



SIGNING IN—Dick Chapman (3154), left, assists the first group of the 100 Youth Opportunity Campaign participants who joined Sandia Laboratory for the summer. This is the third year that Sandia has participated in the national program which provides meaningful work and training opportunities for students. The trainees are, from left, Leonard Sanchez, Ural Mitchell, Annfred Platero and Katherine Armijo.

## 110 Trainees Join Company

### Third Youth Opportunity Program Starts

For the third summer, Sandia Corporation is participating in President Johnson's Youth Opportunity Campaign to provide temporary summer work and training experience for students returning to school in the fall. Students are selected based on their qualifications and degree of economic need.

At Sandia Laboratory, 100 Youth Opportunity Trainees signed in during the past two weeks. Nine will join the Company at Livermore Laboratory and one at Tonopah Test Range.

In addition to performing work which will benefit the Company and the experiences which will benefit the students by introducing a new environment and further developing various skills—the employment at Sandia will help make it possible for the students to continue their education.

Of the group, 38 are rehires from last year. In 1965, Sandia hired 80 students. In 1966, 81 were hired.

Ages of the trainees range from 16 through 21. The majority (53) have at least one year of college. Forty-nine have just finished high school. Eight will be high school seniors next year.

In recruiting the students, Sandia had the cooperation of local schools and state employment offices. An effort was made to solicit the interest of last year's trainees to realize as much savings as possible on required security clearances and training.

Trainees again this year will help carry out assignments in clerical, manual and laboratory areas.

The following trainees, interviewed by the SANDIA LAB NEWS after less than

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## K. R. Braziel Appointed To Head Special Projects at AEC's Sandia Area Office



Kenneth R. Braziel has been appointed chief of the recently-established Special Projects Branch at the Atomic Energy Commission's Sandia Area Office.

In his new position, Mr. Braziel is responsible for an-

alysis of Sandia Corporation activities related to weapons research and development and full-scale testing; AEC-funded non-weapons projects such as detection of nuclear explosions, peaceful uses of nuclear explosives and aerospace nuclear safety; and reimbursable work performed by Sandia for other Federal agencies.

Mr. Braziel, who has been chief of Programming and Control Branch, Office of Operations, in the AEC's Albuquerque Operations Office (ALO) since 1959, joined the AEC at Richland, Wash., in January 1952. He transferred to ALO in 1955. He previously was with the Army Corps of Engineers and was a mathematics instructor at Montana State College.

He received BS degrees in applied science and civil engineering from Montana State College. During World War II, he served as a combat navigator with the U. S. Air Force.

## Walter Westman Re-Elected To IDEP Advisory Board



Walter W. Westman, supervisor of Quality Engineering-Nonweapon Activities Division 2435, was re-elected executive secretary and a member of the Contractor Advisory Board of Interagency Data Exchange Program

(IDEP) at the fifth annual conference in Houston recently.

IDEP, which is made up of some 160 Government agencies and contractors engaged in missile, space and related programs, is designed to establish an exchange of test data on component parts.

Walt, who is the Sandia IDEP representative, has served a year as executive secretary and two one-year terms on the 14-member national advisory board. His current term is for two years. He also served as arrangements chairman of the third annual IDEP conference in Albuquerque two years ago.

## Finance Tellers' Hours Will Be Different on July 3

The tellers' windows in the finance office, Bldg. 802, Rm. 122, will be closed Monday, July 3, until approximately 10 a.m. This is necessary due to year-end closing activities, according to C. Olajos, 6020 department manager.



# SANDIA LAB NEWS

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SANDIA LABORATORIES

ALBUQUERQUE, NEW MEXICO; LIVERMORE, CALIFORNIA

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### Computers Help

## IMOG Develops ADDS to Maintain And Distribute AEC Materiel Lists



NEW AUTOMATED MATERIEL LIST system is explained to a group of Sandians by R. E. Garin (2225). The new procedure is being implemented at Sandia Laboratories and AEC production facilities.

Computer-processed materiel lists for weapon and non-weapon programs soon will be maintained and distributed as part of an Automated Drawing Data System (ADDS).

The development of ADDS is a joint Interagency Mechanical Operations Group (IMOG) effort of AEC production agencies and Sandia Corporation. By reducing manual operations, the new system will eliminate repetitive handling of data, provide consistent data, shorten the intervals between the exchange of information and improve the control of engineering data.

In recent years there has been a tremendous increase in the amount of technical information which must be exchanged rapidly and accurately by AEC contractors engaged in development, production and storage activities. For example, Sandia Laboratory releases an average of 8500 drawings and specifications each month.

The Automated Materiel List (AML), a subsystem of ADDS, is currently being implemented at Sandia and Livermore Laboratories and other AEC-contractor facilities. The AML system will replace the lists of materials, parts and specifications formerly maintained manually on design

drawings or as separate listings.

Under the new AML procedure, non-graphic design data are normally prepared by the design or production agency draftsman for processing by the computer. The computer produces the materiel list and a message for transmission over a new security-protected communications system to the appropriate AEC design or production facilities.

At the receiving facility, the information is fed into a computer which prints a facsimile materiel list. Thus identical materiel lists can be distributed at the design and production facilities at essentially the same time although no two AEC agencies have identical computer facilities.

Implementation of the broad ADDS system will be accomplished in stages that will permit integral subsystems, such as AML, to be assimilated into new and current programs. Among the several other ADDS subsystems planned, current projects include computer-prepared interproject group shipment listings, which will be released starting next month, and automation of engineering change data for printing a new Acceptance Index, formerly called a product record.

## 49 Employees Complete Tech Development Program

Forty-nine members of the 1967 Technical Development Program class received congratulations from President John A. Hornbeck and Vice President Glenn A. Fowler, chairman of Sandia's Education Committee, at a luncheon last week. The occasion recognized the completion of one-year and two-year programs of advanced study at the University of New Mexico. TDP participants work at regular assignments half the day, attend classes the other half.

Members of the Sandia Small Staff and Education Committee were introduced by Mr. Fowler who said, "We are acknowledging our pleasure at seeing you complete the Technical Development Program. We are very pleased. It is a good program and it has accomplished its objectives of further preparing top graduates from top schools to work in the advanced areas of Sandia's special interests."

Mr. Hornbeck, in congratulating the group, noted that the "academic competition must have been fierce." Students in the group were among the top five percent of graduates from their respective schools before entering TDP at Sandia.

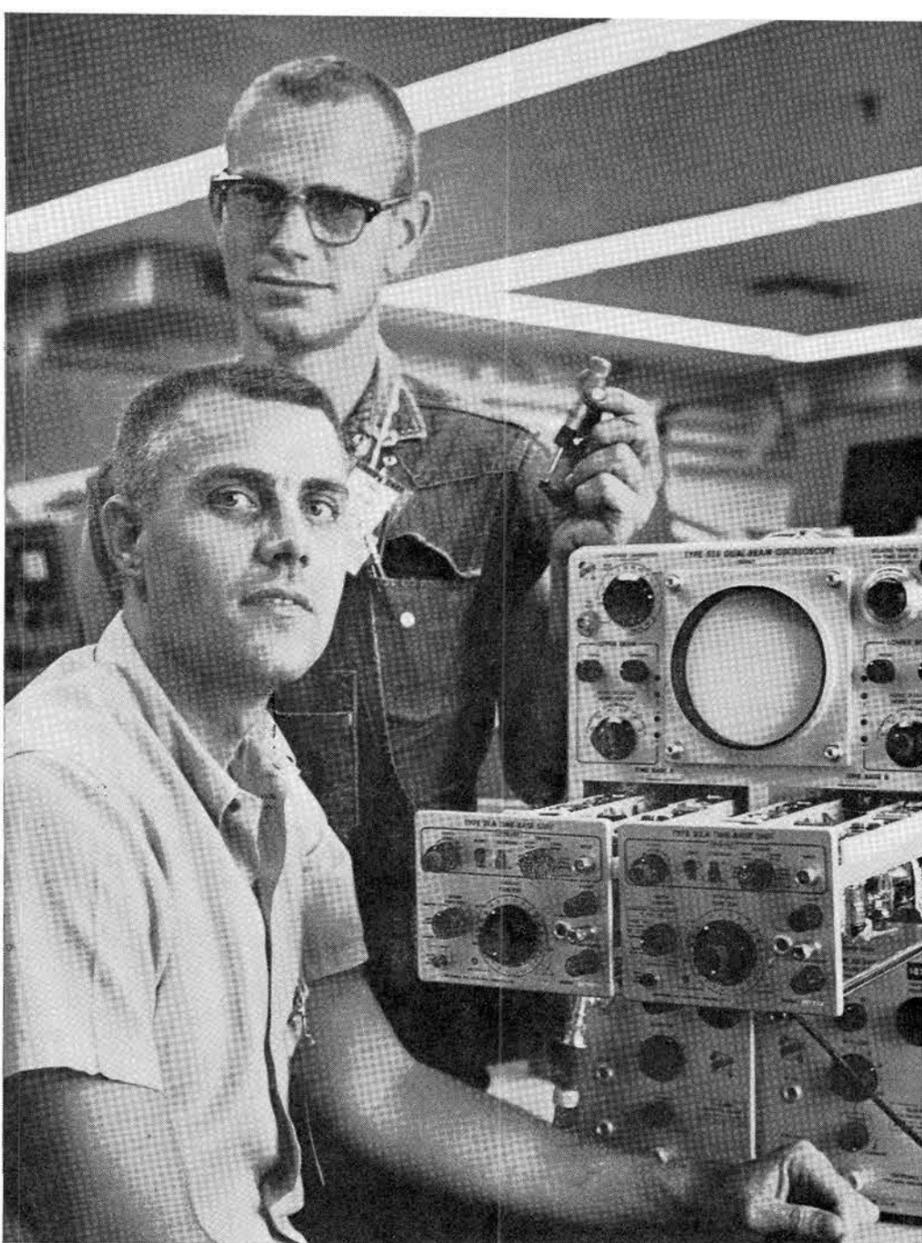
"All of us are concerned with a continuing technical education," Mr. Hornbeck said. "It is abundantly clear that the rate of new developments in technology and science makes keeping current a continuous process. We must constantly adapt to new fields and keep learning in new areas."

Twelve of the participants in the program were hired with Master's degrees and took only the TDP advanced "core" courses developed specifically for Sandia Corporation areas of interest. Members of this group are Floyd W. Adams (9225), George L. Davis (5613), F. P. Gerstle, Jr. (7311), Dwight S. Hill (7244), Gerald J. Hochrein (9326), James L. Jorgensen (1423), Stewart M. Kohler (1320), William R. Leuenberger (1322), James K. Linn (9233), Bruce W. Noel (7222), Douglas C. Smathers (9227) and Ivan G. Waddoups (9333).

Also completing one year of TDP participation was Donald J. Rigali (9326), an on-roll employee who joined the program after meeting the requirements under Sandia's Educational Aids Program.

Thirty-six TDP students joined Sandia with Bachelor's degrees and completed two years of advanced study under TDP. Members of this group are Paul G. Beck (9234), Glen W. Belden (1425), Ronald D. Bentley (7211), Richard R. Berlint (9425), Bennie F. Blackwell (9326), John A. Brammer (9331), David M. Darsey (7334), Paul R. Dodge (7122), Thomas A. Duffey, Jr. (1142), Burt Edwards, Jr. (9226), John L. Fallon (1333), John S. Farnbach (9422), Lewis J. Gorin (7222), Richard G. Hay

(Continued on Page Eight)



GRADUATING FROM SANDIA'S apprenticeship program June 2 were Richard L. Foster (4253-1), standing, who completed the machinists training, and Ervin L. Smith (4231-3), who completed electronic training. Both became Journeymen on June 5.

## Bob Esterly, Bill Chandler Serve On Local 'War on Poverty' Board

Bob Esterly (9614) and Bill Chandler (3112) are members of the Albuquerque-Bernalillo County Economic Opportunity Board, the local non-profit corporation which plans and coordinates most of the "war on poverty" efforts in the county.

Bob is an elected "member-at-large" on the Board, while Bill is a representative to the Board from the United Community Fund. The Board is composed of 31 members, 14 representing organized neighborhood associations where most of the projects are conducted.

"Although it is difficult to summarize the work of the Board," Bill says, "we can say it is responsible for a number of long-range programs aimed at breaking the pattern of poverty and providing new dignity in the lives of the poor. It deals with difficult and complex problems of social change."

Board members make basic policy decisions about local operations of such programs as Headstart, which prepares youngsters for first grade, and Upward Bound, which is aimed at motivating continued education and developing the existing potential of high school juniors. Both programs embrace economically and culturally deprived children.

The Board is involved in many programs of the neighborhood centers, all designed to provide new opportunities for development of human resources. These neighborhood centers, such as the one at Barajas, are provided with a professional staff. The staff arranges services such as medical, mental health, family counseling, general referral and consultation on various community resources such as legal aid, adult education classes and vocational training.

"The neighborhood centers are tremendously involved in a great number of projects," Bob says. "The important thing is that the people receiving the services from the centers are also active in the initiation of the programs, the operation of the programs and the benefits of the programs. It is a new social concept. The welfare dole is not the answer to poverty. Maybe this new approach isn't either—it is too early for judgments—but the results are encouraging so far."

Bob has served on the Board since last October. It has been an educational experience.

Bill, who has been a member of the Board for three months, agrees.

"Poverty is a deep rip in the fabric of our society," he says. "The statistics tell the story—65,000 people in Bernalillo County exist at the poverty level or below. These people and their children are the ones involved in the programs. Board members can only offer judgments on proposed programs and administrative advice on current programs. To be successful, the programs must create initiative in the people who participate. The programs are aimed at providing these



DISCUSS WAR ON POVERTY—Bill Chandler (3112), left, and Bob Esterly (9414) are members of the Albuquerque-Bernalillo County Economic Opportunity Board which plans and coordinates war on poverty programs.

people with direction into the full participation of American life."

Many programs and institutions are involved in the neighborhood centers. The UNM Medical School is responsible for conducting pre-natal examinations and referring patients to community medical services. Classes are provided in consumer education, sewing, vocational skills, basic language and math, and mechanics. Day care is provided for children so that their mothers may work or take training leading to jobs. Staff people survey needs of the neighborhoods, help people organize credit unions, help organize cooperative purchasing and community improvement projects.

"Here is where the war on poverty is being won," Bob says. "Federal officials have evaluated Albuquerque's program and rank it among the most successful in the nation."

Projects of the Board are financed through Federal grants and matching local contributions. Under the program, local facilities and volunteer labor help meet the matching funds requirement of the Federal programs.

"There is a great need," Bob says, "for volunteers to perform a number of tasks at the neighborhood centers and at the administrative headquarters at 222 Third St. NW, tel. 242-2796. The staff could use general office workers, typists, teachers, nurses, doctors, counselors, social activity and recreation workers. Anyone who could volunteer as little as two hours per week on a regular schedule would be welcomed. There is much work to do and great satisfaction in doing it."

## Five Sandia Papers at Nuclear Society Meet

Several Sandia technical papers were presented this week in San Diego during the 13th annual meeting of the American Nuclear Society.

Those presented were:

"Creep Strain Prediction for Radioisotope Heat Source Capsules" by A. W. Mulendore (1122) and Charles Stein (1131).

"The Space Isotope Power Program" by A. J. Clark (9330).

"Thermal-Neutron-Induced-Defects in n-Type Cadmium Telluride" by C. E. Barnes (5212) and Chihiro Kikuchi of the University of Michigan.

"Thermal Stress Analysis for the Sandia Pulsed Reactor II" by J. A. Reuscher (5223).

"Neutronic Decoupling of Fast Burst Reactors" by R. L. Coats (5223).

## Technical Papers at Meetings in Canada, USSR

Three Sandia technical papers will be presented this month at meetings held outside of the United States.

"Angular Correlation of Positron Annihilation Radiation from Cerium Hydride" by R. C. Heckman (1134) and D. R. Gustafson, Wayne State University, will be given by Mr. Gustafson at the American Physical Society Meeting in Toronto, Canada, June 21-23. Physicists from both the United States and Canada will attend.

F. F. Eichert (2210) will attend the Sixth Meeting of the International Standards Organization in Moscow, June 20-23. He will present two Sandia-written papers before the Technical Committee 10—Drawings (General Principles). They are: "The Three Plane Concept" by R. O. Dell (2223) and "The Projected Tolerance Zone Concept" by P. A. Nicovich (2212).

## Three Sandians Awarded Doctorates



Adelbert L. Roark of Applied Mathematics Division I 5261 received his PhD degree in mathematics from the University of New Mexico during commencement exercises last week.

His doctoral dissertation was on "Approximation of Eigen Values and Eigen Functions of Convolution Kernels."

He received both BS and MA degrees in mathematics from the University of Kentucky, and has been with Sandia since September 1963 in numerical analysis work.



Donald F. Post of Advanced Electronics Systems Division 1425 received his PhD degree in electrical engineering during University of New Mexico commencement exercises last week.

His doctoral dissertation was on "An Analysis of the Signal Processing in a Radio Altimeter Utilizing Random Angle Modulation."

Both his BS and MS degrees in electrical engineering were conferred by the University of Colorado.

He has been assigned to Division 1425 since coming to Sandia in 1962.



Jerry A. Hood, supervisor of Radiation Effects Division 1435, was awarded a PhD degree in electrical engineering during recent commencement exercises at the University of New Mexico.

His dissertation was entitled "Effects of Nuclear Radiation on Oxidized Silicon Surfaces."

He previously received a BS degree in EE from the University of Oklahoma and an MS from UNM.

Assigned to Electronic Components Department during his 11 years at Sandia, he was on educational leave of absence from September 1965 to December 1966 to fulfill requirements for his doctorate.

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JUNE 16, 1967

SANDIA LAB NEWS

### SANDIA LAB NEWS



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Editorial Offices, Albuquerque, New Mexico  
Employee Publications, Rm. 112, Bldg. 800,  
Tel: 264-1053  
Editor: Robert C. Colgan

Staff: Cherry Lou Burns, Robert P. Gall,  
Donald E. Graham, Bill Laskar

Public Information, Livermore, California  
Rm. 138, Bldg. 912, Tel: 447-5100, Ext. 2387

William A. Jamieson, supervisor  
Staff: Matthew J. Connors, Lorena Schneider

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PEACE CORPS VOLUNTEER Keith Christian stands between two shepherders in the Elburz Mountains of Northern Iran. Keith worked in East Pakistan as well as Iran during his service with the Corps.

### In East Pakistan & Iran

# Keith Christian Serves with Peace Corps

Mechanical engineer Keith Christian (8146) has returned to Livermore Laboratory after serving two years with the Peace Corps in East Pakistan and Iran.

Keith says it's nice to be back but that his two years in the Peace Corps were the most rewarding he has ever had. "Living in two countries so different from each other and both totally unlike the United States was an experience both interesting and enjoyable," he commented, "and seeing different cultures from such a close vantage point altered my own values in many ways.

"I found that the level of my living standard was relatively unimportant compared to the quality of the social and working relationships built up with the people around me," he added.

Peace Corps volunteers go through an intensive three-month training course to familiarize them with the country they are assigned to. Technical training, when necessary, is also given. In Keith's case, he was sent to the Experiment in International Living at Putney, Vt., where he studied the customs, economics, politics, etc., of East Pakistan along with an intensive course in Bengali, the East Pakistan language.

Keith says his first impression when flying into East Pakistan was that "here is a rich agricultural country." From the air, everything looked very green, with rice fields, interrupted by groves of palm trees and many rivers, stretching to the horizon.

After living in the country for a year, he felt differently. His first impression changed to "here is a potentially rich agricultural country."

Keith feels the abject poverty of the average farmer must be seen to be comprehended. If he can find work as a laborer, the farmer earns about 40 cents a day and very likely has to support a large number of children on this occasional money plus what rice he can raise on an acre or two of land. His needs are so great that anything done to help him is significant. "This great need made my work there very satisfying, although living conditions were quite primitive and unhealthy—over 200 inches of rain per year, temperatures over 100° F. with 90 percent humidity for several months at a time, clouds of insects, and endemic diseases," says Keith.

Initially, Keith designed and helped supervise the construction of bridges and buildings made from brick and reinforced concrete in the Sylhet area in the northeast corner of East Pakistan. These structures were indirectly financed by American aid. Under authority of Public Law 480, wheat was sent and sold in East Pakistan. The funds from the sales were then used for development projects. Keith was involved with building about 15 bridges and three Thana development centers, which are large buildings used as working quarters by the Thana development officers (a Thana is the basic governmental unit, encompassing about 100,000 people).

Later, he helped to organize and teach a training course for Pakistani construction supervisors at the Basic Democracies Training Institute in Sylhet. When a course was in session, five or six other Peace Corps engineers served as instructors, but most of the time Keith was on his own. "Generally the students were eager to learn, although they didn't have the drive or willingness to work with their hands that you could find with American students," Keith said. "They have little interest in doing a good job, possibly because advancement is usually more dependent on family connections than on

job performance.

"I regarded the work itself as being in the nature of a stopgap measure. The real problem is a long-range one—the great population pressure on the land (50-60 million people in an area the size of Louisiana) which makes the future agricultural requirements difficult to cope with. Population grows at such a rate as to more than eat up the increases in agricultural production. The government of East Pakistan recognizes this problem and has instituted a birth control program, but it's not yet effective at the village level. This lack of population control made me, in the end, very pessimistic about the future for the people of East Pakistan."

At the time of the Indo-Pakistan war, in September 1965, Keith was evacuated from East Pakistan along with many other Americans. He was sent to the Philippine Islands and after five weeks was reassigned to Iran.

Keith says his first impression of Iran was just the opposite of East Pakistan. "All I could see was desert and barren mountains as we flew in. The surprise, on landing, was to find Teheran a modern, vigorous city as contrasted to Dacca, the capital of East Pakistan, which gave the impression in some ways of being an overgrown trading bazaar. This difference was noticeable at every level, down to and including the small farmer's house.

"In Iran, although my living conditions were far better, I found the work less satisfying. This was because of the relatively advanced condition of the country which reduced the possibilities of doing anything immediately significant," he said.

"However, I left the country feeling op-



WEST GERMAN Peace Corps volunteer Anke Capelle, now Mrs. Keith Christian, met Keith in Iran. During his two years with the U. S. Peace Corps, Keith met other volunteers from the Peace Corps in Norway, England, Switzerland and Holland.



IN EAST PAKISTAN Keith Christian and a ranking official stand in the noonday sun by the foundations for a Thana center. Keith was involved in the design and construction of several buildings and bridges while with the Peace Corps.

# LIVERMORE NEWS

Available to Sandians

## LRL Pool to Open on June 17

This year's swimming season will get underway at the LRL Olympic-sized pool with an open house on June 17.

As in the past, Sandia employees may participate in the pool program by joining the Lawrence Radiation Laboratory Recreation Association (LRLRA), and then

either purchase a season ticket or pay a single admission fee each time they swim.

The pool area, located near LRL's Personnel building, features barbecue and picnic areas, basketball and volleyball courts, and a wading pool for youngsters. Last year the weatherbeaten structure which enclosed the pool was removed to provide outdoor swimming. An eight-foot concrete wall was built to the north and west for wind protection, and the locker-room building was renovated.

This spring several other improvements have been made to the pool facilities. A multi-purpose building has been completed and two covered patios have been added to the complex.



LINDA MAMAROS (8235) tests the diving board at the LRL pool scheduled to open tomorrow. A multi-purpose building and two covered patios have been added to the pool facilities this year.

The following prices have been announced for the 1967 season:

**Memberships**  
Family membership .....\$29  
Individual membership ..... 17

**Single Admissions**  
Adult .....\$50  
Children ..... 30

**10-Ticket Guest Card**  
Adults .....\$4  
Children ..... 2.50

Swimming lessons for both children and adults are being offered again this year. Registration will be June 17-18, 2-5 p.m.

The pool schedule is 1-8 p.m. daily with noontime swimming (for employees only) Monday through Friday.

Additional information may be obtained by calling Pat Jordan, LRL, ext. 7051.

## Welcome . . . Newcomers

May 23 - June 5  
California  
Guadalupe Martin, San Leandro .....8243  
Ervin J. Molitor, Redwood City .....8128

## Congratulations

Mr. and Mrs. Ted Gold (8131), a daughter, Melissa Yvette, June 5.

Mr. and Mrs. Randy Gummus (8253), a son, Michael Gene, May 31.

Mr. and Mrs. Ted Hebebrand (8245), a daughter, Vicki Lynn, May 15.

Mr. and Mrs. Alan Richards (8117), a daughter, Michelle Ann, May 26.

## Sympathy

To Mike Daly (8131) for the death of his father in Union Dale, N. Y., May 29.



RETIREES Naomi and Dick Wynant check out mountain roads they will be driving over in their new four-wheel-drive vehicle.

## Sandia Couple Arrange for First 'Coordinated' Retirement; June 30

Mr. and Mrs. Ralph R. (Dick) Wynant enjoy a unique situation. As man and wife, both employed by Sandia Corporation, they have been able to take advantage of the early retirement feature of the Company's new retirement plan, thus becoming the first married couple at Sandia to arrange for a "coordinated retirement." Their last day at Sandia will be June 30.

Naomi Wynant joined the Company in June 1956 as a document clerk. In 1962 she transferred to her present job as editor in Drafting & Engineering Services Section 2234-1. Before coming to Sandia, Naomi had been a physical education teacher.

Dick came to Sandia in May 1953 as an expeditor in the Purchasing organization. He was with the MD engineering group from 1954-59 and then transferred to Interprojects Programming Section 2521-2 where for the past three years he has handled Sandia's sales to other integrated contractors.

The Wynant's immediate retirement plans include a six-week trip to Michigan and Canada to visit with family and friends. They have two sons — one attending college at Las Cruces, N. M., and the other married, with two children, living in Iowa.

In 1955, Dick and Naomi leased some land at Horseshoe Springs in the Jemez Mountains and began building their future retirement home. Except for the fireplace, they have done all the work themselves, with occasional help from friends. What started out as a "summer cabin" has evolved into a permanent home — four bedrooms, large living and dining room combination, kitchen, bath, library, 18- by 20-foot screened porch, and carport.

"We had to save a few projects to take care of after we retire," Dick says, "so we still have to install some paneling in our latest addition." "Other than that, the house is complete," Naomi adds, "but we are going to put in some sidewalks and build a woodshed."

"We plan to make this our year-around headquarters," Dick says. With this in mind, they recently purchased a four-wheel-drive vehicle so they can get in and out during bad weather.

In 1956 several homeowners in the area (including six other Sandia families) organized the Horseshoe Springs Summer Homes Association. In 1959 they reorganized and 18 families became members of the Horseshoe Springs Water Association, providing a gravity-fed water system for each member. Dick served as president of the group for two years and has been secretary-treasurer for the past six years. Future plans of the association include financing some road maintenance and possibly a caretaker-type operation for any vacant homes in the area.

"Knowing that Dick and I could retire on the same day and making our plans has been fun," Naomi says. "Our friends think it is wonderful that this is possible, and we are especially looking forward to the 'dual-retirement party' that our two divisions are having for us." (For interested friends, 7 p.m., Wednesday, June 28, at the Sandia Base Officers Club.)

Dick agrees with Naomi about their plans. "We took a long vacation in Hawaii last year," he says, "but I'm enjoying this just as much. We're happy with our home in the mountains, we like to fish and travel; however, we have both enjoyed our 'tour of duty' at Sandia."



JEMEZ MOUNTAINS retirement home of Dick and Naomi Wynant.

## Welcome . . . Newcomers

May 29 - June 9

<b>Albuquerque</b>	
Juliet Abeyta	3150
Joe D. Arguello	457-4
Ervin F. Armbrust	3211
Antonia M. Barnhill	3150
Robert A. Brooks	4631
Bartolo Castillo	457-4
Ray A. Cooper	4253
Betty D. Cummings	3126
Mary Alice Flores	3153
Beatrice A. Gutierrez	3153
Sylvia W. Ingram	3154
*Charles M. Justice, Jr.	4382
James F. Lang	7256
Robert C. Lindsey	422
William J. Manelli	4234
Gloria V. Montano	3150
Fredrick J. Schroeder	3153
Irene E. Silva	2234
Barbara A. Springle	3126
Maurice L. Tobyas	4253
Frank Torres	3311
Gloria E. Velasquez	3150
Dorene F. Yepa	3150
<b>New Jersey</b>	
Kurt E. Putz, Hoboken	9326
<b>New Mexico</b>	
Joseph A. Allen, University Park	4543
Carlton C. Newcom, Las Cruces	9000
<b>Oklahoma</b>	
George A. Shelton, Jr., Norman	5122
<b>Texas</b>	
Ronald H. Barrick, Lubbock	4153
Robert L. Miller, Austin	5623
Rod K. Quinn, Austin	1111
J. David Theis, Jr., Austin	1112
<b>Wisconsin</b>	
Daniel J. Thompson, Oconomowoc	3313
<b>Temporary Summer Hires (Albuquerque unless otherwise noted)</b>	
*Michael E. Aguilar	9212
Edward E. Anderson, Ames, Ia.	5636
John E. Archibeque	2211
James F. Banas, Oak Park, Ill.	5613
William H. Becker, Philadelphia	5141
*Robert C. Bolton	3312
*Ray M. Bowen, Baton Rouge, La.	1116
*Jack B. Brown, Austin, Tex.	2153
Robert Bylin, Ames, Ia.	7311
Leon W. Christensen	1314
Marion M. Cottrell	1116
Gilbert B. Davis	7344
*Richard J. Dolejsi, Las Cruces	2450
Deborah J. Duncan	2213
Charles Z. Falls, Jr., Phoenix, Ariz.	2131
*George W. Forman, Lawrence, Kan.	1542
Ben D. Gay	7323
J. Darrell Gibson	1541
*Leland J. Gion	2451
E. Neal Gruetter	1123
Eloy Gutierrez	2212
Christian C. Hartwigsen	7336
*Arthur V. Houghton	1541
George E. Kaye, Norman, Okla.	3313
Harold K. Knudsen	9210
*Cecil R. Lennox	2412
Bruce W. Lites	7220
Bruce J. Mann	3312
*Merle L. Quisenberry, Portales	2211
Thomas R. Rogge, Ames, Ia.	1314
Robert J. Schuyler, Jr., Madison, Wis.	1122
Ronald G. Sea, Chicago	5212
John W. Simons	7221
Stanley R. Sleeter	5155
Winton L. Smith, Hobbs	3132
Zoltan G. Soos, Princeton, N.J.	5213
Grant G. Summers, Fargo, N.D.	1430
*Billy Joe Thorne	1116
Harry T. Weaver, Auburn, Ala.	5150
John C. Wiese, Baton Rouge, La.	1142
Doyle Z. Williams, Lubbock, Tex.	4121
*Denotes rehired	

## Sandian Finds Goats Climb Trees, Camels Plow Fields In Morocco

There are few American women who visit Morocco on their first trip abroad, but Donna Foor (3153) did.

For several years Donna's sister and brother-in-law, who live in Park Ridge, Ill., have asked her to accompany them on trips. She had always refused until last fall when they suggested Morocco — that sounded like a great adventure.

They flew from Chicago to Casablanca via Lisbon and Madrid. "What impressed me first," Donna said, "was the great number of men wearing fez caps and djellabas, which are long flowing garments with attached hoods. Many women wore face veils with djellabas or else wore a white draped garment and held one corner of it across the lower part of their face."

Casablanca, a city of more than a million people, is noted for its main streets lined with orange trees and its many beautiful parks and gardens. They viewed the King's palace and grounds, and visited some of the flower markets. Donna noticed that in Morocco some of our common flowers grow to especially large size or occur in unusual colors (such as purple poppies).

They arrived at Marrakech for the start of Spring Festival, a week-long religious observance. There was great activity at the sheep market because during this holiday each family traditionally kills a lamb.

"The children were all dressed in bright-colored, almost fluorescent, dresses that reached their ankles. Many of their palms were stained — a good luck omen," Donna recalled. "We also saw djellaba-dressed men on motorcycles with live sheep draped across their shoulders."

Adjacent to the regular market there was a group of entertainers — dancers, snake charmers, acrobats, stunt bicyclists and others — hoping to collect a few coins from passersby. The boys who sell drinking water by the cup are among the most colorfully-dressed natives.

"From our hotel window in Marrakech, we had a beautiful view of the snow-capped Atlas Mountains, and the aroma of jasmine and orange blossoms filled the air. It's no wonder that Winston Churchill liked this city as a retreat," she said.

At Taroudant, they crossed the lush Souss Valley where oranges, dates, olives, almonds, grapes, flax and barley are grown as well as other produce such as bib lettuce, artichokes, carrots, tomatoes and squash. Many other parts of Morocco are quite barren, and terraces have been built near water sources to make use of every bit of arable land.

To the south they visited Tafraout, which is tucked away amid huge red granite boulders in the Anti-Atlas Mountains.

Agadir on the coast may be remembered because of the disastrous earthquake in 1955 which killed 25,000 persons and vir-

## Events Calendar

- June 16-18, 23-25 — Strindberg's "Ghost Sonata," Corrales Adobe Theater.
- June 16-25 — Tennessee Williams' "The Rose Tattoo," Greer Garson Theatre, Santa Fe.
- June 17 — Del Agua hike (north end of Juan Tabo Bowl). N.M. Mountain Club, leader Mary Dey, tel. 256-1970.
- June 17-18 — Yiddish folk drama "Tevye der Milchiger," Old Town Studio, 1208 Rio Grande NW, for reservations tel. 242-4602.
- June 18, 21, 25 — June Music Festival, Lyric Art String Quartet of Houston with soloists, UNM Recital Hall.
- June 19 — UNM Lecture Under the Stars. F. T. C. Yu, educator, journalist and author, speaking on "Foreign News in the American Press."
- June 23-24 — Corn dances, Taos Pueblo and War Dance at San Juan Pueblo (June 24).
- June 24-25 — Truchas Peak area. N.M. Mountain Club, leader Bob Babb, tel. 256-9016.
- June 26 — UNM Lecture Under the Stars. J. E. Taft, an Audubon Society speaker, showing "The Shandon Hills."
- June 28-Aug. 6 — 1967 Southwestern Craftsmen's Exhibition, Museum of International Folk Art, Santa Fe.
- June 29 — San Pedro's Day dances at most Pueblos including Acoma and San Felipe.



MARKET PLACES in Moroccan villages were always "must" stops for Donna Foor (3153), in dark glasses, and her sister during a recent trip to that North African country.

tually leveled the town. "The port and industrial sectors have been reconstructed," Donna said, "and tourist facilities and residential quarters are now being rebuilt. The buildings are quite modern and mostly of reinforced concrete, except in the outskirts where adobe is used."

Continuing up the coast, the Americans stopped at Essaouira, where goats climb trees! There is a forest consisting mainly of argan trees whose fruit and foliage are eaten by the numerous goats of the region. After the fruits are eaten, the pits are collected by the natives and pressed to make a cooking oil. The area is also known for its lobsters and examples of wood marquetry.

"When King Hassan II came to Washington to secure money for Morocco, he said, 'The people are poor but the country is rich.' This certainly seems to be true," Donna said. She saw many beggars, cripples, blind people and those with rickets. "People live in very crowded conditions surrounding the markets and use a community water well.

"Transportation is very poor throughout the country. The natives ride camels or burros and also use those animals to work in the fields. We saw only one train while in Morocco and it appeared to be very old. There is bus service between some of the towns but usually only once or twice a week. The roads are paved and relatively good but you can drive for miles without meeting another car.

"On the other hand, the food is delicious, the people are excellent craftsmen, and the country is very interesting, all of which make it a good place to visit," Donna concluded.



COLORFUL WATER CARRIERS were seen throughout Morocco by Donna Foor (3153) during her recent visit. The brass cups are used by natives when they purchase a drink of pure water.



CHARLES STEIN (1131), left, chairman of the recent 1100 Organization conference, "The Metallurgy of Beryllium," conducts the closing round table discussion at the Coronado Club patio. The two-day conference, featuring national authorities as speakers, had an out-of-town attendance of about 40 representatives of various government agencies, universities and private research institutions. About 150 Sandians attended.

## Local Universities Confer Degrees On Sandia Employee-Students

### Master's Degrees



D. A. Butel



J. W. Campbell



J. A. Cantwell



R. H. Dungan



George Lamb



L. H. Pitts



R. M. Workhoven

Bachelor's and Master's degrees were conferred upon a number of Sandians during the recent commencement exercises at the University of New Mexico and the University of Albuquerque.

Most of the student-employees completed their studies under Sandia's Educational Aids Plan.

Those receiving Master's degrees include: Donald A. Butel (5221), MS in civil engineering (structural mechanics). His undergraduate work was at Kansas State University where he earned a BS in civil engineering.

James W. Campbell (5612), MS degree in electrical engineering. He received his BS degree in EE from New Mexico State University.

John A. Cantwell (3114), MA degree in accounting. His Bachelor of Business Administration degree is from the University of Texas at Arlington.

Robert H. Dungan (1132), Master's degree in physics. He already has both BS

and MS degrees in ceramic engineering from Alfred University in New York state.

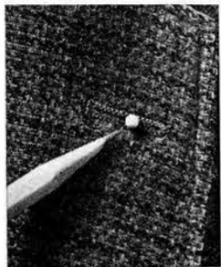
George Lamb (3133), Master's degree in business administration. He received his BS degree in business administration from the University of Denver.

L. Herbert Pitts (3114), Master's degree in business administration. His BBA degree was conferred at the University of Oklahoma.

Robert M. Workhoven (7322), MS degree in mechanical engineering. He received his BS in ME from the University of Iowa.

Those receiving Bachelor's degrees include: Thomas E. Latta (7112), BS in physics, F. A. Leckman (3153), BBA in industrial administration, and Robert T. Tuffnell (4121), BBA in accounting, all University of New Mexico; Edward A. Salazar (1113), BS in chemistry, William T. Huntsman (3243), BA in English, and William H. Swiss (3413), BA in English, all from the University of Albuquerque.

## Care to Try Mensa?--It Might Be Fun, Bright and Challenging



Yellow pin marks a Mensa membership is to score higher than 98 percent of the general population on an intelligence test.

Sharing opinions with other intelligent people capable of contributing to almost any topic is an advantage of membership in a local Mensa group.

Topics at Mensa meetings virtually cover the full range of human knowledge. The basic, but limiting, qualification for membership is to score higher than 98 percent of the general population on an intelligence test.

Mensa, a Latin word for table, is a round-table type of international organization where no one has special precedence. Mensas claim that, besides providing the base for many new friendships, the society of equals provides its members with a receptive but critical audience on which to try out ideas. People of all ages and vocations belong to Mensa International.

The New Mexico group has a general meeting each month, usually featuring a speaker. Informal social gatherings are often held at members' homes.

There is no set format for a Mensa get-together. A newcomer may embark on a discussion about any subject with a reasonable expectation that his listeners will understand him. Discussions may at times be profound, witty, or intensely serious, but the participants are always tolerant.

T. A. Allen (4233), one of eight Sandians who are members of the organization, feels that Mensa provides an excellent forum for intelligent people. "One never knows what the subject matter may be, but you can be assured that at least one member of the small local group is qualified to discuss any given topic," he says.

Currently he is interested in expanding the membership of the state chapter which now numbers about 45 people. He is especially enthusiastic about enrolling enough Sandians to form a Laboratory sub-group to meet during the lunch hour. He believes that a larger number of Sandians are qualified for membership.

Since its formation in 1945, the international non-profit society has grown to 15,000 members, some 9000 of whom are Americans.

Mensa International's annual membership fee is \$7.50 which covers the cost of the society's journals and other services.

Applicants for membership in Mensa need only offer proof that they have a high enough intelligence quotient, or undergo Mensa's test. Sandians who believe they qualify for membership may contact Mr. Allen for additional information on membership procedures and the usually acceptable methods of submitting proof of I.Q. scores.

Individuals receiving, for example, a score of at least 133 on the Stanford-Binet, 130 on the Wechsler Adult Intelligence Scale, or 148 on the Catell intelligence test would qualify.

Applicants may also obtain test forms from the American Mensa Selection Agency, P. O. Box 86, Gravesend Station, Brooklyn, N. Y., 11223. Candidates will be sent a preliminary do-it-yourself intelligence test to take at home. If the results of this test show that the applicant has a high enough intelligence quotient, he will undergo another test under supervised conditions.

Other Mensas at the Laboratory are V. Erbert (5812), J. H. Smith (9424), E. P. Quigley (2555), W. G. Brown (7532), Mrs. M. T. Harrison, F. H. Hannah and W. N. Dehon (all 3131).

## 'Melmade' Camper Has Conveniences in Compact Space

The sleek white camper atop a matching pickup truck carries the brand "Melmade" which means it is the handiwork of Mel Pliner.

Right now Mel is in Arkansas with others from Operations Support Division 9228, assigned to JTF-2, and this is the major shakedown trip for his effort in self-contained living.

Looking inside the camper, you'll first notice the brown tweed wall-to-wall carpeting, the Luan mahogany walls, the yellow appliances, and the matching vinyl-topped dinette table and kitchen counter. But, as Mel points out, "It's the niceties that count."

One of these features is a complete 3/4 bath — truly unusual in a camper. There are two separate electric systems (12 volt DC and 110 volt AC), which do away with the need to change light bulbs when switching from one line to another. And for comfort in all kinds of weather, there is a built-in refrigerative-type air conditioner and a 9000 BTU butane space heater with thermostat. The camper is insulated with one-inch fiberglass.

Mel started dreaming about this travel unit shortly after he finished his first camper. He looked at many commercial models, decided which features he wanted to add, checked available appliances suit-

able for limited spaces, and started to draw his plans.

"My first problem was having to limit the height of the camper because I was building it in my garage and had to be able to get it through the door," Mel recalls.

What could have been a serious problem occurred when Mel framed for a particular type of picture window. When he tried to order the item, he found the manufacturer had stopped producing it and the nearest substitute was nine inches wider. Mel had to cut through the spruce frame and aluminum skin to make the window fit. He figures his actual construction time at around six months, working weekends and evenings.

The finished camper is 10 feet 6 inches long plus a 53-inch area over the cab. It is 7 feet 6 inches wide and has a 6-foot 2-inch clearance inside. Mel has it mounted on a 1963 3/4-ton wide bed V-6 pickup truck with 4-speed transmission. For safety reasons, he uses 8-ply heavy duty tires (rated at 3000 pounds each) on the rear. There are no outside tie-downs between camper and truck; instead, he installed four turn buckles inside the camper which attach to the frame of the truck bed. With the built-in jacks, Mel can move the camper on or off unaided in 15 minutes.

There is adequate sleeping space for five

adults. The over-cab area is 48 x 75 inches and features a large upholstered foam mattress, a bookcase headboard, reading light, and windows on three sides. The dining table and seating area convert to another double-size bed with the foam cushions and bolsters serving as a mattress. A canvas hammock, normally stored under the cushions, fits into an area above the dinette for the fifth person.

Storage is no problem. There are shelves over the kitchen counter, above and below the refrigerator, floor-to-ceiling compartments outside the bath, and five drawers and cabinet in the bathroom, plus a large closet.

For convenience there is a four-burner stove with full-size oven, double sinks and a three cubic foot refrigerator with freezer compartment large enough for two trays of ice and two steaks.

Locked doors outside the camper provide access to the six-gallon hot water heater, 12-volt pressure pump, 20-gallon plastic water tank, 1500-watt generator, 12-volt heavy duty battery (charged by truck alternator or battery charger) and two butane bottles with their automatic cross-over valve.

The only thing missing is a fireplace. Would he ever build another camper? "Well, not in a garage," Mel answers.

HOME CONVENIENCES not usually found in campers, were included in this self-contained unit designed and built by Mel Pliner (9228). It's spacious enough to accommodate five.



READY TO ROLL in any direction (preferably where there's water), Mel displays his whole travel rig: truck-camper, 16-foot boat with two motors, and Melmade boat trailer.



## Supervisory Appointments



**C. RAYMOND ALLS** to supervisor of the newly created Systems Evaluation and Product Control Division 1426, effective May 16.

Ray joined a radar development group at the Laboratory as a design engineer in June 1954. In December 1959, he transferred to a systems evaluation group in Electronic Development Division 1422 where he has been evaluating pre-production hardware.

Ray received his BS and MS degrees in electrical engineering from the University of Arkansas in June 1953 and June 1954 respectively.

From July 1946 to September 1949, he served with the U. S. Navy.

Ray is a member of Tau Beta Pi and the Institute of Electrical and Electronics Engineers.



**DAVID F. MCVEY** to supervisor of the newly created Re-Entry Vehicle Aero Projects Division 9328, effective June 1.

Dave joined the Laboratory's environmental testing group in July 1958 where he worked as a test engineer in Sandia's radiant heat facility. In May 1961, he transferred to an aerodynamics design group in Aero- and Thermodynamics Department. There he participated in the design of the hypersonic wind tunnel and plasma jet facilities. Later he worked on the design of several Sandia rocket systems. In May 1965, he transferred to Re-Entry Studies Division 9326 where he has conducted studies on aerodynamics heat transfer and ablation.

Dave received his BS degree in mechanical engineering with an aeronautics option from the University of Wyoming in June 1958 and an MS in mechanical engineering from the University of New Mexico in June 1962. He completed requirements for his masters' under Sandia's Technical Development Program.

Dave is a member of Sigma Tau and American Institute of Aeronautics and Astronautics.

## Take Note



**JIM LEONARD** with Sandia Employees Golf Association traveling hole-in-one trophy.

James A. Leonard (9331) recently made a hole-in-one on the 165-yard second hole of the University of New Mexico's South Golf Course. It was the first hole-in-one on that particular hole and the third to be sunk on the new course. Jim used a six iron. Other members of the foursome were G. L. Morter (9221), C. C. Fornero (2523) and B. A. Clouse (2525).

Low gross champion of the annual Fred J. Given Memorial Golf Tournament was

Dick Kidd (1515) with a score of 73. Dick is the only Sandian to take the championship twice. He won low gross honors in 1961. Ivan Wright (4513) was low net winner with 65.

The tournament was played June 3 at Los Altos municipal course with 127 Sandians participating.

R. A. Quelle (3122), Sandia's pre-retirement counselor, will be participating in the national conference of state executives on aging in Washington, D. C., June 18-21. He is currently a member of the technical review committee for the State Program on Aging and has served on other governor's committees on aging in the past. Two years ago, he participated in a similar national conference in Washington.

Frank Muller (2113) and H. E. Walker (2151) won the Seventh Annual Open Pairs Duplicate Bridge Tournament at the Coronado Club June 8. Their winning climaxed a series of duplicate bridge competitions conducted during the lunch hours in various Laboratory buildings during recent months.

Since the Sandia Employees Bridge Association was formed in 1963, it has experienced continued growth. The recent tournament had a record high in participation. Out of a total of 250 active Sandia bridge players, 54 qualified for the final competition.

Anyone interested in joining the association may contact O. J. Foster, Division 3126, 264-7775 for additional information.

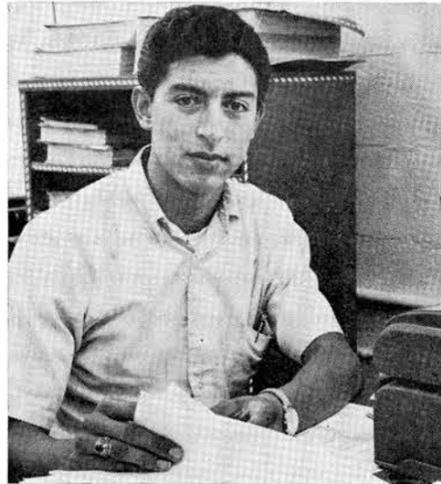


**THE HONORABLE M. CARL WALSKÉ, Jr.** (right), Assistant Secretary of Defense for Atomic Energy and Chairman of the Military Liaison Committee to the Atomic Energy Commission, chats with President John A. Hornbeck during a recent visit to Sandia Laboratory. Mr. Walske, who succeeded W. J. Howard (1000) in the government post, met with Laboratory personnel for briefings on Sandia programs.

Continued from Page One

## Youth Opportunity Program at Sandia

a week on the job, are typical of the enthusiastic youngsters. They find Sandia an exciting place, full of busy people performing important work.



**LEO GALLEGOS**  
—18th birthday tomorrow—

**LEO GALLEGOS** is working in Records Depository 3428-2 this summer. He is helping with the preparation of records for microfilming and will help operate the microfilm camera.

Leo graduated from Rio Grande High School recently and will be observing his 18th birthday tomorrow. At Rio Grande, chemistry was his favorite subject and he plans to make chemistry his major when he attends the University of New Mexico next fall.

For the past two years, he has worked after school and during the summer at a service station.



**THERESA OLGUIN**  
—an exciting first job—

**THERESA OLGUIN** is finding her first "real job" exciting. She is a typist with

### Welcome Youth Opportunity Trainees

\*Mary Ann Aikin 9411, Vernon E. Anderson 9230, \*Ruben V. Aragon 2213, \*William B. Aragon 2153, \*Henry Armijo 4153, Katherine M. Armijo 4135, Ronald C. Atkinson 4515, Anthony Baca 9411, \*Cecilia T. Baca 3312, \*Gilbert Baca 3415, Judith R. Butcher 3241, \*Christina G. Candelaria 9230, Samuel R. Caron 2112, \*Linda B. Champlin 3133, Genevieve K. Chato 2234, \*Patricia Concannon 2125, \*John DeFlice 2232, \*Harry P. DeLong 2434, David E. Dunham 2422, Michael Edenburn 1543, Patricia Esquibel 4333, \*Margaret Fernandez 7130, Fred Fox 7344, Leo Gallegos 3428, Marian P. Gallegos 4333, Richard P. Gallegos 4613, Edward Garcia 4575, \*Evans R. Garcia 4517, \*Albert J. Giannini 3134, Louis R. Giannini 4574, Steven Glodowski 7233 (Tonopah Test Range), Eloy Gonzales Jr. 4574, Nancy Gonzales 3122, \*Pearl D. Gonzales 9210, \*Rose Lee Gonzales 3126, Katherine L. Gutierrez 3241, \*John Hebert III 5133, William Herrera 2565, \*Dale M. Holmen 7344, William C. Houston 4518, \*Richard H. Jackson 7122, Lawrence Jaramillo 4512, Janice M. John 3126, \*James L. Karins 2565, \*Ernest E. Kilker 9411, \*Ronald A. King 1415, Carol Ann Klaus 3122, Robert J. Lager 5134, Thomas R. Lancaster 1411, Eva Ann Lopez 9319, Joe A. Lovato 7335, N. Hope Lovato 2234, \*Luis F. Lucero 5150, \*John M. Luian 4516, Linda M. McClintock 1330, William J. McKay 3211, Diana Lee Martinez 3411, M. Dolores Mascarenas 3126, \*Herman Mayfarth III 1134, Dennis L. Miller 1543, \*Ural Mitchell 2232, \*Gloria J. Montano 3421, Grace Montoya 3111, Bobby R. Moore 4575, Randy C. Mordhorst 4573, Mary H. Muth 3126, Larry S. Niederman 4542, Dale L. Oldham 4574, Robert L. O'Leary 9322, R. Theresa Olguin 3126, \*Della C. Ortega 2232, Clifford Oxley 3126, \*Elizabeth Padilla 4615, \*Daniel J. Panobouef 2564, \*Eugenia J. Persiani 4613, Anfred Platero 4331, \*Maureen Roesch 5590, \*Eleno J. Romero 2523, \*Mary Ann Romero 7270, \*Yolanda P. Romo 3421, Charles E. Roybal 4135, Maxine Y. Roybal 9220, Rosita N. Roybal 3421, \*Raymond N. Rudolph 5120, Betty L. Salazar 3212, \*Franklin D. Sanchez 2412, Leonard Sanchez 9411, Maxine L. Sanchez 3126, Albert Sandoval 4575, Mary E. Sandoval 1100, \*Bertha R. Schloer 2234, Jay R. Schmitt 4511, \*Phyllis E. Schubert 1310, Gary Lee Smith 4543, Russell F. Smith 7323, \*Kathleen Sullivan 3341, Orlando C. Torres 7234, Brian Tyree 4511, Kathy L. Vinke 1320, Edward Williams Jr. 2213 and Bonnie J. Worden 3341.

\*Denotes rehire

Secretarial Section 3126-1 temporarily assigned to office duties in Instrumentation Fielding Division II 7124. Last week she was typing technical drafts, filing, and forwarding mail to Division personnel in the field.

Theresa graduated from Valley High School early this month. At Valley she was an honor student and active in student organizations and athletics. She took two years of typing and shorthand and plans to major in business at UNM next fall.

"I like it here," she says with emphasis. "It feels good to be useful and part of an important activity. There is so much to learn and the people are extremely helpful and kind. Yes, I'm excited about it."



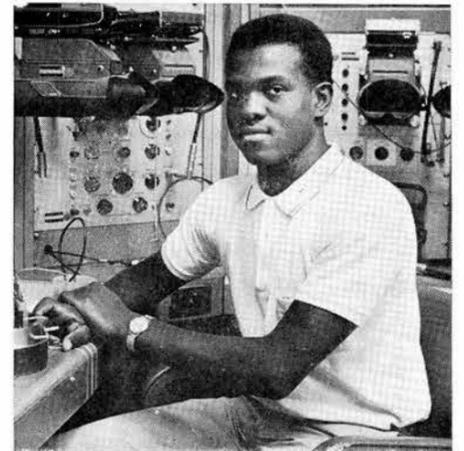
**RICHARD JACKSON**  
—invaluable practical experience—

**RICHARD JACKSON** is at Sandia for his third summer. He is assigned to Measurements Development Division II 7122. His current assignment is to help build and test a specimen holder for instrumentation to be subjected to radiation in Sandia's pulsed reactor.

His first summer at Sandia was spent helping operators of a firing site in Area Y, and last summer he worked in the thermal properties laboratory in the Materials organization.

He will be a junior in mechanical engineering at UNM next fall.

"Working at Sandia has been a wonderful experience for me," he says. "The practical experience in an R&D laboratory is invaluable when relating theory to applications. The work experience gave direction to my studies and actually shaped my decision to major in mechanical engineering."



**JOHN HEBERT III**  
—ambition to become a doctor—

**JOHN HEBERT III** is a young man with an impressive school record and an ambition to become a doctor. This is his second summer at Sandia. He worked with an air conditioning maintenance crew last summer and is currently assigned to assist the staff in the helium gun facility, Dynamic Stress Research Division 5133.

He recently graduated from Rio Grande High School where he was president of the senior class and consistently on the honor roll. He participated in student council affairs and student organizational activities.

"I'm happy to be back at Sandia," he says. "The job is a tremendous experience and it will make enrollment at UNM possible next fall. I will major in biology and hopefully go on to medical school."

# Service Awards

## 20 Years

## 15 Years



C. H. Senter  
1424



R. E. Womelsdoff  
3313



J. E. Anderson  
4151



W. B. Ballard  
2548



B. L. Barth  
9224



W. C. Clark  
7247



L. E. Doherty  
1521



R. E. Fair  
3242



R. E. Fox  
1325



J. P. Gallagher  
9323



P. A. Gelt  
1424



D. E. Gregson  
8130



J. R. Harner  
1425



L. B. Hobbs  
1415



M. D. Hodge  
9413



A. M. Imriscik  
7322



C. E. Ingersoll  
9213



E. G. Kadlec  
5611



E. E. Lister  
4224



W. V. McGuire  
8252



D. W. Miller  
1333



H. H. Passmore  
7268



R. S. Pinkham  
5631



E. H. Simonson  
4122



R. K. Skelley  
4514



C. E. Smith, Jr.  
2121



W. F. Stinnett  
4517



R. G. Tant  
4252



A. J. Tucker  
7341



G. R. Zahm  
4253

Earl V. Shannon, a staff assistant in Electro-Optics Division 9232, retires today. He has worked in electronics since first employed by Sandia in February 1949. He was assigned to Salton Sea Test Base for five years and has participated in a number of tests in the South Pacific and in Nevada.

Earl says he has so many things to do after his retirement that he may not have time for them all. He will be involved with the sale of his recently published book, "Water Witching" (see SANDIA LAB NEWS, May 5, 1967); he will spend some time on locations for new water wells; however, his main interest will be the development of property near Golden, N. M., for a gold placer mining operation. Earl is president and general manager of a firm incorporated especially to develop this property, and "I'm excited about getting on with the job," he says. In the past, lack of water in this area has prevented any large scale mining, but Earl solved that. He found water and now has a well with a water supply large enough to take care of the operation.

Mr. and Mrs. Shannon live at 3329 Monte Vista NE, but for the next few months at least, you'll find Earl moving lots of earth up around Golden.

Joseph D. Duran, Coyote & Shock Tube Division 7343, retires from Sandia today. He joined the Company in July 1948 in the Field Test organization. From 1949-59 his work involved camera maintenance and from 1959-62 he worked with high speed cameras, mounted on turrets, for tracking purposes. During these years he was stationed at Salton Sea, Tonopah and Mercury. Since 1962 he has been assigned to Coyote Test Field.

Joe has one son and two grandchildren. His son is a Warrant Officer in the U. S. Navy, stationed at San Diego. Joe plans to visit with him following his retirement. Other travel plans include visiting with relatives in New York, Washington and Nebraska.

"When I return from my trips," Joe says, "I expect to be busy with my woodworking hobby. I have a fully equipped shop and lots of ideas."

## Sympathy

To Ben Garcia (2522) for the death of his mother in Riverside, Calif., May 5.

To Daris Fuller (9423) for the death of his brother in Bradford, Pa., May 6.

E. P. Quigley (2565) for the death of his mother, May 15.

To T. B. Sherwin (3430) for the death of his father in Cody, Wyo., May 30.

To J. H. Simmons (4512-4) for the death of his wife, June 7.

To D. M. Fenstermacher (7224) for the death of his wife, June 10.

## 10 Years

June 16-29

R. S. Sonnenberg 1514, T. D. Donham 2453, V. F. Simmons 2522, E. Irene Messcher 3411, Arlene B. McCarty 3461, P. M. Alarid 4315, C. Isabelle Fuller 4331, L. E. Whelchel 4332, D. L. Hurt 7513.

R. V. Richards 8223, W. N. Caudle 9327, C. L. Sparks 1522, C. K. Lee 2151, Z. H. Phillips 2254, John Marcon, Jr. 2451, R. N. Rose 3454, O. E. Talley 4231, E. E. Alexanderson 8159.

R. E. Tate 9322, C. T. Gebert 1313, D. E. Carnicom 1334, J. E. McCreight 2545, Rita L. Hodgden 3313, J. M. Sanchez 4614, M. H. Reynolds 8161, J. E. Scheinbar 9232, K. L. Shipley 9321, D. W. Johnson 9324.

Benjamin Garcia, Jr. 9411, F. J. York 2212, K. W. Shriver 8168, D. D. Kirk, Jr. 8254, L. H. Schultz 1524, M. K. Lauffer 2411, F. E. Diebold 2522, K. L. McClelland 2546.

W. H. Bradford 5264, R. W. Donohoe 7255, J. J. Bluett 7332, R. E. Rychnowsky 8148, C. M. Potthoff 8167, J. M. May, Jr. 9226, D. D. Frasier 1543, R. B. Dick 2211.

Rita J. Bushmire 3126, K. A. Blush 4573, M. L. Gonzales 4574, A. Villescas, Jr. 4575, Herman Kirby 4622, and C. W. Jennings 1133.

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JUNE 16, 1967

SANDIA LAB NEWS

## SHOPPING CENTER

### CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication unless changed by holiday. A maximum of 125 ads will be accepted for each issue.

### 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 Corporation 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.

### FOR SALE

#### REAL ESTATE

- TIJERAS CANYON**, 3 miles east of city limits, 3-bdr., 2 baths, w/fireplace, swimming pool, home workshop, 2-car garage, will finance. Miller, 298-1289.
- MOSSMAN** 3-bdr., separate dining, paneled den, large lot, parking for trailer, boat, Appraisal \$21,725. 6505 Natalie NE. Moore, 299-3758.
- FURNISHED** 3-bdr., 2 1/2 baths, den, buff brick, Altura Park, hw/floors, electric kitchen, central heat, AC, landscaped, enclosed backyard, patio, garage 4 1/2 FHA. Burger, 256-2618.
- 3-BDR** w/den Chapman, 5/4 GI, AC, dual heat, fireplace, heated garage, 1 blk schools, 3 miles from Corp. 1101 Parsifal NE. Lamb, 298-1385.
- LARGE CUSTOM** Pueblo, 3-bdr., den, 2 fireplaces, all extras, near ACF, \$17,300. Roth, 242-4636.
- 2 ACRES** in Bosque Farms, is irrigated and in alfalfa, gravel road and utilities available. Gay, 636-2781.
- VACATION ACREAGE** on the Blanco River, 9 miles from Pagosa Springs, Colo., 198 miles from Albuquerque. Dimberger, 298-5172.
- CUSTOM** 3-bdr., paneled study or 4th bdr., 1 1/2 bath, fp, hw/floors, covered patio, near schools, below appraisal, \$17,950. Price, 298-0262.
- 3-BDR.**, 1 1/2 baths, carpet, drapes, AC, walled, pitched roof, near Corp., \$14,500, low down, 433 Gen. Stilwell NE. Fox, 299-9031.
- 3-BDR.**, 1 1/2 baths, near Winrock, dining, utility, drapes, carpeted, AC, sprinklers, \$14,150 or assume 5 1/4% loan. Jeffers, 1618 Vermont NE, 299-7020.
- 3-BDR.**, 1 1/2 bath, den w/fp, built-ins, utility rm., large walled backyard, landscaped, \$15,700. 5739 Fairfax Dr. Paradise Hills, Oliveira, 898-2170.
- BOSQUE FARMS**, 3-bdr., den, 1 1/2 bath, fp, 1 1/4 acres on South Loop, \$17,500. Wise, 1-636-2611.

### CARS AND TRUCKS

- '64 VW Camper, 22,000 miles, 1500 cc engine, sell or trade for comparable value pickup. Holt, 299-5943.
- '64 CHRYSLER 300 4-dr. hardtop, AC, PS, PB, guarantee can be transferred, \$1650. Huddle, 265-6248.

'61 FORD convertible, new top, AT, right for teenager at a good price. Singleton, 299-1613.

'59 CHEVROLET, complete engine overhaul 1/67, original upholstery, \$450 without car stereo, \$550 with. Cunningham, 255-6083 after 5.

'64 CHEVROLET II Nova, AT, R&H; 1959 Impala, V-8, AT, R&H. Tucker, 877-1140.

'65 EL CAMINO (custom model) 283 V-8, O'drive, bucket seats, Positraction, low mileage, less than Blue Book, \$1750. Richardson, 299-3673.

**DUNE BUGGY**, converted '49 Chevy, 1/2 ton, 4-speed, 5-pass., luggage box, best offer. Gustafson, 243-3690.

'53 CHEVY 4-dr. sedan, R&H, needs engine overhaul, make offer. Phillips, 298-6109.

'64 FORD Fairlane (289), V-8, AT, 20,800 miles. Johnson, 298-8623.

'65 CHEV. Impala Super Sport coupe, AT, R&H, PS, must sell. Dale, 296-4266.

'49 PLYMOUTH, runs, make offer. Coonce, 296-1089.

'57 PONTIAC V-8 Hydramatic, 4-dr., R&H, recent motor tune, new muffler, Sear's AC, \$250 cash. Johnson, 255-2846.

'53 CHEV. 2-dr. sedan, R&H, new battery and voltage regulator, \$100. Evans, 298-7816.

'66 SIMCA "1000," 15,000 miles, \$100 below NADA at \$1090. Taylor, 299-2866.

'56 CHEV. wagon, 2-dr., 6-cyl., stick, good basic transportation, needs muffler, \$225. Rainhart, 299-2887.

'60 FIAT 4-dr. sedan, 12000 model, will sell for \$300. Gais, 256-9180.

'61 RAMBLER Ambassador, R&H, AT, AC, PS, PB, trailer hitch, below Blue Book. Miller, 247-4522.

'65 CHEVELLE Malibu 4-dr., blue, stick shift, actual mileage 15,000, must sell, \$1650. Burns, 255-3737 after 5.

'64 PLYMOUTH Barracuda, V8, AT, AC, white exterior, Gillette, 298-0919.

'62 RAMBLER Classic station wagon, R&H, 50,000 miles, \$475. Schellenbaum, 299-1005.

'64 CORV. conv., 300 HP, 4-spd., AM-FM radio, metallic power brakes, original owner. Bolek, 265-6166.

'66 SCOUT Custom-800, 4-spd., 4/wd, R&H, rear seat, full cab, Comanche 4-cyl., top carrier, 8000 miles, \$3500 new, sell \$2250. Cox, 299-0480.

### MISCELLANEOUS

'51 4-cyl. Jeep engine complete with starter, generator, ignition system and complete clutch assembly, \$50. Cashion, 242-3345.

'67 FORD 427 cu. in. cylinder heads. Reif, 265-7264.

**HAMMOND ORGAN**, Spinnet, L100 series, will furnish transportation, best offer. Durkee, 268-3836.

**DOALL BANDSAW**, variable speed, \$300; 1958 Renault, been rolled, minus engine, tow it away, \$10. Ernst, 344-8694.

'53 HARLEY-DAVIDSON 74, new tires, buddy seat, battery, windshield, \$450. Foster, 282-3112.

**TWO FOR ADOPTION**, pure and demure, domestic loose hair kittens. They're beautiful, baby. McHarney, 255-7883.

**30" ELECTRIC** stove, GE, white, \$60. Sektnan, 268-6643.

**GASOLINE ENGINES**: Power Products, approx. 2-2 1/2 hp, 2-stroke w/horizontal shaft, chain, pulley, \$10; Briggs & Stratton, 3-hp, 4-stroke w/horizontal shaft and auto. clutch, \$15. Fletcher, 298-2142.

**FRENCH DOOR**, new, \$8; 6'x8" closet door, new \$8; louvered doors, \$4 pr.; 3/4" conduit. Pritchard, 268-9618.

**WEDDING DRESS**, never worn, formal length w/cathedral train, size 9-10, best offer over \$25. Dawson, 265-1153.

**GOLF BAG-CART** combination, tan vinyl, 15 compartments, zippered hood and pockets, 14" ball-bearing fold-up wheels, never used, \$22. Daut, 255-2529.

**KENMORE** automatic washer, \$45; Norge dryer, \$35 or both \$70. MacDougall, 7500 McInerney NE.

**8 x 10 TRAILER** building, insulated, butane, electric w/thermostat, \$375. Garage sale — stove, washer, refrigerator, clothes, iron furniture, etc. Hole, 298-2015.

**KENMORE** electric range, 36", deep well burner, \$20. Garcia, 255-3201.

**TWO 2-year-old** registered half-Arab colts, ready for gelding this fall. Two-year-old Saddlebred filly. Walter, Los Lunas, 865-9650.

**WELSH PONY**, gentle, 5 years old, w/bridle, \$60. Netz, 282-3607.

**26" BOY'S 3-speed** Schwinn bicycle, \$15. Merillat, 242-4873.

**ELECTRIC** range, Hotpoint, \$35. Kohl, 268-3754.

**STORKLINE** crib w/Kant Wet mat, \$15; bathinette, \$8; portable playpen \$8; padded carseat, \$4; stroller w/backseat and shade, \$10. Fewell, 268-9084.

**CANOE**, Northway 16', fiberglass, \$175. Littell, 255-2716.

**BED** rollaway type, \$20. Blottner, 298-9459.

**BABY BUGGY**, \$10. McVey, 299-1994.

**OR TRADE**, young tropical fish. Crites, 256-7967.

**WINDOW FAN** 20", 3-speed, reversible, fits 30-36" wide, \$20. Vittitoe, 299-9298.

**SIAMESE** kittens, 8 weeks old, housebroken. Hayes, 299-1200.

**ELECTRIC** range, Westinghouse, 3 burners plus deep well, \$30. Durgin, 298-6433.

**REFRIGERATOR**, apt. size, \$35. West, 299-6695.

**WARD'S CAMPING** trailer, sell for \$225 or trade for automobile, Butane bottle, stove, and lantern, sleeps four. Mellroy, 299-4977.

**8" I-beam**, 17.5 feet, \$25; 8 inch channel beam, 17.5 feet, \$12. Houghton, 299-3386.

**INTERCOM** system for camper, telephone-style, complete w/cable, \$5; camper table w/formica top and brackets, \$3. Schafer, 299-6217.

**GOLF CLUBS** 1967 Spaulding "Executive" professional irons, No. 2 thru No. 9, brand new, \$170 value for \$125. Would take old irons in trade. McClure, 256-0369.

**EKTAR** 178mm f2.5 custom Pentax focusing mount with 1A hz and R2 filters, \$80. Simmons, 282-3214.

**BUNK BEDS** Salem maple w/springs, mattresses, ladder and guard rail. One year old, \$35. Frye, 296-3184.

**SMITH & WESSON** 357 Magnum, 6 1/2" barrel, big frame, \$100 firm. Grant, 255-0576 after 6:30 p.m.

**REFRIGERATOR**, Westinghouse, 9 cu. ft., \$35. Coughenour, 295-4146.

**REFRIGERATOR**, \$35. Hutton, 256-0504.

**KELVINATOR** electric range, '56 model, 40", foil lined oven, \$35. Goen, 268-7521.

**165CC** Harley Davidson, \$100; 7-yr.-old mare, trained, \$150; 3-yr.-old mare, untrained, \$150. Shock, 877-3728.

**TENT TRAILER**, MW, \$100 as is. Hobart, 282-3983.

**REFRIGERATOR**, Crosley, 9'. Worley, 298-4039.

**BAGBOY** golf cart and bag; dishwasher, Kenmore portable; Inland Marine soft water conditioner. Chandler, 296-3323.

**BAR**, 66" curved front, white grained black finish, cabinets, drawers, including ice drawer, 3 upholstered wrought iron stools. Collins, 299-6452.

**SCHWINN** 3-spd. bike, cost \$65, asking \$30. Mikkelsen, 268-1485, 3421 Dakota NE.

**3-PIECE** sectional couch, turquoise, with round hardwood coffee table, \$25. Devlin, 299-1450.

**CARTOP BOAT**, 12' Arkansas Traveler, all welded aluminum construction, \$75. Alberts, 282-3704.

**20" BICYCLE**, boy's or girl's, \$15. Thompson, 298-8954.

**WEIGHT LIFTING SET**, 110 lbs., \$12.50; redwood picnic table, 58"x30", 2 benches, \$10; men's 26" bicycle, needs new coaster brake, \$5; power mower, 18" reel type, \$25. Kirby, 299-2948.

**BADMINTON RACKETS**, four Spaulding, two double frames, all for \$10. McKinley, 268-4779.

**COMPLETE** amateur radio station, transmitter DX-35 50w CW or AM, 80 thru 10M; Heathkit VFO, NC-98 receiver-broadcast thru 30MC, \$100. Richardson, 298-4861.

**AIR CONDITIONER**, auto, ARA, make offer, sell or trade; two metal cots, \$5. Schowers, 255-9279.

**LARGE**, antique rocking chair, \$25; Rem. 30-06 pump w/Weaver KV, \$95; muzzle loading shotgun, \$35, others, coin collection. Zaluga, 344-1564.

**COLEMAN** STOVE, \$8; electric hotplate, \$5; Kerosene heater, \$10. Moore, 256-274

**Coronado Club Activities**

# Social Hour Buffets Will Feature Exotic Food for Friday Frolicking

Under the direction of Hubert Pée, the Coronado Club's well-traveled manager, a series of exotic buffets will be featured for the next three Social Hours. Mr. Pée, born in Belgium of British parents, collected recipes throughout the world during his tenure as a chef with the Royal Air Force and later as a club management specialist for oil companies in the Persian Gulf area.

Tonight, Polynesian food with the flavor of Tahiti and Bora-Bora will be spread for the buffet. Tommy Kelly will maestro the hula music while Mike Michnovicz with accordion will circulate in the main lounge. The buffet costs \$1.75 for adults, \$1.50 for kids.

On Friday, June 23, the buffet will consist of local goodies — the very best tacos, enchiladas and tamales. The Rhythm Masters will play the sambas. The buffet price is \$1.25 for adults, \$1 for children.

On Friday, June 30, Chinese food will be featured at the buffet. Max Madrid and the mandarins will kick the gong around. The price is \$1.50 for adults, \$1.25 for children.



GO NATIVE to the Coronado Club's Polynesian Luau Saturday, June 24. Mary Alice Flores (4311) likes sarongs but you are invited to wear your grass skirt. The fun starts at 6 p.m. Phil Graham's orchestra will play the hula after the buffet and entertainment by the Lum Lung Polynesian show.

**Teenage Go-Go**

Tomorrow from 7:30 until 10:30 p.m. Roger and the Sapphires will furnish the uproar on the sound system while Club teenagers provide the visual gyrations. Parents should pick up tickets (members 25 cents, guests 50 cents) by 5 p.m. manana at the Club office.

**Invitational Swim Meet**

The Coronado Club twin pools will be closed for recreational swimming tomorrow as the swim team hosts its annual invitational swimming meet. The meet starts at 6 p.m. this evening with diving competition. Swimming competition will start at 8 a.m. tomorrow. Seven teams including Santa Fe, Los Alamos and Farmington will participate. Spectators are welcome, no charge.

**Bridge**

Duplicate bridge meets at 7 p.m. Monday, June 19. ACF bridge meets Wednesday, June 21, at 7 p.m. The monthly master point bridge competition will be held Monday, June 26 at 7 p.m.

**Luau**

High point of the remaining June Club calendar is the Luau scheduled Saturday, June 24. The scene will be among the gas lamps in the Club patio starting at 6 p.m. Social hour prices will prevail until dinner at 7 p.m. A special Polynesian buffet will be spread and the Lum Lung Polynesian Show is scheduled for entertainment at 8 p.m. Phil Graham's orchestra will play for dancing starting at 9 p.m.

Informal attire (grass skirts preferred) is in order. Admission is \$3.50 for members, \$4 for guests. Tickets should be picked up at the Club office by 9 p.m. Friday, June 23.



BUS SERVICE to and from the Coronado Club during noon hours has averaged about 50 passengers daily. Buses depart from Gate 1 and the front of Bldg. 892 at 12:05. One bus makes a return trip through the area for additional passengers and both buses return to the Laboratory about 12:45.

# Speakers

H. E. Walker (2151), "Reliability Assessment and Dormant Storage," 21st Annual Technical Conference of the American Society for Quality Control, May 31-June 2, Chicago.

D. W. Ballard (2564), "First-Hand Impressions of Life Behind the Iron Curtain," South Valley Optimist Club on May 17, local section of National Society of Professional Engineers on May 22, Downtown Optimist Club on June 2; "Recent Advancements in Contamination Control," Albuquerque Rotary Club, June 8.

S. W. Key (1142), "Convergence and the Finite Element Method," Department of Engineering Mechanics, Louisiana State University, May 10; "Reissner's Variational Principle and the Finite Element Method," Department of Mechanical Engineering, University of New Mexico, May 17.

C. S. Johnson (7252), "Modern Man's Guides to Mature Living," New Mexico group of the National Association of Bank Women, May 20.

C. A. Olson (7221), "Cloud Seeding," North Albuquerque Lions Club, May 23.

R. M. Jefferson (5224), "Nuclear Reactors," Downtown Optimist Club, May 26.

G. W. Hughes (7224), "General Astronomy," Hoover Jr. High science classes, May 31.

W. H. Trump, R. E. Day and Jean Gillette (all 3132), "An Overview of Sandia Training," UNM business education graduate students, May 30.

A. F. Cone (2430), "The Vendor-Vendee Committee," 1967 ASQC 21st annual conference, May 31, Chicago.

W. H. Kingsley (3310), "The Environmental Health Program at Sandia Laboratory," to health personnel from Western Electric Company complex during American Industrial Hygiene Association meeting, May 1, Chicago.

C. W. Campbell (4000), "Community Council Activities," Telephone Pioneers of America, June 8, Albuquerque.

**Continued from Page One**

## 49 Complete TDP

- (9235), Bruce J. Hodgins (5612);
- Albert A. Lemieux (7334), Leonard D. Licking (2152), Alton D. Luckey (9325), Lawrence R. Marker (7222), Gary H. Mauth (9233), Marvin E. Morris (2564), Milo Navratil (1524), John K. Owens (9226), James M. Parvin (9231), Paul W. Plomp (2223), Robert S. Printis (5612), David E. Ryerson (7252), Donald H. Schroeder (2547), Douglas D. Schuler (1322), Jack W. Schwarz (5632), Stephen A. Sheffield (1315), William W. Shurtleff (7334), Wayne D. Sundberg (9321), Daniel M. Talbert (5621), Patrick L. Walter (7336) and Sidney G. Williams (1422).

# Sandia Safety Signals

**Car Loading**

When you overload your car you increase problems, for the acceleration is slower, stopping distance longer and sway on curves greater. Be sure to allow plenty of room for passing and stopping.

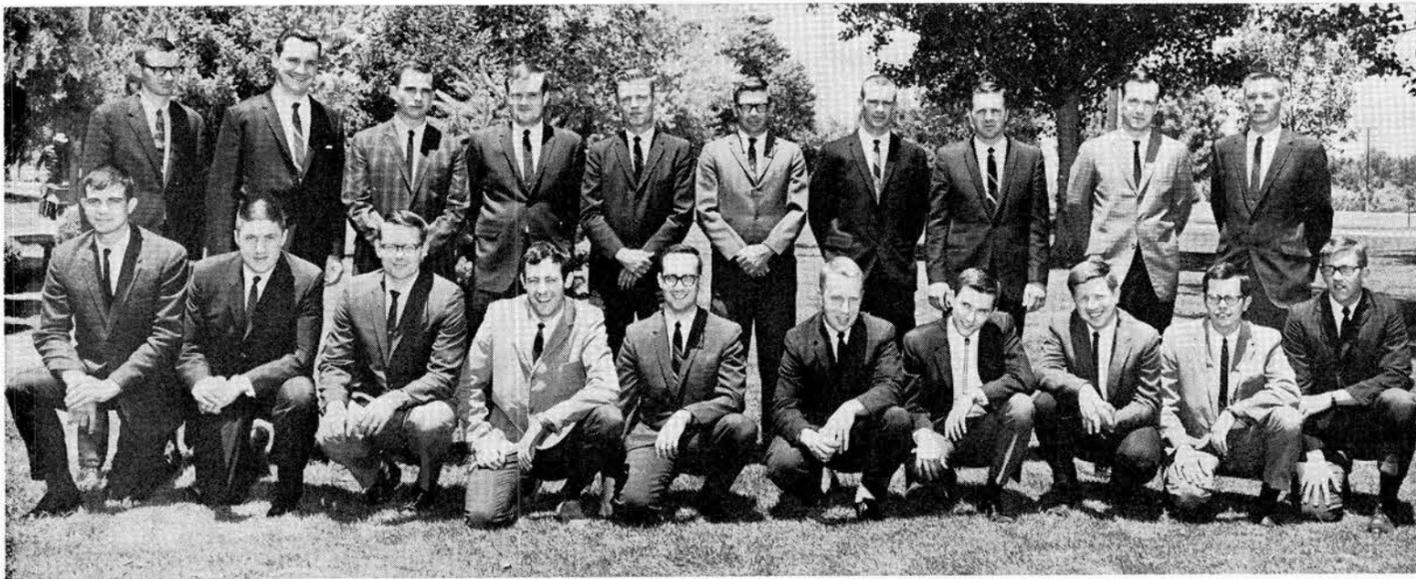
**Label**

We heard about an amateur photographer who narrowly missed death when he mistook a potassium cyanide solution for lemonade.

Containers used for chemicals should be clearly marked and set aside, so they will not be mistaken for food.

**Suffocation**

Two University of California students camping in the High Sierra Mountains died of suffocation beneath a heavy plastic cover which they had used as a tent. With increasing use of plastic tarps as rain shelters, the need for ventilation cannot be over-emphasized.



Technical Development Class of 1967 — "We must constantly adapt to new fields . . ."

