., May 30. Club members and former Pennsylvanians are invited to attend. Bring your own food, beverage and table service. For additional information call Louise Lewis (3421), tel. 255-3316.

* * * *

Leonard Jacobvitz has been appointed Chief Counsel, ALO, effective May 4. Mr. Jacobvitz had been assigned to the Office of Chief Counsel and is succeeding Chalmers King, who is retiring.

* * * *

The Albuquerque Philatelic Society will hold its Spring Auction at Albuquerque Federal Savings and Loan Ass'n., 4901 Central NE, May 27, 7:30 p.m. Peter Kaestner (9323), society president, says there will be material for all tastes and price ranges in the 100 lots, including U.S. with some plate blocks, British North America, and a nice selection of first flight covers. For further information call Peter, tel. 265-0283.

* * * *

The Sandia Base Kindergarten has announced that registration for next year will take place at 8:30 a.m. Aug. 5 for the children of Sandia employees. The enrollment will be at the school, bldg. 1851.

* * * *

Bill Benedick (5134) will present "Low Gruneisen Materials and Their Application in the Nuclear Radiation Environment" at the 5100 Staff Seminar Tuesday, May 25, in rm. 201 of bldg. 806.

* * * *

Talks presented at the Mathematical Computation Symposium held May 6-7 at Sandia Laboratories-Albuquerque were videotaped and will be shown June 1 and 2 at Sandia Livermore. Contact Bob Huddleston (8321) for information.

The tapes will be retained until July 1 and a schedule of showings in Albuquerque can be arranged after June 7. Persons interested in seeing any or all of the talks should contact Bernie Hulme (1722).

Copies of abstracts of all of the talks presented are available from either Bob or Bernie.

* * * *

The Santa Fe Trail 200-mile car rally will be held Saturday, June 5, starting at 5:30 a.m. at Ramada Inn. Registration and safety inspection of participating vehicles will be conducted the previous evening.

The rally, sponsored by Rio Grande Region of the Sports Car Club of America, will be run on both paved and unpaved roads having little traffic.

Additional information may be obtained from members of the rally committee who include Phil Class (1543), Lyle Gerdes (1542), Ron Ewing (5235), and Earl Gruer (4542).



GOTCHA! some employees will go to any length to avoid the 20-year service award ritual, but John Eckhart (left), manager of Dept. 9220, is not easily put off and cornered Bob Middlesworth (9224) in this Arctic locale — the Poker Flats Range near Fairbanks, Alaska.

Deaths



Rita Gutierrez



Dean List

Rita Gutierrez, a secretary in Division 3256, died following surgery May 3. She was 23.

She had worked at Sandia Laboratories since February 1969.

Survivors include her mother and father, two brothers and a sister.

* * * *

Dean List, a technical staff associate in Instrumentation Fielding Division I 9123, died suddenly May 11 while working on a project at Amchitka, Alaska. He was 41.

He had worked in Field Test organizations at Sandia Laboratories since August 1952.

Survivors include his widow, daughter and son.

Service Awards

25 Years

James Karo 7514, Walter Treibel 2634, and Blythe Wemple 4222.

20 Years

Reuben Montoya 3524, Bill Rappleyea 4253, Norman Sinnott 7222, John Martinez 4623, Frank Lucero 9415, Herschel Rogers 2334, Grover Edwards 3311, Willard Prekker 4122, Joseph Tilley 4511, Max McWhirter 7320, Tony Lopez 3428, Richard Rael 4337, Roy Buckner 5165, Clary Valdez 6021, Reynolds Moore 9221, Harold Jeske 7221, Audra Reger 7531, and James Scott 9200.

15 Years

Edward Ashland 1514, Earl Wilson 3132, Vivian Hedman 4152, Lou Fisher 8176, Dolores McKelvey 9110, Juan Ortiz 4623, and Damacio Sandoval 4232.

10 Years

Ruben Urenda 2324, Patsy Bergsten 3256, Bruno Morosin 5152, Mary Campbell 100, Robert Miller 8182, Mae Wood 9220, Richard Coughenour 4115, and William Mahaffey 3454.





SANDIANS ride snowmobiles through a rough ice field near Alert, Canada, to mark a target zone for ice penetration tests.

Ice Penetrometer Tests

Our Men in the Frozen North

In mid-April a team of Sandians successfully conducted a series of ice penetrometer tests near Thule, Greenland, and Alert, Canada. As reported in the last issue of the LAB NEWS, instrumented projectiles were dropped into various kinds of ice and accurately reported thickness and other data.

Sandians on the expedition included Gordo Miller, Don Fifield, Lewis Ellis and Cal Cox (all 7252); Leon Keck (9231); Wayne Young and Jack Kiker (both 9327); Doug Bruce (9323); and Ray Wood and Ellis Heustess (both 7281).

The accompanying photos were taken by Bill Mahaffey of Motion Picture Division 3454 who also provided technical photographic coverage of the project.



DROPPING a penetrometer unit through "bomb bay" on the C-54 aircraft used in the project are test director Gordo Miller and Wayne Young.



CAL COX rides a snowmobile off the C-54 at Alert, Canada.



MEASURING entry angle of a projectile into the ice are Jack Kiker and Wayne Young.



ESKIMOS at Thule, Greenland, offered to lend dog teams to the expedition but the hardy huskies were not needed.

Retiring



LLOYD JOLLY (4232)



MAX ENGLE (2492)



AL GURER (3260)



CLAURYS PINE (3220)



EVERETT CLICK (2335)



MARCEL WEINREICH (3424)

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RULES

1. Limit: 20 words
2. One ad per issue per person
3. Must be submitted in writing
4. Use home telephone numbers
5. For Sandia Laboratories and AEC employees only
6. No commercial ads, please
7. Include name and organization
8. Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.

MISCELLANEOUS

PAIR heavy duty camper jacks. Newton, 255-2074.

TURQUOISE SOFA, 90" long, 2 reversible cushions, one arm slightly worn, \$35. Bishop, 7105 Gladden Ave. NE, 299-0649.

PANASONIC port. AM/FM phonograph; ext. speaker; 5" squirrel-cage fans; Rolleiflex plate film adapter; hand crafted kites, Frauenglass, 265-7372.

NORTON '69 Commando w/Vetter Fairing, 7000 mi., \$1150. Rand, 299-1048.

PUPPIES, Collie cross, will be good country dogs, \$5 ea. Miller, 282-3189 after 6.

CAMPER, 10' Vista Liner, sleeps 6, pressure water system, 5-gal. butane bottle, jacks available. Corn, 299-0601 after 6.

BASSINETTE, w/mattress & skirt, \$10. Verzi, 299-7028.

POWER MOWER, 18" reel type, Jacobson, \$15; 4-cycle motor for power mower, \$8; knee high rubber wader boots, \$6. Shepherd, 299-9066.

SECTIONAL SOFA, 4-pieces, sunset. Cosden, 256-0547.

REG. Spalding top-flite pro irons, 2-9, used, leather grips, \$50. Horne, 296-1416.

BEAGLE PUPPIES, 4 males, 3 females, can leave mother June 1, mother & father AKC reg. Bartel, 296-5270.

'69 TRIUMPH TROPHY 250cc, \$400. Cox, 299-5855.

ROTARY POWER MOWER, 4-cycle engine, \$10; 2 translucent single-panel room dividers, 2/\$15. Laramore, 299-6941.

ELEC. adding machine, \$75; 2-dwr. steel file cabinet, \$75; 20 rabbit hutches, \$35; parakeet cage, \$15; black nagahide recliner, \$65. MacGibbon, 344-0725.

LADIES WIG, Dutch boy style, medium brown, Penney's color six, worn once. Randall, 299-0372.

WASHER & DRYER, GE matched pair, working order. Rainhart, 299-2887.

LEICA M3, 50mm Sumicon, 90mm Elmar, 135mm Hektor, Leicameter, sell as unit, \$450. Bowland, 256-1861.

USED steel frame window, 3' x 4', \$6; 6' x 8' alum. sliding doors, \$60. Sanchez, 864-8494.

METAL CAB HIGH stock racks to fit short wide Chev. or GMC 1/2-ton pickup, \$50. Tolbert, 1-636-2729.

KODAK 500 movie projector, B&H movie camera, film splicer & editor, light bar, 2 lights, all for \$65. Eaves, 299-7728.

9 X 12 OVAL BRAIDED RUG, lt. beige background. Fisher, 264-6044 or Bosque Farms, 1-636-2864.

BOY'S bicycles, 1 Schwinn Sting Ray & 1 20" std. Poulsen, 268-7437.

LAWN MOWER, push type, \$10. Stirbis, 299-5363.

TYPEWRITER, Royal Quiet deluxe port. w/case, \$25. Swanson, 842-9695.

'70 KAWASAKI 100cc, many spare parts, \$345; small tape recorder, \$10; round chair, \$35; reclining chair, \$35. Otero 294-0060.

DISHWASHER - sink, \$60; deluxe Estate gas range, \$60; maple cabinet top, \$10; exterior door, \$15; breakfast nook table, \$20. Officer, 256-0337.

GARAGE SALE: Sat., Sun., 10 to 5; small appliances, Coleman stove, baby equip., toys, bowling ball, bike, misc. Brass, 4725 Westridge NE, Glenwood Hills.

FRENCH windows, set of 4, \$25; encyclopedia, Colliers, 10 vol., \$50. Wurlitzer piano spinet, \$500. Chavez, 255-9006.

CULVERT, 3' diameter, 12' long, 3/8" steel. Wilson, 282-3225.

PUPPIES, West Highland White Terrier, AKC, perfect for children. Young, 296-1963.

MASON-HAMLIN piano, console, 1/3 orig. price. Parisi, 255-2933, no calls after 8 p.m.

COACHMAN travel trailer, 18', used 5 times, less than 1500 miles, sleeps 6, self-contained, save \$800. Rea, 299-9315.

8' BELL custom 1/2 cabover camper w/tripod jacks & intercom system. Chapman, 299-3946.

FLYING CLUB share in 10-man club w/Cessna 172 & 182, low rates, nominal initial investment. Elliott, 256-7909.

BEAGLE PUPPIES, AKC reg., excellent hunters or children's pets; Porsche luggage rack & poly pad cover. Kupper, 298-7720.

TENT TRAILER w accessories, \$175; 3-burner Coleman, \$13; Coleman lantern, \$7; alum. cots, \$4; bookcase maple headboard for dbl. bed. \$10. Laursen, 256-1460.

2 WHEEL cargo trailer, \$35. Randle, 867-2668.

TRAILER, '69 Starcraft Executive, improved better than new, best offer over \$2200. Newton, 299-1283, 2909 Charleston NE.

6-WK. OLD toy poodle puppy, silver, male, excellent pedigree, beautiful coat, Davis, 298-1957.

SHOP VACUUM, lg. capacity, \$20. Westman, 255-6048.

GENTLE MARE, riding horse, \$200; 5 rolls 90-lb. roofing, \$25; 8' alum. pram boat, \$30; utility trailer, \$40. Shock, 877-3728.

MAPLE BUFFET, 54", 4 lg. drawers, 2 small drawers, 2 cupboards, \$95; dbl. pedestal maple desk, 7 drawer, \$60. Libby, 299-5948 after 5:30.

DAY BED COVER w/two matching bolsters, bright orange corduroy, \$20 or best offer. Summers, 299-4710.

CARS & TRUCKS

'66 MUSTANG V8, air, radio, \$995. Laval, 898-0518.

'66 OLDS conv.; one owner, \$1350 or best offer. Winter, 247-8811 ext. 43 or 299-2387 after 6.

'63 FORD GALAXY, 8-cyl., R&H, AC, AT, all power. Smith, 299-7151.

'66 DODGE pickup, R&H, 4-spd., 7:00x15 6-ply tires. Chavez, 299-2392 after 5.

'61 CHEV. Impala 283, AT, R&H, \$275. Cox, 299-5855.

'66 VW sedan, less than 50,000 miles, \$850. Lynch, 296-6177.

PEUGEOT MODEL 403 sedan, sun roof, Swiss, 265-5346.

'60 CHEVELET, 4-spd., 1/2-ton pickup, rebuilt engine, \$485. Benjamin, 243-1022 after 5:30.

'62 FORD station wagon, 352 V8, \$200. Kavet, 299-1793.

'59 CHEV., 2-dr., blue, PS, PB, \$105. Guist, 265-3250.

'68 DATSUN 1600 sport coupe, fiberglass top, soft top, tonneau cover, R&H. Dehon, 247-8537.

'61 DODGE Polara station wagon, \$300; '61 Ford Falcon, \$100. Phillips, 299-7074 after 6.

'67 MUSTANG, red/white, sports sprint decor, low mileage, 289, PS, PB, AC, 1 owner. Conklin, 298-8217.

'64 STUDEBAKER pickup, V8, 5-spd trans., 1/2-ton, Positraction, lwb. \$550 or best offer, camper shell available. Molter, 282-3203.

'69 CHEVY II NOVA, 11,000 miles, \$1395. Tufts, 255-9663.

'63 SCOUT, 4-wd, new brakes & generator, extra heater, 2 sets wheels & tires, 4 tire chains. Foster, 282-3975.

REAL ESTATE

LAND, 10.3 acres in Sandias at La Madera, 6900-ft. elevation. Clement, 298-4994.

8 WOODED ACRES, Edgewood area, \$4500, title ins., owner will finance. Dungan, 298-2906.

WANTED

POOL TABLE, full size plus accessories, Shepherd, 255-2396 after 6.

EXERCYCLE in good condition. Baisdon, 268-8805.

35MM single-lens reflex camera without lens; 400mm lens; shoulder mount for a camera w/long lens. Stevens, 299-6086.

ONE ACRE west end Tijeras Canyon, outside city limits. Norris, 255-0118.

LINCOLN CONTINENTAL, '64-'66 4-dr., must be in excellent condition. Davies, 265-7283.

OCCASIONAL CHILD CARE IN MY home. Edmonds, 264-7746.

BICYCLE, 5 or 10-spd., for less than \$75. Tiefs, 299-2763.

GERMAN SHORTHAIR POINTER owners to join GSP club. Valdez, 268-5375.

OLD LEICA cameras & accessories. Lieber, 298-1101.

SLEEPING BAGS & camping equip. Ross, 265-4990.

OKLA. CITY, driving to Okla. City Friday, May 28 — returning Mon., May 31, rider wanted, share costs. Brown, 268-6427.

VW JACK HANDLE, cartop luggage rack. MacCallum, 242-4602.

GIRL'S multi-speed bike. Claassen, 255-4347.

FOR RENT

3-BDR., 1 1/2 bath, DR, fp, garage, sprinklers, available June 1, NE near Winrock, \$200/mo. Williams, 296-7491.

3-BDR., 1 1/2 baths, utility rm., AC, oven & range, drapes, walled yard, landscaped, available June 1, \$160/mo. Patterson, 243-6219.

3-BDR, 1 1/2 bath, garage, AC, \$165 /mo., w/den \$185/mo. Johnson, 247-8634 after 4.

2-BDR. furnished house, \$165; furnished efficiency apt., \$90; available June 1. Palmer, 255-7907 or 299-9044.

LOST AND FOUND

LOST—Diamond dinner ring, black notebook with personal records. LOST AND FOUND, tel. 264-2757, Bldg. 832.

FOUND—Pr. black gloves, Ford trunk key, lace glove. LOST AND FOUND, tel. 264-2757, Bldg. 832.

Coronado Club

Latin Fiesta Manana

LATIN FIESTA manana at the Coronado Club will feature a tremendous spread of Mexican food and music by Sol Chavez. Setting the mood are Denny Gallegos (3428) and Irene Chavez (4135).



Ole! It's fiesta time at the Coronado Club. Tomorrow night Sol Chavez and the mighty Duke City Brass will play the samba sound while the Club's kitchen staff goes all out preparing our own unique Rio Grande style Mexican food. It will all be there enchiladas, tacos, carne adovada, the works.

The evening will start with cocktails at 6

p.m. with a free marguerita issued to each trooper. Dinner will be served from 7 to 8:30 p.m. and the dancing will start at 9 p.m.

During the cocktail hour, the Mariachi Gala will entertain.

If you pick up your tickets (\$3.50 for members, \$4 for guests) tonight, you can still make the scene. Ole!

* * * *

WILDMAN Bob Banks returns to the happy hour stage tonight with the crazy red Yamaha electronic organ and the terror trio. There are those who do not believe that the Yamaha is an organ—it's a horizontal trail bike. Where does the music come from? No one knows for sure.

As an added attraction tonight, the Wagon Wheel Square Dance Exhibition Team from UNM will perform a lively exhibition about 7 p.m. of some of the more energetic and exotic square dance routines.

Veal cutlets will be the buffet feature and it will be spread from 6 to 8 p.m. Happy hour starts right after work when the north end crew gathers in the main lounge and continues with very special prices until 9 p.m. Then Yolanda Adent and Stu Bryan, the flying banjo banger, entertain with a sing-along.

Next week Frank Chewiwie will make the happy music while the Club's famous chuckwagon roast beef buffet is spread. On Friday, June 4, Sol Chavez will be on the bandstand while Italian food will be the buffet feature.

* * * *

THE TWIN POOLS open Saturday, May 29, at 11 a.m. and a patio party starts at 1 p.m. Herb Filusch (9228), Club swimming director, booked a "Heinie" band for the occasion. Herb says the group is made up of members of the Dukes of Albuquerque Drum and Bugle Corps which took fourth place in national competition recently. While the kids swim and eat hot dogs, parents may enjoy 10-cent beer. Speaking of patio parties, the July 4 celebration will be held on Sunday, July 4, which is a change from a previous notice.



Heart Association Honors ECP Donors

Sandia Laboratories employees were honored for continued contributions in support of the New Mexico Heart Association during that group's annual meeting May 8.

Jack Sivinski (1740) accepted the award in behalf of the Sandians. He will be chairman of the Employees Contribution Plan during the 1971 fund drive. The New Mexico Heart Association is one of the organizations which benefits from the annual ECP solicitation.

SOUL SESSION is scheduled Saturday, May 29, from 8:30 to 12:30. Music lovers should be happy to know that Rod King and the Soul Knights will be on the bandstand. Admission is free to members and happy hour prices will be in effect all evening.

* * * *

THE TRIP to Las Vegas July 23-25 has now signed up 61 travelers, according to Chet Fornero (4337), Club travel director. Chet also reports reluctantly that the airlines raised prices recently and that \$7 must be added to cost of the package. The three-day package (which includes everything but lunches) will cost \$106 per person for double room occupancy and \$121 for singles. Only a few seats remain open for the trip.

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J.M. Peek (5234), "Theoretical Study of H^{\pm} Ground Electronic State Spectroscopic Properties," Vol. 53, pages 3681-3690, JOURNAL OF CHEMICAL PHYSICS.

E.K. Beauchamp (5332), "Stress Determination in Opaque Materials," Vol. 54, No. 2, JOURNAL OF THE AMERICAN CERAMIC SOCIETY.

A.G. Beattie (5153) and G.A. Samara (5132), "Pressure Dependence of the Elastic Constants of $SrTiO_3$," April issue, JOURNAL OF APPLIED PHYSICS.

G.A. Carlson (5224), "The Generation of Maximum Shock Wave Pressures by Exploding Wires," April issue, JOURNAL OF APPLIED PHYSICS.

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A.J. Toepfer (5241), "Finite Temperature, Relativistic Electron Beam," April issue, PHYSICAL REVIEW A.

R.P. Clark (2345), "Electrical Conductivity Measurements in Anhydrous Hydrogen Fluoride," April issue, JOURNAL OF THE ELECTROCHEMICAL SOCIETY.



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