



**John H. Findlay
Director 1400
Retires June 30**

John H. Findlay, director of Electronic Component Development 1400, will retire the end of this month. He joined the Laboratory in December 1953 as a section supervisor in the electronics components organization, and became department manager of the group in 1955. Mr. Findlay was named director of the quality assurance organization in March 1958, and assumed his present position in July 1959.

Before joining Sandia, Mr. Findlay was with Westinghouse Electric Corporation in Bloomfield, N. J., for 17 years working in development of electronic tubes. He worked two years with Union Switch and Signal Company as a research physicist.

He received his BS and MS degrees in physics from Queen's University in Kingston, Canada, and PhD in physics from Princeton University.

In February 1966, Mr. Findlay was elected a Fellow of the Institute of Electrical and Electronics Engineers. The award was based on "outstanding contributions to the development of electron tubes and devices for atomic weapons." He is also a Fellow of the American Association for Advancement of Science and member of the American Physical Society.

Mr. and Mrs. Findlay will continue to reside in Albuquerque for the present. They have two children—both living at home. Mr. Findlay says his retirement plans are indefinite.

**Third Sandian Attends
WE Management Program**



Still another Sandian—Paul M. Stanford (4122)—has been selected to attend the five-month Management Training Program conducted by Western Electric Company in New York City.

Preceding him in this highly specialized course were R. J. Blount (3120) and C. R. Andes (3131).

In a letter to Mr. Stanford, Western Electric President P. A. Gorman described the course as "one of the most extensive and intensive programs of training in American industry." He added that "by your selection, your organization has shown their confidence in you based on your demonstrated capability and effectiveness of your past assignments."

The session Mr. Stanford is attending will begin July 7 and will include 14 men of "middle management" level from WE facilities across the nation. The subject areas cover personal development, labor relations, administrative policies and practices, business in the American economy, managerial controls, management science, and public affairs-community relations.

**Jack Tischhauser
Elected National
Director of ACM**



Jack Tischhauser, manager of Programming Department 9420, was recently elected to the 11-man national governing board of the Association for Computing Machinery. He was elected Regional Representative of the organization's Mountain Area which includes New Mexico, Colorado, Utah, Wyoming, Arizona, Montana and parts of Texas and Canada. ACM has 11 regions and one representative is elected from each.

Jack has served as chairman, vice chairman and program director for the state Rio Grande Chapter of ACM.



SANDIA LAB NEWS

VOL. 20, NO. 13, JUNE 28, 1968

SANDIA LABORATORIES

ALBUQUERQUE, NEW MEXICO; LIVERMORE, CALIFORNIA

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

Providing More Accurate Data

New Control Center Operating in Area III

Data recording, monitoring and control functions of the vibration and acoustic facilities in Area III are now centralized in a new computer-like center in recently-constructed Bldg. 6650.

The shakers and vibrators in Bldgs. 6610 and 6560 and the acoustic facility in Bldg. 6640 are tied into the new control center. When the vibration capability is added to the underground centrifuge and installation is complete on the multiple shaker and low frequency facilities in Bldg. 6560, these also will be connected to the Bldg. 6650 control center.

The control center concentrates test operations in one location and provides for more efficient use of equipment and personnel, according to John Otts, supervisor of Area III Vibration, Acoustic and Centrifuge Division 7324. "More important," John says, "we are getting more accurate data and we are getting it quicker. This is probably the most sophisticated instrumentation of its kind."

Previously, each of the facilities had its own remote control and data recording installation. "The center has been in operation about six months now," John says, "and we are extremely pleased with the results."

The center is divided into two sections—one section handles the control and recording operations for the test facilities and the other the magnetic tape playback functions operated by Test Projects Division 7331 under Elmer White. The latter provides service for all of Sandia's environmental test operations and for other specialized Sandia test groups.

The playback section can handle playback and analysis of test data tapes to almost any degree from simple "quick look" data to complete analog or digital analysis. It can provide statistical analyses of ran-



NEW CONTROL CENTER for acoustic and vibration test facilities in Area III concentrates control and recording activities into one area for more efficient use of equipment and personnel. From left are John Otts (7324), test operations supervisor; George Lemmon (7311), facility designer; and Ken Bauhs (7335), responsible for data systems design.

dom noise, random vibration, acoustic noise and shock spectra as well as analog analyses of sine wave vibration and random wave vibration.

The data recording and control section provides up to 150 channels, including a 50-channel multiplex recording system, to each of the test facilities in the network. The system was designed to give maximum operator convenience while handling a large number of data channels.

Data are monitored and recorded by pushbutton control with a minimum of manual switching between recording systems and test facilities.

For quick scanning of signals coming from a test setup, the consoles of the recording section use 14 miniature oscilloscopes to form 14x4 input signal switchers and 7x8 output signal switchers—all controlled by pushbuttons which are numbered and color coded for easy identification of signal failure on any channel. Periodically during tests, the operator can visually check functioning of all data channels.

Nine tape recorders provide almost unlimited data recording capability and proximity of the recorders to the playback section permits the engineer to immediately review the data.

In addition to data recording and control functions, the new facility incorporates telephone, radio and television communications with the test facilities. More than a million feet of cable went into the data acquisition and control network.



CERTIFICATES OF COMPLETION of Sandia's apprenticeship program were recently presented by R. J. Hansen, director of Development Shops 4200, (left) to Tommy M. Simpson (4254-2) and Stephen Eyster (4233-2), second from right. At extreme right is Jacob E. Young, president, Metal Trades Council.

Sandia Announces 'Extras' for Retirees

Sandia retirees received a surprise in the mail this month: retirement pins. They are similar to service award pins except the finish is white gold rather than yellow gold.

This is one of several "specials" provided through Employee Benefits Division 3122 to extend the feeling that these former employees are still an "unofficial" part of the laboratory. There are now 362 retired Sandians, including 173 who elected to take early retirement as a result of the recently improved benefits.

Other "extras" that each retiree receives include a wallet with company identification card, a year's subscription to HARVEST YEARS magazine, a directory of employees who are already retired, and a lifetime subscription to the LAB NEWS.



DETONATION of a buried charge of 30,500 pounds of conventional high explosives in Coyote Canyon Test Field created a dust cloud and a crater about 30 feet deep and 105 feet in diameter. The blast was part of a Plowshare experiment to study air-blast geometry. At left is Virgil Harris (9133), Field Test project engineer, with L. J. Vortman (7111), scientific advisor for the project.

Study of Air Blast Geometry

30,500 lbs. of High Explosives Detonated in Coyote Test Field

Largest charge ever detonated in Coyote Test Field—30,500 pounds of conventional high explosives—was exploded June 13 as part of a continuing Sandia effort in the AEC's Plowshare Program. Plowshare involves investigation and development of peaceful uses of nuclear explosives.

The HE charge, buried at a depth of 48 feet, created a crater about 30 feet deep and 105 feet in diameter. The blast tossed 144,000 cubic feet of earth (weighing about 7250 tons) out of the crater.

Three minutes after the first explosion a 2400-pound charge was detonated on the surface to provide a correlation between air blast effects from surface and buried charges.

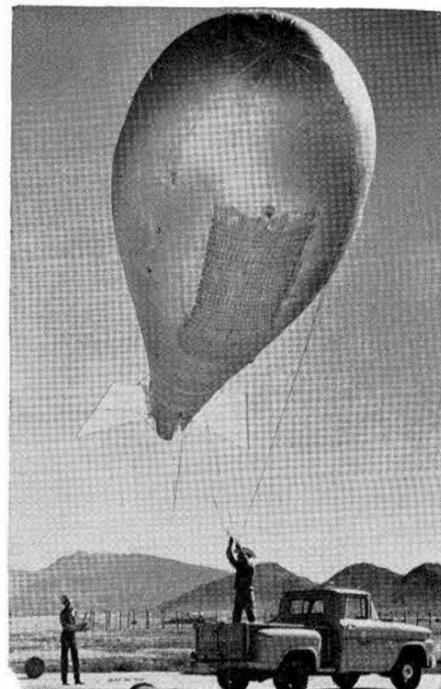
Purpose of the underground blast was to pinpoint the factors that relate size of the charge and depth of burial to close-in and distant air-blast pressures. Past Plowshare explosive experiments revealed that although burial of the charge suppresses the amount of close-in air blast as compared to a surface blast, the distant air blast is not suppressed as much as one would expect.

Being able to accurately predict air blast pressures is a prime requirement for any proposed earth moving project involving nuclear explosives, such as the building of dam, harbors or canals. Jack Reed and Luke Vortman of Underground Physics Division 7111 have been working in this area for Sandia since the early days of full-scale testing. Both Jack and Luke support the Nevada Test Site operations as well as being involved in the Plowshare Program in various projects, including the refinement of air blast prediction formulas. They were scientific advisors for the recent Coyote experiment.

One of the specific objectives of the June 13 experiment was to formulate complete profiles of the close-in air-blast geometry. To obtain the necessary close-in measurements, Instrumentation Fielding Division I 9123 provided surface pressure gages and two strings of instrumentation suspended from helium-filled balloons tethered by cables to hover at 1500 feet altitude. Project leader for the instrumentation was H. G. Laursen (9123).

Long range measurements, from 100 to 150 miles from the blast, (made by microbarograph instruments), were the responsibility of A. B. Church of A&F Field Support Division 9132. Manning the station at El Morro National Monument was D. A. McFadden (9132). Don Browning (9132) was at Zuni, N.M. with a station, and Toby Montoya (Eberline Instruments) was at Ramah, N.M. Gene Styberski (2543) operated a station at Kirland AFB.

Although distant air-blast pressure waves are influenced by atmospheric conditions, the data obtained do indicate the extent of the propagation and refraction of the pressure waves through the ozone-sphere (an atmospheric layer 100,000 to 150,000 feet above the earth). For example,



TWO BALLOONS—40 feet long and 17 feet in diameter—were tethered at 1500-foot altitude to suspend strings of pressure gages over the blast site of a recent Coyote Plowshare explosive experiment.



MORE THAN 7200 tons of earth were tossed out of this 105-foot diameter crater created by the detonation of a buried charge of 30,500 pounds of high explosives. The experiment, primarily conducted to study air-blast geometry, also contributed to a knowledge of cratering mechanics. The photographers are shooting film for local television.

pressures detected from the underground blast were below the range audible to the human ear; whereas the surface shot was clearly heard at El Morro, about 100 miles away. The effect of propagation and refraction of shock waves is dramatically illustrated by the fact that people in Area I, a few miles from the test, did not hear the surface blast.

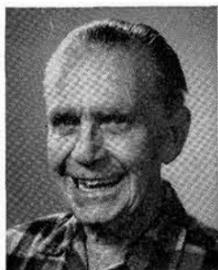
In addition to the main objectives of the experiment, the Coyote blast also provided data for studying craters and the distribution of material ejected by an underground blast.

Ejecta data for the experiment were obtained by burying radioactive tracers—small nails—at various depths near the explosives. Comparison of pre- and post-shot locations permits estimate of the trajectory of debris ejected by the detonation.

Field Test Project engineer for the Coyote Plowshare experiment was Virgil Harris (9133). Arming and firing of the buried charge was performed by Ed Holder (9132). Arming and firing of the calibration surface shot was done by Ray Mosteller and John Fuqua (9132).

A communications net for the distant microbarograph station was the responsibility of E. L. Hansen (7223).

Death



Edgar E. Pierce, a material coordinator in Maintenance Planning & Control Division 4517, died June 16 after a short illness. He was 61.

He had worked at Sandia Laboratory since January 1951.

Survivors include his widow, a daughter and three grandsons.

Welcome Youth Opportunity Trainees

Faye S. Aillin 3252, Jewell F. Aikins 4517, Lamont Anderson 7332, *Vernon E. Anderson 7335, *Ruben V. Aragon 4542, *William B. Aragon 9411, Henry Archuleta 3415, *Katherine M. Armijo 4135, William E. Arneson 4212, Robert V. Benavides 7224, Michael K. Bencoe 5154, Martha Bird 3126, Himmy D. Burke 9411, *Judith R. Butscher 3241, James M. Carminat 2210, *Genevieve K. Chato 2234, *Patricia A. Concannon 2121, Michael D. Cooper 4252, Arthur B. Crawford 5221, Josette T. Crespino 3122.

*John DeFlice 2232, John A. Dixon, Jr. 3465, Lloyd A. Drennon 2210, *David E. Dunham 4631, Claudette I. Duran 3126, Rexford A. English 4615, David P. Escudero 5121, T. Paul Espinosa 5131, Joseph Fields 4575, Bernadette Fernandez 5630, *Margaret Fernandez 7130, Linda S. Ferro 9230, *Fred M. Fox 7344, Roger A. Freidline 2453. D. Dickie Gallegos 7226, Jose D. F. Gallegos 2210, *Leo L. Gallegos 4573, *Richard P. Gallegos 4131, Silas W. Gallegos 5131, *Evans R. Garcia 2232, Simon E. Garcia, Jr. 2565, Larry B. Garley 4254, *Albert Giannini 3134, Barbara Giannini 4382, *Louis R. Giannini 1411, *Eloy Gonzales, Jr. 1413, Mike J. Gonzales 3428, *Nancy C. Gonzales 7216, Louis J. Gonzales 3126, *Pearl D. Gonzales 9210, Richard D. Gonzalez 1340, Roy E. Gonzalez 2210, Rudolfo M. Grado 4574, Virginia R. Griego 4517, Shirley A. Griffin 3244, *Katherine L. Gutierrez 4333.

John S. Haynie 3313, *John Hebert III 1310, John E. Hedquist 2442, Roger E. Henry II 4253, *William P. Herrera 2565, Charles R. Hickam 2454, Isaiah Hicks III 4517, *William C. Houston 5234, Linda C. Jaramillo 3126, Rosie M. Jennings 3311, *Janice M. John 3126, Evelyn B. Juarros 3126, Betty Ann Judee 9411, *James L. Kairns 5234, Rosemary M. Kerschen 1310, *Ernest E. Kilker 9411, *Ronald A. King 1411, William J. Kluesner 2442, *Robert L. Lager 7122, *Thomas R. Lancaster 9322, John C. Lanoue 4224, *Eva Ann Lopez 9319, Joseph Lopez 2491, *N. Hope Lovato 2234, Erlinda L. Lucero 3341, Timothy A. Lucero 2112, *John M. Lujan 7216.

*Linda M. McClintock 1340, *William J. McKay 2134, Ray N. Maldonado 1113, Eugene P. Marquez 9226, *Diana L. Martinez 3411, Dorothy F. Martinez 3244, L. Jeanne Martinez 3232, Martin Martinez 2153, Steven R. Martinez 4517, *M. Dolores Mascarenas 4211, Michael J. Matthews 4574, Michael W. Mauser 4575, *Herman Mayfarth III 1134, Richard A. Mayo 3253, David D. Mochen 2451, *Gloria J. Montano 3421, Joe D. Montano 4615, Carl A. Montoya 3253, *Grace Montoya 1100, *Randy C. Mordhorst 2232, Herman O. Mueller 9411.

*Larry S. Neiderman 9230, *Dale L. Oldham 4151, *R. Theresa Olguin 7124, Theresa A. Otero 3231, *Clifford R. Oxley 2523, *Elizabeth Padilla 4615, *Daniel J. Paneboeuf 2564, Leroy D. Perea 4631, Phillip R. Perea 4574, *E. Jeanne Persiani 4613, E. James Powdrell 4575, Clifford Rhoten, Jr. 4517, David K. Robinson 9411, *Maureen J. Roesch 5590, Daniel Romero 2115, Julia A. Romero 3421, *Charles E. Roybal 4135, *Maxine Y. Roybal 9220, *Rosita N. Roybal 3421.

*Betty L. Salazar 3122, Betty A. Sanchez 4333, *Franklin D. Sanchez 2412, Fred L. Sanchez 4574, Louella G. Sanchez 3126, *Albert L. Sandoval 4543, *Leonard Sanchez 1413, *Bertha R. Schloer 9411, Frank C. See 3132, Abnan A. Silva 1322, Dennis E. Smith 4574, *Gary L. Smith 7226, Linda F. Smith 7220, *Russell F. Smith 7323, Patricia M. Stakvel 3430, Kathryn L. Steele 3313, Larry J. Stephenson 7121, *Orlando C. Torres 7324, Luis A. Trujillo 5132, Theodore M. Trujillo 7344, Fred N. Umbarger 3415, Olivia Y. Vargas 4382, Philip T. Walker 4517, Bobby L. Weaver 1344, Alvin W. White 4517, *Edward Williams, Jr. 3463, Robert S. Young 5613.

*Denotes rehire

Supervisory Appointments

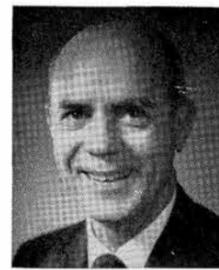


LEO W. SCULLY to supervisor of Optical Measurements Division 7232 at Tonopah Test Range, effective July 1.

Leo joined Sandia's optical development group in the field testing organization in June 1960. Five years later he transferred to Nevada Test Site Engineering Department where he has been working on engineering and hardware for Sandia's weapons effects tests at Mercury.

He received his BS degree in mechanical engineering from Kansas State University in June 1950. He did his graduate work under Sandia's Technical Development Program and received his MS in mechanical engineering from the University of New Mexico in June 1962.

From 1953 to 1956, Leo served with the Marine Corps, including two years in Japan. He is a member of Pi Tau Sigma and Sigma Tau.



ROBERT E. THOMPSON to supervisor of newly-created Administrative Procedures and Standards Division 4118, effective July 1.

Bob has been at Sandia since 1952, the majority of the time in the Systems and Procedures organization. He also worked a year in Accounting and two years in Personnel.

Before coming here he attended the University of Arkansas where he received a BS degree in business administration. He has also taken graduate courses at the University of New Mexico. He is a member of Beta Alpha Psi, honorary accounting society, and Beta Gamma Sigma, honorary business society.

Bob served four years in the Army during World War II. After the war, he operated a hardware and furniture store in Oak Grove, La., for several years.

SANDIA LAB NEWS



SANDIA LABORATORIES
ALBUQUERQUE, NEW MEXICO
LIVERMORE, CALIFORNIA

Operated for the United States Atomic Energy Commission by Sandia Corporation

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LASER LIGHT SOURCE focus is checked by Bob Miller (8119) with an electronic image converter (which is similar to the Army's "snooper scope"). Designed and developed by former-Sandian J. W. Stull and Bob, the small portable laser (right) is used to test photodiode operation (left) in intense light. It produces a fast-rise, intense, repeatable source of light for testing fast response photodiodes at infra-red frequencies.

Take Note

Bruce Held of Environmental Health and Medical Services Division 8215 spoke at the Western Safety Congress held in Los Angeles June 12. The Congress was sponsored by the Greater Los Angeles Area of the National Safety Council. Bruce discussed "Comparative Hazards and Method Control."

Arlyn Blackwell (8110) won two honors in this month's Livermore Camera Club black and white photography competition. His entry called "Henry II," a neighborhood cat, took first place and a photo "Japanese Scene," shot on his trip to Japan last year, was judged second. The club's monthly meetings include both black and white and color slide competition, evaluated by an outside judge.

A JD (Doctor of Law) degree was conferred on Lawrence H. Bakken (8147) recently at commencement exercises at the University of Santa Clara.

Larry, a structural dynamicist in Applied Mechanics Division II, received his Bachelor's degree in 1955 and an MS the following year, both in civil engineering from the University of Minnesota, and has completed a year's graduate work in structural dynamics at the University of California at Berkeley. Before joining Sandia in 1961, he worked for four years at

Congratulations

Mr. and Mrs. Hal Norris (8148) a son, Gary Andrew, June 10.

Jim Pergossi (8164) and Diane Stone married in Oakland, June 8.

Never Look at the Sun

A 15-year-old California boy wearing sunglasses suffered permanent damage to his vision from retinal burns sustained while sunbathing. The boy's tragic experience dramatizes a popular misconception that one can safely look directly into the sun while wearing sunglasses.

The National Society for the Prevention of Blindness urges sunbathers and vacationers to protect their eyes from bright sunlight and reflected glare by using sunglasses that have been selected for proper light transmission, tinting and comfortable fit.

Convair Aircraft Corporation in San Diego. He is both a registered civil and mechanical engineer in the State of California and holds full membership status in the American Society of Civil Engineers.

Larry plans to take the 1968 State of California Bar Examinations in August.

The B. S. Biggs Invitational Golf Tournament was held June 6 at the Sunol Valley Golf and Country Club (palm course) in appreciation of Mr. Biggs' support of the Sandia Employee Golf Club.

Dan Pegan (8154) won the first place trophy in the tournament by finishing with a net low score of 66. The tourney was played on a straight handicap basis with participants divided into two flights. Dave Timmer (8166) was the top winner of the first (handicap of 22 or less) with a net score of 70, and Smokey Maxwell (8243) took the second flight (handicap 23-36) with a net score of 71.

Lawrence M. Dorety (8148) has been elected to membership in Phi Beta Kappa, the national honorary society for scholastic achievement.

Larry joined Livermore Laboratory in June 1967, after receiving his BS degree in engineering physics from the University of California at Berkeley. While working on his Bachelor's degree, he participated in Sandia Livermore's Cooperative Work-Study Program for three years—1964-66. The Co-op Program is a plan of education whereby students alternate three six-month periods of regular employment in industry with equal periods of class attendance. Presently, Larry is assigned to Division 8148 where he is involved in radiation transport problems. Concurrently, he attends the University of California at Davis/Livermore under Sandia's Graduate Education Program (GEP), working on his Master's degree in applied science.

Livermore Valley Technical Panel members George Anderson (8140), Elvis Skidgel (8127-1) and Paul Dane (LRL) were involved recently in the installation of a remote radio paging system for many of the doctors in the local area. Now, even if the doctors are away from their office or home—such as shopping or playing golf—their telephone answering service can reach them when they are on hospital call or in event of emergencies.

The panel volunteers assisted by making recommendations in selecting the equipment and evaluating the capabilities and price quotations of the various commercial suppliers. Elvis wrote the specifications and discussed the technical aspects of the requirements with the suppliers' representatives.

The transmitter license for the system, issued by the Federal Communications Commission, is owned by Valley Memorial Hospital and the transmitter and antenna are based at the hospital.

John Bryson Elected President of Livermore Booster Club

John Bryson (8223) is the 1968-69 president of the Livermore Booster Club, an organization of civic-minded citizens interested in the youth of the community and the high school athletic program.

He was elected at the 19th annual Boosters Awards Banquet held in Livermore recently. Each year the Boosters honor athletes who have excelled in scholarship, sportsmanship, citizenship, and integrity during their high school careers. A \$400 scholarship, called the Livermore Booster Club's Olympian Award, is presented to the outstanding senior for each of the two local high schools.

This year, Kelly White, son of Dick Ballard (8212), was the recipient of the Olympian Award for Granada High School. In addition to the scholarships, 34 awards went to members of both schools who displayed sportsmanship, improvement and ability on the varsity and junior varsity teams.

John has been active in the Booster Club since 1958 when he transferred to Livermore from Albuquerque as section supervisor in the Model Shop. He was promoted to division supervisor later that year and presently supervises Model Shop, Manufacturing, and Shop Liaison Division 8223 at SLL. He has been with Sandia Laboratories since 1946.

Death



Jamie B. Batalla, a helper-trades in General Maintenance Section 8222-2, died June 7. He was 59 and had been ill for some time.

He joined Sandia in January 1959 and worked as a gardener at Livermore Laboratory until transferring to his most recent position in October 1962.

Survivors include his widow and a brother who resides in the Philippine Islands.

Jerry Nerton Installed Pleasanton BPW President

Jerry Nerton (8115) was recently installed as president of the Business and Professional Women's Club (BPW) of Pleasanton for the year 1968-69. She has been an active member in the club since 1950.

Jerry has worked at Sandia since 1960 and is presently an Electronic Accounting Machine (EAM) clerk in the Computer Division at SLL. Previously she held such assignments as telephone operator, key punch operator and critical path clerk.

Before coming to Sandia, Jerry worked at Valley Memorial Hospital, Park Air Force Base and Mare Island Navy Base. While at Mare Island, she appeared as the featured blues singer with the Mare Island civilian band for five years, and tapes of the shows were broadcast over the Vallejo radio station. She has also appeared with several small musical groups in Marin County.

Approximately 35 women from various business and professional fields in the Pleasanton area are currently members of the local club.

Trophies Awarded as Winter Bowling Competition Ends

Winners of Sandia bowling leagues' winter competition were awarded trophies during recent ceremonies.

First place in the 10-team, Sandia Mixed Handicap League was taken by "Snoopy's Reruns." Members of the championship team were John Barnhouse (8226), Roger Busbee (8127), Jackie Garrett (8119), Don Knape (8253), Lovell Smith (wife of Elmer Smith, 8131), and Gayl Tschritter (wife of Ken Tschritter, 8252). "The Tigers," composed of John Anderson (8155), Roger Baroody (8160), Harry Farmer (8168), Ed McKelvey (8119), Mary O'Shea (8242) and Otto Schreiber (8139), won the second spot in the league.

For the men, individual awards were presented to Bill Rego (8245) for his high-scratch game score of 261; Paul Dominguez (8161) for high-handicap game, 280; Don Knape (8253) for high-scratch series, 677; and Art Kellom (8113) for high-handicap series, 713.

Taking honors for the women were Jackie Garrett (8119) for high-scratch game of 256; Marge Bell (former Sandian) for high-handicap game, 257; Dorothy Chappell (wife of Ken Chappell, 8112) for high-scratch series, 612; Lori Jones for high-handicap series, 693; and Shirley Baumann (wife of Don Baumann, 8252) for the most improved average, 12 pins.

In the eight-team, Sandia Men's Thunderbird League, the top spot was won by the "Gutter Rats." Team members were John Freie, Art Kellom, Bob Strout, Bob Tockey, Don Werner (all 8113), Walt Maupin and Merle Snyder (both 8124). The "Push-Overs," Carl Beckham (8151), John Cordial (8161), Ray Culy (8127), Bert Folks (8119), Ubbie Hammer (8233), Howard Appleton, Tom Imler and Woody Wilson (all LRL), came in second.

Individual honors went to Jerry Hunting (8168) for his high-scratch series of 681; John Freie (8113) and Carl Beckham (8151) for their high-handicap series of 717; Tom Imler (LRL) for high-scratch game, 267; Harry Farmer (8168), Gale Hudson and Gerry McCorkle (both 8252) for their high-handicap game, 276; and Gerry McCorkle for the most improved average, 20 pins.



Mary Gelinias (8142)

Take A Memo, Please

It's not too late to join the payroll deduction plan for Savings Bonds.

Welcome Newcomers

June 3-17

California	
Marilyn K. Fullenwider, Livermore	8242
Catherine Imhoff, Livermore	8243
Fran M. Rupley, Livermore	8242
Timothy J. Sage, Stockton	8252
Curtis J. Specht, Stockton	8252
Zell S. Terry, Manteca	8222
Arizona	
*Gerald A. Benedetti, Tempe	8147
Idaho	
Gary Lee Clark, Moscow	8154
Richard S. Kunter, Moscow	8142
Oregon	
Walter J. Finchum, Klamath Falls	8252
Danny R. Mitchell, Klamath Falls	8252
Kansas	
Melvin Chato, Jr., Lawrence	8252
Ellen L. Sweszy, Lawrence	8242
Shirley A. Wilson, Lawrence	8242
Pennsylvania	
Marvin J. Kenig, Philadelphia	8149
* Denotes Rshire	
Youth Opportunity Trainees	
Lawson L. Bunn, Oakland	8222
Shelton D. Bunn, Oakland	8222
*David G. Collins, Livermore	8253
*Joan M. Edwards, Livermore	8232
Paulette L. France, Livermore	8245
Marilyn M. Gee, Livermore	8115
Ronald D. Glaum, Pleasanton	8222
*James T. Haun, Jr., Livermore	8242
Janice L. Marshall, Livermore	8243
Gloria R. Ramil, Livermore	8242
Sharon L. Ritter, Livermore	8214
Kirk A. Stromberg, Livermore	8242
Z. Wayne Wahaski, Livermore	8253
Michael E. Wells, Livermore	8245
*Denotes Rshire	

For a Place in the Sun

Navahos' Long March

Little remains of the military reservation of Fort Sumner, located on the Pecos River in eastern New Mexico. It was there that the major element of the Navaho tribe was held in exile for five years.

Sunday there will be a ceremony to commemorate the 100th anniversary of the signing of a peace treaty between the U. S. Government and the Navahos. It will be followed by parades in Santa Rosa on July 1; Albuquerque, July 2; Grants, July 3; Gallup and Window Rock, July 4.

The occasion cannot truly be called a "celebration" because to many Navahos it recalls the blackest days in their history.

After the U. S. took possession of former Mexican territory in 1846, many army posts were established within Navaho territory. Navaho and Apache raids on Rio Grande settlements increased. Treaties were made with chiefs of local tribes, but were often violated by members of other tribes not under jurisdiction of these leaders.

Finally, Colonel Kit Carson and soldiers of the New Mexico Military District were ordered into Navaho country with specific instructions to destroy all crops and livestock. Some Indians were killed; others were taken prisoner. Then came orders for "The People" (as the Navahos call themselves) to surrender at Fort Defiance. Many gave themselves up; some were hunted and captured in the depths of Canyon de Chelly; others remained at large in inaccessible areas.

On March 6, 1864, 2400 braves, squaws and children began a 300-mile forced march to a part of the Fort Sumner reservation called "Bosque Redondo" (circular grove of trees). The end of April, 3500 more Navahos made what is known as "The Long Walk." Eventually 8000 Navahos were in captivity as well as several hundred Apaches—their traditional enemies.

The Government intended to make peaceful farmers out of the nomads. The Indians worked hard to build homes, dig ditches, and plant crops; but the water was alkaline, unseasonable cold followed withering winds, drought followed flood. In four years no real crop was harvested and many Navahos died of disease and malnutrition.

Finally a Peace Commission was sent to the Bosque Redondo to negotiate a treaty with the Navahos and to decide their future. After the treaty was signed, the survivors returned to their new reservation—3,500,000 acres of their previously-occupied lands.

Navahos employed at Sandia have expressed mixed feelings about the centennial events. Two had grandfathers who were children at the time of the historic march. Another felt that mention of the "Long Walk" opened up old wounds, and he compared the inhumanity of the Navaho "Long Walk" with the Bataan death march.

This part of our story may not make pleasant reading for the non-Indian American, but this is the way it was 100 years ago. More important, however, is how it has been since then? And what does the future hold for these "first" Americans?

The Navaho people have come a long way, primarily through their own efforts,

since that fateful march in 1864. It might be said that World War II did more than anything else to turn The People to modern ways, although this transitional stage continues. During wartime 3600 Navaho men and 12 women served in the armed forces. In fact in the South Pacific, many Navahos were radio operators and were able to develop a "code" which the Japanese were never able to break—they merely used their native language. At the same time, other Navahos contributed to the war effort by taking jobs off the reservation in industry. When these Navahos returned to their homes, they brought with them a new way of life—and new hope.

Agriculture and livestock are no longer the major source of income for the tribe; instead, mineral resources (uranium and vanadium), oil and gas leases and royalties have given these Indians the ability to help themselves. From the leases and royalties, a trust fund of \$10,000,000 is earmarked for scholarships, to help support Navaho children through college or to pay costs of vocational training.

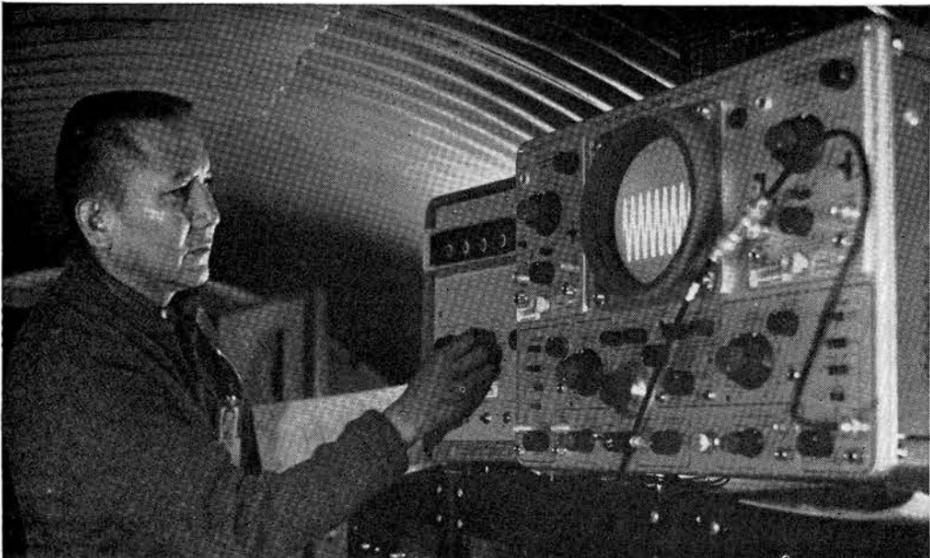
Fully aware of the economic and social injustices suffered by the Navahos, the Government has stepped up ways to help them to better education, more job opportunities, improved agricultural methods and more wide-spread health services.

In Albuquerque, July 10-12, the Community Relations Services of the Department of Justice, the Inter-Agency Committee for Mexican-American Affairs, and the Plans for Progress organization will co-sponsor a Conference of Southwestern Region Employers. J. Robert Garcia (3260), who is helping to set up this conference, explains that its purpose is to give representatives from various industries an opportunity to outline their participation in the Equal Employment Opportunity Program. At the same time, representatives from minority groups could relate how they are preparing their people to qualify for employment. Representatives of the Bureau of Indian Affairs will be among those to attend.

This is one of the ways in which Navahos will be able to look ahead to a brighter future.



ORDER ANALYST Edward Paul (right) of Supplier and Logistics Section II 2554 is checking procurement requests with his former supervisor James M. Kelly (3341). Ed has been at Sandia since 1950 and is past president of the Navaho Club in Albuquerque.



AMONG NAVAHOES employed at Sandia Laboratories is Carl Csinnjinni of Instrumentation Fielding Division I 7123. An electronic technician, he has participated in numerous scientific experiments at Nevada Test Site. He has been with Sandia nearly 20 years.



A CONCERT GRAND has replaced customary dining room furniture in the home of C. Rex Gardner (9426) who takes his piano playing seriously.

Attending Berkshire Music Seminar Unique Type of Summer Vacation

Camping, traveling, golfing and fishing are the usual ways one spends his vacation. C. Rex Gardner (9426), however, has two weeks planned that will be a true change of pace—he will be attending a music seminar at the Berkshire Music Center.

To music lovers, the Berkshire Festival at Tanglewood (Mass.) is synonymous with the Boston Symphony Orchestra. The orchestra will be heard in 24 programs during the 1968 eight-week summer season.

Less well known to the general public is the Berkshire Music Center and Tanglewood Institute, sponsored by Boston University and the New England Conservatory of Music. Erich Leinsdorf, conductor of the Boston Symphony Orchestra, is also director of the music center.

Rex will be at the center from June 30-July 12 attending classes and concerts. He is registered for a general music seminar, to be led by Peter Gram Swing, which will include discussions of such topics as analysis and its relevance to the understanding of music, selection of repertoire, music history and theory, etc., in addition to informal performances of chamber music or choral works. However, Rex hopes to change his registration to a piano seminar which emphasizes the various aspects of public performance and teaching problems. The group will be divided into two sections: one concentrating on the solo piano works of Haydn and Mozart, the other on the complete solo piano works of Brahms. Chairman of this seminar is Bela Boszormenyi-Nagy.

Attendance at seminars at the Berkshire Center is not merely a matter of having the time or money. Before acceptance as a registrant, the musician must submit a tape recording of his playing or submit a letter of recommendation from teachers or conductors who know his proficiency and musicianship.

In Rex's case the required letter was submitted by Ralph Berkowitz, manager

of the Albuquerque Symphony Orchestra, who was dean of the Berkshire Music Center before coming here. Mr. Berkowitz is also a well-known pianist.

Rex's interest in music dates back to when he was 12 years old and studied the piano for two years until sports became a main interest. During his senior year in high school and freshman year at the University of Oklahoma he again took piano lessons. In January 1967 Rex began to study under Mr. Berkowitz and his enthusiasm has grown ever since.

He spends between two and three hours a day practicing and twice a month takes an hour-long private lesson. In the past year and a half, Rex has learned the Chopin waltzes, seven sonatas and six polonaises, several selections by Prokofiev, two Ravel numbers, and several Schubert compositions including two impromptus. He is currently learning Beethoven's second piano concerto in B-flat major with the goal of some day playing it with a local symphony.

His favorite composer? "Beethoven," he answers, "probably every pianist's favorite because of the intricate fingering required to play the selections exactly."

Authors

A. R. Sattler (7114) and D. K. Brice (5211), "Channeling in Quartz," Proceedings of the 1967 International Conference on Solid State Physics Research with Accelerators.

H. R. Vaughn (9321), "Boundary Conditions for Persistent Roll Resonance on Re-entry Vehicles," June issue, AIAA JOURNAL.

K. J. Touryan (9326), G. E. Clark (1325) and D. J. Rigali (9326), "Pressure Distribution on Cone-Cylinders in Hypersonic Flow," April issue, AIAA JOURNAL.

G. A. Shelton, Jr. (9326) and R. G. Fowler (University of Oklahoma), "Nature of Electron Fluid Dynamical Waves," April issue, PHYSICS OF FLUIDS.

Service Awards 20 Years



J. R. Doyle
4613



C. A. Dunlap
1521



T. A. F. Eagar
2134



C. C. Fornero
2523



Peggy Henrie
3241



M. C. Jones
2411



J. J. Miller
9222



H. G. Pickard
2126



G. H. Roth
7320



Adolfo Sanchez
4623



W. R. Sims
2525



D. A. Skinrood
8151



R. E. Wason
7224



H. H. Wilhelm
4518

15 Years



G. L. Adkins
9323



R. L. Ault
7323



Jane Baker
3462



P. D. Bishop
2526



W. H. Blair
2412



G. E. Boettcher
1431



B. A. Coleman
4613



G. H. Conrad
1122



J. C. Drake
2412



J. D. Ferguson
4512



P. C. Hernandez
7212



R. A. Jeffrey
7215



Ellen Jones
3413



R. W. Kelley
7334



C. A. McKeever
1414



Mary Ann Melo
7120



G. S. Mills
2443



W. P. Morales
4518



M. J. Norris
5320



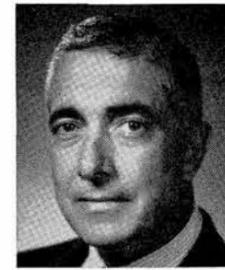
O. B. Tjeltweed
8159

Welcome Newcomers

June 10-21

Albuquerque	Ernest A. Aguilar	4574
	Laurino D. Campbell	4574
	James A. Davis	5311
	Laudente Gallegos	4574
	Mary G. LaFollette	4574
	Henry T. Martinez	7344
	Jose E. Martinez, Jr.	4253
	Roman N. Martinez	3126
	*Carolyn A. Nelson	3126
	Dorothy N. Owen	4574
	Jesus J. Sanchez	4254
	*Nina Vee Usery	3126
	Edwin J. Zurawsk	4254
Canada	Hovey D. Corbin, Montreal	2212
Colorado	Raymond M. Merrill, Pueblo	1121
Florida	Robert W. McCoy, Orlando	9225
Indiana	Charles C. Carson, Muncie	5000
Iowa	Larry J. Ellis, Knoxville	9000
Kansas	Kenneth E. Morgan, Salina	1422
Nevada	Frederick R. Lucas, Las Vegas	2213
New Mexico	Maliky Chavez, Portales	2212
	Arturo Gandara, Las Cruces	7211
	Gloria C. Garcia, Las Vegas	4152
Oklahoma	William L. Estes, Miami	2213
	Ronald C. Hall, Stillwater	4382
Temporary Summer Hires (Albuquerque unless otherwise noted)		
	Anthony C. Bolling, Blacksburg, Va.	5155
	*Robert C. Bolton	3312
	*M. Lawrence Clevenston, Mountain View, Calif.	2113
	R. Thomas Davis, Blacksburg, Va.	9321
	*B. Douglas Gay	7343
	David M. Haland	5234
	James E. Hooper, Lovington	2211
	R. Michael Lamb, West Lafayette, Ind.	5121
	*Bruce W. Lites, Boulder, Colo.	5214
	*Hannibal H. Madden, Jr., Detroit	5123
	Frank A. Massey, Jr., Pueblo, Colo.	2211
	*Rudolph B. Miller	7214
	*Laverne E. Romesberg	9323
	James C. Tsang, Allston, Mass.	5211
	*Nicholas E. Vanderborgh	1121
	Wallace F. Walters	9326
	J. Lloyd Williams, Jr.	3252
	*Denotes rehire	

Degrees Conferred On Two Employees



W. J. Halpin

Degrees were conferred on two more Sandians during June commencement exercises at the University of New Mexico.

Walter J. Halpin (5133) received a MA degree in mathematics. He was graduated from the University of Kansas in 1950 with a

BS degree in engineering physics. Walter E. Kappus (1326) was given a BS degree in electrical engineering. This was his second Bachelor's degree—he previously received a BS in agriculture engineering from Ohio State University.

Retired



Bernardo (Benny) G. Valencia, a security guard in Patrol Division 3242, retired June 6. He has been with the guard force since he joined Sandia in January 1951.

Benny, a native New Mexican, grew up in Belen

and became well known throughout the Southwest as a boxer, first as an amateur and then as a professional. He joined the Army in April 1941 and continued to gain recognition for his boxing ability. Benny was in the service for a total of six years, and 42 months of that time were spent in Japanese prison camps. He survived the Bataan death march, was interned in 11 different prisoner-of-war camps, and was liberated in Japan in September 1945.

Mr. and Mrs. Valencia will continue to live in Albuquerque at 1742 Barcelona SW. They have six children—three living at home. Benny's retirement plans depend on how rapidly he regains his health. In compliance with his doctor's orders, Benny intends to rest and relax in the mountains of northern New Mexico. Later the Valencias will visit relatives and friends in California and Colorado.

Congratulations

Mr. and Mrs. G. L. Heston (4574), a daughter, June 4.

Mr. and Mrs. H. H. Pike (2491-1), a daughter, Jennifer, in Willingsboro, N.J., June 11.

Mr. and Mrs. Don Johnson (9324), a daughter, Kristen Lynette, June 9.

Mr. and Mrs. Peter C. Lysne (5133), a son, Per Arnold, May 28.

Mr. and Mrs. Eric W. Reece (9325), a daughter, Sandra Page, May 29.

Mr. and Mrs. Jerrel Lochner (1316), a son, Todd Ryan, June 3.

Mr. and Mrs. L. R. Hill (7111), a daughter, Julie Kristine, April 18.

10 Years

June 28-July 11

J. L. Todd, Jr. 1313, L. H. Wilhelm 2212, W. M. Whittington 2221, W. K. Paulus 7251, J. E. Bear 7336, J. A. Duggar 8125, E. W. Kenderdine 1326, D. K. Holck 1431, C. E. Sisson 1543, L. A. Fisher 1545.

R. R. Precit 1546, P. J. Spellman, Jr. 2412, W. J. Crawford 2525, Marcella Noble 8232, J. N. Middleton 5624, L. F. Brady 7131, P. G. Schmiedeberg 7212, R. I. Hughes 7224, J. C. Mitchell, Jr. 9234.

E. L. Jacobs 1414, R. E. Knutson 2547, L. L. Alpaugh, Jr. 3412, Anna Gonzagowski 4135, G. J. Hansen 7121, T. J. Flanagan 7122, Hanloy Quock 8114, D. F. McVey 9328, D. H. Hill 2212, Antonio Garcia 4574, E. B. Romero 4574, D. G. Schreiner 5123, and A. T. Steele 9423.

Sympathy

To Allan P. Gruer (2130) and Earl R. Gruer (4542) for the death of Lawrence, their son and brother respectively, on June 15.

To T. V. White (2213) and Phyllis White (1314) for the death of their father on June 10.

To R. E. Woolsey (5313) for the death of his father on June 21.

SHOPPING CENTER • SHOPPING CENTER • SHOPPING CENTER • SHOPPING CENTER • 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
MISCELLANEOUS

ACRILON CARPETING, plush-pile, 13'x17', blue, \$4/yd.; dbl. bed w/walnut headboard, \$60; modern stuffed chairs, \$10 ea. or \$15 for both. Chandler, 296-3323.

MOTORCYCLE, '68 TR6C, Triumph 650 Scrambler, 470 miles, make offer. Armijo, 345-0137

TABLE LAMPS; end & coffee tables; high chair; stroller; car seat; infant seat; 18" fan, 3-sp. Gendreau, 268-3436.

.45 AUTOMATIC PISTOL w/holster, \$70; .45 ammo, 6c ea. Klett, 344-9021.

17 ASSORTED vending machines, make offer. Shaw, 344-3566 or 298-5163.

VOLKSWAGEN RADIO, 6 volt, speaker & antenna, fits other models, \$25. Cobb, 268-3151.

KALAMAZOO GIBSON lead guitar, solid body; Harmony base guitar, hollow body; Silver tone amplifier, dual 12" speakers. Embry, 344-3173.

FOLDA-ROLA folding stroller, swivel ball bearing wheels, collapsible handle, \$5; folding car bed w/pad, \$2; car seat, \$1. Daut, 255-2529.

WINDOW FAN, portable, 20", \$5. Glenn, 268-1853 after 5.

ELECTRIC GUITAR, dual pick-up, Silvertone w/case, \$40. Roeske, 345-1152.

SIAMESE kittens, purebred, seal point, 5 wks. old, gentle disposition, \$10. Meyer, 298-4825.

GOLF CLUBS, Sam Snead, Blue Ridge, woods, 1, 3, & 4, irons, 3, 5, 7, & 9, bag and size 9 hush puppy shoes. Morrison, 855-6244.

ANTIQUE ornamental cherry desk, \$50; motor, 1/2 HP, \$15. Hill, 243-3493.

CANOPY bed, full size, solid maple, w/spring & mattress, \$60. Browne, 344-6343.

VOX amplifier, 30 watts, 2 channels, 4 inputs; vibrato w/foot switch, \$125. Grothe, 299-4395.

UTILITY TRAILER w/4'x7'x2 1/2' bed & springs, \$45; J. C. Higgins .12 gauge single barrel shotgun, \$10. Moyer, 345-0567.

1/4 INTEREST in J-Bonanza, dual omni, localizers, marker, ADF, oxygen, other extras, \$900 now, \$1200 after major, Schwoebel, 268-6440.

SEVEN KITTENS who need homes, mixed colors, but all housebroken. Johnson, 255-8851.

RADIO controlled model auto, proportional steering, 2 speeds, fwd. & reverse, complete w/transmitter and batts. Lenz, 298-3872.

HONEYWELL Rondelle 100 35mm slide projector, autofocus, dust cover, 15 rotatrons, new in box paid \$224, sell for \$160. Watkins, 299-0411.

TROPICAL FISH, blue acaras, 4 mos. old, 2 for 25c. Schroll, 299-9142.

5-GAL aquarium w/accessories, \$8; 10-gal. aquarium w/access., \$13; both \$18; push lawnmower, \$5; gerbils, \$3/pr. McVeety, 299-5718.

MOBILE HOME: 10x55 Home Crest, well-planned interior, 2-bdr., 1 1/2 baths, AC. Brandt, 298-2972.

HEATH ham radio equip: DX-40 xmtr., AT-1 xmtr., VF-1 VFO, GR-64 .5-30MC rcvr., GR-81 rcvr. Cave, 299-5066.

RECORD PLAYER w/2 speakers, \$60; twin bed, \$40. Nieto, 242-2039.

LAWNMOWER, 20" rotary, 1 yr. old, \$50; slide trays, Carousel and TDC type. Lieber, 298-1101.

MOTORCYCLE, Matchless 500cc, single, set up for dirt. Baldin, 298-5178 after 5.

AC. auto, 12 v., front seat type, \$10; outboard motor controls for Johnson, Evenrud, older Sea King's, \$10. Blaine, 299-1036.

BASKETBALL w/backboard, hoop & net installed on pole. Upchurch, 299-5062.

GE auto, washer, \$30. Chemistruck, 299-7563.

MEMBERSHIP in Sigma Flying Club, Cessna 182 Skylane & club owned hangar at Sunport. Bickel, 268-3203.

CHILD'S GYM SET, 2 swings, glide ride & lawn swing, \$12. Flower, 298-0632.

REGISTERED 3/4 Arabian gelding, broke & gentle; 3/4 Arabian filly, excellent breeding & good show potential. S. mon, 299-0703 or 344-3002.

VIKING cycle helmet, size large. Entwisle, 296-3379.

SCHWIN 24" boy's bike, \$12. Hurley, 298-5250.

12 GA. Remington mod. 48 sportsman auto. shotgun; 22 cal. Dura-Matic auto. pistol & .45-70 Springfield 1884 rifle. Rudolph, 298-0941, after 5:30.

BOY'S bike, 26", \$10. McMillin, 282-3226.

ONE-WHEEL TRAILER w/spare and plate, \$30. Maese, 299-3677.

CARS & TRUCKS

'60 DODGE DART, 4-dr., stick shift, original owner, 2 new tires, \$300 or reasonable offer. Scully, 299-9373.

'59 CORVETTE, 2 tops, new 327 engine, new paint & interior, 4-sp., chrome wheels, one Indy tire included. Velo, 255-3903.

'61 GREENBRIER, '67 engine, makes camper & sportswagon, \$500. O'Nan, 299-1803.

'66 VW deluxe bus, 4-sp., trans., west coast mirrors, oversize w/w tires, below book. Martin, 296-1183.

'54 FORD pickup, V8, 4-sp., new battery & carb., Tarbell, 256-1322.

'63 V8 Pontiac Temp. s. w., \$750 or trade for pickup same value. Davis, 298-6944.

'58 CHEVY sedan, ST. Chavez, Bernalillo 1-867-2213.

'63 VW, \$600 or best offer. Thomas, 256-7775.

'63 JEEP WAGONEER, 4-wd., 42,000 miles. Bowerman, 268-8145.

'54 CHEVY 1/2-ton pickup truck, 4-sp. trans., overload springs, \$295. Grear, 282-3166.

'57 CHEVROLET, 6-cyl., stick shift, 4-dr. sedan, yellow/white, R&H, 72,000 miles, original owner. Lynes, 268-0144.

'63 ENGLISH FORD ANGLIA wagon, 4-dyl, 4-sp., 25 mpg, 6-ply tires, \$480. Cover, 268-0921.

'60 SUPER 88 Holiday, 4-dr. HT, original owner, 58,000 miles, \$600 or best offer. Chavez, 265-1146.

'62 MERCURY conv., PS, PB, new AAMCO AT, steering tires, \$695. Mortley, 299-5286.

'62 CHEVY pickup w/camper, insulated, sleeps two, trailer hitch. Bush, 255-2183.

'64 FORD 2-dr. auto., AC, R&H, \$795. LaPoint, 268-2290.

REAL ESTATE

20 ACRES, 217 Hiway & Frost Rd., part new fence, Heath, 255-5418.

CEDAR CREST, Sandia Mountain homesites, take mobil home, easy terms, 6%. Aaron, 282-3803 evenings.

THREE & 5/8 ACRES building location, 20 mins. downtown Albu., utilities available 1/2 mi. off freeway on 44. Haley, 898-3041.

3 BDR., 1 1/2 baths, two 2-bdr. units, NE Hts., trade \$9500 equity for land, total \$25,500. Baca, 255-8452 after 5:30.

MOUNTAIN HOME, 2600 sq. ft., 3 acres, carport, tennis court, fine view, private & convenient, \$46,000. Linn, 282-3986.

4 ACRES leveled w/unfinished home, plumbing, electric, 2 wells & lg. garage; big ducts, roll iron, irrigate. Pump. Skelley, Rt. 3, Box 423J, Los Lunas, 636-2143.

4-BDR., Swearingen home, 13 1/4 baths, den, fp, carpets, drapes, extra lg. cul-de-sac lot, sprinklers front & back. Pitts, 299-0271.

HILLTOP TEN ACRE TRACT, original Antelope Springs Ranch, clear title, graded road front, would trade for trailer. Herrmann, 299-5598.

2 ACRE view lot in Ranchos de Placitas. Beattie, 898-2706.

MOUNTAIN VIEW from lg. covered patio, landscaped, 3-bdr., den, fp, utility rm., pantry, dbl. garage, 4 1/4%. Spray, 299-0412.

WANTED

WANT to rent 3-4 bdr. home in Sandia High-Annunciation Parish area, require possession on or about Aug. 1. Swiss, 898-2083.

RIDER to alternate with, vicinity of G. I. Forum on Gabaldon Rd. NW. Nieto, 242-2039.

CEMENT MIXER & wheelbarrow, will pay cash or trade for snare drum, violin, trumpet and/or guitar. Tiera, 299-2763.

3-BDR. & den, brick, 2-car garage, fireplace, house in NE Heights. Young, 255-9022.

RJ ENCLOSURE for an 8" speaker. Littleton, 299-7467.

FOR RENT

2-BDR. APT., unfurnished, vicinity of Los Altos-Grant schools, utilities paid. Bernyk, 299-9171.

TRAVEL TRAILER, 15', sleeps 5, butane stove & light, some time in Aug. still open, reserve now. Colp, 268-8035.

NEW TENT TRAILER w/add-a-room, sleeps 4 to 6, easy to haul, \$25/wk. Harris, 299-6664.

2-BDR. furnished, east of Tijeras on 65, available mid-July, weekends only by appointment. Brooks, 282-7537.

LOST AND FOUND

LADIES blue butane Ronson lighter, vicinity of 839 cafeteria. Stephenson, 264-5008.

AT CORONADO CLUB swimming pool area, 1968 Sandia High School class ring, initials inside band PWH, reward. Houghton, 299-3386.

LOST—Rx glasses w/black frame, Ronson butane lighter, chrome Zippo lighter, Rx glasses in It. tan case. Rx glasses in brown case, safety glasses. LOST AND FOUND, tel. 264-2757, Bldg. 610.

FOUND—tie clasp (coys). LOST AND FOUND, tel. 264-2757, Bldg. 610.



FOURTH OF JULY PICNIC at the Coronado Club is planned as an old-fashioned fun day for club members and their families. Hot dogs (the kind kids like) will sell two for two-bits with beans and a soft drink included. Demonstrating hot dog appeal are Troy Wilson, Maureen Neas, and Mark Wilson.

Coronado Club Activities

Celebrate 4th of July at Family Fun Picnic at Coronado Club

Next Thursday is the Fourth of July. Celebrate it at the Coronado Club with an old-fashioned family fun picnic. There will be games, swimming, hot dogs (two for two-bits) and other refreshments. Admission is free to club members and their families.

The fun starts at 11:30 a.m. when the pool-patio area opens. The games start at 2 p.m. Mike Michnovicz and accordion will serenade from 3 to 6 p.m. Special prices on refreshments will be in effect from 1:30 to 6.

Use the main entrance of the Club or the entrance to the swimming area for this event. More adequate parking space, of course, will be in front of the Club.

Additional parking space will be available in the area around the Club, and two men will be on duty from 12 to 4 p.m. to assist you in finding parking space. Parking, however, is not permitted on Main Street, in the dormitory parking lots and adjacent streets south of the Club, or on streets directly in front of any military housing.

Sandia Safety Signals

Extension Cords

Electric extension cords are commonplace and are taken for granted, but there are some "Don't" recommendations that deserve your attention. Don't support cords on nails. Don't place cords near radiators or other sources of heat. Don't knot the cord. Don't use cords near oil or moisture (unless specifically labeled water-resistant or oil-proof). And don't ever string cords through doorways or across walkways.

Safety Hazards

Recently the U. S. Public Health Service named 12 types of household equipment most often involved in home accident injuries. Five of the 12 categories included portable appliances, such as electric drills, power saws, space heaters, electric skillets, appliance cords and sun lamps.

Social Hours

Tonight the Aristocrats will make the happy music while the Coronado Club staff wheels out the famous seafood buffet. The spread costs \$1.25 for adults, \$1 for kids. Pat Reich and piano will entertain in the main lounge.

Next Friday, July 5, the Mexican food buffet will be the featured attraction while Max Apodaca makes the mood music.

On Friday, July 12, the chicken buffet will be spread while Phil Graham occupies the band stand.

Bridge

The duplicate bridge group will hold individual championship play Monday, July 8. The event will be preceded by a social hour at 5:30 and dinner at 6 p.m. The menu calls for Swiss steak and other goodies. Reservations are needed for this one. Call Mrs. R. W. Mottern, 299-8817 by July 5.

Luncheon Special

The monthly special 99-cent luncheon will be served Wednesday, July 3, at the Club, in the Bldg. 839 cafeteria and in Area III. For this one, the entree will be barbecued beef, a big slice with tossed salad, corn on the cob, roll and butter, chilled watermelon wedge and coffee or iced tea as the side goodies.

Sanado Club

Annual mother-daughter luncheon of the Sanado Club will be held Tuesday, July 9, at 1:15 p.m. in the Club ballroom. Program will feature a dance exhibition by Mike Haley's studio. Make reservations with Mary Ann Perkins, tel. 298-4546.

Events Calendar

June 28-29—Tennessee Williams' "A Streetcar Named Desire" and July 12-13, Moliere's "The Imaginary Invalid." Santa Fe Theatre Company, Greer Garson Theatre, Santa Fe.

June 29-30—Tennessee Williams' "Night of the Iguana." Corrales Adobe Theatre, information tel. 898-2932.

June 29—San Pedro Day dances at Acoma and San Felipe Pueblos.

June 30—Ceremony in commemoration of 100th anniversary of signing of peace treaty between U. S. Government and the Navaho Indians, Fort Sumner, N. M. July 2 parade in Albuquerque, part of centennial observance.

July 2—Performance of "Madame Butterfly" to mark reopening of Santa Fe Opera. Repeated July 6 and 12. "The Magic Flute" will be presented July 5 and 10.

July 4-7, 11-14—Three comedies by Cervantes: "El Viejo Celoso," "La Cueva de Salamanca," and "El Retablo do las Maravillas." Old Town Studio, for reservations tel. 242-4602.

Take Note

The Sandia Employees Bridge Association (SEBA) conducted its annual open pairs duplicate bridge tournament May 23 and June 13 at the Coronado Club with 17 pairs competing.

Overall winner for the two sessions was the pair of W. L. Dye, Jr. (4136), and R. H. Barnett (7335).

The SEBA conducts duplicate bridge activities on the second and fourth Thursday of every month. All interested Sandia and AEC employees are invited to contact John Nakayama (1513), SEBA president, for additional information.

All former residents of Kansas are invited to attend a Kansas reunion picnic, Sunday, June 30, 1 p.m. at Bataan Park (Lomas and Carlisle NE). Bring your own picnic lunch and table service. Refreshments will be provided.

Corrales Adobe Theater will hold tryouts Sunday at 2 p.m. for parts in the forthcoming production of "Twelfth Night." Director John Gardner (3421) anticipates a shortage of male actors.

At a recent bowling tournament in Tonopah, Sandia's Test Range personnel walked off with the championship. "The TTR's" team took first place in the Tonopah men's handicap league. Team members are Al Brazda, Don Anderson and Bill Moore (all 7231), and Bob Oswald, Jack Meyer and Dick Williams (all REECO).

M. M. Sluyter (9321) has been appointed AIAA representative to the Engineering Council for Professional Development Committee to accredit aerospace curricula in universities.

RADIATION EFFECTS IN SEMICONDUCTORS, which was published by Plenum Press recently, contains a number of American and foreign technical papers which were presented at an international meeting in Santa Fe last Oct. 3-5. F. L. Vook (5211) was editor of the publication.

Sandians who contributed papers were Mr. Vook, H. J. Stein, D. G. Brice, and G. W. Arnold (all 5211), B. L. Gregory (5212), Ruth E. Whan (1122), C. E. Barnes (5212), G. W. Gobeli (5214), and A. R. Sattler (7114).

Recent Rolloff

Four 'Bowlers of Year' Emerge

A recent rolloff settled a contest that's been in progress since last September and revealed Sandia Laboratory's four "Bowlers of the Year." The four winners were Evelyn Ricard (3252), straight score of 621 in a three-game series; Cynthia Kelly (3113), 626 with handicap; Ken Jones (2211), 621 scratch score; and Lyle Davis (7216), 667 with handicap.

The four had earlier won "Bowler of the Month" titles by bowling the top three-game series during the month in any league.

All monthly champs in each of the four categories competed in the final rolloffs. The "Bowlers of the Year" were presented trophies at the annual meeting of the Sandia Laboratory Bowling Association recently. New officers of the Association were also elected.

Other "Bowlers of the Month" include (men's scratch division) Tony Satroplus

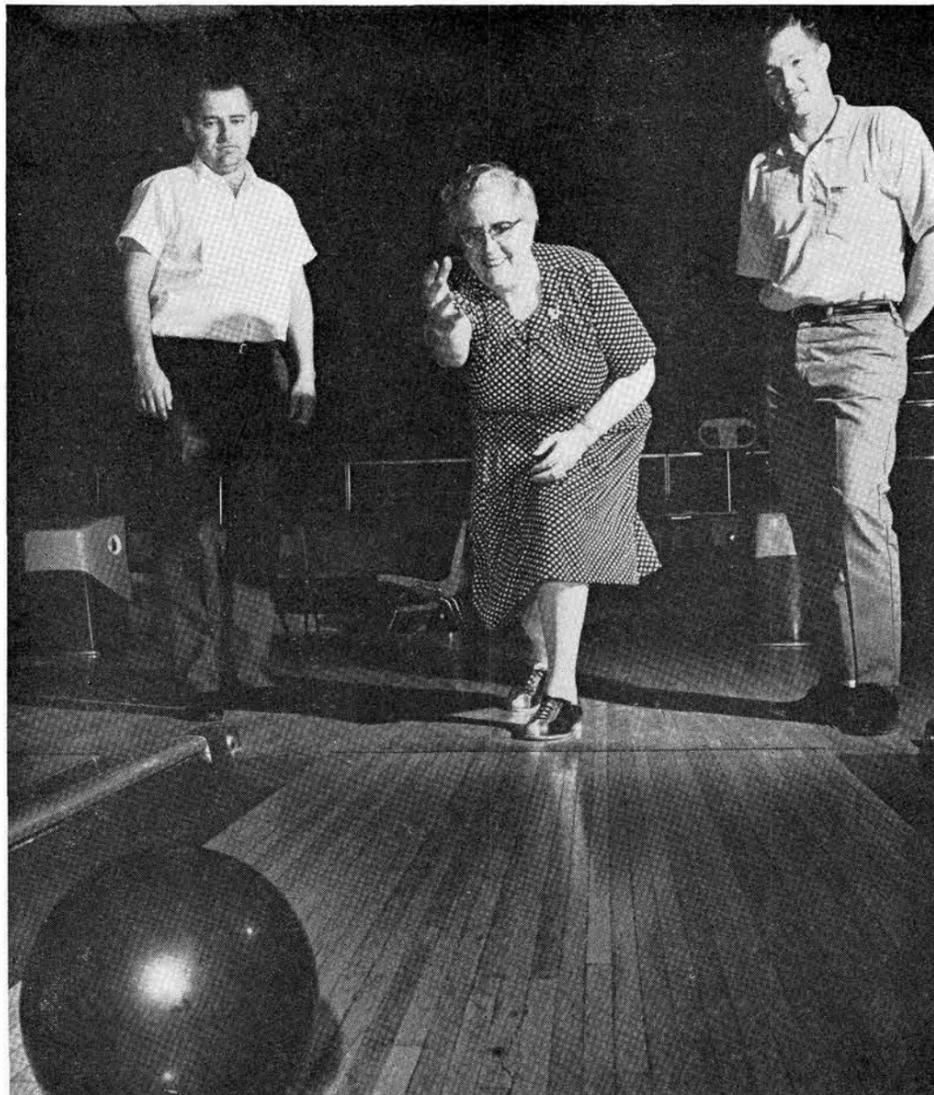
(4234), George Kolesar (2211), Roy Dell (2223), Pilo Rios (AEC), John Ford (1321), Tom Roche (AEC) and Bob Balthaser (2131).

In the men's handicap category, winners were Larry Harrah (5213), Bert Neumon (2561), W. G. Vander Laan (2542), Roy Brett (3242), Jim Lohkamp (7124) and Chester Laskowski (3256).

In women's scratch category, the following won "Bowler of the Month" titles: Gertrude Byrne (3232), Lil Radtke (9230), Brenda McAtee (4135), Georgia Pettit (2521) and Neita Fitch (4135).

In the women's handicap division, winners were Ruth Brooks (3132), Lillith Baker (2551), Wilma Ash (4136), Rose Hainlen (4152) and Lil Bowers (4152).

George Horne Jr. (9414) was elected president of the Association. Jake Gonzales (3134) is vice president and Dutch Eisold (2211) is treasurer.



BOWLERS OF THE YEAR—Top bowlers at Sandia Laboratory, winners of a recent rolloff between monthly champs, include (l to r) Ken Jones (2211), men's scratch champ; Evelyn Ricard (3252), scratch category winner; and Lyle Davis (7216), winner of men's handicap division. Not shown is Cynthia Kelly, top woman bowler in the handicap division.