

Sandia Corporation LAB NEWS

ALBUQUERQUE, N. MEX. • LIVERMORE, CALIF.

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APRIL 28, 1961

1960 Record Brings to Sandia Lab Another Nat'l Safety Council Award

Sandia Laboratory has received its eleventh National Safety Council Award of Honor "For Outstanding Safety Performance." The plaque is in recognition of Sandia Lab's 1960 safety accomplishments.

In addition to these National Safety Council Awards and the all-time AEC Safety Record Trophy, Sandia has accumulated other honors for safety performance. These are three AEC bronze-plaque Awards of Honor and two AEC Awards of Merit.

A. R. Luedecke, General Manager of the Atomic Energy Commission, commented on the AEC Contractor Safety Record in a letter to K. F. Hertford, Manager of Albuquerque Operations, AEC. He wrote:

"Our efforts to reduce injury to workers and property damage in AEC plants were so satisfactory in 1960 as to deserve specific commendation. The number of workers injured during the calendar year was lower than in any year in AEC's history. Eight contractors received the Award of Honor for having achieved over three million man hours without any injury to their employees. One of these—the Sandia Corporation plant at Albuquerque, New Mexico—achieved a total of 14,936,000 man hours for the best record in our history."

Two Unions Notify Sandia Corp. of Desire For Replacing Contracts

The Metal Trades Council and Local 251 of the Office Employees International Union have notified Sandia Corporation of their desire to negotiate replacing agreements.

The current agreements expire July 6 of this year. The first bargaining meeting with the Metal Trades Council and the OEIU has been set for May 9.



NEW SAFETY PLAQUE for Sandia Laboratory's 1960 record went on display last week alongside other awards earned in the past. Susan Gonzales (4362-5) stands in front of the impressive display which lines the front hallway entrance to Building 802.

C. F. Quate Urges Strengthening of Schools—Also of Educational Concepts

"Our National Laboratories — What Are the Future Needs?" was the title of a talk presented by C. F. Quate, Vice President, Research, before the Parent-Faculty Club of Van Buren Junior High School on April 13.

He noted that we must seek every opportunity to enlarge and strengthen our educational institutions and concepts of education; however, this does not necessarily imply that our present system is inferior or unacceptable.

In seeking ways for improvement, Mr. Quate pointed to four challenges worthy of great effort

on our part: the challenge to improve our national culture; the challenge presented by the Communist revolution; the movement toward national independence of the young nations of the world, and the challenge of the scientific revolution.

Examples of technical problems encountered by National Laboratories were illustrated by two Sandia Corporation movies depicting the Nevada "Scooter" high explosives shot, and the water-reentry problem encountered by missiles used to attack underwater objects.

Gov. Mechem to Speak At ASQC Banquet May 8

Gov. Edwin L. Mechem will be guest speaker at the annual spring banquet of the Albuquerque Chapter, American Society for Quality Control. His talk is entitled "The Forward Look in New Mexico."

The banquet will be held at the Sundowner Motel on Monday, May 8. Social hour will be from 6:15 to 7 p.m., and dinner will follow immediately. Entertainment will be provided by Phillip Pfeiffer, vocalist.

Reservations for the dinner, which costs \$3.50, may be obtained from G. J. Lombardi (7511), ext. 52263.

5-Year Livermore Safety Record Ended April 22

Livermore Laboratory's unblemished safety record, dating back to the establishment of the laboratory in March 1956, ended abruptly Saturday, April 22, when an employee's finger was severed in a printing press.

At the time of the accident, Livermore Laboratory employees had worked 4,790,189 man-hours or 1891 days without a disabling injury.



R. E. POOLE, Vice President, Livermore Laboratory

R. E. Poole, VP Livermore Lab, Will Retire June 1 After 37 Years Service

Robert E. Poole, Vice President, Livermore Laboratory, will retire June 1 after 37 years of service to the Bell Telephone System.

During those years Mr. Poole has been instrumental in establishing and organizing a number of laboratories engaged primarily in commercial and military equipment development.

He has headed Livermore Laboratory since 1957, shortly after it was established to work with the University of California Radiation Laboratory.

Mr. Poole was one of a number of key executives of the Western Electric Company and Bell Telephone Laboratories assigned to establish Sandia Corporation in 1949. His first post at Sandia was Director of Research and Development; he was elected Vice President, Development, in 1952.

Establishes Laboratory

Before coming to Sandia, Mr. Poole was Director of the Bell Telephone Laboratories' Military Electronics Laboratory at Whippany, N.J. He established this laboratory in 1927 when he was sent with a staff of eight engineers and a few technicians to set up a radio transmitter design laboratory at Whippany. During those early years he supervised the design and installation of the radio transmitting apparatus for the American Telephone and Telegraph Company's first radio television demonstration.

In 1939 he organized and supervised construction of a laboratory for the development of fire-control radar at Fort Hancock, N.J., part of the Monmouth Signal Corps laboratory. This was an extension of work started in 1936 when he took over supervision of the first application of radar principles for experimental purposes.

Fire Control Radar

By 1940, with the nation on the verge of war, Mr. Poole was head-

ing the production design of the first fire control mobile radar for the Army. In 1941 he supervised the development of the first Naval fire control radar.

He returned to Whippany in 1942 to assume responsibility for development of radar fire control and bombing equipment for the Army, Navy, and Air Force.

In October 1957, when Mr. Poole came to Livermore, the laboratory staff consisted of 245 people, all sharing office quarters with Radiation Laboratory personnel. Since then the Livermore Laboratory staff has grown to 960, housed in a modern \$6 million plant.

Reviews Years

In reviewing his years at Livermore, Mr. Poole noted that "the compact size and ease of communication with the Lawrence Radiation Laboratory have been major factors in the success of the Laboratory." He said that over the years the efforts of employees to make the Laboratory a success have been "outstanding."

Mr. and Mrs. Poole have no immediate plans for their retirement. They will continue to reside in Livermore. "Health permitting, we may do some traveling later on," he said.

Mr. Poole is a graduate of Stevens Institute of Technology with a degree in mechanical engineering. He is a Fellow and Life Member of the American Institute of Electrical Engineers and a former senior member of the Institute of Radio Engineers.

To Present Paper At BTL Symposium

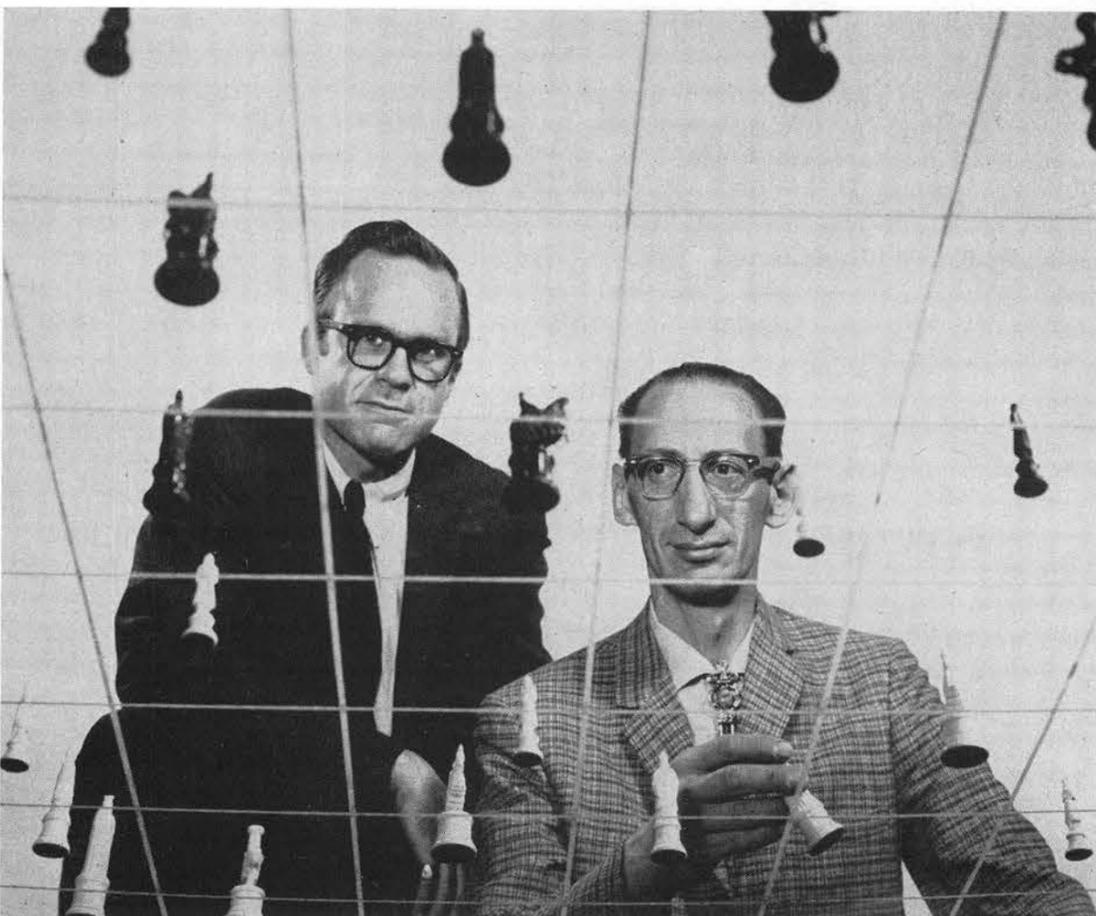
Don Williams, Jr., (7311) will present a technical paper at the Bell Telephone Laboratories Equipment Development Symposium in Whippany, N. J., May 23-24.

His talk is entitled "X-ray Motion Picture Photography as a Tool in Vibration Analysis."

Papers to Be Read at Franklin Institute Meet

Two members of Advanced Electronics Systems Division 1424 will read technical papers at a Hazards of Electromagnetic Radiation to Ordnance meeting. The meeting will be held at the Franklin Institute in Philadelphia, Pa., on May 24-26.

George Rodgers has prepared a paper entitled "Electro-magnetic Coupling in Ordnance System," and Robert L. Parker is the author of "Low-Level EMR Instrumentation."



CHESS WINNERS in two sections of recently completed Western Electric System tournament, started in 1958, were Crawford MacCallum (5152), left, and

Herman S. Levine (5153). Each played a half dozen games by mail to defeat their opponents in other parts of the country. Both enter tourney every year.

Editorial Comment

A Note on Use of Government Property

Responsibility for care of government property rests heavily upon Sandia Corporation employees. We are expected to assume this charge with the same serious consideration we give our security and safety responsibilities. The fact that our duties as custodians of U. S. Government property are infrequently discussed does not lessen their seriousness.

Value of Uncle Sam's equipment used by Sandia runs into millions of dollars. If listed, the items would present a staggering compilation. Costs of items in this list would vary from 15-cent rolls of pressure sensitive tape to a multi-million dollar nuclear reactor. In between is a vast, and frequently expensive, array of equipment which is Federal property.

Our custodianship calls for us to not only assure that this equipment is handled properly, but also to see that it is used for official purposes only.

It should not be necessary to prompt Sandia employees very often in the use of this property. We should always be conscious of our obligations.

Sandia Earns Safety Award - Again

Let's have no "ho-hum" attitude about our most recent Award of Honor from the National Safety Council. True, it is the eleventh Sandia Laboratory has received from the Council, and displays nicely with an array of AEC plaques given in recognition of our safety accomplishments. But don't let frequency of appearance of these plaques deaden their meaning to us.

Sandia's Safety Engineering Department reminds the Lab News to pass the word that these honors have not been conferred on any one man or organization, but on the entire Laboratory. They are a credit to our safety-mindedness which should continue on and on and on . . .



OFFICERS TO BE INTRODUCED during Sanado Club's May 6 dinner dance include: Mrs. K. E. Sutton, membership vice president; Mrs. A. F. Cone, welfare vice president; Mrs. S. D. Brooks, hospitality vice president; Mrs. C. L. Carpenter, secretary; Mrs. George Matvichuk, treasurer, Mrs. W. S. Sharp, past president.



PUBLICITY FOR FORTHCOMING Mardi Gras dinner dance was discussed during this meeting of new Sanado Club officers: (1 to r) Mrs. C. E. Drew, publicity co-chairman; Mrs. T. M. Cowles, program vice president; Mrs. Robert S. Lemm, president; Mrs. B. W. Scott, activities vice president, and Mrs. George Dennis, publicity.

Sanado Club Plans Festive Mardi Gras Party

A gay New Orleans atmosphere will prevail at the Sanado Club's Mardi Gras dinner dance, May 6, at which time new officers will be introduced.

The affair will start at 6 p.m. at the Coronado Club. Elaborate decorations have been designed by Mrs. James E. Baylor and her committee. Reservations for Sanado members and their guests may be made before May 1 with Mrs. James Fesler.

To be introduced during the evening are Mrs. Robert S. Lemm, the club's fourth president, other officers pictured on this page, and Mrs. S. P. Schwartz, honorary Sandia Corporation officer, Mrs. J. V. Durant, representing Mrs. Kenner Hertford, the honorary AEC officer, and Mrs. C. A. Seay, newsletter editor.

Additional committee chairmen chosen by Mrs. Lemm are Mrs. H. C. McIlroy, scrapbook, and Mrs. L. W. Otski, hospitality.

Weddings

Howard O. Burtmett and his bride, the former Ruth Birdseye, are at home at 2931 Maxine NE after their recent marriage.

Ruth is in 3126 assigned to 4510 and has been at Sandia three years.

Mildred F. Crouch (4500) was married to Merrill N. Doughty last Saturday during an afternoon ceremony at Monte Vista Christian Church.

The bride has worked for Sandia 11 years.

The couple will be at home at 5408 El Encanto Pl. NE.

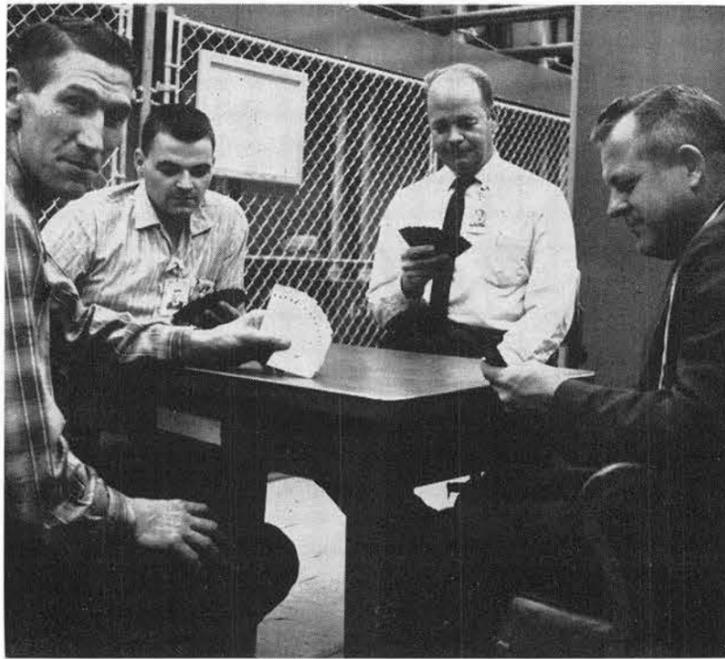
Congratulations

Born to:

Mr. and Mrs. Jack Adams (8222-1) a son, Craig, on April 17.

Mr. and Mrs. Tommy Glauner (4413-2) a son, Russell Floyd, on April 7.

Mr. and Mrs. George Dunbar (8115-2) a daughter, Elaine Theresa, on April 20.



PERFECT HAND—Thirteen diamonds were dealt to M. B. "Lucky" Sanders (7323-4), left, during a noon-hour bridge game last week. Completing the foursome are (from left) Milt Stomp, Jack Barber and Elmer White who dealt the hand. Odds are 159 billion to one.

Perfect Bridge Hand - Statistically Next Due Lucky is 300,000 Years Off

A perfect hand—13 diamonds—was dealt to M. B. "Lucky" Sanders (7223-4) during a noon-hour bridge game last week. The odds for this happening are 159 billion to one.

"At first," Lucky says, "I thought someone had stacked the deck. It was too good to be true. When the bidding started I played it cool and opened with a bid of two diamonds. The opposition went to five clubs and then I bid seven diamonds. It was doubled and re-doubled."

Elmer White was dealing. His partner was Milt Stomp. Lucky's partner was Jack Barber who did not mind being dummy for this hand. Lucky made 1760 points.

"Later we became curious," he said, "about the odds for a perfect hand. I computed it and then checked the figures with E. E. Ard in Statistical Development and Training Section 7511-2. It is 159 billion to one."

Lucky figures that if one bridge hand were dealt every minute, 24 hours per day, 365 days per year,

Seat Belt Testimonial Willingly Submitted By Don Emrick

Don Emrick (2322-1) was glad to get back to work after being banged up a bit in an automobile mishap. He was even happier that he had installed seat belts.

About a month ago Don, accompanied by his wife and two other passengers, was driving on Highway 66 east of Albuquerque. A truck had traffic stopped so Don pulled into line and waited.

Before traffic started moving, a car slammed into the rear of his automobile throwing it into the vehicle ahead.

All people in the car were shaken and suffered whiplash injuries, but the seat belts stopped them from going through the windshield.

"We shudder to think what might have happened if the seat belts had not held us," Don says. "Had it not been for those belts I might not be here now."

Industrial Photographers Elect Elliot Harris as Group Vice President

Elliott Harris (3462-1) was elected vice president of the New Mexico Industrial Photography Association at a recent meeting at White Sands Missile Range. An Albuquerque chapter of the organization is being formed now, Elliott reports, with membership open to anyone engaged in any type of industrial photography. For further information, call AX 9-6664.

Sandians at Livermore Serve on Council of Social Planning

Serving on the board of directors of the newly-organized Livermore Area Council of Social Planning are Ray Huston (8212-2), Matt Connors (8213-1), Jim Hyde (8145-1) and Bill Jenkins (8233-1).

Bill, whose one-year term expired, was re-elected to a three-year term at the Council's first annual meeting April 20. Presiding at the meeting was outgoing president Marvin L. Glaze (8213).

The Council was created last year during a general reorganization of social planning and budgeting in Alameda County. Its purpose is to centralize control of budget allocations and provide equitable distribution of the Bay Area United Crusade funds.

Welcome Newcomers

April 10-21

Albuquerque	
Nena E. Bearden	3176
O. Marie Blakey	3126
C. Mahota Caruthers	3126
Thelma M. Cole	3126
Ruth A. Kleindienst	3126
*L. Jean LaPaz	7513
Helen P. Maurer	4333
*Robert P. May	7321
*Kenneth R. Nielsen	7212
*Antonio Silva	3464
*Betty Lou White	4333
Kentucky	
Donald M. Mattox, Lexington	1124
Missouri	
William H. McAtee, Kansas City	5431
Texas	
Ralph H. Carden, San Antonio	3451
Wisconsin	
Martin A. Konkel, Milwaukee	7213
* Denotes rehired	
Returned from Leave	
Walter D. Buchly	7162
Josephine B. Canady	4413
Van C. Lewing, Corpus Christi, Tex.	7321
Ronald J. Harron, Bethesda, Md.	1314
Esther E. Martinez, Albuquerque	4613
Eleanor E. Smith, Albuquerque	3 26
Deyote T. Stark	3423
Mary Ann Yaple	4132

Mental Health Drive Will Be Held In May

The third annual fund drive by the Albuquerque Association for Mental Health will be held May 7 during National Mental Health Week.

The local group provides scholarships for New Mexico students interested in work-study programs in mental health career areas, volunteer assistance for patients in the psychiatric ward at Bernalillo County-Indian Hospital, and guidance for families of mental patients.

The Albuquerque Association became a member of Sandia Laboratory's Employee Contribution Plan during the 1960-61 drive and this year will receive about \$1250 as its share of total funds donated.

Sympathy

To Ben Cordova (4573) for the death of his mother in Belen April 12.

To Imogene Kelly (8212-1) for the death of her father in Wichita, Kan., March 30.

To Robert (1111-2) and Marcy (3461-1) Noble for the death of her father in Long Island, N.Y., on April 8.

To Joanne (2310) and S. A. Urevitch (4212-2) for the death of her mother in New Jersey on April 7.

To Ronald E. George (4513-3) for the death of his father recently.

To George A. Edwards (4573-3) for the death of his mother recently.

To Frank H. Grubbs (3450) for the death of his father in Albuquerque on April 17.



Pat Beavers (8232-2)

Take a Memo, Please

THINK safety . . . ACT safety

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Sandia Members of Psychological Ass'n Plan Convention

Psychologists from a six-state area will meet in Albuquerque May 11-13 for a convention of the Rocky Mountain Psychological Association. Program for the three-day meeting was arranged by R. F. Utter (3123).

The New Mexico Psychological Association will meet in conjunction with the regional organization, and will hold a business meeting after the convention ends. Mrs. Lynette Plumlee (3154) is program chairman for the New Mexico group and will assume presidency of the organization July 1.

Sherwood H. Peres (3133) will present a paper during the Industrial-Vocational session of the convention. Title of the paper is "Dimensions of Descriptive Adjectives Used in Reference Letters—A Factor Analytic Study."

Some 150 psychologists are expected to attend the meeting, Mr. Utter reports. They will tour Sandia's Sphere of Science on Friday, May 12.



DISCUSSING PROGRAM of the Rocky Mountain Regional Psychological Association convention to be held in Albuquerque May 11-13 are Mrs. Lynette Plumlee (3154), left, and R. F. Utter (3123).



RELIABLE METHOD for making a number of identical signs by the silk screen process was demonstrated by Kenneth B. Stiver of Painting Section 4513-3, during tour of Plant Maintenance Shops by vocational carpentry students from Socorro High School.

D. B. Owen Author of Statistical Book Published by Stanford Press

D. B. Owen, supervisor of Statistical Research Division 5425, is co-author of a new book entitled "Tables of the Hypergeometric Probability Distribution," published by the Stanford University Press.

The co-author was Gerald J. Lieberman, professor of statistics and industrial engineering at Stanford University.

The book includes 29 pages of introduction and nearly 700 pages of statistical tables. Combined with existing methods, the tables have applications in the fields of quality control, quality assurance, industrial management, and economics.

In the book's introduction the authors acknowledge help given them by G. P. Steck and E. J. Gilbert (both 5425), who were co-authors of two Sandia Memorandums; C. M. Williams and Kitty Weston (both 5426), who pro-

grammed for the IBM 704 computations of logarithms of factorials and of the hypergeometric probability distribution; and Marjorie E. Endres (5425), who made spot checks of the tables for accuracy and completeness.

A new project of Mr. Owen's is a "Handbook of Statistical Tables" to be published by Addison Wesley of Redding, Mass.

"This handbook will contain more than 400 pages of tables, 80 per cent appearing in a collection for the first time," Mr. Owen said.

The book is designed to provide readily accessible tables for students in statistics, practicing statisticians, quality control men, industrial engineers, or research workers.

The handbook has been written on a contract between Sandia Corporation and the publisher with rights assigned to the Atomic Energy Commission.

"The first draft is in the hands

of the publisher and I'm waiting for their reaction," the author said.

In recent months Mr. Owen has also provided additional tables for Volume 2 of "Biometrika Tables for Statisticians" to be published by the Cambridge University Press in England. Marjorie Endres prepared a FORTRAN program for the 704 which produced these tables.

In addition he has written an introduction and explanation of the application of bivariate normal distribution tables for the Applied Mathematics Series of the National Bureau of Standards. This was based on a Sandia Corporation report of a related function.

Mr. Owen has been with Sandia Corporation since June 1954. He received his Bachelor's, Master's and PhD degrees in mathematics and statistics from the University of Washington.

Vocational Students Tour Sandia's Plant Maintenance Department Shops

Twenty-five vocational students from Socorro High School visited Sandia Laboratory's carpentry, paint, and boxmaking shops April 19.

The tour was requested by Robert M. Griego, head of the Vocational Department of Socorro High School. Community Relations Section 3431-2 coordinated arrangements.

J. H. Simmons, 4513-2 section supervisor, took the group through

the general woodworking specialty shop and described the various power tools, their operation, capability, and safety features.

In the boxmaking shop Supervisor George Austin described some of the problems incurred in filling orders for containers, and told how various problems are solved.

In the paint shop the students saw large pieces of galvanized metal being spray painted. K. B. Stiver (4513-3), discussed different types of paint and sign-making.

Bowling Prowess Shown by Guards

A team of Sandia Lab security inspectors won the New Mexico class "D" bowling championship during the state tournament in Albuquerque last week. The team bowled 2266 points.

Members of the team are Curtis McMurtrey, captain, James Rabold, Tom Chiado, Roy Brett and Cliff Hiner (all 3242).

F. R. Martinez Died In Albuquerque April 17

Frank R. Martinez, a Sandia Corporation employee for four and one-half years, died April 17 in Albuquerque. He worked in Janitor Service Division 4574, but had been on leave of absence for the past year.

Funeral services were held in Tucuman, N. Mex., where he was buried.

Mr. Martinez is survived by his widow, four sons, eight daughters, and two sisters.

Ione Pierson Died April 15 in Albuquerque

Ione H. Pierson, a Sandia Corporation employee for 12 and one-half years, died April 15 after an extended illness. She was a data reduction clerk in Experimental Aerodynamics Division 7132.

Funeral services were held in Albuquerque on April 18, and interment was in Fairview cemetery.

Survivors include a daughter, Mary, and a son, James, both of Albuquerque.

Two Sandians Author Paper Being Presented To Glassblowers Society

C. D. Cosgrove and G. L. Kreiger (both 1413-2) are co-authors of a technical paper prepared for presentation in New York City. It will be presented to the Sixth Annual Symposium of the American Scientific Glassblowers Society May 24-26.

Mr. Cosgrove will present the paper which is entitled "A Bakeable Diffusion Pump Assembly for Ultra-High Vacuum."



LOOKING OVER CONSTRUCTION of Sandia Laboratory's new Research Building last week were (l to r) R. S. Claassen, Director of Physical Research, R. E. Hopper, Director of Plant Engineering and Maintenance, and C. F. Quate, Vice President, Research. Work is proceeding on schedule for the three-story Phase II of Bldg. 861. The building will contain 60,000 sq. ft. of office and laboratory space.

Promotions

- Stanley B. Roeske (4233) to Wireman
- Helen P. Agats (4233) to Coil Maker
- Linda Kay Shaifer (3126) to Steno Clerk
- Mary Ann Cowley (3126) to Typist Clerk
- Jean A. Craven (3421) to Library Assistant
- Lyle Wetherholt (7321) to Data Reduction Clerk
- Robert T. Tuffnell (4152) to Accounting Clerk
- Robert D. Bryant (8225) to Receiving Clerk
- John D. Seuser (8223) to Technician
- James M. Kimberling (8114) to Draftsman
- J. D. Creek (7536) to Property Clerk
- Andrew H. Stark (1124) to Staff Assistant
- Joseph E. Magruder (4424) to Staff Assistant
- John H. Barnum, Jr. (1322) to Staff Associate
- Larry D. Tichenor (4224) to Molder and Assembler
- W. J. Villanueva (4224) to Molder and Assembler
- James R. Melton (4224) to Molder and Assembler
- Amy L. Lawrence (3126) to Typist Clerk
- B. T. Adkins (3126) to Secretary Typist
- Dorothy H. Raper (3126) to Secretary Steno.
- W. Joleen Koger (3126) to Secretary Steno.
- Amy C. Anez (3241) to Service Clerk
- M. L. Garberich (4623) to Record Clerk
- David A. Edwards (8232) to Ozalid Operator
- Clarence Rogers (8222) to Helper-Trades
- Lowell S. Bayless (8225) to Receiving Clerk
- Helen I. Longbrake (3121) to Personnel Clerk
- Donald J. Knaple (8232) to Camera Operator
- Janice H. Brown (3463) to Chartist
- June F. Ridge (8161) to Senior Clerk
- Marcus G. Martinez (4614) to Utility Operator
- Theresa F. Phelps (4151) to Accountant
- George P. Beller (4123) to Staff Member
- Edward H. Gallegos (4152) to Accountant
- Patricia A. Beavers (8232) to Reproduction Service Clerk
- Mary Lou Polaco (4423) to Typist
- Evelyn Lois Ricard (3133) to Staff Assistant
- Carolyn B. Mouser (7512) to Staff Associate
- John W. Windsor (7323) to Data Reduction Clerk
- Mary Haines Davis (3466) to Senior Clerk
- Lewis G. Sisneros (4152) to Accounting Clerk
- Wanda M. Stevenson (7311) to Lab. Assistant
- Preme Ulibarri (7321) to Lab Assistant
- Supervisory Lateral Transfers**
- J. F. Hammerstran from 2451-4 to 2452-4
- W. L. Stevens from 7164-1 to 7117-2
- F. A. Kohut from 4343-3 to 4315-2
- J. W. Reynolds from 4315-2 to 4321-3
- J. L. Miller from 4613-1 to 4333-1
- W. E. Henry from 2413-1 to 2451-5
- J. P. Callahan from 2644-4 to 2643-3
- P. D. Bishop from 2641-3 to 2644-2
- G. O. Thorne from 2642-1 to 2641-3
- E. G. Dyllo from 2642-2 to 2642-1
- M. F. Stewart, Jr., from 2641-2 to 2642-2
- S. DeHaan from 4611-2 to 2641-2
- C. M. Dixon, Jr., from 4612-1 to 4611-2
- H. W. Gentry from 4612-2 to 4612-1
- R. N. Lord from 2644-2 to 4612-2
- J. S. Cundy from 4611-1 to 4621-2
- J. H. Samuelson from 4621-2 to 4621-1
- J. M. Miller from 4621-1 to 4613-1
- F. H. Vishaway from 4613-2 to 4611-1
- W. L. Paxton from special assignment in 4630 to 4613-2
- H. H. Mabie from 1342 to 1333
- L. L. Motichko from 4252-7 to 4221-5
- L. A. Barry from 1124 to 8115
- W. B. Marsh from 8115 to special assignment in 8150
- E. F. Ingledue from 8145 to 8156

Aerospace Sciences Emphasized by Activities of New Mexico Scientists

The New Mexico Section of the Institute of Aerospace Sciences is calling attention to its activities through use of a display and the appearance of X-15 test pilot Joe Walker at its monthly meeting.

Mr. Walker will speak on "X-15 Program Progress" at the IAS meeting May 5.

Earlier this month the California test pilot rode his advanced research craft to a height of 169,000 feet above the Mojave desert. The plane shot upward at 2756 mph to reach the new altitude mark for winged aircraft.

The social hour will be at 6:30 p.m. with dinner served at 7:30 at the Sandia Base Officers Club. The talk will be given at 8:30 in the Sandia Laboratory theater, Bldg. 815. Reservations may be made with Roger Tate (7134), ext. 41246.

The display on aero science and aerospace science was placed in the Public Service Company building. Included was an exact scale wind tunnel test model of the F-105 Thunderchief, an Atlas pod designed to obtain high altitude radiation data, and a model of the Vanguard I satellite.

The IAS is the representative society in America for engineers,

designers and technical specialists in all the sciences related to the design and development of air and space craft. To carry out its purpose of interchange of technical ideas, the institute has major technical library and microfilming facilities in New York, Los Angeles and San Diego. Its technical publications are the "Journal of the Aero-Space Sciences" and "Aero-Space Engineering."

The New Mexico Section was founded two years ago by A. Y. Pope, manager of Sandia's Aero- and Thermodynamics Department 7130. He is now one of the 15 members of the IAS's national executive council.

R. C. Maydew (7132) is currently the section's vice chairman and W. N. Caudle (7131-2) is secretary.

Membership of the local section includes personnel from Sandia Corporation, Kirtland AFB, ACF, LASL, University of New Mexico, and Holloman AFB.

Career Day Talks to Help Guide Valley High School Students

Talks on different jobs or professions will be given by 14 Sandia Laboratory employees during Valley High School's Career Day on Wednesday, May 3.

During the half-hour talks students will hear discussed such things as specific tasks involved in performing the job, purpose it serves in industry, qualities and education desired, opportunities, pay, and advantages and disadvantages. Time is allotted for students to ask questions.

Sandians participating in the program and their subjects are: W. H. Kingsley (3311), biologist; M. I. Weinreich (3421), linguist; G. P. Steck (5425), mathematician; John McLay (1420), electronics; Jean Gillette (3132), secretary; R. E. Fisher (1122), chemist.

F. F. Norris (4541), civil engineer; R. P. Gall (3431), public relations; A. C. Taylor (4554), welder and machinist; H. O. Pierson (1112), plastics; D. M. Fenstermacher (5224), astronomer; R. M. Dayhoff (7134), aeronau-

Seek Women Interested In Forming Golf League

Women interested in joining a Sandia Laboratory women's golf league are asked to contact Fred Romero (3122), ext. 29157. If enough interest is shown, the league will be set up, Fred reports. Women participating will decide whether to have a weekend or evening league, or both.



WESTERN ELECTRIC AUDITORS, headed by D. D. Westermeyer, Department Chief, Auditing, recently completed the annual Sandia Accounting and Property Control Audit in accordance with the contract between AEC and Western Elec-

tric Company. Above (l to r): P. J. Jordan, Hawthorne; A. P. McDermott, Hawthorne; W. N. Eckstein, Indianapolis; S. G. Petras, Hawthorne; R. D. Watkins, Columbus; P. S. Rhoads, Indianapolis; W. A. Maus, Hawthorne; D. D. Westermeyer, Hawthorne.

Supervisory Appointment

CLIFFORD O. ERICKSON to supervisor of newly-created Mechanical Design Drafting Section 8114-5, Design Drafting Division, Livermore Laboratory.

Cliff joined Sandia as a design draftsman in August 1954. In September 1955 he transferred to the Design Drafting Division at Livermore Laboratory.



Before coming to Sandia, he was employed as a junior engineer for the C&H Sugar Company in Crockett, Calif. Previously he worked for the Pneumatic Scale Machining Corporation in Quincy, Mass., and for Bethlehem Steel at Quincy.

Cliff attended evening classes for four years at the Franklin Institute, Boston, Mass., receiving diplomas in machine design and ship design. He has also taken evening courses at Diablo Valley College in Concord, Calif.

During World War II he served in the Navy as a Second Class Petty Officer. His tour of duty included South America, Africa, England and France.

tical engineer; Arthur Troum (1112), chemical engineer; and T. B. Cook (5110), physicist.

Nondestructive Test Papers Presented

Two members of the Advanced Manufacturing Development Division 2564 recently presented technical papers at the Western States Convention of the Society for Nondestructive Testing in Los Angeles, Calif.

J. Gordon King's paper was entitled "Leak Detection Method" and Douglas W. Ballard was the author of "The Scope of the Present Nondestructive Testing Field."

Military Police to Issue Citations to Careless Pedestrians

Sandia Base Military Police are becoming increasingly concerned over the safety of pedestrians. They are worrying especially about jaywalkers who are going across streets where there is no crosswalk.

MP's report that a number of warnings have been issued to pedestrians who disregard crosswalks, but if violations continue citations will be issued.

Looking at themselves . . .

Sandia Lab Division Seeking Even Better Security Record

Ordering Division 2644 has set up an employee-staffed committee to investigate division security and to make recommendations for its improvement.

Committee members have studied the history of the division's security infractions to determine areas which need more attention. They have also checked procedures followed in carrying out security requirements to see if even better methods could be established.

As a result of their study, several recommendations have been adopted in the division to improve security.

Material filed in safes was checked, and by consolidating and disposing of unnecessary files, monitoring of six safes was eliminated. In addition, all tub files have been declassified.

The committee members plan the monthly security meetings for the entire division with assistance from Security Education Section 3232-2. Last month they showed a film, "The Daily Enemy," heard a talk by a member of the Security Education Section, and listened to a tape recording on the spread of Communism.

A written report is published by



CLYDE WALKER (8126), right, and Joe Sladky (8144-1) were victorious in their campaigns for election to posts on Livermore school boards. On April 18 Clyde was elected to the Board of Trustees of Livermore Joint Union High School District Board.



Helping Hand Given Square Dance Festival by Sandia Lab Employees

More than 800 people from New Mexico and southwest Texas are expected to participate in the New Mexico State Square Dance Festival in Albuquerque May 5 and 6.

Several dancing Sandians are helping plan the event. Round dancing will be under the direc-

tion of M. K. Laufer (2411), who was recently elected Central District Chairman of the New Mexico State Square Dance Association.

R. J. Siebenforcher (4152) is handling arrangements for an "After Party" following the main square dance on Saturday night. B. W. Scott (3426) has been instructing a group of 12 junior high students who will perform an exhibition dance on Saturday night.

Publicity chairman is W. J. Norris (2644), who will be assisted by C. F. Bild (1100) and Arlene Mick (3420). Motel arrangements for out-of-town guests are being handled by K. L. Wiley (7532).

Activities for the weekend include dances on Friday at 4:30 p.m. at the Fair Plaza parking lot and again at 8:30 p.m. in the Civic Auditorium. On Saturday, an informal dance will be held at 9 a.m. at the Auditorium, a children's roundup dance at 11 a.m. at the Albuquerque Square Dance Barn, and the main square dance at 8:30 p.m.

The public is invited to attend

Les Rowe Honored

J. L. "Les" Rowe (8220) has been voted "Committeeman of the Year" by the Livermore Chamber of Commerce for his work on the Chamber's Industrial Committee. Les, who was recently elected second vice president of the Chamber, was instrumental in attracting a machine tool company to set up a plant in Livermore.

Present Paper in Arizona

C. M. Williams (5426) is speaking today at a meeting of the Rio Grande Chapter, Association for Computing Machinery, in Scottsdale, Ariz.

His talk is entitled "The Use of an Assembler (SAP) as a Logical Decision Maker."



SECURITY COMMITTEE in Ordering Division 2644 meets twice a month to discuss security problems and to make recommendations for improvements. Current officers are (l to r) Tom Thompson, chairman; Rita Sanchez, secretary; and John Lew, vice chairman.

15 Years



J. F. Bryson
8223
May 8, 1946



William H. Kingsley
3311
May 8, 1946



Leslie E. West
3453
May 9, 1946

10 Years

April 29-May 12

Paul C. Kind 4575, David K. McCoy 4131, Betty B. Tatum 3321, Charles H. Weidman 4513, Michael Zownir 4254, Sam Apodaca 4624, Helen J. Kelly 3421, Terrence M. Clark 3463, George E. Power 4543, Doris J. Miller 2450.

Richard R. Bassett 2543, Marcel I. Weinreich 3421, Lloyd M. Melick 1422, Artie I. Redlinger 4212, Harold L. Bigley 3242, William H. Buckalew 5432, Robert L. Cresson 3242, Dean A. Hitchens 8121, Gerald J. Hurler 2323.

Brooks L. King 3241, Walter W. J. Rediker 4612, Howard J. Smyth, Jr. 8232, John Q. Toler 3242, Joe R. Duran 4611, Millard S. Taylor 8232, Consuelo A. Cummings 3421, Mary E. Sparger 8231.

The eighth annual Civil Defense and Disaster Mobilization exercise (Opal 61) began Wednesday afternoon of this week and will conclude tomorrow. As in previous years, Sandia Corporation and the AEC are participating.

The exercise this year offers American industries an opportunity to test their emergency plans at the same time as communities in which they are located.

Sandia is participating by simulating actions which would be taken during an increased readiness period prior to an enemy attack. A review is being made of Sandia's emergency planning during the exercise. Special emphasis is being placed on maximum protection to employees.

In addition to the Corporation's simulated activity in Opal 61, a number of Sandia employees are participating in behalf of Civil Defense.

Twenty-three Sandia employees are members of the Radio Amateur Communications Emergency Service, the official communications branch of Civil Defense. These employees are subject to call on any emergency involving the Civil Defense organization.

Two Sandians Speak In St. Louis Before Supersonic Tunnel Ass'n

R. C. Maydew (7132) and W. T. Botner (7132-2) spoke at the 15th Supersonic Tunnel Association meeting which was held in St. Louis, Mo., April 24-25. Mr. Maydew discussed "Status of Sandia Laboratory Hot Gas Facility." "Failure of a Flexible Metal-Hose in a 300 PSIA Wind Tunnel Air Compressor System" was the title of Mr. Botner's talk.

At 9 a.m. today Civil Defense forces across the nation mobilized for a simulated nuclear attack. At Livermore, Bob Verdier (8144-1) and his 15-member Radiological Defense (RADEF) crew converged at their control center to plan protective measures during the national disaster exercise.

For two days Civil Defense agencies have been on standby alert during a "period of tension." Today's exercise will include "bombings" at strategic locations throughout the country with CONELRAD in operation from 1 to 1:03 p.m. Tomorrow, the last day of the four-day alert, will be a post attack recovery period. How well the agencies cope with the emergency will be analyzed next week.

RADEF is just one branch of the Civil Defense mechanism. Its job is to ascertain the amount of radioactive fallout in a given area and, from wind and weather conditions, calculate its pattern and range. RADEF also evaluates potential fallout danger to communities and advises local and regional Civil Defense authorities. From this information the Civilian Defense authorities can determine if the population should evacuate or seek shelter.

Among those working with Bob in the Livermore RADEF group are Glen Brandvold (8144-1), Rudy Johnson (8115-1), Art Thomas (8161-2), Dewey Farmer (8161-3) and Everett Moore (8114-3). They work closely with other local Civil Defense groups, including the police, fire, and sheriff departments. From them they receive vital information on the size and location of the blast, prevailing winds, and other data



BOB VERDIER (8144-1), Livermore Radiological Defense Chief, and members of his staff plot fallout pattern during "simulated attack." (L to R): Glen Brandvold (8144-1), Rudy Johnson (8115-1), Bob, Dewey Farmer (8161-3), and Everett Moore (8114-3).

from which to make their calculations.

In time of actual emergency, the RADEF group would also use a small trailer containing walkie-talkie radios, geiger counters, ion chambers, maps and other equipment. This trailer would support six field teams taking fallout readings at selected locations, and radio back their findings to the control center.

"In a real disaster we would need a crew of 30 to operate the control center on a 24-hour basis," said Bob. "We're recruiting personnel now to reach that figure, and anyone interested in working with us is urged to contact me or anyone else in the

group for more details. We'll provide any training necessary."

Bob is a strong advocate of Civil Defense. As a youngster during World War II he was forced to evacuate from France with his parents as the Nazis moved in. "I feel we should take whatever protective steps we can while we still have time," he said.

Tidwell Presents Paper

Roy M. Tidwell (8125-1) is presenting a technical paper on "Some New Techniques for Recording and Processing Vibration Test Data" at the 7th Regional IRE Convention today at Phoenix, Ariz.

SHOPPING CENTER ● SHOPPING CENTER ● SHOPPING CENTER ● SHOPPING CENTER ● SHOPPING CENTER

CLASSIFIED ADVERTISING
Deadline: Friday noon prior to week of publication unless changed by holiday.
RULES
1. Limit: 20 words
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4. Use home telephone numbers
5. For Sandia Corporation and AEC employees only
6. No commercial ads, please
7. Include name and organization.

FOR SALE
HOUSE FULL of furniture, best offer. Aidikonis, AL 5-2163.
KENMORE automatic washer, \$100; 17" Silvertone table model TV, \$40; barbecue with electric rotisserie, \$20. Edwards, AM 8-8017.
PING-PONG TABLE with paddles and net, \$20. Goff, CH 2-6073.
AKC registered Dachshund puppies, red, 2 months old. Neel, 3617 Espejo NE, AX 9-9309.
OUTDOOR FINCO FM antenna, \$7; assorted 2-track stereo tapes; \$3-\$6. Ross, ext. 20132.
'53 PLYMOUTH, 4 dr. sedan, std. shift, \$250, window fan, Sears Homart, 20", 2-speed, \$12. Esterly, AL 6-9251.
WOOL RUG, 9x15, w/pad, green; lawn mower, push type, 16". Carter, 4501 Delamar NE, DI 4-6563.
REEL HAND LAWN MOWER with grass catcher, \$5. Schneider, AX 9-6243.
TRANSMITTER, Globe Chief Deluxe, 90 watts—C. W., \$50. McClure, 620 Madeira SE, AM 8-0720 after 5 p.m.
'59 CUSHMAN EAGLE motor scooter, extras. Ryzczak, AX 9-3527.
GONSET AIRCRAFT RADIO, 12 v, 108 to 130 mc. Riley, AL 6-0719.
'56 FORD, 4 dr, V-8, \$145 cash and take over 7 Credit Union payments of \$50.70. Archuleta, 243-9513.
RELAXICISOR, \$75; 8-in. Karlson enclosure w/speaker, \$12.50; springhorse, deluxe, \$10; maple dinette table, 4 chairs, \$15. Matthews, AX 9-4200.
PHILCO refrigerator, 8 cu. ft., freezer and crisper, \$25; travel trailer, 17', self contained, sleeps 6, \$1395. Zimmerman, AX 9-5195.
SX 28 HALLICRAFTER receiver set with head phones. Libby, AX 9-0344.
'58 CORVETTE, yellow and white, R&H, removable hardtop, 3-speed stick, dual quad carbs, hi-performance cam, position-traction, new tires. Cornwell, AM 8-1943.
LAWN MOWER, push type w/grass catcher; table top GE electric ironer; 20" floor fan. Williams, AX 8-2671.
ACME VISIBLE FILES, 4 x 6" cards; steel office desk with typewriter drawer, \$125. Barker, AX 9-2365.
'57 LAMBRETTA SCOOTER. Hines, AL 6-7872.

'55 ENGLISH FORD. Minter, AL 6-9225 after 5 p.m.
'58 MERCURY Montclair, 4 dr. sedan, below book \$1275; '52 Chrysler NY, 4 dr., one owner, \$260. Magee, AL 6-1358.
2-WHEEL luggage trailer, \$15 or best offer; double mattress and springs, \$12.50; will trade for camping gear. Netz, AX 9-7036.
LUGGAGE, 3 Samsonite pieces, 17 x 12", 22 x 15", and 28 x 18", blue grey, \$50. Williams, CH 2-3771 from 6 to 8 p.m.
GIRLS BIKE, 24". Dadd, AX 9-6330.
MATCHED SET Ben Hogan, McGregor 1 and 3 woods, bag and putter, \$15. Grogg, 11409 San Jacinto NE, AX 8-0267.
2 BDR HOUSE near Highland High; will trade equity for good house trailer or will sell. Causey, AX 9-0089.
'56 OLDSMOBILE, 4 dr., R&H. Benton, 435 Lafayette Place NE, AL 5-4466.
POWER MOWER, Cooper Clipper, 18", reel type w/grass catcher, \$75. Sheard, 921 Dakota SE, AL 5-5309.
ELECTRIC IRONER, Blackstone, 25 inch roller, \$10. Brown, AX 9-2279.
'57 SPORT FURY, hardtop, R&H, all power, \$925. Caudle, AX 9-4579.
BASSINET w/pad and bumpers, used only 3 months, \$8; '46 Pontiac, 4 dr. sedan, radio \$75. Harris, AX 9-6664.
3 BDR & DEN, drapes, w-w carpet, air cond., newly redecc., GI loan, \$12,000 \$1500 down. 2804 Parsifal NE, Jones.
PAIR 5' French doors; kitchen door 2'8", with hardware, cheap. Rusty, 933 Madison NE, AL 5-0568.
DINING ROOM table, 1 arm chair, 5 regular chairs, blond, one year old, three table pads, original cost \$175 sell for \$125. Padilla, 2721 Charleston NE, AX 9-0460.
1961 FOREIGN CARS, Morris Minor, Austin, low mileage; must sacrifice equity for \$100 each, assume low bank payments. Zamora, DI 4-2997.
1950 CHEV, heater, \$125. Stoever, 1009 Indiana SE, AL 6-2439.
3 BDR ROBERSON, wool carpet, fireplace, air conditioner, sprinklers, landscaped, near schools. Holmes, AX 9-5109.
1956 RAMBLER 4 dr. sedan, \$575, no trades, see after 5 p.m., 7723 Robin NE, Mares.
'55 CHEV Bel Aire, V8, R&H, OD, best offer; Cushman scooter, 5 hp, 3 wheel, \$75. Parker, 2208 Inez Dr., NE, AX 9-9429.
HOT WATER HEATER, gas, 40 gal., 15 mo. old, \$25 or best offer. Fry, 420 Buena Ventura PI NE, AX 8-1613.
OUTBOARD MOTOR, 2 1/2 hp, \$45. Roussel, DI 4-1080.
MOTORCYCLE, 1959 Harley Davidson, "74", fully equip, will sacrifice for \$895 cash. Mata, 832 Los Arboles NW, DI 4-5296.
REFRIGERATOR, Frigidaire, 7 cu ft, \$90. Sanchez, ext. 36232.
'54 DODGE CORONET sedan, R&H, automatic transmission, original owner. Russell, 7738 Robin NE, AX 9-6921.

NEXT DEADLINE
FOR SHOPPING CENTER ADS
Friday Noon, May 5

LARGE CHROME and formica kitchen set, 4 chairs, \$25. Wheeler, AL 6-7284.
BOYS BIKE, 26" Schwinn, person seat, new tire, optional carrier, \$20. Schofield, 701 Wellesley Dr., SE, AM 8-0956.
GAS RANGE, 4-burner, \$25. Breitenbach, AM 8-7900.
ELECTRONIC TEST equipment and parts, will sacrifice. Buska, AL 6-9313.
PUPPIES, 6 weeks old, short hair, small mixed breed, free to good homes. Walker, AX 9-8020.
TWO 3-pane bathroom windows, one screen; one 6-pane kitchen window, w/ screen; one 3-pane door (one pane broken). Hodyke, AM 8-5210.
8" TILT ARBOR SAW, \$55; jig saw, 24" throat, \$55; car cooler, 6 volt, pump and fan, \$10. Grymkoski, AX 9-4053.
DINETTE SET, 5 piece chrome and grey, \$24; Stella guitar, \$15. Gustafson, AX 9-3270.
18" ROTARY MOWER, 2 cycle, runs. Wilde, DI 4-6079.
'58 CHEV, original owner, 4 dr., stick shift, full lakers, louvered hood, R&H, WW, \$995. Smith, AL 5-2305.
DACHSHUNDS, 2 male puppies, 3 months old, not registered. Clark, AL 5-5747.
'57 VOLKSWAGEN deluxe sedan, sky blue, leatherette interior, wsw, new battery, radio, 22,000 miles, \$995; Cushman motor scooter, \$95. Johnson, AX 9-8980.
MERCURY 35 mm camera with flash attachment, \$20. Wheeler, AL 6-6230.
'46 FORD WAGON, would make good fishing wagon, \$150. Conklin, AM 8-6050.
BABY BED and mattress, solid maple, early American, \$30. Owens, 1033 Florida SE, AL 6-0606.
S&W .45 revolver, new blue, target grips, \$30; Model 1911A1 .45 auto pistol, \$30. Stephenson, AX 9-3914.
NE HEIGHTS, 3 bdr. home, den, fireplace, 1 1/2 bath, double garage, wall to wall carpet in living area. Tilley, AX 9-2762.
LIMED OAK table, four chairs, \$25; portable washing machine, \$5; chrome kitchen table, 4 chairs; small air conditioner, \$2; birch baby bed, mattress, \$5. Bell, AX 9-4064 after 5 p.m.
1 1/2 ACRES, fenced, in Manzano Mountains. Byrne, BU 2-3194.
3 BDR. HOUSE, completely landscaped, walled, 10 minutes from Base, very clean. Keller, 8109 San Joaquin SE.
1948 OLDS, 4 dr, \$125; bunk beds, \$35; baby stroller, \$15; child's desk set, \$5. Orendorff, AM 8-3331, nite AM 8-9753.
1958 BMW 500 cc motorcycle, \$695. Dunlap, DI 4-1007 Sat. and Sun.
RANGE, 30" Frigidaire, \$70; 2 albino parakeets, \$10 ea. Luhn, CH 7-4889.

MOUNTAIN ACREAGE on South Hiway 10, reasonably priced. Dow, DI 4-5893.
1959 TRIUMPH Tiger Cub T-20S, \$250. Evenings, 215 Solano NE, Monson.
\$95.95 WARDS 9" tilting Arbor saw for \$60, 4 months guarantee; 3/4 hp motor for saw, \$25. Shock, TR 7-3728.
1958 BSA 500cc single motorcycle, \$600. Huddle, AX 9-6603.
1958 MGA Roadster, new white paint, disc wheels, \$1595; 1957 Allstate deluxe scooter, red, w/windshield, \$150. Atkinson, AX 9-3250.
REFRIGERATOR, 9", \$50; 30 gal. hot water tank, shop smith, bandsaw. Scranton, AX 9-4779 after 6 p.m. or all day Sun.
POWER LAWN MOWER, 14" Kooper Klipper, reel type; Kodak camera, photo copier. Quinlan, AM 8-5665.
1958 MATCHLESS motorcycle. Newman, CH 2-4147.
MAYTAG AUTOMATIC WASHER, \$50. Klipolsky, AX 9-4110.
WORCHESTER ROTARY lawn mower, 18" Briggs & Stratton engine, \$30. Brown, AX 9-5405.
3 BDR HOME, den/fireplace, dining room, large kitchen, breakfast room, 2 baths, utility, carpeted, dishwasher, sprinklers, under \$18,000. McKiernan, AM 8-0516.
'55 NASH, R&H, overdrive, new tires, recently overhauled, clean, \$500. Martin, AL 6-3384, 1417 Indiana NE.
3 BDR HOME, air conditioned, dishwasher, carpeted, \$400 down. Redburn, AL 6-4147, 936 California SE.

FOR RENT
NICE 2 BDR house on Brazos River for rent by day or week. Labrier, CH 3-3392.
1 BDR HOUSE w/garage \$50 per month or without garage \$45. Lopez, 1139 Forrester NE, CH 2-5118 or AX 9-0941.
COZY 1 BDR HOUSE, furnished, SW valley, air conditioned, utilities, fruit trees, flowers, garden to plant, \$75. Cummings, CH 7-8437.
FURNISHED 3 bdr house, 1 1/2 bath, fully carpeted, two-car garage, air conditioned, water paid, adults only, no pets. Miller, 2608 Carol NE, 299-6676.
2 BDR and study, attached garage, walled back yard, in SE heights, close to bases, schools and shopping. Culley, AL 6-6308.
2 BDR APT. in brick triplex, with stove and refrigerator, a.c., storage space, water and garbage paid. Tillman, 528 Cardenas SE, AL 5-6292.
FIVE ROOM HOUSE, 1 BDR, furnished or unfurnished, University area, 111 Ash SE, \$65. Flores, CH 2-1586.

WANTED
BABYSITTING, 2 or 3 children in my home. On base near Corporation. Reasonable, experienced. Smith, ext. 54176 after 5.
TO JOIN carpool or ride from vicinity of Girard and Indian School NE to bldg. 800. Miller, AL 5-1324.
OUTDOOR REDWOOD TABLE and bench set; air pump and filter for 5 gal. aquarium. Gauthier, AX 9-1373.

FURNISHED HOUSES and apartments, 1, 2, 3 and 4 bedrooms from June until September for Sandia Corporation summer employees. Call AL 6-4411, ext. 36258.
RIDE from 2616 Manzano NE to Gate 2 or 4, bldg. 836. Mrs. Hines, AL 6-7872.
RIDE vicinity Lomas and Monroe NE to bldg. 892. Konen, AM 5-0077.
ELECTRIC MOTOR 1/2 or 1/2 HP, 115 volts. Baxter, DI 4-7601.
RUBBER RAFT, two or four man. Newman, AX 9-2729 after 6 p.m.
SETTING HENS. Stetz, TR 7-0975.
RIDE OR JOIN carpool from 1304 Princeton NE or vicinity to Gate 4 or 3. Carmichael, ext. 54131 mornings, ext. 54140, afternoons.
JOIN OR FORM carpool from New Hampshire NE (Dellwood addition, near Wyoming and Candelaria). Sundberg, AX 9-2177.
RIDE from 1110 Cerrillos Rd SW (Hoffman City) to bldg. 836. Weitzel, UL 5-9454.
CHILD TO CARE FOR in my home, age 3-6, hot lunch, 1811 Field Dr NE, Adams, 298-3364.
RIDERS to eastern Indiana, leaving here May 16th p.m. and starting back June 5th a.m. O'Bryant, 268-9049 after 5 p.m.
RIDE or carpool from vicinity Constitution and Girard to 880/892. Church, CH 2-6062.
CARPOOL members from vicinity Baldwin and Morris NE to gates 4 or 5. Stephenson, AX 9-3914.
SWAP 60w commercial AM rig for small commercial all band receiver. Scussel, AX 9-7821.
ATTENTION, HORSEMEN! South Valley Rebel Riders Horse Show Sunday April 30, 1 p.m., arena on Pajarito Rd SW. Tatum, TR 7-0997.
EVAPORATIVE air conditioner for four room house. Orendorff, AM 8-9753.

FOR SALE AT LIVERMORE
'56 FORD V8, Fairlane, 4-door sedan, R&H, power steering, Fordomatic, needs grill, fender slightly dented, \$600 or best offer. Valdez, Ext. 2454.
WEDGEWOOD Gas Stove, 1957, Monterey Model, with chrome flue pipe, \$50. Baker, HI 7-0329.
ALUMINUM Frame Windows, 6 x 6, double opening, hinged, \$30; 3 x 4, single opening, hinged, \$12. Cooper, JE 7-0280.
LATHE, heavy duty, 14" with drive, \$250; Shaper, 14" with motor drive, \$250. Fones, HI 7-1643.
POWER MOWER, reel type, \$25; Power Mower, rotary type, 1 yr. old, \$40; Bathinette, \$5; Bottle sterilizer, \$4; Infant seat, \$3; Playpen, \$8. Dickson, HI 7-3622.
WANTED AT LIVERMORE
PIANO, will trade 17" portable TV. Sage, HI 7-0714.

Countdown at White Sands Familiar to Section 7252-1

"X minus 14 minutes," drones a voice amplified by several loudspeakers. To the observer of a missile launching at White Sands Missile Range (WSMR) this announcement indicates 14 minutes left to chat and perhaps wonder if the missile will fire on schedule.

But to the Sandians stationed at WSMR, "X minus 14 minutes" is the cue to turn on the Sandia transmitters within the missile and to resume final activities.

The Sandia Section (7252-1) at WSMR consists of Ed Stout (supervisor), Calvin Cox, Joe Baca and Jane Goetz. They represent Sandia to the military personnel and civilians who operate the Range, and to employees of the

many DOD contractors who test missiles at WSMR. "On Board" many of these missiles (anywhere from 24 to 60 launchings per year) are Sandia components or the Sandia-developed non-nuclear systems for the nuclear warheads.

Needs Telemetry Package

To obtain data on the performance of components of a system during a missile flight, it is necessary to equip the unit being tested with a telemetry package. A project engineer (in 7200) designs this package to transmit the desired data and to be compatible with both the test item and the missile.

The operation of this telemetry package is checked out by Section 7252-1 at WSMR both before and after it is inserted in the missile

that will carry it and the test unit aloft.

Ed Stout arranges with WSMR to have the Range telemetry and tracking equipment ready to obtain the data needed by the Sandia development engineers.

A few hours before missile-launch on the day of a firing, Joe Baca reports to Sandia's building which contains an office, work shops, an assembly area, and telemetering receiving and recording equipment. During a missile flight Joe records the telemetered data for "quick look" by Sandia's engineers.

To Fly, Or Not To Fly

Ed Stout, usually accompanied by the 7100 and 7200 project engineers, goes to the Sandia trailer located near the launch pad. There Ed and the project engineers read the signals from the Sandia instruments within the missile, and decide whether or not the missile should fly.

In the blockhouse by the launch pad, Cal Cox controls and monitors the telemetering instruments within the missile until it becomes airborne.

Three different agencies share control of the launching of a missile. WSMR personnel can "hold" the firing if Range tracking equipment or telemetering receivers are not operating properly, or if the Range is not prepared to receive the missile. The missile contractor can hold the firing if the missile itself is malfunctioning. And Sandia can hold the firing if the test unit or related telemetry is not operating properly.

Even when the missile is airborne, a test can be halted—for each missile carries self-destruct units which operate automatically if a missile gets off course. The units can be initiated from the ground if the missile malfunctions.

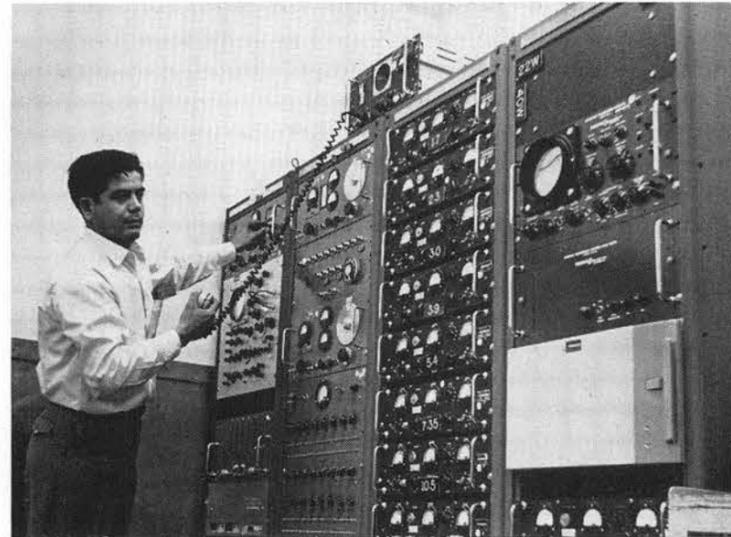
Data To Sandia Lab

After a missile flight, 7252-1 gathers the recorded data from the Range personnel and forwards these data to Sandia Laboratory's Data Services Department (7240) for reduction and distribution.

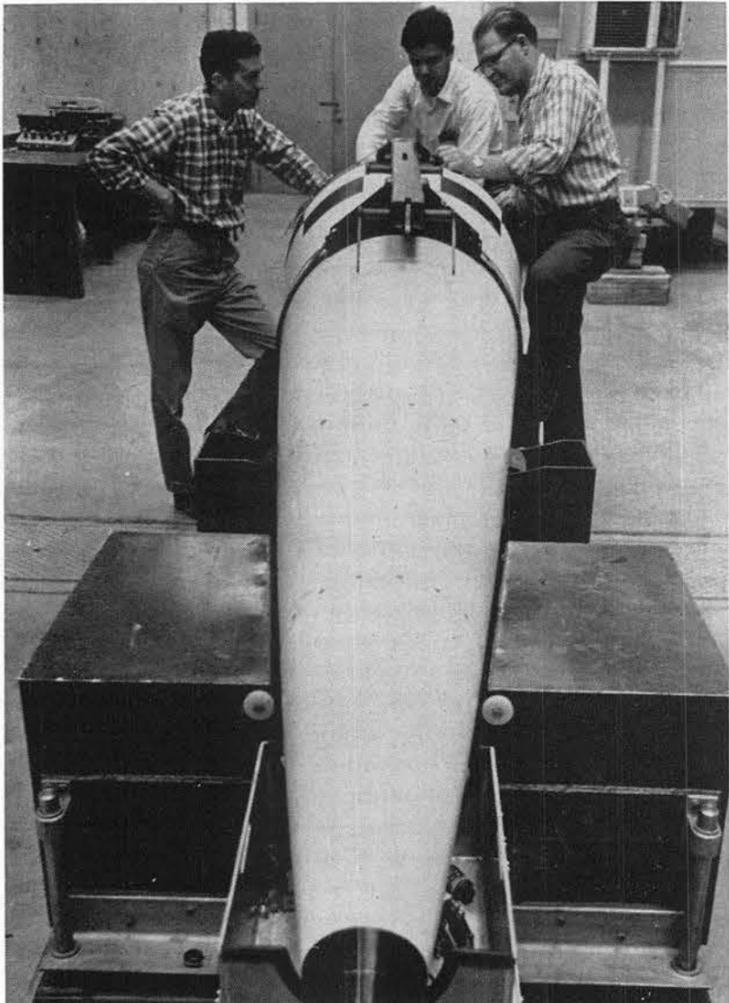
The White Sands Missile Range is operated by military personnel and civilians under command of the Ordnance Corps of the U. S. Army. Located in Tularosa Basin, the launch and headquarters area of the Range are flanked on the west by the rugged Organ Mountains. WSMR is about 40 miles wide and extends about 100 miles north from the launch area, which is some 30 miles west of Las Cruces.



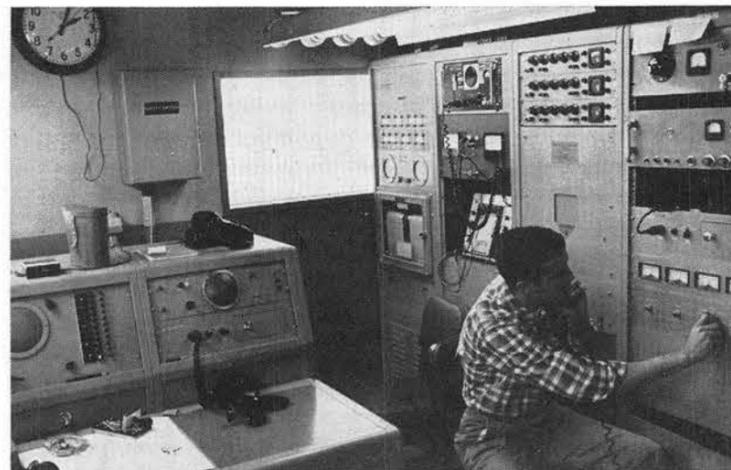
THE SERGEANT is a U. S. Army missile 31 inches in diameter and about 35 feet long. The missile's launcher is carried on a semi-trailer. With the missile are Ed Stout (upper left) and Cal Cox.



SANDIA'S GROUND STATION at WSMR is operated during missile flights by Joe Baca, who is shown here with racks of telemetering equipment. The data received from the transmitters within the missile are recorded for "quick look" and summary test evaluation.



SANDIA INSTRUMENTS within the nosecone of the Sergeant missile are checked in Sandia's building at WSMR by (left to right) Cal Cox, Joe Baca and Ed Stout, members of Section 7252-1.



IN THE BLOCKHOUSE by the launch pad of a missile is Cal Cox, who controls Sandia telemetry and monitors the telemetry voltages and electrical status before the missile is launched down the range.



SANDIA'S SECTION 7252-1 is grouped in front of the building that they occupy at the White Sands Missile Range. Left to right are Cal Cox, Jane

Goetz, Ed Stout, and Joe Baca. Cal and Jane have been at WSMR since 1958, Ed since 1953, and Joe transferred to WSMR from Sandia Lab in 1952.

Sandia's Safety Record

Sandia Laboratory
HAS WORKED
875,000 MAN HOURS
OR 25 DAYS
WITHOUT A
DISABLING INJURY

Livermore Laboratory
HAS WORKED
14,520 MAN HOURS
OR 3 DAYS
WITHOUT A
DISABLING INJURY