



UP, UP AND AWAY—Sandia is using the Sandia Peak Tramway for a special terrain measurement project of Advanced Radar Development Division 1423. Note movable antenna mounted on front of the car. Additional photos and story on Page Four.

Sandians Participating in Global Airborne Scientific Studies

Twelve Sandians will participate in a three-week scientific expedition to study atmospheric phenomena in the northern and southern hemispheres from two NC-135A flying laboratories.

The two planes, one assigned to Los Alamos Scientific Laboratory and the other assigned to Lawrence Radiation Laboratory, are scheduled to leave Kirtland AFB the evening of March 15 and return April 6.

They will fly to Honolulu together, where one will remain while the other goes on to Pago Pago, American Samoa. On March 20, they will take off simultaneously from their respective airbases for the other's base. Both will fly along a path crossing the equator to study cosmic rays and land at the base from which the other departed.

The Los Alamos plane will then leave Pago Pago for Christchurch, New Zealand, while the LRL plane heads for Elmendorf AFB, Alaska, from Honolulu. Each of the planes will make local flights from these bases and simultaneously gather data on the auroral spectrum (northern and southern lights) and on cosmic rays at magnetic conjugate points (corresponding positions in the northern and southern hemispheres where magnetic lines curve in a north-south direction around the earth and intersect it).

Scientists on the LASL plane will make measurements at the southern end of these lines while flying along a magnetic meridian over the Pacific south of New Zealand. Experimenters in the LRL aircraft will

make identical measurements at the northern end during flights from a point south of Anchorage north to College, Alaska.

By correlating data gathered at the same time at conjugate points in both hemispheres, scientists hope to learn more about the aurora borealis and aurora australis.

The two jet aircraft, instrumented originally for use in the test readiness program, have served as flying laboratories for several scientific expeditions in the past three years. Studies of the auroral spectrum and cosmic rays were also conducted during a similar expedition in the same areas a year ago.

About 20 scientists and technicians will be aboard each aircraft. Sandia experimenters are M. M. Robertson (1122), who will be on the LASL plane, and James E. Keith (5234), who will be on the LRL flying laboratory.

Other Sandians on the LASL aircraft will be A. F. Hutters, supervisor of Diagnostic Aircraft Operations Division 7255; R. W. Martin, B. R. Stanton and G. S. Worthen (all 7255).

Aboard the LRL plane will be C. E. Smith, supervisor of Diagnostic Aircraft Section 7255-2; and R. E. Hooker, M. C. Frettem, L. C. Harris, R. P. McKnight and H. F. Sisson (all 7255).

President Hornbeck to Serve on Special NASA Safety Advisory Panel

President John Hornbeck has been named a member of the Aerospace Safety Advisory Panel to the head of the National Aeronautics and Space Administration, James E. Webb, administrator.

The advisory panel was formed by an act of Congress as one of the measures to prevent recurrence of accidents such as the Apollo spacecraft fire on the launch pad in which three astronauts died in January 1967.

Four other members of the panel are Maj. Gen. C. H. Dunn, director of military construction for the Chief of Army Engineers, Washington, D. C.; Dr. Henry Reining, Jr., dean of the Von Karman Center of International Affairs, UCLA; Dr. E. F. M. Rees, special assistant to the Apollo spacecraft manager, NASA, on detached duty from his post as deputy director of the Marshall Space Flight Center, Huntsville, Ala.; and B. T. Lundin, associate director for development, NASA, Lewis Research Center, Cleveland, Ohio.



CHECKING THE PROGRAM for technical briefings for Atomic Energy Commission officials are (l to r) President John A. Hornbeck, Chairman Glenn T. Seaborg, L. P. Gise and Commissioner James T. Ramey. The AEC officials visited Sandia last week before departing for Los Alamos Scientific Laboratory where they participated in a program observing LASL's 25th anniversary and groundbreaking ceremonies.

Thomas M. Burford

Appointed Director 5300

Thomas M. Burford becomes the director of Systems Analysis Organization 5300, effective March 15. He comes to Sandia Laboratory from the Bell Telephone Laboratories at Murray Hill, N. J., where he has been a department head in the Mathematics and Statistics Research Center.

Reporting to the new director will be the following organizations: Systems Analysis Department 5310 (formerly 5250) and Mathematics Department 5320 (formerly 5260).

Mr. Burford joined BTL in 1955 after receiving his PhD degree in electrical engineering from the University of Wisconsin. He earned his BS degree from Washington University, St. Louis, Mo., in 1952.

At BTL, Mr. Burford has been concerned with the planning of active defense systems, particularly guidance methods, tactics and deployment. More recently, he has been involved in underwater sound—longrange active sonar. His mathematical research interests include operations research, game theory and cost effectiveness analyses. He holds several patents in communications systems.

Mr. Burford has been associated with



Thomas M. Burford

several Washington committees and has performed special studies for the National Academy of Sciences and the Department of Defense.

He will be accompanied to Albuquerque by Mrs. Burford and their 12-year-old-son.

SANDIA LAB NEWS



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SANDIA LABORATORIES

ALBUQUERQUE, NEW MEXICO
LIVERMORE, CALIFORNIA

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

AEC Officials Visit Laboratory For Briefings on Sandia Projects

Two members of the Atomic Energy Commission and key members of the AEC Headquarters and Albuquerque Operations staff visited the Laboratory last week for technical briefings on Sandia weapon systems and other programs.

Members of the Commission who attended the afternoon program were Chairman Glenn T. Seaborg and Commissioner James T. Ramey. The AEC Headquarters group included R. E. Hollingsworth, AEC general manager; Brig. Gen. E. B. Giller, USAF, assistant general manager for military application, and J. A. Erlewine, assistant general manager for operations.

Other members of the party were L. P. Gise, manager, Albuquerque Operations; J. L. McGraw, deputy manager, Albuquerque Operations; A. R. Fritsch, special

assistant to the chairman; D. C. Kull, executive assistant to the general manager; Col. R. H. Parker, USAF, assistant to Gen. Giller for research and development, and J. A. Harris, Jr., director, Division of Public Information.

President John A. Hornbeck opened the program with introductory remarks. He was followed with presentations on various current Sandia projects by G. A. Fowler (9000), D. B. Shuster (5600), R. G. Clem (5630), L. Gutierrez (8100), W. J. Howard (1000), T. B. Cook, Jr. (5000), and L. D. Smith (5500).

The following morning the AEC officials departed for Los Alamos Scientific Laboratory where they participated in a special program commemorating LASL's 25th anniversary and groundbreaking ceremonies for the Meson Physics Facility.

Commissioner Ramey spoke at the anniversary luncheon. Chairman Seaborg joined Sen. Clinton P. Anderson in remarks at the groundbreaking ceremonies. At the civic auditorium that evening, Chairman Seaborg delivered the anniversary address and Commissioner Gerald F. Tape presented an AEC citation to Dr. Norris E. Bradbury, director of LASL since October 1945.

IES Sub-Committee Hears Environmental Test Talks

Several Sandians presented technical papers during a meeting of the Institute of Environmental Sciences Sub-committee on Flight Instrument, Metrology, and Testing held in Albuquerque Feb. 14 and 15.

L. E. Lamkin, director of Environmental Testing 7300, was host to the group. The opening address was presented by R. A. Bice, vice president 7000.

Included among the talks were "The Zatter Facility" by M. H. Woodward (7334), "Fluidic Devices and Their Environmental Testing" by P. L. Walter (7336), "Force Control Vibration Testing" by J. V. Otts (7324), and "Gyro Work at Sandia Corporation" by N. F. Sinnott (7214).

A tour of Area III facilities was conducted the afternoon of Feb. 15.

LASL's Silver Anniversary

As LASL celebrates its 25th anniversary this month the entire staff and personnel of Sandia join in wishing them well and in congratulating Dr. Norris Bradbury and his fine organization on their many accomplishments over the years. We are proud to be associated with LASL and her sister facility, Lawrence Radiation Laboratory, in the vital activities of the weapons program and other atomic energy projects.

General Oberbeck Reassigned

Maj. Gen. Arthur W. Oberbeck, USA, who has been commander of Joint Task Force 8 and the Defense Atomic Support Agency's Test Command since the summer of 1966, was recently reassigned to Fort Belvoir, Va. As he left Sandia Base, he sent a letter to President John A. Hornbeck expressing appreciation to Sandia Laboratory. The letter read in part:

"On my departure, I wish to thank you and the Sandia Corporation for the very pleasant relationships I have enjoyed with, and for the splendid support I have received from your organization during my tour with two DASA commands at Sandia Base.

"I am at a loss to mention any of your officers and employees by name, since I seem to develop practically an organization roster when I do so. Let me say, that all of the many Sandia Corporation people I have met and worked with have been competent and agreeable without exception, and I regret having to leave such good friends."



"THE PROBLEMS and the important role of the Spanish-speaking minority in this country" were among the topics discussed by Lorella M. Salazar (3111) during a recent visit in Washington with Vice President Hubert H. Humphrey. In line with the subject of the meeting was the arrival this week of representatives of the Department of Health, Education and Welfare to discuss with Mrs. Salazar and other community leaders opportunities and fair consideration of Mexican-Americans for employment in the Federal Government.

Center Provides Information On Aerospace Nuclear Safety

An Aerospace Nuclear Safety Information Center (ANSIC) that serves as a focal point for the collection, evaluation, storage and dissemination of information related to space isotope power and aerospace nuclear safety has been established at the Laboratory.

Located in Rm. 228 of Bldg. 892, ANSIC's three main functions are storing and retrieving information, preparing reports, and providing audio-visual material on aerospace nuclear power sources.

Depth and breadth of ANSIC's coverage is varied because of the many related disciplines and fields of interest involved in aerospace nuclear safety and isotope power sources. In addition to information on space isotope systems and aerospace nuclear safety, it includes data on properties of materials, health physics, dispersion of radioactive particulate, atmospheric sciences, structural analysis, soil studies and other diversified subjects.

The center provides copies of documents in its files to any Sandia organization requiring the information for aerospace nuclear safety or isotope power related work.

ANSIC presently has some 3800 technical reports, 125 books and 27 periodicals. In addition, there are several hundred miscellaneous technical, management, contract and educational documents.

Aerospace Nuclear Safety Department's reports are either prepared by or coordinated through ANSIC. The center also compiles several publications, including monthly and quarterly reports on San-



CATALOGING DOCUMENTS for ANSIC files are (l to r) Mrs. Neta Tyler and Mrs. Earlene Brinegar (both 9319).

dia's aerospace nuclear safety contracts, an annual bibliography of ANS reports issued by Sandia and a weekly "ANSIC Newsletter," which lists new acquisitions.

ANSIC's audio-visual service includes a library of more than 6800 photographs, slides and viewgraphs.

The Center uses other facilities and services to the maximum practicable extent to avoid duplication of effort. Close cooperation and coordination are maintained with Sandia's Technical Library.

ANSIC is part of the Safety Analysis Division 9319 under J. D. Appel. It is administered by R. G. Illing. The Center is staffed by Mrs. E. W. Brinegar and Mrs. N. I. Tyler. E. R. Burke maintains the visual-aids library.

P. D. Thacher (5143), "Electrocaloric Effects in Some Ferroelectric and Antiferroelectric Pb (Zr,Ti)O₃ Compounds," March issue, JOURNAL OF APPLIED PHYSICS.

P. J. Roach (9325) and C. F. Knapp, University of Notre Dame, "A Combined Visual and Hot Wire Anemometer Investigation of Boundary Layer Transition," January issue, AIAA JOURNAL.

Take Note

An exhibit of photographs by Tom Zudick, supervisor of Still Photographic Services Section 3465-1, will be on display at Jonson Gallery, University of New Mexico, through March 8. The exhibit is called "Artists of New Mexico" and presents photographs of 40 artists in their working environments. Some of the photos, in both color and black and white, use an experimental multiple exposure technique.

M. A. McCutchan (3112) has been re-elected chairman of the New Mexico State Advisory Council for Vocational Education. He was one of the original members when the council was created in 1962 and has served as the group's chairman for several years.

Mr. McCutchan's involvement in training and education activities also includes chairmanship of the State Manpower Advisory Committee and the Cooperative Area Manpower Planning System. The latter group was set up by the Federal government to review all manpower programs in the state, eliminate any duplication by the various agencies, and determine the state's total needs in training programs.

Dick Hodges and Joe Laval of Photographic Services Division 3465 will be judges of a print competition to be held in connection with the 9th Annual Conference of the New Mexico Industrial Photographers Association in Albuquerque March 2-3. In addition, Dick will discuss "Color Transparency Films" during the program.

The Welsh Terrier Club of Jemez will hold a sanctioned competition in conformation Sunday, Feb. 25, at 1 p.m. For further information, contact Mike O'Neal (1414), home tel. 298-2859. The show, to be held at 330 Washington SE, will be open to the public.



PLAN VIBRATION WORKSHOP — Robert I. Butler (7342), right, chairman of the shock and vibration committee of the Instrument Society of America, met recently at Sandia with representatives of MB Electronics to plan a vibration workshop in New York City in October. The workshop will be part of a national ISA symposium. The visitors are James C. Stephens, left, and Joseph A. Dudrick.

Paper Airplane Contest Will Raise Funds For Heart Association

The paper airplane, which has disrupted innumerable classrooms, is achieving respectability.

The Bernalillo County Heart Association is interested in their design and performance. As an event to raise money for the work of the agency, a paper airplane contest will be held Saturday, March 2, at Highland High School gym at 1 p.m. Prizes will be awarded in three age groups for three performance categories—flight distance, duration and aerobatics. Age groups and registration-donation fees are 18 and over, \$2; 13 to 17, \$1; 12 and under, 50 cents.

Prizes will be awarded for winners in all age groups and categories.

To enter, send your name and donation to the Bernalillo County Heart Association, Paper Airplane Contest, 142 Truman NE, Albuquerque, before Feb. 29.

Construction rules allow paper clips, scotch tape, glue, paste and any thickness of paper cut to any size and shape. Rules forbid structural metals, wood and on-board energy sources.

Final entry decision is up to the judges. G. A. Fowler (9000) is one of the judges.

Spectators at the event are welcome. Admission is a 50-cent donation for adults, 25 cents for children under 12.

SANDIA LAB NEWS



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Authors

B. L. Gregory and H. H. Sander (both 5212), "Injection Dependence of Transient Annealing in Neutron Irradiated Silicon Devices," December 1967 issue, IEEE TRANSACTIONS ON NUCLEAR SCIENCE.

C. W. Gwyn (on leave), "The Analysis of Radiation Effects in Semiconductor Junction Devices," December 1967 issue, IEEE TRANSACTIONS ON NUCLEAR SCIENCE.

SCLL LAB NEWS Staff Wins Publications Contest Award

Sandia's Livermore Laboratory won a first place honor award in the 1967 Company/Military Publications Contest, sponsored by the United Bay Area Crusade (UBAC) and the Bay Area Society of Industrial Communicators (BASIC).

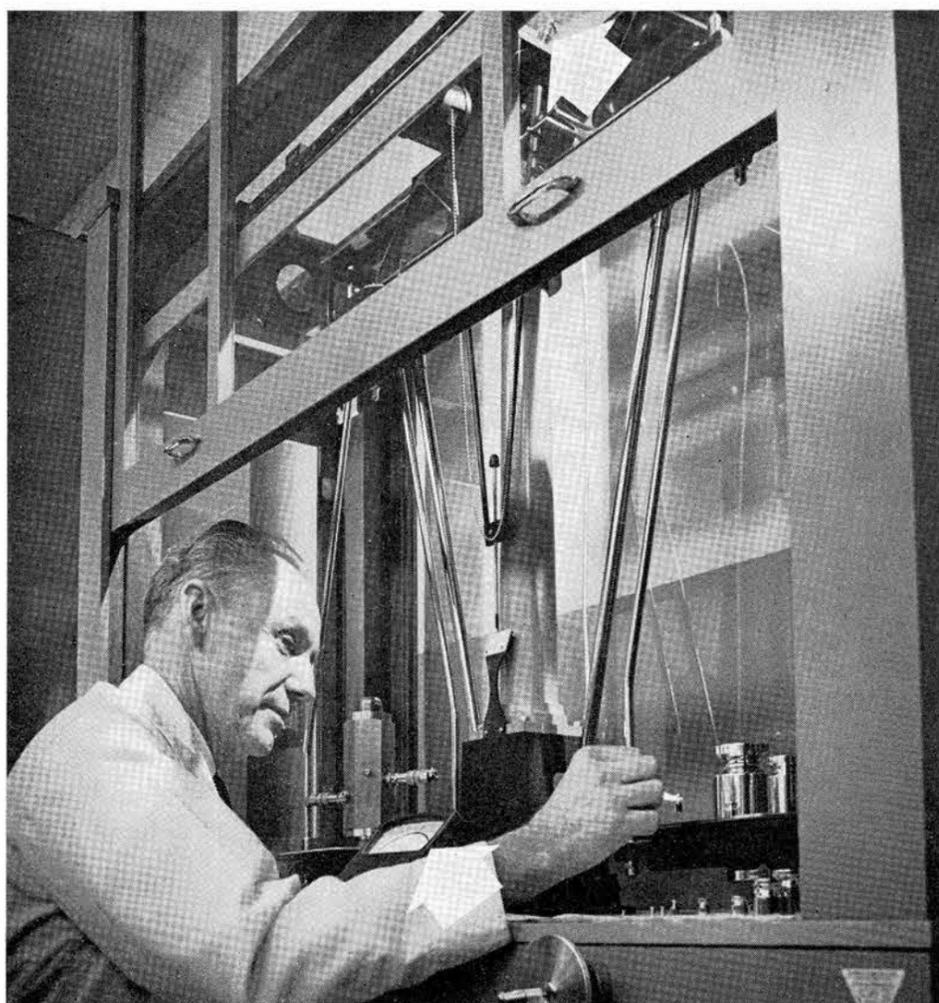
The award was made for Livermore page coverage in the LAB NEWS during last fall's UBAC campaign. The Sandia publication was judged first for the "Best News Story," one of the eight categories in the contest. Pacific Telephone and Telegraph Company won the second place merit award in this category.

Paul Speegle, chairman of the Community Relations Committee for UBAC, presented the SCLL award to William A. Jamieson, supervisor of Public Information Division 8242, at a special dinner meeting of BASIC held Jan. 24 at the Officer's Club on Treasure Island. Among those attending the awards presentation meeting were Lorena C. Schneider and Matthew J. Connors (both 8242), members of Livermore Laboratory's LAB NEWS staff.

All company or military publications in the five-county Bay Area were eligible in the contest. There were approximately 85 entries. Judging was performed by a panel of three experts in the field of magazine production, none of whom are currently working on a company or military publication. Entries were judged on the basis of writing, design, art and printing.



ACCEPTING PUBLICATIONS AWARD for Livermore Laboratory LAB NEWS staff is William A. Jamieson, (left), supervisor of Public Information Division 8242. Paul Speegle, chairman of the Community Relations Committee for the 1967 United Bay Area Crusade, presented the award at a recent dinner meeting of the Bay Area Society of Industrial Communicators.



WEIGHING A VESSEL AND ITS VALVES on analytical balance is part of process metrology technician Chuck Shinneman (8112-1) uses to determine the volume—to an accuracy of ± 2 milligrams—of the vessel. Increasing the accuracy of the balance from ± 15 milligrams to ± 2 milligrams resulted from installation of a photoelectric tilt indicator (arrows) designed jointly by Chuck and electronics technician Mike Rogers (8151).

Metrology Laboratory

Ingenuity Helps Precise Measurements

Development of a photoelectric tilt indicator by measurement technician Chuck Shinneman (8112-1) and electronics technician Mike Rogers (8151) has increased the sensitivity and accuracy of a 25-kilogram (55-pound) capacity analytical balance in Livermore's metrology laboratory.

Metrology (science of measurement) instruments are so sensitive that minor temperature variations can affect the accuracy of their readings. To minimize this, the lab's temperature and humidity are controlled ($68 \pm 0.1^\circ\text{F}$, 44% H.). Even so, technicians have found it necessary to refine some of the equipment in order to give engineers information they request.

According to Jack Wilson, supervisor of the Calibration, Standards and Repair Section 8112-1, the control of room temperature "is one example of the precision we need to solve some of the problems brought to us by engineers. Through the use of the standard physical and electrical units, whose certification is traceable to the National Bureau of Standards, we are capable of making precision measurements for project people."

"Like determining the liquid volume of an odd-shaped vessel and its valves to ± 2 milligrams or 66 millionths of an ounce," Chuck says. "Measuring the length, width and height wasn't practical. We decided to determine the volume by weighing the vessel before and after the addition of a liquid of precisely known density. The difference in weight would tell us the volume. However, the weight difference was so minute that the analytical balance would not measure it. By equipping the balance with the Sandia-designed photoelectric tilt indicator, we were able to increase its sensitivity from ± 2 milligrams to ± 0.2 milligrams; hence, its accuracy was increased from ± 15 milligrams to ± 2 milligrams. Refining the equipment in this way solved our problem."

Not all of the optical, mechanical, electronic and pneumatic equipment needs refinement to provide a measurement.

"To tell an engineer the thickness of a flake of gold he intends to use in a design to ± 5 millionths of an inch, we used the fringe count micrometer," Chuck continues. "It's an interferometer-type instrument that uses a beam of krypton 86 light, an infinitely variable contact pressure, and an elaborate optical system to measure distances between fractions of wave lengths of light. Accuracy to 0.3 of a millionths of an inch can be achieved."

In addition to special jobs, the metrology

lab certifies product gages used by inspection personnel to accept or reject fabricated parts. To obtain measurement data (reference) points for this work, metrology used the level surface of the 48-inch diameter master granite flat. In operation, the one-ton cylinder of granite is lifted from its six-sided granite base by a four-thousandth-inch cushion of air introduced at eight pounds of pressure per square inch. The air assures that the bottom of the cylinder touches no part of the base. Vibration and surface deflection (curving) are eliminated. On such a surface, heights can be measured by optical instruments to an accuracy of 10 millionths of an inch.

Why the concern about such precise measurements?

"Measuring what something is helps the engineer know what it will do," Chuck says. "In turn, he knows—with confidence—the reliability of his design."

Numerous manufacturers may make Sandia-designed components. Each component must fit with others to work smoothly together under sudden and extreme temperature and pressure changes. Error—however small—introduced at any step could compound itself into an unreliable or unworkable component.

Welcome . . . Newcomers

Jan. 25 - Feb. 12

California	
Sherry A. Bowen, Livermore	8242
Judith M. Reid, Livermore	8242
Michael A. Roudabush, Livermore	8231
William G. Wilson, Pasadena	8131
Missouri	
James E. Shelby, Jr., Rolla	8141
Oklahoma	
John E. Brown, Stillwater	8147
Steven N. Burchett, Stillwater	8147
Oregon	
Paul E. Jarvis, Eugene	8124
Tennessee	
*Gale L. Hudson, Nashville	8252
* Denotes rehire	

Congratulations

Mr. and Mrs. Rodney Aguilar (8223), a daughter, Cassandra, Jan. 26.

Mr. and Mrs. Vern Barr (8112), a daughter, Suzanne Rachelle, Dec. 16.

Mr. and Mrs. Bill Landt (8139), a daughter, Kirsten Elaine, Dec. 9.

Mr. and Mrs. Jim Mogford (8149), a daughter, Elizabeth Ann, Dec. 10.

Mr. and Mrs. Ronald Saltgaver (8114), a daughter, Dolores Christine, Dec. 27.

Take Note

Marv Glaze and Ken Bennett (both 8243) were judges for the recent Youth Leadership Contest sponsored by the Livermore-Pleasanton Elks Lodge. From brochures submitted by high school students from the Livermore-Pleasanton Valley, they selected four seniors who have demonstrated unusual extracurricular accomplishments involving qualities of leadership and citizenship.

First-place winners (two) received \$50 Savings Bonds. Two second-place winners received \$25 Savings Bonds. All will have an opportunity to compete in the state and national levels of the contest.

Livermore Lab Initiates New Security Infraction Prevention Program

A new Infraction Prevention Program at Livermore Laboratory calls for a survey of all organizations by the Security Administration and Operations Division 8236 during the next six months.

The program is a new approach to the Laboratory's continuing effort to keep the number of security infractions to a minimum. Emphasis will be placed on helping line organizations perform their security responsibilities in the least burdensome manner while, at the same time, maintaining good security practices.

Each survey will include a review of the organization's security practices to see if they are adequate and effectively meet the security needs of the organization. An inspection of the security equipment which the organization uses will also be made.

"We don't intend to move into an organization and impose a preconceived method of operation because, frankly, there is none," says Frank Moon, manager of Technical Information and Security Department 8230. "We have long recognized that what works well for one organization may not be the answer for another."

"But," he continues, "we have seen numerous security plans in operation, and from this experience we can make suggestions to assist an organization in avoiding the pitfalls that lead to infractions and other troublesome security incidents."

Jim McMinn, supervisor of Division 8236, says that his staff prefers to visit an organization before an infraction occurs rather than afterwards. "So, if through this program we can help prevent even one infraction, I feel the program will have been well worth the effort," he comments.

RLRA Travel Club Lists Schedule for '68 Tours

Sandians interested in traveling can begin now to plan for vacation trips being offered by the RLRA Recreation Association (RLRA) travel club during 1968.

A proposed travel program, which includes tours to the U.S. East Coast, the Caribbean, Hawaii, Alaska, and Canada, has been announced by the general travel chairman.

LRL or Sandia employees (Albuquerque as well as Livermore) and members of their immediate families are eligible to participate by joining the RLRA. Basic tours are sponsored jointly with the Kaiser Employees Club, Shell Development Recreational Association, Crockett Culture Club and certain segments of the California State Employees Association.

The 1968 tour program again encompasses a wide variety in terms of places, rates and dates so that employees have a well-rounded travel package from which to choose. RLRA tries to offer travel values which cannot be obtained outside employee organizations.

Prices cover air, rail and/or sea transportation, transfers, and hotel accommodations. In some cases, meals, sightseeing tours, tips and special features are also included.

This year's basic tours with approximate cost per person are:

Alaska Inland Cruise—11 days—\$595.
Via air and ship; three departure dates: May 30, Aug. 26 and Sept. 3.
Canadian Rockies and U.S. East Coast—23 days—\$795.
Air to Vancouver, rail to Montreal, and return by air from Washington, D.C.; Oct. 5.
Caribbean—15 Days—\$675
Via air; visits Miami, San Juan, Kingston, Ocho Rios, Montego Bay and New Orleans; June 15.
Cradles of American History—15 days—\$535.
Air to Boston and return from Washington; Sept. 28.
East Coast—8 days—\$299 (not exclusive organizational trip).
Via air; budget tour to New York City and Washington; departure every Saturday commencing in May.
East Coast Discovery—13 days—\$479 (not exclusive organizational trip).
Via air; expansion of tour above, plus Hudson River and Colonial Virginia excursions.
Hawaii (air/sea)—15-17 days—\$499
Air to Honolulu and return by ship; five departures: April 17, May 22, Sept. 7, Oct. 10 and Nov. 6. Outer island optional tour—\$185 extra—leave Oahu via air fourth day; two days each in Maui, Hawaii, and Kauai.
Hawaii (Honolulu)—8 days—\$259.
Via air to Honolulu; six departures: May 4, June 15, July 27, Sept. 7, Oct. 12 and Nov. 9.

An additional trip to Mexico and a summer tour to Yellowstone National Park and the Grand Teton area are expected to be available shortly.

Further information concerning the travel program may be obtained from Jack Hum (LRL-Livermore), ext. 7109; or Bill Lathrop (LRL-Berkeley), ext. 5987.

Sympathy

To Carl Bachmann (8168) for the death of his mother in Park Falls, Wisc., Jan. 28.

Sandians Back After Recovery Action on Ice Cap

Seeing the sun on the horizon for the first time in two weeks was a sight Roy P. Lambert (1544) appreciated most during his flight home from Thule, Greenland, a few weeks ago. Jack W. Hickman (1544) feels he was more fortunate because periods of twilight were getting longer during his stay in the area about 800 miles south of the North Pole.

Both Sandians were there as members of an AEC action response team that assisted in search and recovery operations on the ice cap where a B-52 bomber crashed with nuclear weapons aboard. Roy was there from Jan. 22 to Feb. 6. He was replaced by Jack who returned to Sandia last week.

Arctic darkness shrouded the area, except for a faint glow on the horizon for a couple of hours each day, when Roy arrived at Thule. However, the "days" are getting about 15 minutes longer each 24

hours. At the end of April, the sun will never set.

Other environmental conditions were also extreme. Wind velocities sometimes exceeded 115 mph with temperatures in the 25 to 35° below zero range. On at least one occasion, the chill factor (combination of wind, temperature, etc.) plummeted the reading to 70° below zero. Fine snow particles are blown horizontally, reducing visibility to absolute zero at times.

A booklet on winter weather procedures issued to all personnel in the Thule Air Base area warns that the seriousness of Arctic storms cannot be over-emphasized. "Protecting lives and property during these storms becomes a problem of major proportions and is the responsibility of all personnel assigned to this base," it states.

To implement procedures for the protection of life and property, storm intensities are divided into four phase condition

classifications. Each phase condition, a combination of wind velocity and visibility, requires all personnel to follow specific procedures outlined in a base regulation. A phase alert, for example, is the initial warning of an approaching storm and personnel are to prepare for more severe conditions. It and other phase conditions are announced over the local radio and television station and a public address system.

From phase one on, the buddy system goes into effect—two or more individuals or vehicles must travel together from one location to another. Phase three conditions, the most serious threat, exist when the wind exceeds 59 mph and visibility is one-quarter mile or less. Absolutely no pedestrian travel is permitted. All personnel, except those performing essential duty, are confined to quarters. Everyone must be accounted for during this alert. Rations are distributed to barracks personnel upon notification by the command post.

Emergency shelters, painted yellow, are located less than a half mile apart along all major off-base roads in the area. Each is stocked with rations, a shovel, candles, telephone, stove, cots and blankets.

Phase conditions can change rather suddenly. Roy recalls that the Sunday after his arrival he awoke to phase one conditions. At 11:30 a.m., the storm intensity had increased to phase two conditions. Three hours later a phase three alert was in effect with winds from 70 to 80 mph, visibility zero and a chill factor of 70° below zero. About 6 p.m. it dropped back to phase one conditions.

"The only time I got cold was after several of us had pulled a heavy sled around the site. We all perspired and the moisture ruined the insulation value of our clothing," Roy comments.

Standard clothing included thermal underwear, "iron pants" (filled with an insulating material), sweater, lightweight flight suit and a heavy parka, which zipped up beyond the mouth to leave a small port for viewing. Feet were usually protected by heavy wool socks, oversize cotton socks, a wool liner and mukluks. Two pairs of gloves and a pair of heavy mittens generally kept the hands warm.

During the initial phases of the recovery operations, the teams traveled the seven and a half miles between Thule Air Base and the accident site on dog sleds, each of which was pulled by 10 dogs under the control of an Eskimo driver. Roy confesses that he flinched each time the driver's long whip sang out as it passed his ear to crack near the feet of the dogs.

"Sleds were the best method of transportation at the time," Roy says. "Helicopters trying to land near the site would have to pull up again because of the 'white out'—zero visibility caused by the whirling blades kicking up snow. Because of this problem, a heliopad was a top priority project. Helicopters brought in bundles of plywood which were dropped and spread on the ice. The plywood pad eliminated the white out problem."

Six plywood, box-like shelters were then constructed and lashed to the ice with cables. Looking at the temporary shelters, an Eskimo made a sweeping motion with two hands. Members of the recovery teams picked up the clue and Eskimos were asked to build 14 igloos which would serve as emergency shelters should the plywood boxes go with the wind.

"It was an around-the-clock operation, seven days a week," Roy says. "During the first week, each of us usually worked about 16 hours a day and caught up on our rest during the Arctic storms."

Other conditions were generally excellent. Roy and Jack praised the steak and seafood dinners at the officers' club. Usually there was a combo to provide live entertainment.

Both of them are happy to be home where the storms are relatively mild. They emphasize that their experiences are not unique. Many others from the Albuquerque area shared the same experiences as participants in the operation.



INSIDE CABLE CAR, from left, Lynn Ernst, Gene Aronson and Roger Chaffin operate terrain measurement equipment. In background are the Sandia mountains. The Sandia Peak Tramway is 2.7 miles long and ascends 3878 feet from the base terminal to the 10,378-foot summit of Sandia Crest.

Sunrise Over the Sandias

Aerial Tram Is Used in Radar Project

Twice on recent cold mornings three Sandians have had a spectacular view of the sunrise over the Sandia mountains as they watched suspended 1300 feet above the ground in a cable car of the Sandia Peak Tramway. They were more interested, however, in the graph emerging from a Viscorder installed with other Sandia equipment inside the car.

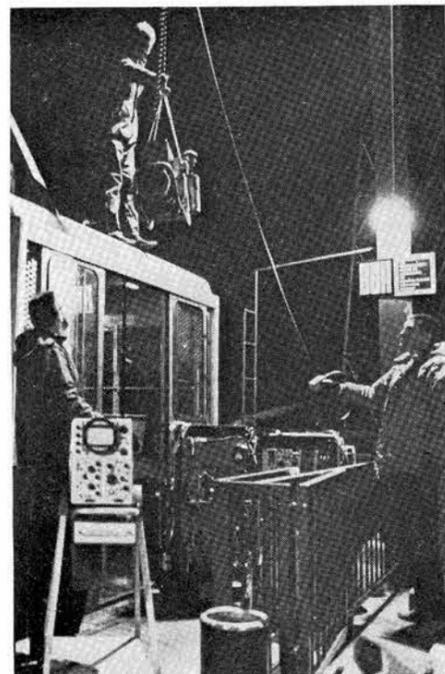
The Sandians—Roger Chaffin, Gene Aronson and Lynn Ernst—were participating in a special study to determine characteristics of radio frequency return signals from uneven terrain, conducted by Advanced Radar Development Division 1423 under C. R. Blaine.

Eight more "expeditions" are planned in coming weeks. By special arrangement with the Tramway company, the cable car is used from 6 to 9 a.m. to avoid inconvenience to the public.

The coach provides a stable platform for the terrain measurement equipment. In the past, helicopters have been used for similar studies.

The study is part of Sandia's continuing program in determining terrain return characteristics and is being made at an RF telemetry frequency assigned to Sandia for experimental use.

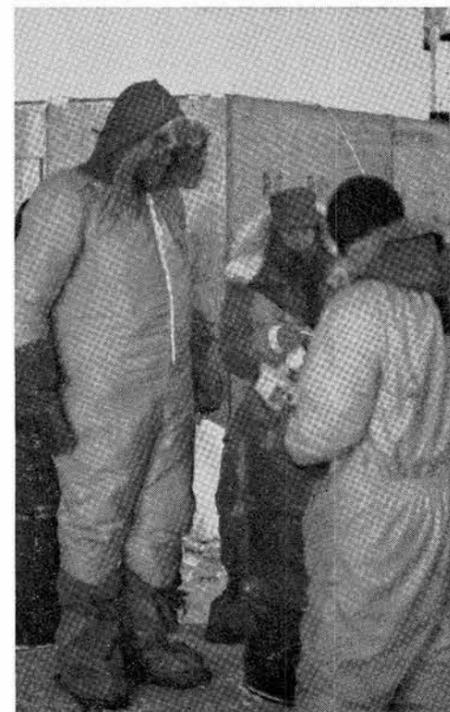
For the studies, a small generator is mounted atop one of the coaches. Two racks of electronics gear are carried inside the coach, and a movable antenna is suspended in front. The movable mast enables the radar to "look" directly underneath the coach, sideways, or forward as the car moves about the rugged canyon to Sandia crest. Strength of return signals varies with surface characteristics.



LOADING EQUIPMENT on cable car before sunrise, Sandians prepare for terrain measurement project. The car was fitted with a movable antenna, racks of electronic equipment and a portable generator, shown here being hoisted to the top of the car.



ESKIMOS HELP OUT by building 14 igloos which can be used as temporary shelters.



DISCUSSING OPERATIONS on the ice cap of North Star Bay are some members of recovery teams. Roy Lambert (1544) is in the center of the picture facing the camera. Plywood temporary shelters are in the background.



PREPARING FOR TRIP to the accident site, Roy P. Lambert (1544) sits on a sled as the driver approaches. The dog team is in the left background. The Eskimo driver is wearing a parka of reindeer hide, sealskin mukluks and polar bear fur pants. Northwest Greenland is noted as a hunting site for polar bears and walrus.



PLANNING DAILY SEARCH PROGRAM in a command post at Thule Air Base are seated (l to r) Maj. W. C. Layne, Directorate of Nuclear Safety, KAFB; and Lt. Col. M. F. Muller, DASA/NET. Standing (l to r) are Robert Hilty, AEC/AEO; unidentified team member; Roy P. Lambert (1544); and Capt. J. V. Brown, DASA/NET.

Service Awards

20 Years



R. G. Carmichael
4517



P. J. Cook
2523



R. W. Durand
2522



A. W. Fite
1344



Dorothy Holloman
3126



W. W. Ives
3463



C. J. McGarr
4600

15 Years



R. P. Astbury
4252



M. H. Brock
7132



Erma Campbell
2232



F. E. Forsythe
9323



P. A. Liguori
2212



C. M. Littleton
2112



K. E. Loughlin
8125



O. F. Padilla
2555



L. F. Parman
3420



B. D. Pontsler
8154



C. R. Sandin
4545



E. Lucille Stewart
3200

10 Years

Feb. 23 - Mar. 7

J. M. Willis 1422, A. T. Purington 7125, Doris R. Davis 8160, Consuelo L. Lopez 4623, W. J. Steger 1542, Claire J. Haut 2112, R. A. Martin 2225.

C. R. Andes 3131, A. B. Banks 3352, C. C. Barsiac 3428, R. N. Tomlinson 7334, Clara H. Hewitt 8117, R. E. Gott 8142, Evelyn A. Foote 8212, Marion L. Sliwinski 2550, D. H. Denton, Jr. 9217, and Marilee M. LeTourneau 4135.

Speakers

W. L. Jacklin (7335), "Data Acquisition and Analysis - A Systems Approach," IMOG Sub-Group on Environmental Testing, Feb. 7-8, Aiken, S. Car.

K. G. Bell (7343), "Plate Impact Tests" and "A Firing Chamber for Use Adjacent to a Building Susceptible to Blast Damage," IMOG Sub-Group on Environmental Testing, Feb. 7-8, Aiken, S. Car.

B. M. Butcher (1141), "Dynamic Compaction of Porous Iron," University of Utah, Feb. 1, Salt Lake City.

R. D. Driver (5262), "A Visit to the Soviet Union," Sunport Optimist Club, Feb. 7.

Albert Goodman (5637), "Some Things That the Future May Bring," Northwest Albuquerque Lions Club, Feb. 13.

H. B. Young (2114), "The Suez Canal," Sunport Optimist Club, Feb. 14.

C. S. Johnson (7252), "The Amazing Mystery of the UFO," Sunport Optimist Club, Feb. 21, and "ESP—Past and Present," Pi Beta Phi alumni group, Feb. 29.

W. H. Kingsley (3310), "Health Physics," Sunrise Optimist Club, Feb. 27.

H. H. Patterson (9230), "Mexico and the Sea of Cortez," Sunport Optimist Club, Feb. 28.

L. J. Vortman (7111) and G. C. Love of Limbaugh Engineers, Inc., "Photogrammetric Techniques Associated with Model Studies of Earth-Moving Explosives," Surveying and Mapping Session, ASCE Transportation Conference, Feb. 20, San Diego.

L. S. Nelson (5234), "Ultra-High Temperature Chemistry; or, How We Licked the Containment Problem," American Society of Certified Engineering Technicians, Feb. 5, Albuquerque; with H. S. Levine (5234), "Combustion of Zirconium Droplets in Oxygen/Rare Gas Mixtures," Stanford University Chemical Engineering Department seminar, Feb. 8, Stanford, Calif.

G. L. Cano (5235), "Atomic Interactions Experiments in the KeV-Energy Region," New Mexico State University colloquium, Feb. 15, Las Cruces.

A. W. Snyder (5220), "Design Concepts of Pulse Neutron and Gamma-Ray Sources," Seminars at Ohio State University, Pennsylvania State University and the University of Michigan, Feb. 9-16.

Welcome . . . Newcomers

Jan. 22 - Feb. 16

Albuquerque	
*E. Gil Cordova	4382
Mary Helen Gallegos	3126
Harold W. Gough	4632
Donald L. Marchi	2211
Evelyn J. Renker	3232
Alfonso R. Sanfisevan	4574
Robert S. Silva, Jr.	4632
Kansas	
John P. Long, Lebanon	9427
New Mexico	
James O. Harrison, Las Cruces	5633
Michael B. Murphy, University Park	2151
Texas	
W. Franklin Mason, Commerce	9414

* Denotes rehire

Events Calendar

Feb. 22, 24, 25—Golden Gloves Boxing Tournament, Civic Auditorium.

Feb. 24—WAC basketball, UNM vs. Arizona State, University Arena.

Feb. 25—South Point (Sandias). N. M. Mountain Club, leader Will Snyder, tel. 299-4172.

Feb. 29-March 1—Broadway musical "The Roar of the Greasepaint - The Smell of the Crowd," UNM Concert Hall.

March 2—Captain's Gala variety show and dance (benefit for Pilot Club), 8 p.m., Civic Auditorium. For reservations, tel. 243-6749.

March 2—Penasco Springs. N. M. Mountain Club, leader Norm Bullard, tel. 268-1812.

Thru March 31—"Paintings of N. M. Pueblo Indians," Museum of New Mexico, Fine Arts Bldg., Santa Fe.

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FEBRUARY 23, 1968

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

CARS & TRUCKS

- '66 CORVETTE, 300 hp, positraction, 4-spd., low mileage. Ives, 282-3851.
- '66 FORD F-250 truck, 352 V8, 4 spd.; '66 Riviera 10 1/2' camper, fully equipped. Bumgardner, 268-9695.
- '61 GMC 1-ton pickup, V6, 4-spd. trans., 9' box, \$565 or consider trade. Workman, 298-8312.
- '60 FORD, 4-dr., PS, AT, radio, one owner, needs seat covers & floor mats, \$300. McEwen, 268-1440.
- '58 MORRIS MINOR "1000", \$150. Huddle, 265-6248.
- '64 VOLKSWAGEN SEDAN, green, new nylon seat covers, utility shelf, radio. Cox, 298-4885.
- '60 CHEVY Biscayne standard, R&H, 6-cyl., 2-dr., \$365 cash. Chavez, 255-6155.
- '62 AMBASSADOR station wagon, 45,000 miles, PS, PB, Hayes, 299-5832.

'58 FORD 3/4-ton 4x4 pickup, rebuilt V8 engine, 3000 miles on engine & tires. Kersher, 299-6513.

'67 SHELBY, 427 cu. in. Ford engine, less than 7000 miles, tuned headers, 2-4 bbls. w/hi-viser manifold, more. Reif, 265-7264.

'60 RENAULT DAUPHINE, R&H, \$225. Harrington, 282-3188.

MISCELLANEOUS

OVEN, electric, Chambers automatic, window door, copper-tone, \$40. Rainhart, 299-2887.

COMPLETE household furniture. Sanchez, 344-5031.

GARAGE SALE: approx. 60 odd items; silver coffee service, \$10; a \$100 solid leather case, \$15; auto. coffee perc., \$3; most items \$1-\$3. Browning, 299-6384.

BOAT, 16' Fibreglass, 80hp Mercury, tilt trailer, complete ski equipment, 18-gal. capacity, sleeper seats, will consider part trade. Schowers, 255-9279.

WOLLENSAK 4-track stereo tape recorder reproducer. Hanson, 298-0637.

BABY CRIB w/mattress, \$15; Canon camera, 35mm, \$45. Bentz, 299-3448.

SMALL TABLE SAW, \$15; 1/2hp Craftsman electric motor, \$30; both for \$40. Huff, 256-9426.

WINDOW, steel casement, 2'x3', one side opens, w/screen, \$5. Moore, 299-3758.

REGISTERED male Beagle puppy, excellent field and show bloodlines. Buckner, 296-1251.

DANISH modern dbl. bed w/bookcase headboard, 2 dressers, desk to match; French provincial harvest dining table, 4 chairs. Keyser, 256-1285.

ORGAN, Baldwin Orga-Sonic, used very little. Buchanan, 242-5066.

TWO-BURNER electric hot plate, \$7. Sommerer, 299-9271.

DOG PEN, 8'x4'x4' w/plywood floor, \$20. Tassia, 299-6096.

SOLID OAK chest of drawers, \$35. Foster, 256-1285.

SIMMONS Backguard mattress, \$20; Kirby vacuum cleaner w/attachments & floor polisher. Brown, 255-0566.

BED, single, w/mattress set, \$10; floor lamp, \$5; 2 table lamps, \$3 ea. Miller, 268-5992.

KROEHLER LR sofa & chair, gray/beige; DR table w/6 padded chairs; china cabinet, light wood, all \$195. Banos, 256-6613.

SMALL 3 cu. ft. refrigerator, \$30. Oberst, 299-1224.

8-WEEK-OLD AKC standard poodles, male or female, cream or white. Naughton, 299-6052 after 5.

BABY STROLLER, \$10; Cosco nylon net playpen, \$10; infant seat, \$2; metal frames w/rollers for twin beds, \$4/ea.; traveler's 3-suit clothes bag, \$2. Champion, 299-5821.

500-GAL. butane tank. Bouton, 898-3562.

WEDDING GOWN, veil, crinoline slip, needs to be dry cleaned, \$35 for all. Pacini, 299-9280.

CONSOLE TV, 21" Motorola, \$75. Chavez, 256-1087.

BUNK BEDS w/bookcase headboards. Dow, 344-8619 after 5:30.

ACRILON CARPET, royal blue plush pile, 13'x17', \$110.50; double size bed, w/walnut headboard, \$65. Chandler, 296-3323.

SILVERTONE console TV, 24", walnut finish. Pass, 299-0474.

200 AMP working pole complete w/meter loop, breakers, outlets. Stomach, P.O. Box 535, Los Lunas

METALATHE, drill press, belt & disc, sander, table saw, jigsaw, jointer, band saw, radial saw, grinder, arc welder, chain saw, etc., Feb. 24 \$25 only. Pliner, 3807 La Hacienda NE.

WURLITZER PIANO, walnut finish, used 1 yr. Duggin, 268-8507.

SX 62 Hallicrafters general coverage (including FM) receiver, \$175; Rolleiflex MX, Rolleikin WA & tele attachments, cases & gadget bag, \$120. Ross, 264-4256.

KITCHEN TABLE w/formica woodgrain top, round w/10" leaf & 2 chairs; 3-piece bedroom set, bookcase bed, dbl. dresser w/lge. mirror, nightstand, frosted mahogany grain. Smith, 299-1264.

BEAGLE PUPPIES, AKC reg. Hansen, 898-3173.

STUDIO COUCH; outdoor storage shed; utility cabinet; ice skates; stadium seats; child's car seat; lge. garden jardiniere; coffee table & end table; bowling ball & bag. Quillen, 256-6738.

SEWING MACHINE, portable; air cooler, portable; kitchen table and chairs; iron, dressmaker form; birdcage; meat grinder. Constant, 296-1431.

REAL ESTATE

CORRALES, lg. 3-bdr. home w/separate apt., adobe walled, paved patios, corrals, 1 acre, trades considered. Swiss, 898-2083.

4-BDR., 3 bath, den, DR, util. rm., dbl. garage, built-ins, disposal, dishwasher, brick Trend, fully carpeted over hw floors. Minor, 8512 Las Camas NE. 299-2267.

MOSSMAN 3-bdr., fp, hwf, carpeting, AC, lg. lot w/sprinklers, 5/4% loan, 3612 Cardenas NE. Cole, 299-9468.

MOUNTAIN HOME, 4 rooms, scenic view, 2 1/5 acres overlooking highway 66, \$9000. Eastman, 282-3835.

5-ROOM modern cabin, fully furnished, in Jemez Mountains. Clyde, 255-6805.

BOSQUE PARK, 4-bdr., dbl. garage, fp, 1 acre, fenced, coral, \$23,500 or best offer, \$158/mo. Downs, 296-4710 or 265-0217.

AVAILABLE MAY 1, Roberson 3-bdr., den, fp, dbl. garage, NE, \$21,000 new FHA or assume 5/4% loan. Weber, 298-1564.

MOUNTAIN ACREAGE, 12 miles from Wyoming & Central, reasonable terms. Hoagland, 282-3825.

WANTED

BOY'S aluminum pack frame & frame pack. Shepherd, 299-9066.

Division 2463 to Conduct Seventh VE Workshop For AEC Personnel

A Value Engineering Workshop will be conducted Feb. 26 - March 1 for personnel of the AEC's Oak Ridge Operations Office by Value Engineering and Cost Improvement Division 2563. E. L. Devor, division supervisor, and Jack Hueter will conduct the workshop.

The Oak Ridge presentation will mark the seventh Value Engineering Workshop conducted by Division 2563 for AEC operations personnel and other AEC contractors.

The activity stemmed from a VE workshop conducted at Sandia for AEC personnel in September 1966. Sandia pioneered the Value Engineering system for reducing costs without sacrifice of quality, delivery schedules or safety within the AEC complex.

As a result of the first workshop, the Sandia VE team was invited to conduct sessions for Bendix-Kansas City, AEC Richland Operations Office, Holmes and Narver, Inc.-Hololulu; AEC Idaho Falls Operations Office, Dow Chemical Company-Rocky Flats and the AEC Savannah River Operations Office. These workshops were presented during 1966-67. A total of 313 persons attended the sessions.

Since the original presentations by the Sandia team, some of the organizations have initiated value engineering activities within their agencies patterned after the Sandia program.

Sandia Seeks Applicants For Apprentice Programs

Candidates are now being interviewed for two Sandia Laboratory apprenticeship programs anticipated to start next fall. Employees who are interested in either the machinist or electronics four-year programs should contact Dick Chapman of Personnel Division 3232, tel. 264-5888. Applications should be filed by March 15.

The programs provide about 8000 hours of on-the-job and classroom training leading to journeyman status for successful participants.

Applicants must be high school graduates or equivalent who have had a year of algebra and geometry in their background. They must be between the ages of 18 and 30, except for those who have served in the Armed Forces. Their eligibility is extended by the length of their military service, up to five years.

On-the-job training in the shops will be given in-hours under qualified instructors. Apprentices will be rotated within the Development Shops 4200 organization for various types of experience with operations and processes required for their training.

Shop theory classes will be conducted in-hours in the classroom or laboratory.

Related academic subjects must be completed in an out-of-hours class enrollment. These courses include subjects such as mathematics, mechanical drawing, physics, metallurgy and plastics.

2-BDR., unfurnished rental (apt. or house) for 2 adults in NE or SE Heights, fp, AC & built-in electric kitchen a necessity. Contact H. A. Krieger, Org. 1514 before March 1.

SHOP MANUAL for Dodge or Plymouth, 1950-1955; 14" wheel for Dodge or Plymouth. Stuart, 299-9190.

WILL PAY \$25 for Go-Cart in good running condition, looks not important. Braffett, 255-1381.

BERLITZ, GERMAN self-teaching record course in good condition. Luxford, 243-1693 after 6.

RECENT edition of World Book Encyclopedia, service manual for 4-wd. Jeep station wagon. Schwoebel, 268-6440.

SET OF ENCYCLOPEDIA. Fulcher, 299-8888.

GOOD USED SADDLE. McFarland, 282-3710.

USED FARM TRACTOR, prefer small Ferguson in repairable condition. Hoagland, 282-3825.

FOR RENT

UNFURNISHED 3-bdr., AC, central heat, carpet, wall, NE location, 1 or 2 children, \$100. Martinez, 344-6045 evenings.

APARTMENT, 2-bdr., unfurn., 2625 Dallas NE, \$110, very clean. Robertson, 296-4613.

MODERN furnished Sandia Mt. cottage, insulated, suitable for 1 or 2, water & butane paid, carpet, 25 min. from Sandia, available about March 1, \$45/mo. McMillin, 282-3226.

LOST AND FOUND

LOST—Keys on silver chain, airline ticket, gold dangle-type carrying man's turquoise w/silver wedding band, left-hand black kid glove, bifocal reading glasses, black rimmed reading glasses, small round colored rhinestone earrings, Sear's Craftsman brown pocketknife, red w/gold trim square earrings, lady's tan glove, keys on gadget key w/space for name. LOST AND FOUND, tel. 264-2757, Bldg. 610.

FOUND—White gold wedding band, S.C. 15-yr. bracelet, right hand lady's black leather glove, lady's gray cloth glove, tan leather glove. LOST AND FOUND, tel. 264-2757, Bldg. 610.



SEAFOOD, the kind New Mexicans like, will be the featured special at tonight's social hour at the Coronado Club. Jennifer Rex (4211), a western-type mermaid, recommends the fried shrimp. The porpoise, courtesy of Marineland of Florida, is too friendly to be edible.

Favorite Buffet Menus

Three Swinging Social Hours Scheduled

Three swinging social hours highlight the Coronado Club calendar during the next three weeks. The Club's staff is going all out to prepare the TGIF crowd's favorite buffets.

Tonight, it's the seafood buffet. The spread includes French fried shrimp, seafood mornay, fried scallops, a selection of salads, and the rest of the goodies to make a memorable meal.

On the bandstand, the Rhythm Masters will make the happy music. Pat Reich

and piano will entertain in the main lounge.

On Friday, March 1, the Club's popular chuckwagon roast beef will dominate the buffet table. Tommy Kelly and combo will play for dancing. Pat Reich will entertain in the main lounge.

For the following Friday frolic, March 8, the Club staff will wheel out the Mexican food buffet. The Aristocrats will be on the bandstand.

* * *

Style Show Luncheon

Next Monday, Feb. 26, the Coronado Club will present a collection of Spring fashions for the family during the lunch hour. Norma Manson of Sears will be commentator. Models will include Hazlet Edmonds (3421). The Club's manager reports that shakedown of the new heating equipment in the serving area has been accomplished and from now on the food will be served steaming hot. No more problems in this area.

* * *

Bridge

Coronado Duplicate Bridge Club meets Mondays at 7 p.m. Recently elected officers of the group include Betty Mottern, president; Hershel Martin (ret. AEC), vice president; Lucille Stewart (3200), secretary; Hugh Kimbrough (3242), treasurer; John Nakayama (1522), statistician; and Jo Hickerson, reservations. Call Mrs. Hickerson, 268-7605, for reservations or information about the group.

The Thursday Afternoon Bridge Club meets on the first and third Thursday of each month at 1:15 p.m. at the Coronado Club. Several retired men have joined the group and others are invited, according to Beth Fjelseth. Call her, tel, 298-2456, for reservations or information about the group.

Sympathy

To Amy Kahoiwai (2234) for the death of her father in Hawaii, Jan. 30.

To H. M. Roberson (4513) for the death of his mother in Albuquerque recently.

To Sadie S. Sedillo (4574-4) for the death of her brother, Feb. 7.

To Janice E. Robertson (1520) for the death of her son, Feb. 12.

Supervisory Appointments

ORVAL E. JONES to manager of Applied Physics Research Department 5130, effective March 1.

He has been supervisor of Shock Wave Physics Research Division 5133 since September 1964. He joined Sandia in 1961 and worked three years in the research organization studying response of solids to shock loading conditions prior to his promotion.

One of his assignments in recent years was organization of the content of the Unified Science and Engineering (USE) course presented to more than 230 members of Sandia management and staff.

Before joining Sandia, he was attending California Institute of Technology under a National Science Foundation fellowship. He has a BS degree in mechanical engineering from Colorado State University, and MS and PhD degrees from California Institute of Technology.

He is a member of the American Society of Mechanical Engineers, Acoustic Society of America, Pi Kappa Phi and Sigma Xi honorary societies.



BENJAMIN E. BADER to supervisor of the newly-created Criteria and Heat Transfer Division 1543, effective Feb. 16.

After joining Sandia in July 1955, Ben worked with a weapons development group until November 1956 when he was granted a military leave of absence. He served with the Air Force for three years and was assigned to Kirtland AFB as a pilot for the last year and a half. He was a first lieutenant when discharged.

Upon his return to the Laboratory, he was assigned to a heat transfer organization. In July 1957, he transferred to advanced systems development where he worked on advanced weapons systems.

Ben received his BS degree in mechanical engineering from the University of New Mexico in June 1964.

He is a member of Tau Beta Pi.



J. D. Shreve Attends Meeting with Danish Officials in Denmark



James D. Shreve, supervisor of Aerospace Sciences Division 5234, was a member of a nine-man U. S. delegation that met with members of the Danish Atomic Energy Commission and government officials in Copenhagen last week to discuss the crash of a B-52 bomber near Thule, Greenland, on Jan. 21. The plane was carrying nuclear weapons.

The Hon. Carl Walske, chairman of the Military Liaison Committee and Assistant Secretary of Defense for Atomic Energy, headed the group. Members included experts on oceanography, fish life, radiological hazards, nuclear weapons and ecology. Others were representatives of the Air Force and the Office of the Secretary of Defense.

In addition to participating in the general meetings to discuss the crash and recovery operations, Mr. Shreve also met with Otto Kofod-Hansen and N. E. Busch of the Technical University of Denmark. They discussed the estimated dispersal of radio-active contamination in and around the accident site based on meteorological conditions in Thule during and after the accident.

Before meeting with the Danish officials, the U. S. delegation met at the U. S. Embassy in Copenhagen.

Regional EEOC Officials Briefed on Sandia's Role And Personnel Requirements

Equal Employment Opportunity Commission officials T. E. Robles, regional director, and Walden Silva, deputy regional director, visited the Laboratory this week for presentations on Sandia's mission and a tour of selected facilities.

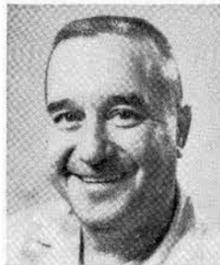
The presentations briefly described how Sandia's mission in the defense and security of the country depends to a large extent on employing highly qualified scientists, engineers and support personnel. To enhance these national interests, Sandia has a policy of recognizing qualifications, ability and merit of all employees and applicants for employment and provides them with equal employment opportunities without regard to their race, color, religion, sex or national origin.

The EEOC officials met with President John A. Hornbeck who described Sandia's mission and its relation to the AEC. R. B. Powell (3000) then explained Sandia's organization structure and personnel requirements.

Presentations on scientific and engineering projects included weapon systems and components by W. J. Howard (1000) and non-weapon aerospace activities by G. A. Fowler (9000).

Following a luncheon at the Coronado Club with Sandia Small Staff members and AEC representatives, Messrs. Robles and Silva toured selected facilities in Technical Area I.

Deaths



I. R. Sanchez

Ishmael R. Sanchez, a layout operator in Specialties Division A 4221, died Feb. 11. He was 52.

He had worked at Sandia Laboratory since November 1950.

Survivors include his widow and six children.



F. L. Rickert

Florian L. Rickert, a retired Sandia Laboratory employee, died Feb. 7 in Phoenix after an illness. He was 72.

He retired in October 1960 after working as a tool and gage inspector at Sandia for six years.

Survivors include his widow, two daughters and three grandchildren.



Elias Meier

Elias Meier, a retired employee, died Feb. 8 in Albuquerque after a long illness. He was 74.

He had worked as a painter at Sandia from January 1951 until he retired in April 1958.

He is survived by his widow.



O. B. Caster

Odes B. Caster, a retired employee, died Feb. 8 in Belen. He had been a rancher in Mountainair since retiring from Sandia in May 1961. He worked as a janitor here from March 1953 until his retirement.

Survivors include his widow, three sons, four daughters and 17 grandchildren.

Sandia Safety Signals

Glass Doors

The Federal Housing Administration now requires safety glass or a divider rail for doors or glass walls in houses financed through FHA. The American Medical Association estimates that 40,000 persons yearly try to walk through glass doors and glass walls, and that about 6000 of these require hospitalization. Ninety percent of the injuries involved doors and panels which had no markings.

Wet Brakes

If you have to drive through water or a heavy rainstorm, occasionally try your brakes to see if they work. If the car pulls toward one side (or doesn't brake at all), shift into low or second gear and proceed slowly with your left foot on the brake as you drive. The heat created by the friction should dry out the lining. If you find that this procedure does not help, stop at your nearest service station and have them check the brakes.