

## Cost-Savings Project Receives First Place Award for Jay Hughes



A Sandia cost-savings project initiated by Jay W. Hughes (4331) has been judged best of some 250 entries in a national purchasing standardization contest.

Sponsored by the National Association of Purchasing Agents, the contest is part of the organization's program to revitalize standards in purchasing and to interest more purchasing agents in initiating programs of this type within their companies. Members were asked to submit a description of a purchasing project that benefitted their company.

Jay's entry described a projected cost savings of \$22,400 for two years in Sandia paint purchases by using a paint blending machine (reported in the LAB NEWS of March 25, 1965).

When the cost-improvement action was started, Jay was responsible for general stores purchasing. Buying paint for the Laboratory was a problem because of the many different colors and bases that were stocked in pints, quarts and gallon sizes. He found a possible solution while buying paint for his personal use at a local store. There a paint blending machine was used to mix colors to the customer's requirements.

Jay worked on the changeover with Ron George, supervisor of Carpentry and Painting Section 4513-3, who spent six months preparing new paint specifications. With the addition of the paint blending machine, Sandia now buys large quantities of paint in five-gallon containers that are 97 percent filled to allow for the addition of color pigments. In addition to the savings made possible by bulk purchasing, the large containers are easier to handle and store and require less space.

Jay will present a paper on his prize-winning cost-savings technique at a workshop during the International Purchasing Conference in San Francisco next month.

## Top Science Students Visiting Lab Today

For the second day, outstanding science students from Albuquerque and surrounding communities are touring Sandia Laboratory. A total of 200 students are visiting the Laboratory for the AEC's annual observance of Science Youth Days. Purpose of the event is to encourage young people to pursue scientific careers. This is the 12th year that Sandia has participated.

## G. A. Fowler Appointed State Chairman for Payroll Bond Buying

One of the first tasks Glenn A. Fowler performed as the newly appointed State Payroll Savings Chairman in the U. S. Savings Bond program was to accept an award of appreciation for Sandia Laboratory employees.

The plaque, from the U. S. Treasury Department, was awarded to Sandia "for patriotic service" in 1967. Some 82 percent of Sandia employees are enrolled in the payroll savings plan for bonds.

Mr. Fowler in turn presented the plaque to Robert Lynes (9413), chairman of the Sandia Savings Bond committee for 1967 and 1968.

As state chairman, Mr. Fowler will be urging employers and employees throughout the state to participate in the Payroll Savings aspect of the Bond program. He will speak in Roswell, Carlsbad, Las Cruces and Alamogordo during the week of April 22 at various community breakfasts and luncheons promoting savings bonds.

He will accompany F. W. Woodruff, general manager of the Chino Mines Division of Kennecott Copper Corporation, who is general Savings Bond chairman for the state.

"My talks will point out the advantages of buying Savings Bonds," Mr. Fowler says, "through the convenience of payroll deductions. It is the most convenient way for a wage-earner to accumulate permanent savings. Although they can be cashed at any time, Savings Bonds tend to be-

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**SANDIA LABORATORIES**

ALBUQUERQUE, NEW MEXICO; LIVERMORE, CALIFORNIA

OPERATED BY SANDIA CORPORATION FOR  
THE U. S. ATOMIC ENERGY COMMISSION

### Like Working a Puzzle

# 100 Components on Tiny Circuit Board



OPTICAL COMPARATOR with 100 magnification is used by Dorcas Gabaldon (4233-3) to check for possible breaks or flaws in circuit paths.

Dorcas Gabaldon works in a tightly controlled world—a world narrowed by extremely close dimensional tolerances. Consider having to fit 100 components on a circuit board measuring 3 x 3 inches without crossing wires! Thirty hours later Dorcas came up with a suitable layout. There were no crossed wires.

She checked off the required components for the "nth" time. It was a good thing. There were only 99. "Fortunately, I had enough height allowance (about a half inch) to stack one component on top of another, otherwise it probably would have taken about 16 hours more to re-do the board," she explains. "Positioning components is like working a puzzle."

Laying out a circuit board from a list of specifications is only one of Dorcas' duties as a staff assistant in Printed Circuitry Section 4233-3. "Packaging," the term they use for component layout, vies with "trouble shooting" as her main responsibilities. Her qualifications for solving such problems come from first-hand experience working on an assembly line, on PT fabrication, and from attending Sandia Out-of-Hours courses. "In addition," she says, "when I am working on a mechanical-type problem at home and get stuck, my husband helps." Victor (4254) has been a machinist at Sandia for 20 years.

A printed circuit board begins with the engineer's schematic. It will list the required circuit connections, component functions, and usually call for a certain board size or configuration. This schematic may go directly to a member of the Design Definition organization, or it may go to Dorcas, in which case the drawings would be made after the packaging design is worked out.

The design is laid out with black tape on a mylar plastic sheet and is sent to an inspector in Inspection and Calibration Division 4213. After the circuit is checked, the master is reduced to actual

(Continued on Page Two)



APPRECIATION PLAQUE "for patriotic service" from the U.S. Treasury Department is accepted by Robert Lynes (9414), left, chairman of the Sandia Savings Bond Committee, for Sandia employees. It is presented by G. A. Fowler (9000), newly appointed state payroll savings chairman in the Savings Bond Program. Some 82 percent of Sandia employees participated in the program in 1967.

come permanent savings because there is a reluctance to cash them in."

An important part of his talk will cover the need of the federal government to borrow money. "Savings Bonds provide a method," he says, "whereby the government can borrow money at a reasonable rate of interest—from us. We benefit from the return on the loan and benefit as taxpayers, also. It is to our advantage for the government to borrow money at reasonable rates. And this is extremely important—purchase of Savings Bonds helps stop inflation. And if we don't stop inflation, the money we make through other investments won't be worth very much."

From a stack of Savings Bond literature, Mr. Fowler quoted from a folder entitled "Savings Bonds for Education," published by the U.S. Treasury Department.

"The idea of buying bonds in the name of your children to be used to finance a college education is valuable," he says. "This folder tells how to file a tax return to establish intent after the first year of purchasing bonds in the child's name. When the youngster reaches college age, he can cash in the bonds. If his income is less than \$900 per year, then the interest the bonds have earned is tax-free."

"I accepted this job with pleasure," Mr. Fowler said. "I believe in buying bonds. There is a great need for more purchases of bonds by more citizens. It's an important cause, it's an investment in our country and I'm happy to help."

## Tech Manpower Shortage

Many of the old timers around Sandia Laboratories now have sons and daughters in college. Some of them have already completed their schooling and are now employed at Sandia or elsewhere. Others are still undecided about what career to follow. Some facts appearing in FORTUNE magazine last month, in an ad sponsored as a public service by Deutsch & Shea, an advertising agency, may be of interest to young people.

Although Sandia has been able to recruit outstanding young engineers and scientists from colleges and universities throughout the country, the supply of such technical people is not keeping up with demand. In 1967, for example, the average technical organization was able to recruit only 75 percent of the experienced technical people it sought. Enrollment in engineering schools has increased barely one percent in the past 10 years while total male college enrollment climbed 52 percent.

Engineers, physicists, computer programmers, engineering technicians—almost every type of technical personnel—are in short supply, with still greater shortages to come.

Said Deutsch & Shea: "Almost every serious approach to meeting today's economic and social problems and tomorrow's vital needs centers around continued—and accelerated—technical progress: new jobs, new approaches to education, higher rates of production, urban renewal, pollution control, improved public transport, increased food production, competing in the world market, maintaining adequate defense capabilities, exploring new areas of science and technology.

"But without an adequate supply of technical manpower, our capacity to achieve these goals will be crippled."

The Russians and the Japanese are turning out many times more engineers than the U.S., and a third of the Russian engineering graduates are women. Why are we lagging behind?

Perhaps, the statement says, it's because American youngsters haven't been shown the vital roles that technical training can play in creating the better world they want. And then, professional courses are not easy; they demand more time and work than many of today's students may be willing to give, and specialized preparation, beginning at the high school level.

Have you had a serious discussion recently with your high school or college age children about their career plans?

Continued from Page One

## 100 Components

size (up to this point a 2-1 ratio has been used).

From here on, Dorcas may act as a "middleman" between the engineer and the assemblers. There may be questions regarding an intended function or perhaps about a minute detail.

The packaging operation requires a familiarity with the many available parts. If a specific component is not available or if the size is unsuitable, Dorcas may have to recommend a change to the engineer.

The array of available components is impressive—and confusing. Identical containers 3/8-inch in diameter may be relays with 5-7 wires, transistors with 3 wires, or an integrated circuit with anywhere from 6 to 12 lead wires. The size of resistors is pretty standard, but each one is color coded as to ohms and tolerance. "Capacitors are the most difficult to work with," Dorcas says. "There is no standard size and each capacitor must be measured separately."

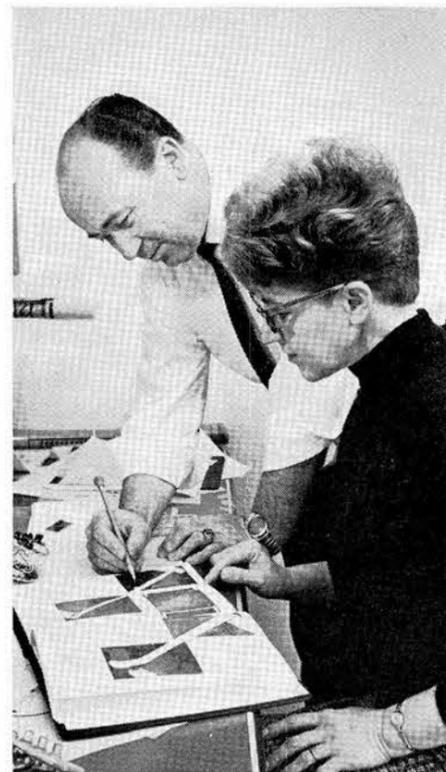
Dorcas and her supervisor, T. A. Allen, recently came up with a way to reduce by 66 percent the area required to mount "flatpack" integrated circuits which are normally placed parallel to the board. They shortened the leads on one end, bent the leads on the other end back around, and set the flatpack on end. Since the solder or spot-weld contact area is only 1/16th of an inch long, however, the modified mounting is limited to low vibration applications unless the whole board is encapsulated.

When the women in the assembly room encounter a problem in hand-finishing the circuit boards, Dorcas goes back "on the line" and works with them to see if she can figure out a solution.

A unique approach was taken to solve one such problem. Twenty-four holes were punched at one-inch intervals around a board which was then plated. Pins .061 inch in diameter were to be positioned in the holes and then soldered in place. It was soon obvious that if the holes were too big the pins couldn't be positioned identically—some would lean one way or the other. When the holes were made smaller, some of the openings were too small after plating.

Dorcas came up with the idea of placing a piece of styrofoam under the board to hold the pins upright until solder fixed them in place. It worked fine. As Dorcas notes, "Sometimes it helps not to have any preconceived ideas on how to solve a problem."

There's no doubt that Dorcas' previous experience and education help in solving problems. During World War II, she attended radio and radar school at Middletown Naval Depot (Pa.) and later worked as a civilian at Selfridge Field, Mich. In 1951 she was hired by Sandia as a "wireman." Since then there has been a steady progression of promotions. While at Sandia she has taken all six of the electronics courses offered under the Out-of-Hours Program in addition to Physics I and Math I under Sandia's Technical Institute Program. She is presently enrolled in Introductory Calculus. She also has a diploma from Capitol Radio Engineering Insti-



GREATLY MAGNIFIED cross-section of a sample board is studied by T. A. Allen, supervisor of Printed Circuitry Section 4233-3, and Dorcas Gabaldon to determine possible reason for a plating problem. Monitoring boards at random is necessary to maintain high standards.

tute in Washington, D.C., for courses taken by correspondence.

"There are still holes in my educational background," she says. "I need to take a refresher course in trigonometry and geometry, and I also want to take chemistry. I like Sandia Out-of-Hours courses because they are oriented to the work here."

## Range Data Group Meeting at Sandia

Sandia Laboratory was host this week to 40 members of the Data Reduction and Computer Working Group of the Inter-Range Instrumentation Group. This group includes physicists, engineers, mathematicians and statisticians from the major test ranges of the nation. They are concerned with all aspects of data reduction and computing equipment including decommutating, decoding, digitizing and translating, recording and display, and tape and film reading equipment.

Host members of the group at Sandia were W. V. Hereford (7216), L. D. Watkins (9212) and M. E. Bauder (9425).

Mr. Bauder was one of the Sandia speakers on the program. He discussed "Computer Graphics" during Wednesday's session. Other speakers included J. C. Eckhart (9220), a member of the Inter-Range Instrumentation Group steering committee, who presented a welcoming address, and G. A. Fowler, vice president 9000, who discussed Sandia's mission.

E. K. Montoya (9425) discussed "Vela Satellite Assembly and Checkout" and E. N. Leslie (1322) talked about Rolamite developments.

The group toured Sandia's Area III environmental test facilities, computer areas, Vela satellite assembly areas, laminar-flow clean room, hypersonic wind tunnel facility and the Sphere of Science.

## Congratulations

Mr. and Mrs. R. T. Jankowski (2541), a daughter, Jo Ann, on March 16.

Mr. and Mrs. P. M. Van Praag (1411), a son, Lee, on March 21.

Mr. and Mrs. Dennis L. Krenz (9331), a daughter, Noel Marie, on March 24.

## Events Calendar

- April 5-6, 18-20—Albuquerque Civic Light Opera production of "Once Upon a Mattress," Highland High School auditorium. Matinee on April 6 and 20.
- April 5-7—"Wherever She Blows," an experimental mixed-media presentation of theatrical poetry. Old Town Studio, 1208 Rio Grande NW.
- April 6—Glen Campbell, UNM Concert Hall.
- April 7—Manhattan Festival Ballet Company, UNM Concert Hall. Also special matinee for children.
- April 10—Albuquerque Symphony Orchestra, Gary Graffman, piano soloist. UNM Concert Hall.
- April 12-15—N. M. Mountain Club trips: Marble Gorge of the Grand Canyon, leader Stan Logan, tel. 256-9703, or Big Bend National Park, leader Hank Tendall, tel. 282-3254.
- April 14—Non-denominational Easter sunrise services at Sandia tramway lower terminal, 6 a.m., sponsored by Albuquerque Federation of Churches.

## Promotions

Bobby J. Little (2454) to Staff Associate, Technical  
 Howard C. Feemster (8141) to Staff Associate, Technical  
 Werner W. Bach (2491) to Staff Associate, Administrative  
 Cyrus D. Hall (2491) to Staff Associate, Administrative  
 Henry G. Neues (2491) to Staff Associate, Administrative  
 Richard C. Wahlberg (2491) to Staff Associate, Administrative  
 Lina B. Chavez (3462) to Reproduction Equipment Operator  
 Richard T. Sparks (4632) to Tester  
 Richard C. Gonzales (4212) to Metal Stock Handler and Cutter  
 Mayme M. Brunacini (4233) to Technician  
 Louis F. Roybal (4631) to Technician  
 Elijah J. Davis (8222) to Helper - Trades  
 Timothy Marino (8222) to Typist Clerk  
 Dorene F. Yeppa (4135) to Typist Clerk  
 Opal D. Walker (4151) to Typist Clerk  
 Juliet Abeyta (4622) to Record Clerk  
 Virginia R. Barkhurst (3126) to Secretarial Stenographer  
 Jennifer J. Rex (4211) to Senior Clerk  
 Helen D. Aragon (2523) to Senior Clerk  
 Joseph L. Thomas (8242) to Messenger  
 Joan N. Tucker (8127) to Secretarial Typist  
 Viola J. Banfield (8253) to Message Center Equipment Operator  
 Joan E. Maffey (8236) to Travel Clerk  
 Patricia G. Carli (9320) to Secretary  
 Raymond J. Giese, Jr. (4622) to Record Clerk



1968 "BOSS OF THE YEAR" Dr. E. M. Roth of Lovelace Foundation received his crown from former recipient O. T. Stuetzer (1420). Dorothy J. Tyson (left) and Helen M. Walsh (5140) participated in the annual luncheon program sponsored by the Albuquerque chapter, National Secretaries Association.

## SANDIA LAB NEWS



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# SCLL Provides Radiological Aid at B-52 Crash Site in Greenland

"The coldest it got was 40° below zero, but accompanying winds of 70 mph plummeted the effective temperature to 105° below zero," says Perry Lovell of Environmental Health Division 8215, home in Livermore after 19 days in Thule, Greenland.

Perry and Ron Hoffman (also 8215) were there as part of a plan established by AEC/ALO to provide radiological support in the event of a nuclear accident. They performed environmental monitoring and completed a bio-assay program in connection with the search and recovery operations at the site where a B-52 bomber crashed the latter part of January with nuclear weapons aboard.

Oddly enough two of the highlights of their trip occurred before they reached Thule Air Base. First, they were the only passengers aboard the four-engine propeller plane, a C-97, as they travelled across the United States and Canada. "Because of the delicate instruments we were carrying, a special flight was arranged to provide maximum care for our equipment," they explained.

Secondly, they encountered aircraft trouble en route. On landing for a stop-over in Goose Bay, Labrador, the steering mechanism on the nose wheel failed at 90 mph and they were forced to lay over a day for a replacement aircraft.

On arriving at Thule, they found to their amusement they were to be housed in the morgue, since this was the only available space. Here they also set up their laboratory.

"We were most impressed with the complexity and exactness of the operation. When we first arrived, the commanding general asked us when our equipment would be operational and we would be ready to go," says Don. "Almost to the minute he was back to be sure everything was going as planned."

Perry and Ron spent only a part of three days on the actual crash site collecting samples. Most of their time was spent in the laboratory doing analysis. "We usually worked about 14 hours a day, and since we were mostly indoors, extreme weather conditions and storms did not hinder us too much."

Perry says that beside the reduced visibility caused by blowing snow he had another problem with his vision while out-

of-doors. "I kept exhaling inside my heavy parka, causing my glasses to freeze up. I finally trained myself to exhale outside the parka."

Several other problems also developed, Perry recalls. He arrived wearing a pair of safety shoes, but because of the extreme cold, the neoprene soles split in half. On other occasions, out at the crash site, the paper on which the sample data were recorded froze and crumbled in the below zero temperatures.

In spite of all that is heard about Eskimo dogs and sleds in this area, motor vehicles are used at the base. However, when parking, the engines of the vehicles are left idling. If turned off, they would freeze up in a short period of time. In the event vehicles are not used daily, head bolt heaters are used, Perry says.

Perry and Ron found that arctic winter storms, such as those encountered at Thule Air Base, must be taken very seriously. Each person becomes responsible for protecting the lives and property of others. So that established procedures can be implemented at such a time, storm intensities are classified into four phase conditions—phase alert through phase three.

During each phase condition, a combination of wind velocity and visibility, all personnel are required to follow specific procedures. The buddy system goes into effect in phase one, and two or more individuals or vehicles must travel together.

A phase three condition existed for over 24 hours while Perry and Ron were at Thule. Under this condition, winds exceed 50 mph and visibility is one-quarter mile or less. No pedestrian travel is permitted, and personnel, except those performing essential duty, are confined to quarters and a check is made to account for each person.

"It was quite an experience," they both agree, "but we know others from the AEC complex who were involved in the operation shared similar experiences."

En route to Thule Air Base, the plane in which Perry and Ron flew stopped in Albuquerque to obtain back-up equipment at Sandia Laboratory. Ron Hayenga and Bob Baker of Special Test Equipment Design Division 2441 supplied this equipment and provided related information and consultation assistance.

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RECENT VISITORS TO LIVERMORE LABORATORY included Frank I. Madigan, Sheriff of Alameda County, (far left) and Captain Glenn E. Dyer, Commanding Officer of the Santa Rita Rehabilitation Center (second from right). In his capacity as Director of the Alameda County Civil Defense organization, Sheriff Madigan spoke to security representatives of AEC-SAN, UCLRL at Livermore, officials of the U. S. Army Defense Depot at Tracy, Calif., Sandia management, and 25 members of Livermore Laboratory's Emergency Security Force. The emergency force consists of employees who are trained to augment the guard force when necessitated by civil defense measures or a civil disaster. Pictured above (l to r) are Sheriff Madigan; J. McMinn, supervisor of Security Administration and Operations Division 8236; C. H. DeSelm, director of Staff Services at Livermore 8200; Captain Dyer; and F. R. Moon, manager of Technical Information and Security Department 8230.

## Take Note

The April 17 meeting of the Mt. Diablo Subsection of ASME will include a tour of the Aircraft Maintenance Facility at the Naval Air Station in Alameda.

Social hour will begin at 6 p.m. at the Commissioned Officer's Club at the Air Station. Dinner will be served at 7 p.m., followed by a slide presentation of the facility and the tour.

For reservations or further information, contact E. T. (Bud) Herzog (8154), ext. 2823. Reservations must be made by April 11 for those who are planning to attend the meeting.

\* \* \*

KQED Channel 9, the Bay Area educational channel, is beginning a new service—instructional television for business and government.

The first course, to start April 15, will be Efficient Reading, a series of 12 thirty-minute color TV lessons designed to increase reading rate and improve comprehension. The exercises are organized in such a manner as to stimulate further growth in word power, sharpen perceptual capabilities, and develop the complemen-

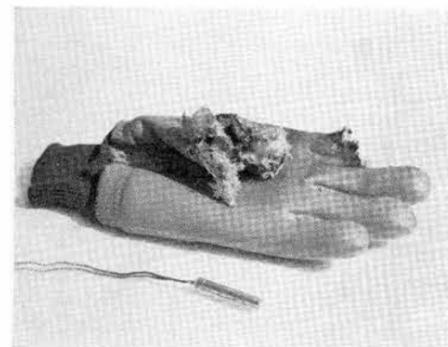
tary skills of listening, speaking and writing. Previews of the course can be seen on April 9 and 11 at 7 p.m.

Two lessons will be shown each week. Each lesson will be offered three times, twice during the day and once in the evening as follows: Lessons 1-3-5-7-9-11 on Mondays at 7:30 and 11:30 a.m. and again on Tuesdays at 7 p.m. Lessons 2-4-6-8-10-12 will be on Wednesdays at 7:30 p.m. and Thursdays at 11:30 a.m. and 7 p.m.

A fee of \$25 for KQED members and group-enrollees (minimum of five) and \$45 for others covers all necessary materials, including a study guide, workbook/reader, and a timer. Application forms are available from Public Information Division 8242.

For additional information, call KQED, 391-1000, ext. 248.

\* \* \*



TORN AND SHREDDED GLOVE indicates the damage a small No. 6 blasting cap (pictured below glove) can do. The cap was intentionally exploded in the glove during a safety experiment at SCLL's Area 8. Recent articles in the Livermore newspapers indicate that similar explosives are being found about the city by children who are unaware of their potential danger. One adult was hospitalized as a result of the serious injuries he suffered while examining one of the blasting caps. Do not handle such objects, but notify the police or fire department.

\* \* \*

Will Vandermolen (8125) was among several panelists discussing various industrial occupations with high school students at the recent Kiwanis-sponsored Career Day at Tracy Joint Union High School. Will—a certified engineering technician in Environmental Test Division II and a member of the American Society of Certified Engineering Technicians (ASCET)—described the role of the technician in today's industry to approximately 220 students.

## Sympathy

To Betty Clark (8223-5) for the death of her mother in Livermore, March 9.

To Kermit Cooper (8164) for the death of his father in Livermore, March 12.

To Barbara Farshler (8253-3) for the death of her mother-in-law in Livermore, March 12.

To John Helms (8141) for the death of his father in Napa, March 7.



DISCUSSING THEIR RECENT TRIP to Greenland are Perry Lovell (left) and Ron Hoffman of Environmental Health Division 8215. The two Sandians recently returned from Thule Air Base in Greenland after providing radiological support in connection with recovery operations at the site where a B-52 bomber crashed in January with nuclear weapons aboard.

## Welcome . . . Newcomers

Feb. 13 - March 16

<b>California</b>	
*Robert E. Hofford, Hayward	8252
*Raymundo J. Lopez, Livermore	8242
*Donald W. Putz, San Dimas	8132
*Freddy L. Whitworth, Livermore	8114
<b>Massachusetts</b>	
James E. Fleischhacker, Boston	8146
<b>Minnesota</b>	
*John M. Nielson, Bloomington	8128
<b>Oregon</b>	
Kenneth W. Dolan, Eugene	8149
<b>Transfers from Albuquerque</b>	
Samuel M. Cummins	8124
Raymond F. Drury	8128
Bobby J. Little	8151
Harold G. Short	8114
C. H. Stockley, Jr.	8138
*Denotes rehire	

## Wedding

Betty Parker (8213) and Bob Mason (5510), in Livermore, March 9.

## LRL Promotes Ex-Sandian

Theodore (Ted) Perlman has been named head of the Weapons Division at Lawrence Radiation Laboratory, replacing Marvin D. Martin who resigned to accept a teaching post at the University of Arizona. Ted assumed the post April 1.

Before coming to Livermore, Ted spent seven years with Sandia at Albuquerque. When he left Albuquerque in September 1956, he was a section supervisor in the Manufacturing Engineering Systems Department. Previously, he worked at Los Alamos from 1944 to 1946 with the Manhattan Engineer District. He received his BS degree in mechanical engineering from Louisiana State University.

Ted, his wife Jeanetta and two children, Janine and Ann, reside in Livermore. A third daughter Mrs. Gene (Candy) Ingran lives in Chico.



SANDIA ROCKET SLED is described by D. C. Bickel (7344), shown pointing, to a portion of the educators who toured Technical Area III as part of the National Clinic on Technical Education.

## Laboratory Personnel Participate in National Technical Education Clinic

Fourteen Sandia technicians described their job experience as technical institute graduates to educators from all parts of the country during the National Clinic on Technical Education held in Albuquerque last week. In addition, three other Sandians addressed the group as part of the three-day program.

Sponsored by the Office of Education, U. S. Department of Health, Education and Welfare, the conference attracted over 250 educators from various technical institutes and state education departments from 44 states.

The first-day's program included a talk on "The Role of the Technician and an Overview of Operations at Sandia" by L. E. Lamkin (7300). He was introduced by George W. Elliott (9331), a member of the conference planning committee.

After they toured Sandia's Technical Area III, the educators met with the Sandia technicians at Western Skies Motor Hotel in informal discussion sessions to obtain first-hand information about the type of work being done by technical institute graduates.

Sandia technicians who participated in the discussions were C. W. Smith (7342), H. S. Tessler (7344), B. W. Cason (7335), W. L. Jacklin (7335), J. H. Sneathen (7324), E. J. Buksa (7324), D. J. Gould (1341), J. B. Moore (1324), E. J. Barkocy (1524), J. F. Kobs (1315), J. H. Weinlein (2452), H. R. Farley (5235), D. L. Humphreys (2213) and R. W. TerMaat (1431).

H. D. Sivinski (2570) spoke on "Man in the Space Environment, or Housekeeping on an Extended Voyage" at a dinner meeting the second day of the conference. Other speakers included college presidents, industrial training executives, state and federal technical education specialists and Technical Education Association officers.

The clinic was designed to explore closer industry-education relationships to meet the need for technicians, to review total staff development for technician education, to consider modern facilities for technician education and to emphasize the need for pretechnical, post-high-school programs.

## Speakers

E. G. Cordova (4362), "My First Year in Public Accounting," Accounting Association, April 25, Albuquerque.

C. W. Harrison, Jr. (1425), University of Wisconsin Seminar in Applied Physics, April 8, Madison.

J. M. Worrell, Jr. (5321), "A Comparison of the Spacial Conceptions of R. L. Moore and A. V. Arkangel'skii," University of Houston, March 13, Houston.

E. D. Jones (5151), "Nuclear Magnetic Resonance of  $Tm^{169}$  in Thulium Gallium Garnet," seminar at Lockheed Aircraft Co., March 22, Palo Alto, Calif.

D. J. Rigali and L. V. Feltz (both 9326), "The Application of High Speed Monorail Rocket Sleds to Aerodynamic Testing at High Reynolds' Number," Third AIAA Aerodynamic Testing Conference, April 8-10, San Francisco.

M. L. Slater (5322), "Two Point Boundary Value Problems for Linear Differential Inequalities," American Mathematical Society, April 10-13, New York.

W. E. Alzheimer (1541), M. J. Forrestal (5636) and W. B. Murfin (1541), "Transient Response of Cylindrical, Shell-Core Systems," AIAA/ASME Ninth Structures, Structural Dynamics and Materials Conference, April 1-3, Palm Springs, Calif.

E. P. EerNisse (5143), "Nonlinear Elastic Effects in Crystal Resonators: Nonlinear Elastic Parametric Devices," 22nd Annual Symposium on Frequency Control, April 22-24, Atlantic City, N. J.

M. B. Gens (1541), "A Preliminary Observation of the Dynamic Environment of Helicopters," 1968 Symposium of the Institute of Environmental Sciences, April 29-May 1, St. Louis, Mo.

G. W. Barr (1142), "Aeroelastic Stability Characteristics of Cylindrical Shells Considering Imperfections and Edge Constraint," AIAA/ASME Ninth Structures, Structural Dynamics and Materials Conference, April 1-3, Palm Springs, Calif.

R. A. Harley (1541), "Automatic Temperature Time Data Acquisition in Transportation Environments," 1968 Symposium of the Institute of Environmental Sciences, April 29-May 1, St. Louis, Mo. At this symposium there will also be a showing of two Sandia movies: "Fundamentals of

Mechanical Vibration," directed by C. E. Spriggs (3464-1), and "Response to Mechanical Shock," directed by F. F. Taylor (3464-1).

N. C. Anderholm (5637), "Laser Generated Pressure Waves," American Physical Society, March 18, Berkeley, Calif.

C. A. Olson (7221), "Cloud Seeding," Association of Certified Engineering Technicians, April 1, Albuquerque.

C. S. Johnson (7252), "The Scientific Quest for ESP," youth group, First Congregational Church, April 7, Albuquerque.

R. D. Driver (5262), "A Visit to the Soviet Union," Sunrise Optimist Club, April 9, Albuquerque.

A. D. Swain (2152), "Human Factors Engineering," Presbyterian Hospital School of Practical Nursing, April 11, Albuquerque.

H. D. Sivinski (2750), "The Role of Planetary Quarantine in the Search for Extraterrestrial Life," Rotary Club, April 17, Las Cruces.

M. M. Sluyter (9321), "Theoretical Aerodynamic Research at Sandia Corporation," Arnold Engineering Development Center, March 29, Tullahoma, Tenn.

## Authors

H. H. Wicke and J. M. Worrell, Jr. (both 5321), "Concerning a Class of Completely Regular Spaces Described by Arkangel'skii," Vol. 15, page 352; "Quasi-Hereditary Properties, Baire Category, and Non-First-Countable Structure," Vol. 15, page 162; "Non-First-Countable Topological Structure," Vol. 14, page 935; and "The Preservation of the u-Space and p-Space Properties by Certain Mappings," Vol. 14, page 820, all NOTICES OF THE AMERICAN MATHEMATICAL SOCIETY.

P. C. Lysne (5133) and A. G. Meister (Arizona State University), "The Near Infrared Spectrum of Ethane-1, 1, 1-d<sub>3</sub>," January issue, JOURNAL OF CHEMICAL PHYSICS.

E. M. Bauer (2562), "A Temperature Differential Measuring Device," December 1967 issue, TEST ENGINEERING AND MANAGEMENT.

# Take Note

M. M. Sluyter (9321) has been appointed to a three-man committee of the American Institute of Aeronautics and Astronautics which will determine AIAA's position with regard to a "Goals of Engineering Education" report by the American Society for Engineering Education.

Retiree Franklin Barnett reports from Prescott, Ariz., about his busy life. He has written a biography, *Viola Jimulla: The Indian Chieftess*, the former head of the Prescott Yavapai Indians. All proceeds from sale of the book have been earmarked for the Prescott Yavapai Indians Educational/Library Fund. Copies may be ordered directly from the author at P. O. Box 1390.

Both of the Barnetts have been avid amateur archeologists for many years. They have added a second museum room to their home to display their many artifacts. Mr. Barnett has written two archaeological reports on their excavations—one report will appear in June.

R. B. Powell (3000) is serving as a member of the University of Albuquerque planning committee which is made up of faculty members and Albuquerque civic leaders. University enrollment expectations to 1980 in light of growth rate statistics for the city and possibly new university programs will be discussed by the committee during the next several months. Later in the year the committee is expected to make recommendations on controlled growth rate to the university's board of trustees.

Anyone with youngsters from the fifth through eighth grades who want to participate in the Young America Football League should pre-register them at the Civic Auditorium tomorrow from 9 a.m. until 1 p.m. Fee to participate is \$15. Additional information available from Cliff Kinabrew (7122), home phone 299-1135.

"Monique," a murder-suspense drama scheduled April 11-14 by the Sandia Base Entertainment Center, will include in its cast Patricia Farrell (3421) and Mrs. George Horne (he works in 9414). Curtain time is 8 p.m. each evening.

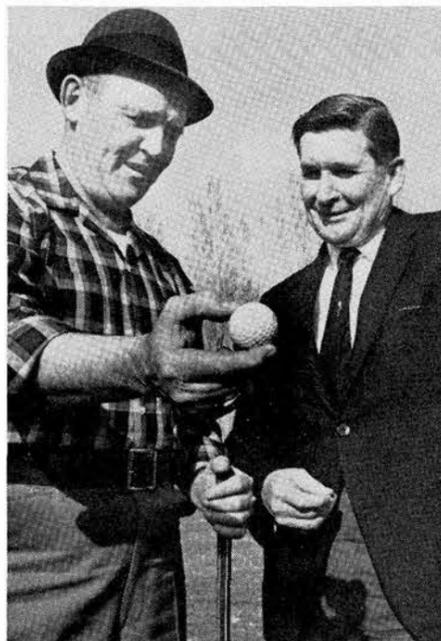
The show is described as macabre and thrilling. It is for mature audiences only. There will be no admission charge.

## SEGA Golfers Get Aces

Golfing season looks brighter for two Sandia Employee Golf Association players who recently carded holes-in-one.

Larry Smith (5235), who has a seven handicap, got his ace March 16 with an eight iron on the 157-yard par 3 number 13 hole at Four Hills. This was the second ace in Larry's 20-year golfing career.

Rex Eaves (3242) holed out his tee shot on the 187-yard par 3 number 9 hole at Arroyo Del Oso on March 23. He used a five wood for his first hole-in-one. He is an 18 handicapper.



ACES—Rex Eaves (3242), left, and Larry Smith (5235), discuss their recent shooting of holes-in-one.



SANDIA'S DAISY BELLE—Holly Armijo (2211-5), represented Sandia in the downtown parade that launched Albuquerque's annual spring cleanup campaign which will last through April.



HYBRID THIN FILM MICROCIRCUIT is examined by (l to r) M. K. Laufer (2411), past chairman of New Mexico Section of American Vacuum Society; K. C. D. Hickman, director of Distillation Research Laboratory, Rochester Institute of Technology and a pioneer in vacuum technology; and J. D. Williams (1433), new chairman of the local Vacuum Society group, during a tour of Sandia in connection with the N. M. Section's annual symposium.

## Sympathy

To Harold R. Vaughn (9321) for the death of his father in Amarillo, Texas, Feb. 23.

To B. G. Valencia (3242) for the death of his mother in Albuquerque, March 20.

Roy A. Furrow (4574) for the death of his father in Iowa, March 24.

## Deaths



W. A. Whitfield W. R. Bentley

Wilbert A. Whitfield, a staff assistant senior draftsman in Design Definition Division A 2211, died suddenly March 17. He was 61.

He had been employed in the Design Information organization since January 1951.

Survivors include his widow, a daughter and one grandson.

William R. Bentley, a retired Sandia Laboratory employee, died March 23 after a brief illness. He was 76.

He worked as a pipefitter in the Plant Maintenance organization from December 1950 until he retired in December 1958.

Survivors include three daughters and eight grandchildren.

# Service Awards

## 20 Years



Frank Baczek  
3221

R. L. Brin  
7220



Wynne K. Cox  
3428

J. P. Hertweck  
4573



J. T. Montoya  
4623

Oleta M. Morris  
4333



J. A. Suazo  
4623

C. M. Vick  
9425

## 15 Years



J. R. Banister  
5120

D. A. Baumann  
8252

W. S. Bedwell  
3242



B. S. Gardiner  
4234

J. P. Gaynor  
2525

W. R. Guntrum  
8124



Helen Kluever  
3232

F. A. Kunz  
1521

G. W. Mead  
1511



V. R. Perkowski  
4362

Dorothy Pratt  
4234

Mary Simpson  
4135



R. G. Taffe  
2555

## 10 Years

April 5-18

Lucile E. Dunlap 4362, F. G. Myers 4518, D. L. Krenz 9331, Winifred H. Burnett 5610, E. L. Norton 7125, H. E. Harling 9200, E. W. Roche 4234, C. L. Gamble 4614, J. K. Cole 9325, and A. W. Dennis 1542.



**PROJECT BUGGY**—An experiment conducted at the AEC's Nevada Test Site March 12 produced this ditch—about 900 feet long, 300 feet wide, and 80 feet deep—which resulted from the simultaneous underground detonation of five nuclear explosives. The ditch is three times as long as a football field and more than twice as wide. An eight-story building would stand upright in it. The experiment was conducted as part of the AEC's Plowshare program in which excavation technology is being developed for peaceful purposes. A number of Sandians participated in the project.

## 13 Tournaments for 1968 SEGA Season

A total of 13 tournaments, with the opener scheduled April 20 at Socorro, is set for the Sandia Employees Golf Association (SEGA) for the 1968 season. The tournaments are open to all Sandia and AEC employees who are members of the Association. Annual membership dues are \$3.

In addition to being eligible to participate in the tournaments for trophies and prizes, membership in SEGA includes a periodic updating of handicap according to USGA rules.

Anyone interested in joining SEGA should contact O. J. Foster (3126), tel. 264-7775. Members are individually notified two weeks in advance of every tournament.

## All-Star Bowling Team Selected

The nine-man Sandia Laboratory All-Star bowling team was selected after a roll-off tournament among the top 47 Sandia players March 23. The team members and their six-game series scores are:

A. E. Maes (1621), 1217; Dick Gonzales (4212), 1188; Charles R. Looney (2547), 1163; George T. Kolesar (2211), 1160; Richard M. Dayhoff (9314), 1157; Rolyn E. Baach (2444), 1156; Dorsey E. Bishop (7322), 1148; Bob Balthaser (2131), 1143; and Curtis M. Warthen (7256), 1143.

The team will compete in the Intra-Base bowling tournament April 6-7 at KAFB Lanes. Team competition will be held Saturday, April 6, at 3 p.m. Singles and doubles will compete on Sunday starting at 1 p.m.

## 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 CARS & TRUCKS

- '63 INTERNATIONAL TRAVELLER custom, model 1200, 9 passenger, V8, 4-spd., power lock differential, AC, fully equipped for trailer towing. Cleveland, 298-0218.
- '67 TRIUMPH, 3600 miles, below blue book, white wire wheels. Malpass, 298-7904.
- '53 FORD, \$50. Workman, 298-3604 after 5.
- FARMALL TRACTOR, it runs, tires terrible, \$25. Souder, 282-3121.
- DUNE BUGGY, '51 Mercury body frame cut down 40 inches, 383 Mercury engine, 3-spd. AT, oil, amp & tach gauges, 6-ply tires on rear, 8.50x15, also extra tires, welded spider gears. Clark, 255-6485.
- '53 FORD PICKUP V8, clean, R&H, side-mounted spares, spotlights, steel bed, heavy bumpers, grill guard, \$245. Tiefert, 299-2763.
- '59 DESOTO wagon, AC, 4 new tires, battery, \$225 or reasonable offer. Biancone, 296-1665.
- '49 CLASSIC WILLYS JEEPSTER, 4-cyl. engine, needs work, can be restored, best offer over \$150. Colp, 268-8035.
- '67 DATSUN, 4-dr. sedan, new tires, 4-spd., \$1250. Crawley, 298-7212.
- '55 CHEV. 4-dr., 6-cyl. AT, \$150. Breeding, 298-5314 after 5 p.m.
- '64 TRIUMPH Vitesse, sports 6 convertible, heater, extras, 4-spd. forward, dual carburation, \$1250. Hanna, 268-2790.
- '58 FORD Fairlane 500, V8, PS, factory air, \$150. Gonzales, 877-5693.
- '67 VOLKSWAGEN, AM & FM radio, leatherette upholstery, \$1400 or best offer. Armijo, 898-3202 after 5:30.
- '56 SHELBY GT 500, lime gold, deluxe interior, new Michelin tires, see at 1331 San Andres NW. Armijo, 345-0137.
- '57 CHEVROLET station wagon, V8, straight stick, \$150. Lerma, 268-1206.

## REAL ESTATE

- 3-BDR., 1 3/4 bath, 16x24 covered patio, completely landscaped, w/bp, AC/CFA, disposal, E. range, garage, carpet, drapes, near schools, shopping, \$15,500. DeWerrf, 298-1029.
- ROBERSON 3-bdr., carpeting, kitchen appliances, newly decorated, landscaped, AC, 1 3/4 bath, central location at 613 San Pablo NE. Bumgardner, 268-9695.
- 3-BDR., 1 bath, frame stucco, near University-Jefferson-Montezuma schools, new roof, newly decorated, attached garage, sprinklers, disposal. Wood, 256-0545.
- LAND on 217 near 66, some wooded at \$600/acre, some grazing w/water at \$400/acre, prefer to sell 40 acre tracts. Linn, 282-3986.
- UNUSUAL HOUSE, exposed beams, flagstone FR, 2 fireplaces, lg. recreation rm., 3 bdr., 1 3/4 baths, Zia Fatima schools, many extras. Hill, 268-1420.
- R-1 LOT, 70'x120', restrictive covenants, excellent view, 13% below market at \$1300. Wemple, 298-2048.
- ASHCRAFT, buff brick, 4-bdr., 2 1/2 baths, den, fp, carpets, drapes, modern landscaping, covered patio, 5 1/2% loan, \$36,000. Eberhart, 268-6943.
- 1850 SQ. FT., 3-bdr. 1/2 bath, den, carpeting, drapes, elec. stove, dishwasher, AC, Snow Executive, near Bellhaven school, assume 30 yr. 4 1/2% loan. Watkins, 299-5893.
- FATIMA AREA, 3-bdr., lg. den, finished basement, utility rm., drapes, carpeting, over 2300 sq. ft., \$20,800. Banister, 256-0180.
- BRICK HOME near Sandias, 3-bdr., 1 3/4 tile baths, lg. LR, DR, paneled den, dbl. garage, \$3300 down, 14111 Encantado Rd. NE. Williams, 298-4602.
- HUGE Glenwood Hills lot, total price, \$6700, small down. Levesque, 299-1213.
- 3-BDR. & den, brick, AC, w/bp, elec. stove, dishwasher, sprinklers, covered patio, carpeting, drapes, 2904 Vermont NE. Few, 299-8825.
- MOUNTAIN HOME, near Taos, community water, less than \$10/sq. ft., golf course, swimming pool, club house. Dunaway, 299-1422.
- MOUNTAIN ACREAGE, for investment and/or home sites, terms. Hoagland, 282-3825.
- UNIQUE 1-bdr., corner lot, walled yard, patio, garage, car port, den, fp, bar, hw/floors, drapes, shutters, new H.W. heater, roof, stucco, UNM area, \$15,200. McDonald, 268-5041.
- NORTH VALLEY, \$19,500, lg. 3-bdr. modern home, traditional New Mexico style w/3/4 acre 813 Guadalupe Cir. NW. Oakes, 898-0236.
- BRICK 3-bdr. Hoffmantown home on 12,500 sq. ft. of land, 13 mins. from work, lawn, sprinklers, fruit trees. Seligman, 298-1993.
- ONE ACRE lot in Corrales, terms, or will discount for cash. Clement, 298-4994.
- BRICK 3-bdr. home, 1 3/4 baths, den w/fp, AC, carpeted, NE Heights, low equity. Dick, 299-4878.

## MISCELLANEOUS

- GUITAR, solid body, 2-pickup Gibson plus Fender amplifier, \$150. Mortensen, 298-5348.

- DRUM SET, white pearl, \$300. Phelps, 344-0441.
- SHELL CAMPER, insulated, custom made for short wide bed, \$175. Cordova, 268-5972.
- OR TRADE: reconditioned cylinder head for older 6-cylinder Plymouth. Stuart, 299-9190.
- ROTARY POWER MOWER, \$15; evaporative cooler, 3-spd. portable, \$20. VanDeinder, 255-9324 after 5:30.
- SIMCA motor & parts, don't call on weekends. Vigil, 265-4371.
- LANTERN, dbl. mantle, \$5; 5-gal. water can, \$2. Thayer, 299-3127.
- SPECIAL PADLOCKS, six each keyed alike, 12 identical keys, Master Brand size 3, used 4 months, \$9. Illing, 298-7189.
- 20 SQ. YDS. used carpeting & pad, beige, \$15. Schafer, 299-4634 after 5.
- GIRL'S 26" Schwinn bicycle, \$20. Somermeyer, 299-9271.
- HAND SPRAYER for flowers or shrubs, 1 qt. size, \$2; steel step for camper bumper mounting, requires 3 small holes, \$1.50. 1828 Florida NE. Henry, 256-2467.
- PEKINESE, male, 6 wks. old, blond, AKC registered. Brown, 299-5405.
- FRIGIDAIRE elec. range, copertone; power mower, reel type, best offer. Hodges, 268-5097.
- CLOTHES DRIER, electric, RCA Whirlpool, \$10; Cosco high chair, converts to youth chair, \$4. Jones, 255-7924.
- 6 1/2' X 10' Marvelle camping trailer, \$225. Liguori, 256-3613.
- LUGGAGE RACK VW sedan, used once, \$15; Craftsman power mower, 18" reel type, \$25. Volk, 299-1702.
- ATLAS 10" metal lathe w/attachments. Bricker, 255-3786.
- FM ANTENNA, 10 element Winegard ultra-fringe. KJeldgaard, 296-2212.
- SCUBA wet suit, completely lined, zippered wrists & ankles, no cuts, includes hood & boots, \$57. Dickinson, 265-5167.
- LARGE GE refrig., 2-dr. w/freezer top, \$60; pool table, \$50. Browne, 344-9675.
- PUPPIES, 8 wks. old, half Basenji, male & female. West, 282-3460.
- HEWLETT PACKARD, AC-DC vacuum tube voltmeter, model 410A; Harmonic wave analyzer, model 300. make offer. Allen, 299-9078.
- 650cc BSA completely rebuilt, painted, new tires, battery, etc., \$650. Kennedy, 344-5667 after 6.
- ROLL-A-WAY BED, full size, \$20. Hostetter, 898-3785.
- 2-PIECE Kroehler sectional sofa, 96 inch, reversible cushions, blue matlese, \$60. Daut, 255-2529.
- WINCHESTER .218 BEE w/scope; Win. .22 auto loading rifle; .22 revolver; Weaver 4X scope for .22 rifle. Svensson, 344-7700.
- MOTORCYCLE, Hudaka 90cc trail & street, all accessories, \$275; 8x14 snow tires on Dodge wheels, \$12. Guttman, 299-7031.
- DINING ROOM TABLE w/6 padded chairs, matching china cabinet, light colored fruitwood, all \$125. Banos, 256-6613.

- '66 PRINCESS MOBILE HOME, 12x55, 2-bdr., 1 1/2 bath, completely carpeted & furnished, AC, 530 Utah SE, space 52. Rodriguez.
- 2-BARREL HOLLEY carburetor & manifold; 4-barrel Holley carburetor & manifold. Causey, 299-0089.
- BASSETT female, 4 mos., AKC, likes children. Gebert, 256-6253.
- MINKUS all-American stamp album, over 600 different U.S. stamps, \$30. Cox, 2946 Morningside NE, 268-2068.
- TROPICAL FISH, guppies, yellow sword tails, blue acaras, 5 for 50c. Crites, 298-6397.
- GULBRANSEN PIANO. Hall, 268-6387.
- SEAR'S 9x12 tent, outside aluminum framing w/ carrying cases for tent & poles. Cost \$95, sell for \$60. Johnson, 298-1011.
- ROUND kitchen table & 2 chairs, table has formica woodgrain top w/gold & bronze trim & 10" leaf, \$30. Smith, 299-1264.
- 1/5 SHARE CESSNA 182, 1430 TT, 225 SMOH, chrome, \$1800. Perkins, 298-4546.
- CORSAIR travel trailer, 20', self-contained, sleeps six, butane refrig., shower bath, \$1295. Barth, 345-0172.
- ACCORDION, custom made in Italy, \$250 or best offer. Galindro, 344-7021.
- BABY rabbits, \$2. Flowers, 282-3458.
- AIREQUIP MODEL C slide projector, \$25; 20 slide trays, 36 capacity, \$1.25 ea., all for \$45. Huff, 256-9426.
- CRAFTSMAN 6" lapidary outfit, diamond saw, 2 grinding wheels, buffing wheel, polishing plate, 1/3 hp motor, \$75. Sherman, 256-2306.
- PIANO, upright, \$95. Wenz, 299-5488.
- '64 HONDA 90 motorcycle w/sprockets for street or trail, \$150. Luehring, 299-6031.
- DISHWASHER, Lady Kenmore portable, remodeling kitchen, will sell for \$60. Northrup, 298-9933.
- TRUNDLE BED, \$50; Pimentel classical guitar, 3/4 size, \$40; Fotron III electronic camera \$45 and take over payments, guaranteed. Swysgood, 256-6902.
- NEW KINGSIZE bed, extra firm Sleepaire mattress, w/frame & brass headboard. Reynolds, 265-0138.
- SECRETARE DESK and chair, solid walnut, new \$185, sell for \$95; Gulbransen organ, used very little, new \$1400, sell for \$550. Stright, 898-1721.
- GE refrigerator. Carter, 298-0945.
- GE electric stove, \$20; Whirlpool electric dryer, \$15. Reynolds, 299-7267.
- CUSTOM MADE insulated camper shell, fits long wide pickup; electric dryer. Benson, 268-9727.
- TOY POODLES, silver, very small, male & female, AKC reg., ready for Easter. Shipley, 298-2433.
- PIANO, upright, \$75 or best offer. Cook, 298-2873.
- SWIMMING POOL, 18' diameter w/fitter, slide, etc., \$75. Singleton, 299-1613 after 5:30.
- WOMEN'S golf clubs, cart & red bag, size 8 golf shoes, used twice. Roark, 298-9800.

- TRAILER FRAME w/hardware & new tires, \$30. Harwood, 299-1326.
- PICKUP CAMPER, fits narrow or wide box, 96" long, heavily insulated, \$395. Garcia, 298-9186.

## WANTED

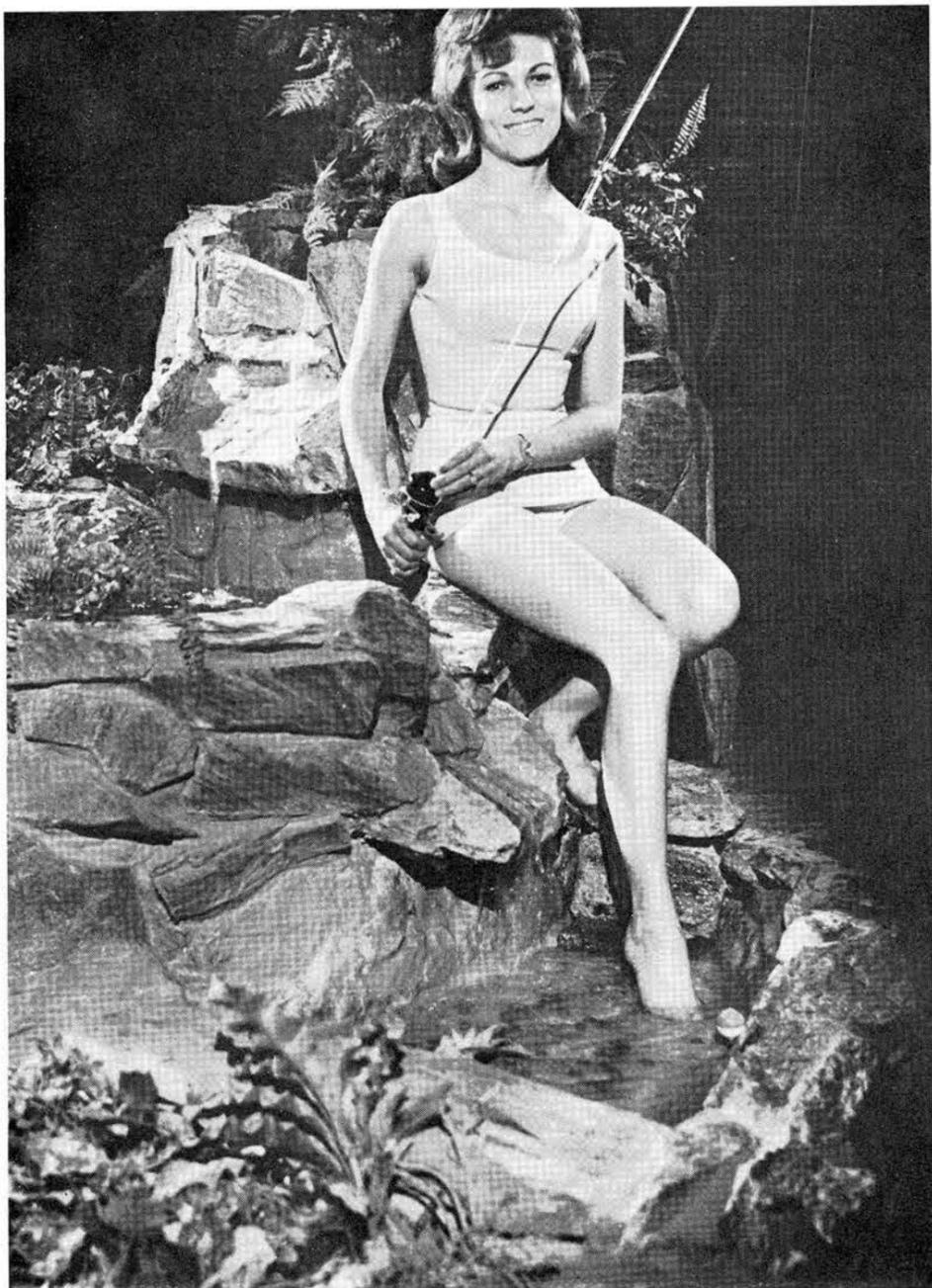
- USED SCUBA GEAR. Sayers, 898-3851.
- TO RENT 2 or 3-bdr. furnished house or apt., by consulting Professor & family for 2 months beginning the week of May 6. Schwoebel, 268-6440.
- '64 or '65 PORSCHE 1600c or 1600sc coupe. Thomas, 256-7775.
- RIDE from 500 blk. Girard SE to Gates 1, 2, 3, or 4 (Bldg. 836). Tholburn, 243-4347.
- FOUR OR FIVE large 14" or 15" used tires. Stuart, 299-9190.
- RIDERS from Gabaldon & Los Anayas NW. Johnson, 247-8634.
- BABY SITTER for summer months 9-5, must be responsible & reliable. Coughenor after 6 p.m., 298-2539.
- JOIN car pool from NE Girard area to 887-880 area. Hensinger, 265-4203.
- CAR POOL members from Highlands North or Desert Terrace areas to Bldg. 802. Thacher, 298-5938.
- '60 CHEVROLET TRUCK shop manual. O'Neill, 298-7914.
- WALL TENT w/floor, any size. Netz, 282-3607.
- RIDER for car pool from vicinity of Coronado Crest or Foothill Estates to 860/880 parking lots. Bartlett, 299-4861.
- WHEELS, one 4-hole, 13" (Falcon) & one 15" split rim (Ford). Wentz, 298-2630.
- USED SNOWSHOES, any condition. Davenport, 256-9315.
- MUKLUKS. Fulcher, 299-8888.
- 20" bicycle, preferably girl's. Barton, 255-5491.

## FOR RENT

- 15' TRAVEL TRAILER, sleeps 5, butane stove & light, easily pulled, reserve now for summer vacation. Colp, 268-8035.
- FURNISHED ROOM w/use of lg. 3-bdr. home, NE, by male owner, \$55/mo., utilities paid. Gallo, 298-1089.
- 3-BDR., den, 1 3/4, utility, 2-car, range, oven, new carpeting, draped, AC, landscaped patio, fp, lease, \$185/mo., 2007 Erbbe NE. Meyer, 298-4825.

## LOST AND FOUND

- LOST—Math book, sq. cuff link, 3 keys w/green tag on ring, black leather glove, pr. grey & brown gloves, w/pigskin palms, silver Cross ball-point pen, Rx safety glasses in gray case, white earring, 2 keys w/bottle opener, silver earring, keys in green key case. LOST & FOUND, tel. 264-2757, Bldg. 610.
- FOUND—GM car key, house key, pr. black leather & cloth gloves, gold & blue dangling earring, Elgin watch. LOST & FOUND, tel. 264-2757, Bldg. 610.



FISHERMAN'S WHARF event Saturday, April 13, at the Coronado Club will feature a social hour, seafood supreme, entertainment and dancing. Judy Eslinger (3126/9324) recommends the clam chowder and fried haddock.

### Coronado Club Activities

## Fisherman's Wharf April 13

Fisherman's Wharf, the big event on the April Coronado Club calendar, is set for Saturday, April 13, opening with a social hour at 6 p.m., a served dinner at 7, entertainment at 8:30 and moving to dancing from 9 p.m.

E. E. Ives (8159), whose big baritone voice and commanding stage presence have built a solid reputation in local musical productions, will present a selection of

songs. Don Lesman's orchestra will play for dancing.

Highpoint of the evening will be the special seafood menu—Coney Island clam chowder, shrimp creole with rice, deep fried haddock plus all the extra goodies which make a memorable meal.

Reservations are required for this one. Call the Club office (264-4561) before 9 p.m. April 12. Tickets are \$2.75 for members, \$3.25 for guests.

\* \* \*

#### Social Hours

Tonight, Tommy Kelly will be on the bandstand while the Coronado Club staff wheels out the special buffet. The spread costs \$1.25 for adults, \$1 for kids. Pat Reich will entertain in the main lounge.

On Friday, April 12, Sol Chavez will make the happy music while the Mexican food buffet is spread.

On Friday, April 19, the Coronado Club's famous chicken buffet will be the feature of social hour. Phil Graham will be on the bandstand.

\* \* \*

#### Luncheon Special

A 99-cent special luncheon will be presented by the Coronado Club on Thursday, April 11. Mama mia, the menu is scallopini of veal, mushrooms and spaghetti with tomato sauce, mixed green salad, garlic bread, and spumoni ice cream. The special will be served at the Club, in the Bldg. 839 cafeteria and in Area III. (The 99-cent sirloin steak luncheon is planned for May 9.)

\* \* \*

#### Bridge

Monday evening April 8 will be a big night for the duplicate bridge group. The annual mixed pair championship competition will be held. The event starts with a social hour at 5:30, dinner at 6 (menu is stuffed veal with apricot dressing), and bridge at 7 p.m. For reservations, call 268-7605. The group meets for regular duplicate bridge play on Monday, April 15.

Ladies bridge will hold an all day session Thursday, April 18. Play starts at 9 a.m. and ends at 3:30 p.m., with a break for lunch from 12 until 1. For reservations, call 298-2456 or 299-8817.

#### Night Driving

Sunglasses should not be worn for night driving. They do reduce headlight brightness, but also cut down your ability to see.

#### Speedometer Accuracy

Some people have received speeding citations because their speedometers were inaccurate due to the fact they had replaced their original tires with larger ones.

It is an easy matter to check the accuracy of a speedometer. Mileposts along the highway, checked against the second hand of a watch can give you a reasonably accurate check. At 60 miles an hour, you should pass a milepost at the rate of one every minute.

#### Alcohol and Traffic Accidents

The good driver is capable of judging speeds and distances, noting traffic situations, making quick decisions and adjustments in emergencies, foreseeing hazards and predicting the other driver's intentions. Alcohol impairs these abilities.

## Supervisory Appointments



MARK J. DAVIS to supervisor of Metallurgy Division 1131, effective April 16.

Mark joined Sandia's metallurgy group in September 1963 where he has worked in micro-electronic welding techniques. Before coming to Albuquerque, he was doing graduate work in high temperature metallurgy at the University of California of Berkeley.

He received his BS degree in metallurgical engineering from the University of California of Berkeley in June 1960 and his MS degree from the same school in June 1963.

Mark is a member of the American Society for Metals, American Institute of Mining, Metallurgical and Petroleum Engineers and the American Welding Society.



JOHN W. KEIZER to supervisor of Division I 5541 effective April 1.

In July 1960, John joined Sandia's physical research group where he worked on the development of instrumentation in support of physical research experiments. Two and a half years later he transferred to Advanced Systems Research Department II where he has worked on weapon systems analysis.

John received his BS in electrical engineering from Oregon State University in June 1960. He received his MS in electrical engineering from the University of New Mexico in June 1962 under Sandia's Technical Development Program.

He is a member of Tau Beta Pi, Eta Kappa Nu and Phi Kappa Phi.



DONALD P. PETERSON to supervisor of Systems Analysis Division I 5311, effective April 1.

Don joined Sandia in July 1957 and was assigned to a systems analysis group where he worked on weapon systems studies. In December 1961, he left the Laboratory to work for General Telephone and Electronics Laboratory in Palo Alto, Calif. He returned to Sandia in July 1963 and has worked in Systems Analysis Division 5253 since then.

Don received his BS degree in mathematics from Washington State University in June 1952 and his MS from the same school in June 1954. His PhD in mathematics was conferred by the University of Oregon in June 1957.

He is a member of the Society for Industrial and Applied Mathematics, American Mathematical Society and the American Association for the Advancement of Science.

### Sanado Club Meets April 9

Carmoline Grady, singing a selection from "The Sound of Music," will provide entertainment for the Sanado Womans Club sherry-luncheon Tuesday, April 9, at the Coronado Club.

The singer is a music student at the University of New Mexico currently preparing her senior recital. She is also rehearsing a lead role for a forthcoming production of "The Vagabond King."

Reservations for the luncheon, which begins at 1:15 p.m., must be made today with Mrs. V. G. Nelson, 801 Van Buren Place SE.

### Teenage Go-Go

Tomorrow night the youngsters will go-go as a group called "The Cherry Currency" will be turned loose on the bandstand. Chuck Logan of KQEO will be master of ceremonies. The bash is scheduled from 7:30 until 10:30 p.m.



LEE W. DAVISON to supervisor of Shock Wave Physics Research Division 5133, effective March 16.

Lee joined an applied mathematics group at Sandia in October 1966 where he has been concerned with modern continuum mechanics. Before coming to the Laboratory, he was a post-doctoral fellow at Johns Hopkins University. From 1959 to 1962, he worked on the Nike-Zeus system in the Electromechanical Development Department at Bell Telephone Laboratories in Whippany, N. J.

He received his BS degree in mechanical engineering from the University of Idaho in June 1959 and an MS in engineering mechanics from New York University in February 1961. His PhD in applied mechanics was conferred in June 1965 by California Institute of Technology.

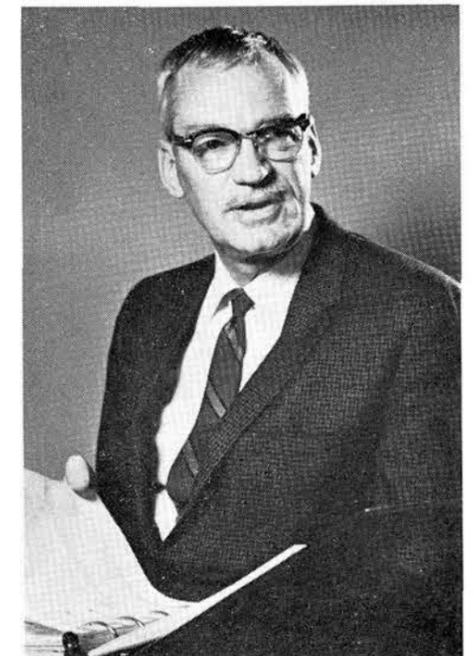
Lee is a member of the American Society of Mechanical Engineers and Sigma Xi.

## Welcome . . . Newcomers

March 18 - 29

Albuquerque	
Don E. Harrison, Jr.	52 0
Judith L. Kay	3126
Hedy Kurovski	4333
Dorothy V. Parker	3126
Rosalie L. Perea	3252
Joyce M. Sedillo	3251
John W. Stenovoc	4231
*Elsie Upchurch	3341

\* Denotes rehire



RUSSELL W. FOSTER (4383) reviews his lecture notes before participating in a training session.

## Russell W. Foster is Member of AEC Audit Training Task Force

Russell W. Foster, supervisor of Price and Cost Analysis Division 4383, serves as a member of a three-man task force that is conducting training sessions for Atomic Energy Commission auditors at AEC offices in different parts of the country.

Russ discusses cost and price analysis during the two-day sessions in each of eight cities. J. P. Gerdes, assistant controller for auditing, AEC Headquarters, opens the sessions and A. J. Wilburn, chief of management division under the deputy director for resources management, Defense Contract Audit Agency, speaks on statistical sampling.

From 20 to 50 AEC auditors and AEC contractor auditors are expected to attend each training session. The first one was held at AEC Headquarters in Washington, D. C., last month. Other sessions are scheduled for New York, Chicago and Oak Ridge this month. Next month the training sessions will be conducted in Richland, San Francisco, Las Vegas and Albuquerque.

The program is designed to reach the maximum number of AEC auditors. Auditors at other AEC offices have been requested to attend the sessions at the city closest to them.