



THE GOLDEN PLEDGE remains anonymous, but is greeted with jubilation as it takes the "Give Once" campaign over the \$100,000 total. L to R: Robert A. Knapp, L. M. Jercinovic, William B. Davis and L. J. Heilman, who were tabulating employee contributions.

Give Once Drive Past \$100,000 With Final Results Not Yet In

Sandia Employees Contribution Plan has been officially declared an outstanding success. As the Sandia Lab News goes to press contributions by employees for all 31 health and welfare agencies which were included in the drive have reached \$95,000.

David S. Tarbox (2440), chairman of the committee planning the Sandia Employees Contribution Plan fund drive, happily greeted the news of the amount raised.

"We are deeply grateful to Sandia employees for their wholehearted support of this 'Give Once' drive," he said. "This contribution to the needs of the community is

significant. Our feeling that we have done a good job is justified."

Tabulation of returns will not be complete for several days but indications are that approximately 66 per cent of all Sandia employees joined the Plan, and an additional 24.5 per cent gave to the United Fund alone or one of the seven health agencies included for the first time this year.

The average contribution was about \$16.

The distribution of the Employees Fund will be as follows:

United Fund	75.0%
Heart Association	4.5%
Cancer Society	7.6%
Muscular Dystrophy	1.3%

Multiple Sclerosis	1.0%
Arthritis & Rheumatism	1.3%
Cerebral Palsy	3.2%
Crippled Children and Adults	4.1%
Reserve for emergencies	2.0%

Several hundred more employees were away from work at the time of the solicitation are still to be contacted.

In addition to the \$72,200 in cash and pledges to the Albuquerque United Fund from the Employees Fund, Sandia Corporation has contributed \$7,000 to the U.F.

Contributions from the Credit Union Employees, Coronado Club and Anderson-Dunham will be reported at a later date.

514 Sandia Employees Taking College Level Work This Fall

When the doors of colleges and universities opened this fall the back-to-school movement of Sandia Corporation employees took on the proportions of a major migration.

Recent figures show that 514 employees have enrolled in college level courses under Sandia's Educational Aids Program.

Encouraged by provisions of the plan which allow time away from work to attend classes for

advanced students and partial financial aid for all students, these employees have enrolled in nine colleges and universities from coast to coast.

Sandia Corporation has adopted this program of aid to employee students as a means of helping maintain a highly educated staff of scientists. Graduate students with at least one college degree already, account for 254 of the total enrollment. Twenty-one are classified as seniors, 30 are juniors, 34 sophomores and 59 freshmen, in addition to 116 non-degree students.

Sandia students this fall are taking one person class hours to keep one person busy for 70 years.

Colleges and universities having Sandia students enrolled are: University of New Mexico, University of California, San Jose State College, Centenary College, St. Mary's of Texas, San Antonio College, University of Maine, Whitworth College and University of Nevada.

National Interrange Telemetry Group Has Conference at Sandia

Sandia Corporation was host recently to a four day conference of the interrange Telemetry Working Group, an organization of representatives from all major missile armament test ranges throughout the country.

G. A. Fowler (5000) welcomed the delegates to the conference. Sandia members of the group include R. S. Reynolds (5223), R. E. Glass (5223), H. O. Jeske (5223), J. C. Eckhart (5223) and B. W. Washburn (5243).

The conference discussed interference problems in present telemetry frequencies and solutions to these several problems. Also discussed were pulse code telemetry systems. Mission of the group is to standardize range equipment throughout the United States and to exchange range and telemetry techniques and information.

U. S. Appeals Tax Case

The federal government has appealed a decision of U. S. Judge Carl A. Hatch that reimbursed moving expenses paid by firms to new employees are not taxable. The brief was filed recently with the 10th U. S. Circuit Court of Appeals in Denver. The appeal is being handled by Department of Justice attorneys in Washington.

Evening Classes Given By Sandia Corporation Attract 408 Employees

Enrolled in the Sandia Corporation Evening School are 408 employees according to figures released by the General Training and Education Division 3124. The students are taking courses in electronics, introductory to advanced levels, electronics laboratories, blueprint reading and mechanical measurements.

Many of the students are taking more than one course. The figures show that the 408 employees represent 620 enrollments.

The Sandia Corporation Evening School is conducted evenings in Bldg. 849 and 833. Instructors are Corporation employees. Courses offered are those that are not available in the evening programs of the Albuquerque public schools but have special interest to Sandia employees.



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Albuquerque, New Mexico

November 1, 1957



AN EYE WITH A BRAIN is this newest Sandia tracking telescope now in operation at Tonopah. The instrument, shown going through shake-down tests in Albuquerque, is operated here by Joel Hamilton (5224). The control stick in his hand activates an "electronic memory" which tracks objects almost automatically.

Let Contract To Build Livermore Technical Area

Work on five new buildings in the Technical area of the Livermore Branch of Sandia Corporation is expected to start this week. A \$3,197,470 construction contract has been let to Williams & Burrows, Inc., of Belmont, Calif., low bidder on the project. Ten firms bid on the project. High bid was \$3,458,500.

Buildings included in the project are: office and laboratory, physical test, model shop and maintenance, warehouse and steam plant.

The contract awarded is in addition to construction of the \$287,758 administration building and erection of steel work at the site costing \$200,000.

The site for Sandia's expansion at Livermore is the 50-acre area across the street from the University of California Radiation Laboratory a few miles east of Livermore.

Presents Tech Paper to Academy of Sciences

Joseph P. Burger (1626-3) presented a technical paper at a meeting of the New Mexico Academy of Sciences last week. The two-day conference of the Academy was held at the University of New Mexico. Chemical effects of gamma radiation was the subject of Mr. Burger's paper.

Sandia Builds Memory Into New Tracking Telescope

An "electronic memory" unit is a unique feature of Sandia Corporation's latest reflecting telescope which is now in operation at the Tonopah (Nevada) Ballistic Range to track rockets and inert experimental weapons.

The new telescope is one of several being used at Tonopah and Salton Sea to gain information important in the design and modification of ballistic shapes for weapons.

With the memory unit attached to the telescope, it can track an object in space at a constant rate almost automatically, according to H. E. Lenander, manager of the Instrumentation Development Department (5220), designers of the new scope.

By applying pressure on a control stick, somewhat resembling the control stick in an airplane, the operator activates the

electronic memory system which "tells" the telescope what to do. Once he gives the scope a signal, the operator can release the control and the telescope will continue to track.

If the speed of tracking or the azimuth or elevation needs correcting, the operator has only to push the stick in the proper direction at the necessary pressure and the memory unit takes over from there.

"The stronger the initial pressure on the stick, the faster the telescope will track," Mr. Lenander said.

Radar Used

Radar is used for initial acquisition of moving targets, automatically pointing the scope at the object to be tracked. It is also used in focusing cameras mounted on the telescope. Radar makes it possible for the operator to locate his

target before it actually comes into view and when visual contact is made the memory system continues precision tracking.

Operation of the scope can also be accomplished by remote control from a distance of several miles away, Mr. Lenander said. In this case a similar control stick is set up in an instrumentation trailer and the instrument is followed with the aid of a television screen. The TV receiver is connected by closed circuit to a TV camera mounted on the telescope.

Optically, the telescope consists of a 16" fused quartz reflecting mirror contained in a cast aluminum tube. Mounted on top of the tube are two motion picture cameras which operate at speeds up to 96 and 2000 frames per minute, respectively. A special "flip-flop" mirror between the cameras makes

possible the interchange of cameras during filming.

Range of 19 Miles

With a focal length of 120" the telescope can shoot motion pictures in sharp focus of aircraft approaching the target area at a slant range of 19 miles, and rockets as high as 100,000 feet.

A hydraulic system, coupled with the memory unit, powers the telescope which is mounted on a former Navy twin 40mm gun mount. The entire instrument weighs five tons.

"The new scope is one of the finest in the world," says Irv Lenz of the Optical Development Section (5221-1) who, with Dan Parsons, section supervisor, and Dan Fenstermacher, designed the telescope's optical system. Dan Parsons served as coordinator for the entire project.

Design of the hydraulic system was the responsibility of Joel Hamilton and Alan Skinner of the Mechanical Systems Section (5224-2).

John Lannon (5221) and Dick Schaum (5222), directed by T. L. Pace, supervisor of the Electronic Development Section (5221-3), designed the scope's memory unit.

Dalton "Doc" Savage and Jim Stueber, with Dave Middleton of the Mechanical Systems Section, worked out the packaging of the electronic components for ease of accessibility and replacement of parts.

Model Shops Work

Radar components design for the tracking system was the work of Bob Summers and Jim Lareau of the Radar Development Section (5221-2) headed by R. I. Peter (See Tracking Telescope, P. 5)



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Make Those Dollars Work

The best businesses in United States have helped keep themselves on a sound financial basis by watching expenses. The outgoing dollars are the ones that tell the story of successful or unsuccessful business management.

Now the United States government finds itself in the position of having to look at its expenditures, just like a businessman who is reaching the limit of his budget.

The government is required by law to operate within the limits of the national debt ceiling. The ceiling presently set by Congress is \$275 billion. The government's rate of spending during the fiscal year we are now in must be held low enough so that it does not break the national debt ceiling. Many defense businesses such as the aircraft industry, are cutting back operations to help stay within the debt limit.

In view of this situation, Sandia Corporation must make every effort to use to the greatest advantage those dollars which have been allocated to us.

To do this, each Sandia Corporation organization is being asked to lower costs through greater efficiency, more skillful performance of individual jobs or any other way which proves practical as well as economical.

Cost reduction activities being undertaken by the Corporation include such things as close study of all travel, realignment of personnel ceilings in some operations, careful review of all expenditures which do not contribute directly to fulfillment of Sandia's mission, improving skills and probably of most importance, making every minute count.

Perhaps the best ideas for economies can come from Sandia employees, ideas on savings of labor, time and materials. The campaign for a more economical operation is not intended to be carried on at the expense of efficiency or results. But if there is any fat, now is the time to trim it out.

This is not a job that can be done by Sandia Corporation management alone. The cooperation of all Sandia employees is needed.



HALFWAY TO CHAMPIONSHIP is Gitana Del Desirto, nine-month-old Afghan hound owned by Pearson Crosby (AEC Security). Last month "Gypsy" took Best of Winners award at the Rio Pecos Kennel Club show in Roswell and in September she won honors at the Southern Colorado Kennel Club show in Pueblo. Both shows gave her a total of six points toward the 15 necessary for championship rating. When not being shown Pearson takes Gypsy hunting for jackrabbits much to her delight.

New Home Owners

Proud new home owners are Mr. and Mrs. Hugh Sumlin (2153-2) who are now living at 1840 Saint St. NE.

Bachelor Shower

Purchase of a new home at 1828 Moon St. NE by bachelor Leonard Foster (7411-2) was the occasion for a "shower" given by his co-workers. Dick Kishbaugh, Al Brewster and Mel Hill made the arrangements. Gifts included kitchen utensils and exotic foods which friends maintained were necessary for bachelor living and entertaining.

Scoutmaster Needed

Needed: a man who likes to work with boys to be Scoutmaster of the active Scout Troop 287 in Wherry Housing Project. Experience is not necessary but interest, time and enthusiasm are top requisites. Satisfaction of doing an interesting job is guaranteed. Call Ken Graves, AL 6-0783, for information.

Busy Vacation

Kelly Fosmo (2223) has returned from Webster, Wis., where he presented his daughter in marriage and did enough fishing to land a 17½ pound, 40 inch northern pike.

Get Well Wishes

Wishes for a speedy recovery are extended to Ted Siegrist (2154-2), Ken Schooley (2154-1) and Niewo Fisher (2152-3), who have been ill for some time.

Co-workers of Bessie Passmore (7423) wish her a speedy recovery following an operation.

Sandianotes . . .

Tech Artists Show Skill in Bagging Two Deer; Also Nabbing Car Trouble

Last Chance Venison

Venison will be frequently on the George's dinner table at Livermore this winter.

Lorraine George (8131-1) and her husband, Bill, headed for the tall timber of Tahoe National Forest last month. After a week of fruitless stalking their enthusiasm was at a low point. While driving on a logging road en route home they spotted two three-point bucks about 80 yards away. Bill misfired the first time, Lorraine helped him steady his nerves long enough to aim in the proper direction and one buck went down. Since the buck dressed out at 100 pounds the nearby location of their car was a blessing.

Two artists from Tech Illustration (2463) were busy last month drawing beads on the local deer population.

Joe Mickey bagged himself a real prize. At 500 yards, shooting a 30.06 Springfield Sporter, he was able to drop a 12 point, 325 pound buck. Thirty minutes later Joe looked on as John Jolley, in true western TV style, was forced to shoot from the hip to bring down a charging wounded doe at 15 feet.

All the luck was not good, however. The boys also collected three flat tires, two burned out generators and numerous ailments plus loss of two days work.

One of the first to get his deer this year was Norm Richardson (5213), who got his buck in the Blanco area on Oct. 15.



FALLING hook, line and sinker for a home-made lure built by R. V. "Bob" Peet (5252) was this 7¼ pound German Brown trout caught by Bob during a fishing trip last weekend at Vallecitos Reservoir in Colorado. With Bob (right) are Clyde Northrup (left) and R. L. "Bob" Burgess, both of 5213. The trio netted a total of 15 trout and salmon.



SUCCESSFUL HUNTERS were Ted Alexander (4111) and his son, John, on a recent antelope hunt in Wyoming. Here young John gets a hand from his father in hauling back his first antelope.

Weddings and Engagements

Sondra Louise "Sandy" Stelter and James W. Markham, Jr., were united in marriage last Saturday in ceremonies at the Rio Grande Baptist Church. Dan Aycock (2461-1), a member of the "Lads of Enchantment," sang for the wedding.

Following a honeymoon the couple will make their home in Albuquerque, where Sandy plans to continue her studies at the University while working second shift at Sandia. She has been with 2461-4 for two years.

Best wishes are extended to the former Marion M. Fogg (7325) on her recent marriage to Lt. Cmdr. Kenneth B. Belman, U.S. Navy. Marion has been with the Corporation since April 1952.

Mr. and Mrs. Benjamin Jaramillo are at home in Albuquerque following a wedding trip through the Southwest. Ben and the former Fabiola Gutierrez were married Oct. 19 in Regina Coeli Church. He has been with Sandia since August 1950 in 7341-4.

Congratulations

Born to:

Mr. and Mrs. A. W. Kellom (1247) a daughter, Barbara Sue, on Oct. 4.

Mr. and Mrs. Robert E. Marsh (1245) a son, Bryan Stephen, on Oct. 1.

Mr. and Mrs. Ted Baldonado (2461-5) a daughter, Diana, on Oct. 10.

Mr. and Mrs. B. W. Washburn (5243-1) a daughter, Linda Sue, on Oct. 8.

Mr. and Mrs. B. L. Pierce (5243-3) a son, John Wade, on Oct. 19.

Mr. and Mrs. H. E. Thiermann (7412) a daughter, Amy Marie, on Oct. 7.

Mr. and Mrs. B. B. Asher (4111-1) a son on Oct. 16.

Mr. and Mrs. Demus Jajola (2151-1) a son on Oct. 19.

Mr. and Mrs. A. L. Johnson (2132) a son, Joseph Allen, on Oct. 5.

Mr. and Mrs. John Hart (1451) a son, John Sterling, on Oct. 4.

Mr. and Mrs. Glenn Elliott (1442) a daughter on Oct. 13.

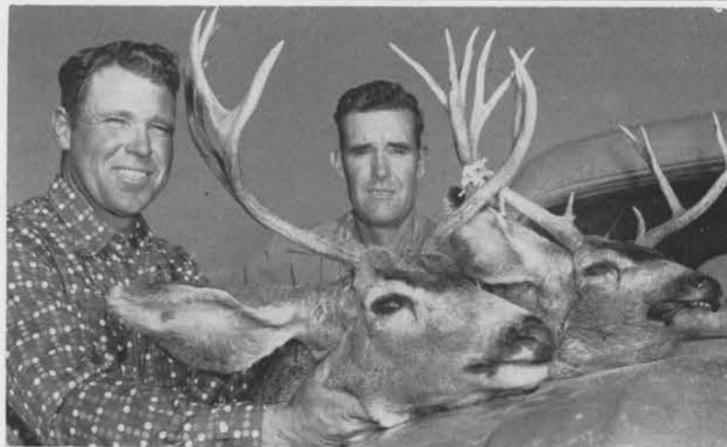
Mr. and Mrs. Don Cotter (1240) a son, Douglas Mitchell, on Oct. 26.

Mr. and Mrs. Russell Martin (1264-2) a son, Edward Hickox, on Oct. 25.

Mr. and Mrs. Charles W. Horvath (2462-4) a son, Charles William, Jr., on Oct. 15. Jean formerly worked in 2461-4.

Wedding Bells

Congratulations to James McCreight (2721-3), who was married Oct. 21 in Albuquerque to Arlene Lewis of Kansas City, Mo.



SHARPSHOOTING guards Charles Farmer (left) and Jim Lossing (both 2742) bagged these two trophy deer at Llaves Sawmill.

Sympathy

To W. C. Larson (1245) for the death of his mother recently.

To Bill Hartman (1261-2) for the death of his father on Oct. 11.

To Court Rathbun (7231) for the death of his wife, Irene, on Oct. 14.

To Frank G. Janus (2723-3) for the death of his father on Oct. 22.

To J. W. Hook (2520) for the death of his father Oct. 21 in Hamden, Conn.

To Theresa de Baca (7423) for the death of her father, Sept. 29 in Bernalillo.

To Ben Armijo (7422) for the death of his father Oct. 10 in Los Lunas.

To Jim Bluett (7422) for the death of his father Oct. 24 in Brooklyn, N. Y.

To Myrtle Mauldin (1661) and her brother Howie (1263) for the death of their mother Oct. 21 in Mathesville, Miss.

To Sally Herrera (7225-1) for the death of her father on Oct. 22.

C. E. Luker Dies While Hunting

Funeral services were held last Sunday for Crawford E. Luker, 40, Sandia Corporation employee for 10 years and supervisor of Section 2473-2.

The body was sent to London, Ky., for burial where Mr. Luker's family still lives.

Mr. Luker died while hunting Oct. 25 near Terrero, N. M.

Survivors include his widow and two daughters, who live at 10918 Cochiti SE.

Back at Work

Back on the job after recent illnesses are Tomas Apodaca (2223) and Don Matejka (5141).



Mr. Luker

Sandianotes . . .

H. V. Catt Represents New Mexico CPA's At University of Wyoming

Wedding Anniversaries

Mr. and Mrs. George B. Roberts (7422) celebrated their 30th wedding anniversary Oct. 15.

Observing their 21st anniversary on Oct. 25 were Dick (7421) and Lillian Jackson (5241).

Their 15th wedding anniversary was marked by Alan Pope (5140) and his wife Caroline, by a flying trip to Mexico City, Acapulco, and the "silver city" of Taxco.



HAND-CARVED MONKEYS trim the ends of Eduardo Chavez' bolo tie. Edwardo, a utility operator in 2711-2, began carving peach stones when he was stationed with the Army in Africa and Italy during World War II. He hollows out the stone with a sharp knife, forms the tiny figure then sandpapers the exterior to a smooth finish. In addition to carving monkeys and elephants out of peach stones he also makes lampshades from cactus strips and attractive jewelry from semi-precious stones.

German Language Students?

Persons interested in taking a non-credit course in conversational German at the University of New Mexico next semester are asked to call Mary B. Phelan (AEC-ALOO) at AL 5-8751. Since such a course is not now offered by the school, sufficient interest in the class must be expressed before it can be included in the curriculum.

Mountain Club Explores

Spectacular Arches National Monument in southeastern Utah is the destination of the New Mexico Mountain Club Nov. 9-11. Zelma Beisinger (5126) will be one of the leaders as the group explores the weird rock formations of the area. Reservations may be made by contacting Zelma at ext. 47156.

UNM Homecoming

Business Administration alumni of the University of New Mexico are invited to Yatoka Hall from 10:30 a.m. to noon tomorrow for a get together. Coffee and doughnuts will be served by Alpha Kappa Psi fraternity.

Jack M. Miller Retires October 31

Jack M. Miller retired at the end of October after six years with the Corporation as a lathe operator.

He worked in Division 2123 for five years and then in 2152 for a year.

A trip back to northern Indiana to see his sister is first planned by Jack and then he hopes to open an appliance repair service in Albuquerque.

Jack has six children and seven grandchildren. Two of his boys are attending New Mexico A&M College at Las Cruces, both studying to be mechanical engineers. The Millers live at 1248 Stanford Dr. NE.



J. M. Miller

Harold V. Catt (4121) represented New Mexico at a recent meeting of the Mountain States Council of Certified Public Accountants at the University of Wyoming at Laramie.

The council represents the various societies of certified public accountants in eight mountain states.

Vectors Class Offered

Howard Wicke (5126) will instruct a special two-session class in Norms of Vectors and Matrices next week. Primarily for Systems Analysis Department personnel, the course will be available to other employees if arrangements are made through the instructor.

The class will meet Wednesday, Nov. 6, in the Rm B-6 of Bldg. 802 from 1:30 to 2:30 p.m. and from 11 to 12 a.m. on Friday, Nov. 8.

Taos Intelligence

During a week-end trip to Taos, Ellen Jones (7423) came upon an interesting item about the northern New Mexico village.

Taos is one of only five places in the United States where the American flag can be flown 24 hours a day. This honor was accorded Taos because of the courage of Kit Carson in nailing the flag to a cottonwood tree and planting it in the middle of the plaza. He then dared the Confederates to remove it.

The flags are replaced on July 4th or Memorial Day as they wear out.

The other places where the flag may fly 'round the clock are: the National Capitol, Fort McHenry, National War Memorial and Frances Scott Key's grave.

Rattle Collector

Henry Sweeney (5216) and his son, Donald, recently came across a large rattlesnake while hiking in the Sandia foothills. Henry killed the snake with a rock and is now the owner of a fine set of rattles.

Ribbon Winner

Another prize winner at the New Mexico State Fair was Dick Jackson (7421) who took four ribbons—one first and three seconds—with his collection of old coins.

New Home

Salvatore Mattins (7123-1) recently bought a new home at 1808 Blume NE.

Nuclear Power Plant Construction to Be Discussed Before AWS

"Construction of a Nuclear Power Plant" will be discussed at a dinner meeting of the Albuquerque Chapter of the American Welding Society Thursday, Nov. 14. Speaker will be Dr. Richard Dove, of the Mechanical Engineering Department, University of New Mexico.

The meeting will begin at 7 p.m. at the Chinese Village Restaurant, 3403 Central Ave. NE. For reservations contact Vince Nelson (1624-4), ext. 42250. Ladies are invited.

Three Are Authors Of Technical Papers

Three Sandia Corporation authors of technical papers will receive recognition for their work this month. P. E. Jockle, Jr., and L. T. Wilson (both 1281) co-authored "Some Properties of Resilient Cushioning Materials" which will be published in Flow Magazine.

Merrill C. Jones (1652) will present "Design Techniques for Technical Manpower Conservation" at the Nucleonics Session of the Mid America Electronics Convention sponsored by the Institute of Radio Engineers in Kansas City on Nov. 14.



CROSSING the arroyo on the way to Area III, movers abandon the road. Weight of the barrel one of the huge cannon barrels to be used in Sandia's new Air Gun test facility is shown as the bridge that spans the arroyo. Work is expected to be completed by February 1.

Supervisory Appointments

JOAN F. ADKINS to supervisor of IBM Key Punch Section 4142-3, Operations Division.



Joan has worked for Sandia Corporation for two different periods, from June 1951-52 and from December 1953 to the present. Both times she was in key

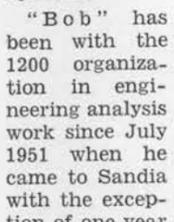
punch operations.

During the period of her absence from Sandia Joan was employed by the Veterans Administration office in Albuquerque, where she learned the operation of IBM tabulating machines.

She received her first IBM training while working more than four years for the Denver & Rio Grande Western Railroad in Denver.

Joan is a member of Beta Sigma Phi, business women's society.

ROBERT A. DAWIRS to supervisor of Section 1261-1, Electrical Systems Division.



"Bob" has been with the 1200 organization in engineering analysis work since July 1951 when he came to Sandia with the exception of one year when he was on loan to 5100.

At Colorado State University Bob received a Bachelor's degree in Electrical Engineering and afterwards had a year's fellowship at the University of Colorado.

Bob served a year and a half in the Army.

He is a member of Sigma Tau, engineering honorary, and Phi Kappa Phi, general scholastic honorary.

E. L. PAINE to supervisor of Section 8123-1, Project Division, at Livermore Branch of Sandia Corporation.



"Bert" joined the Corporation at Livermore as an electrical engineer last February. He is a veteran of 13 years with Western Electric, where he worked as a

field engineer in Boston, Portland, Bremerton, Norfolk, Washington, D. C., Japan, Hawaii and Vallejo, Calif.

His BS degree in Electrical Engineering was obtained at the University of California at Berkeley. Bert has also taken extension courses in Nuclear Physics and received the WE administrative and supervisory training.

FRANK P. HUDSON to supervisor of Physical Chemistry Research Division 5151, Physical Sciences Department.



During his five years at Sandia Corporation Frank has been with 5130 until the recent formation of 5150.

He came to Sandia from the University of Notre Dame, where he obtained a PhD in Physical Chemistry. Frank also has a BS in Physics and a BS in Chemistry from the University of Washington.

He served an apprenticeship in structural steel work at the Naval Shipyard in Bremerton, Wash., and later worked there as a structural engineer and electronics engineer. He was also a mechanical engineer for the Winkelman Company in South Bend, Ind.

From 1944-46 Frank served as an electronics technician in the Navy.

He is a member of the American Physical Society, the American Chemical Society, Phi Beta Kappa, liberal arts honorary, Sigma Xi, science honorary, and the Association for Applied Solar Energy.

THOMAS O. MEYER to supervisor of Component Section II, 2541-2, Electromechanical Component Division.



"Tom" has been with Sandia since May 1952 and has been in the same section for the past 18 months.

Prior to employment here he was in estimating and plan preparation work for the New Mexico State Highway Department for nearly five years and later for the U. S. Engineers, Albuquerque district office.

He holds a Bachelor's degree in Engineering from the University of New Mexico.

Tom served a short period in the Army Air Force during World War II then three and one-half years in the Navy in the Aleutians and the South Pacific.

He is a member of the American Society for Testing Materials, the National Society of Professional Engineers, and has been a registered professional engineer in New Mexico for three years.

DEADLINE NOTICE

Because of Veterans' Day holiday on Nov. 11, deadline for news for the next issue of the Sandia Lab News will be Thursday, Nov. 7, a day earlier than usual.

Promotions

Oct. 4-25

N. Lorene McEwen (3154) to Personnel Clerk

Gregorita Abeyta (7225-6) to Typist Clerk

Rose M. Etherton (4135) to Key punch Oper. (Payroll)

Marilyn J. Harden (7225) to Typist Clerk

Charles M. Judd (2131) to Technician (Elec. Fab.)

E. Genese Shieler (7225-1) to Editorial Asst.

Kenneth A. Bixler (5242) to Aux. Eqpt. Optr. (EC)

Betty Lou Reddy (7225-6) to Secretarial-Steno.

Eugene Chavez (2722) to Inspector (Mechanical)

Willa L. Urbanski (2111-1) to Report Clerk

Betty Carroll (2464) to Typist (Compositor)

Mary Ellen Sanchez (5111) to Staff Assistant

Floyd Hursh (2713) to Investigator (Field Inspection)

William E. Reed, Jr. (7312) to Technical Asst. (Surv.)

Elaine H. Aidikonis (2335) to Secretary Stenographer

Robert L. Burgess (5213) to Technician (Instrumentation)

Edith D. Miller (2464) to Editorial Asst.

Robert E. McDermott (2722) to Inspector (Special Components)

Robert T. Tuffnell (2722) to Property Clerk

Lydia S. Villanueva (7225-6) to Record Clerk (Accountability)

Supervisory Lateral Transfers
Maury N. Orrell from Supervisor of Section 2742 to 2741.

Roger H. Johnson from Supervisor of Section 2111-2 to 2152-5.

A. W. Porter from Supervisor of Section 2112-2 to 2111-1.

J. P. Logan from Supervisor of Section 2111-1 to 2111-2.

S. A. Urevitch from Supervisor of Section 2112-4 to 2112-2.

W. C. Scrivner from Manager of Department 1210 to 8150 at Livermore.

H. F. Gunn 'On Loan' To Special Committee Of United Fund Drive

A Sandia representative is serving on the Albuquerque United Fund Campaign's Major Firms Division for the duration of the City's drive.

Harold F. Gunn, supervisor of Employee Records, Reports and Processing Division, is "on loan" from the Corporation to assist local business leaders in promoting the United Fund campaign.

For the past five years "Hal" has been active in United Fund and Community Chest campaigns serving as a solicitor, squad leader and program chairman.

Mr. Gunn pointed out that Sandia has been a leader in community service activities, being one of the first firms in the community to institute for its employees a year 'round payroll deduction plan for contributions.

Six Employees Return to Sandia After Completing Military Service

A number of employees have returned to work at Sandia Corporation in recent weeks after completion of military service.

Back on the job is Eugene E. Ives (1264) who was on a six months tour of duty with the Army. He was an electrical engineer in Division 1262 for nine months before entering the service. Eugene was stationed at Fort Monmouth, N. J., in the Signal Corps and later at Fort Gordon, Ga.

Harvey Dale (5222) returned last month after serving in the Navy since December 1954. He was stationed in Newfoundland half of the time. Harvey was a physicist in Digital Systems Division for two years before reporting for Navy duty.

Also back last month was Edward Heising, staff member in Electrical Systems Division. He had been with Sandia a year and a half when he took a military leave of absence in January 1954. "Ed" was in the Navy's special weapons program and made two trips to the Far East.

William C. Myre had been with Sandia five years and was a section supervisor in Test Project Division II when called into the Army in September 1955. He served two years as an engineer at White Sands Proving Ground while in the Army and is now supervisor of 5252-2.

A six months tour of duty in the Army Signal Corps in Fort Monmouth, N. J., has just been completed by James C. Carrol (1444). Jim has been with the Corporation since April 1955 as a project engineer on test equipment.

Also returned from six months duty is Jerre R. Moore (1473) who was on troop duty with the Army Signal Corps at White Sands Proving Ground. Jerre has been a staff member in Advanced Development Division since June 1956.



E. E. Ives Harvey Dale



E. Heising W. C. Myre



J. C. Carrol J. R. Moore

ASTE Meets Nov. 13

Meeting for dinner and an illustrated lecture Wednesday, Nov. 13, the Albuquerque Chapter of the American Society of Tool Engineers will hear Paul Garmus discuss "Graphitic Tool Steels and Applications."

Mr. Garmus is Field Engineer with the Timken Roller Bearing Co., Steel Division, Los Angeles. The meeting will begin at 7 p.m. in the Hilton Hotel.

For reservations contact J. S. Reese (2553), ext. 26141.

Minnesota Veterans Get WW II Bonus

Any ex-residents of Minnesota who served in the Armed Forces during the Korean conflict might be eligible for a veterans bonus.

To be eligible the person must have served 30 consecutive days or more between June 27, 1950 and July 27, 1953, and must have been a resident of Minnesota at least 6 months prior to entering the service.

The bonus is computed on the basis of \$15 per month for foreign duty and \$7.50 per month for stateside duty. Further information and application forms may be obtained from Lyle E. Kinvig, commissioner of Veterans Affairs, State of Minnesota, Korean Bonus Division, Veterans Service Building, St. Paul 1, Minn.

QA Program for Nuclear Weapons To Be Explained

"A Quality Assurance Program for Nuclear Weapons" will be discussed by L. J. Paddison, Director of Quality Assurance 5500, at a meeting of the Albuquerque Chapter of the American Society for Quality Control Tuesday, Nov. 12.

Preceding Mr. Paddison's discussion, scheduled for 8:15 p.m., will be an educational session conducted by A. F. Hurford (1451-1). He will discuss "A Method of Selecting an OC Curve" beginning at 7:30.

The public is invited to attend the meeting in Rm. 120 of Mitchell Hall. University of New Mexico.



BEWITCHING is the word for Winnie Wylie (7225 assigned to 1216) who marks the passing of Halloween with a friendly looking pumpkin and an appropriate costume for the witching night.

T. G. Kinsley Awarded Bell Laboratories Pin For 35 Years Service

A service emblem in recognition of 35 years with the Bell Telephone Laboratories was presented today to Thomas G. Kinsley.

He has been attached to Sandia Corporation since March 1, 1952, first as a staff member and since March 1953 as supervisor of Section 1464-2, in Piezoelectric Device Development Division. For the past two months Mr. Kinsley has been on sick leave.

Since 1926 he had been a member of the Bell Labs technical staff.

Mr. Kinsley has a number of patents to his name and is a member of a special branch of the American Society for Testing Materials for investigating Barium Titanate and other piezoelectric ceramic compositions.



Mr. Kinsley

Open Registration for Noon Shorthand Class

Employees interested in attending noon-hour classes in Gregg Shorthand Review are urged to attend an organizational meeting Monday, Nov. 4, at 12:10 p.m. in Rm. 3 of Bldg. 849.

The classes will offer a complete review of the principles of Gregg Shorthand with emphasis placed upon learning to write difficult words and technical terms. Some dictation will be given during each class period.

Instructors will be Sue Moreton (3152-2) and Calla Ann Crepin (7225).

Two sections of the course are planned. One will meet on Mondays and Wednesdays and one on Mondays and Thursdays. Both sections will meet from 12:10 to 12:50 in Bldg. 849 for 13 weeks.

Tuition will be charged and will vary according to the number of students.

'Flu' Shot Given to Livermore Employees

Influenza virus vaccine has been administered to some 144 Sandia employees at Livermore under the Corporation's immunity program.

Welcome Newcomers

Oct. 14-25

Albuquerque		
Kenneth R. Anderson	2133	
Raymond L. Beatty	2463	
Robert W. Blagg	2133	
Joseph B. Flanagan	2463	
Edward J. Hart	3162	
Loraine B. Holstrom	1463	
Dorothy S. James	4135	
Mary L. Lowe	2421	
Paul A. Mordasini	2482	
Amelia E. Salazar	2224	
California		
Audie J. Cowan, Livermore	8142-1	
John P. Gallagher, Vallejo	8141-1	
Frederick G. Hohmann, Livermore	8142-1	
Ralph M. Johnson, Livermore	8142-1	
Frank A. Maestas, Livermore	8142-1	
Dorothy J. Maxwell, Livermore	8132-4	
Gilbert L. Rhodes, Castro Valley	8142-2	
George E. Smith, Livermore	8142-1	
Dennis T. Valdez, Hayward	8142-1	
Robert L. Walker, Pittsburg	8142-1	
Will B. Williams, Oakland	8142-1	
Massachusetts		
John P. Spacer, Jr., Pinehurst	5224	
Minnesota		
Walter J. Granfield, Minneapolis	7241	
Missouri		
Donald R. Hill, Richmond	2711	
Roy F. Lyon, Kansas City	2711	
New York		
Roy G. Allison, Spencerport	2713	
Walter D. Hewitt, Brooklyn	2543	
John W. McGowan, Yonkers	2713	
New Jersey		
Clarence B. Olson, Arlington	7412	
Lynette Plumlee, Princeton	3154	
Ohio		
Alphonse Rakoczy, Garfield Heights	1246	
Pennsylvania		
William L. Bierly, Woolrich	2723	
Rhode Island		
Joseph M. Proud, Jr., Providence	5113	
Tennessee		
Wilfred E. Slade, Nashville	2530	
Virginia		
Guy W. Robinson, Norfolk	1224	

British Movies Appear On Noon-Time Program

A feature-length British movie and two short films are slated for the Corporation's noon hour entertainment program for the coming two weeks.

Nov. 5-8 the offerings are "Sailing to the Cape" and "Water for Dry Land."

The first half of "The Lavender Hill Mob," starring Alec Guinness, will be shown Nov. 12-15. The second part will be shown the following week.

Showings start at 12:10 p.m. in Room 3, Bldg. 849, on Tuesdays and Thursdays, and Room B-6 of Bldg. 802 on Wednesdays and Fridays. Free admission.

AEC Toastmasters Get Recognition

Celebrating recognition by Toastmasters International, members of Beta Aloosters Toastmasters Club No. 2524 held a charter party and installation of officers recently.

Jack Culley (AEC) as president heads the organization of 30 AEC employees and members of the military. Walter Meador is educational vice-president, W. E. Gries is administrative vice-president, Ed Bedneau is secretary, Don Dutton is treasurer and John J. Robitaille is sergeant-at-arms. All are AEC employees.

Service Awards

Ten Year Pins



Luciano Gurule 2462 Nov. 4, 1947

Frank N. Reeder 5213 Nov. 7, 1947

Edward A. Salazar 1625 Nov. 3, 1947

Walter R. Drake 5212 Nov. 7, 1947



Clark D. Read 2234 Nov. 3, 1947

Charles L. Becker 2121 Nov. 4, 1947

Five Year Awards

Nov. 1-7
Clarence S. Lane 2723, Robert M. Lacey 1281, John H. Brengle 1243, Robert B. Evans 2532, Jerome B. Carter 7313, Everett M. Gieseker 2713, Nana A. Brannan 7121, Deluvina S. Montoya 7221, Lillian M. Liskovec 2231, Victor Padilla 2415, Charles C.



Carol Campbell



Lenore Farnum and Sister



Jerre Clark

—featured models in Livermore fashion show—

Sandia Girls In Livermore Style Show

The fashion world of "sack" dresses, cloche hats and pointed toe shoes had three Livermore Branch girls in its midst as they modeled recently in a fashion show sponsored by the Livermore Venture Club.

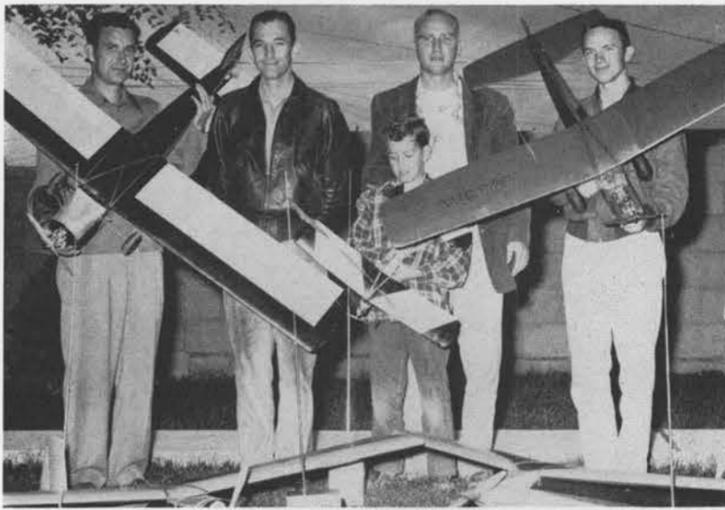
The organization is a service

group of young business women sponsored by the Soroptomist Club.

Carol J. Campbell, Jeroldine L. "Jerre" Clark and Lenore Farnam (all 8132-4) were all enthusiastic about modeling. As Carol express-

ed it: "It gives me a chance to try on all the clothes I wish I could buy."

All three are recent additions to Sandia's Livermore staff and are graduates of Livermore Union High School.



MODEL PLANES to compete in the radio control contest during the weekend are displayed by members of the Albuquerque Radio Control Model Airplane Group. L to R are Frank Hoover, Fred Stong, Dan Parsons (5221-1) and Don Locke (7412-5). C. G. Hoover is standing immediately in front of Parsons. Entrants from throughout the Southwest are expected to enter the meet.

Radio Controlled Model Planes in Competition Here

Radio controlled model airplanes and operators will compete in a two-day contest this week end sponsored by the Albuquerque Radio Control Model Airplane Group. The public is invited to attend the meet, according to Dan Parsons (5221), treasurer of the group.

The planes will be required to execute intricate maneuvers such as prototype takeoffs, rolls, spins, power dives and outside loops to place in the meet.

The contest will be held at the model field located between the National Guard Armory and the Animal Shelter on N. Wyoming.

Golfers in 1470 Win Top Tourney Honors

Golfers in department 1470 copped team honors for the second year in the annual 1400 golf tourney held last month at the University of New Mexico course.

Other trophies were awarded Russ Maxwell (1470) for low net, Alex Chabrek (1470) for low gross and Bob Robertson (1470) for high gross.

Prizes on the blind bogey were given Lee Hogue (1450), Bob Parker (1450), Vic Sirwinski (1440), Gino Carli (1440) Mike Gasta (1460), Alex Chabrek and Leo White (both 1470).

2100 Touch Football Team Heads League With Two Victories

Leading the Employees Touch Football league at the end of two weeks play is Team 2100. This team has defeated 7200 14-6 and won from 2400 on a forfeit 1-0.

Most impressive first game was played by 2500 who swamped 5100 39-6. Team 1400 is in second place with 1½ points followed by third place 2500 with 1 point. One point is awarded a winner, half a point for a tie.

Games are held on a field located on Softball Diamond B. Starting times are 6:30 and 8 p.m. Monday through Thursday.

League standings are as follows:

Team	Won	Lost	Tied	Points
2100	2	0	0	2
1400	1	0	1	1½
2500	1	0	0	1
1600-3100-AEC	1	1	0	1
7400-7100-5500	0	1	1	½
2400	0	1	0	0
5100	0	1	0	0
7200-5200-2300	0	1	0	0

Non-Destructive Testing Expert To Address 2 Tech Organizations

A German expert on non-destructive testing will address meetings of the Los Alamos - Albuquerque Chapter of the Society for Non Destructive Testing Tuesday, Nov. 12, and the Albuquerque Section of the American Society for Metals Thursday, Nov. 14. Dr. Friedrich Foerster, director of Institute Dr. Foerster, Reutlingen, West Germany, will discuss "New Electromagnetic Methods for Non-Destructive Testing of Metals" at both meetings.



Dr. Foerster

Dr. Foerster is internationally recognized as the discoverer of the use of eddy currents for non-destructive testing. He was Director of the Metallurgy Division of the Kaiser Wilhelm Institute, Berlin, until after World War II. In 1948 he founded the present Institute Dr. Foerster.

The SNT meeting will be held in Los Alamos beginning at 8 p.m., in the Health Research Lab.

The ASM meeting will be held in La Placita Dining Rooms in Old Town beginning at 6:30 p.m. Reservations may be made by

contacting Charles Arthur (1624), ext. 40153, or Byron Wickett (1624), ext. 25163.

Tracking Telescope (Continued from page 1)

son. Mr. Lareau is now in the Radiation and Materials Properties Division (1626).

Sandia's model shops made and assembled most of the telescope. Byrd McKay and Charles Riley of the Pattern and Foundry Section (2124-4) headed by J. F. Bryson, fabricated the prototype wooden scale models of the telescope and cast the aluminum tube.

The Branch Shops Section (2131-1) headed by J. K. McDowell, assembled the electronic systems. Machining work on the tube and base was carried out by the Heavy Machine Section (2151-1) under the direction of E. L. "Tex" Arterburn.

Precision measurements for the massive bearings on which the scope revolves were made by Henry Schroer and Bob Dineen of the Mechanical Standards Section (2132-4) headed by H. M. Meidal.

The mechanical parts for the automatic focusing system were made by Mike Zownir and Elmer Kraft of the Project Shops Section A (2153-1) directed by R. J. Gorney.



SECURITY AWARD — Given each month to that Field Testing organization department whose outstanding security violation record clearly demonstrates that it has the wrong end in view.

Field Testing Organizations With Wrong End in View Still Get Award

A novel security award, originated by Glenn A. Fowler, Vice President, Research when he was Superintendent of Sandia Corporation Field Testing, is still doing duty as security reminder in 5200, which is now headed by R. A. Bice.

The award, a carving of a bedraggled horse, goes monthly to the Field Testing department whose security violation record is the poorest. Carrying the idea of the security lesson even farther, Field Testing department managers prepare certificates for employees who helped earn the dubious honor.

This unique plan for "honoring" those whose security record has the greatest room for improvement has paid off. Records show fewer violations than in days gone by.

Horseshoe Playoffs Started This Noon

Starting today during the noon hour, horseshoe singles champions will begin the playoffs that will determine who will wear the Sandia Corporation crown. Matches will continue through next week on the courts east of Bldg. 840.

Competing in the tournament are the following winners of organizational contests:

Al Holmes 1400, Stanley Eastman 2100, Nazario Gonzales 2300, Alfonso Cossell 2400, Ludwig Eversgard 2700, George Duffield 5200, Carl Frantz 5500, Mark Elich 7100, Parker Burns 7200, and Tom Bolz 7400.

Organizations not listed have yet to complete their competition.

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
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.

FOR SALE

SPEED GRAPHIC, Pacemaker, 4x5 w/3.5 Tessar 15 cm lens flash, 3 holders. Hall, AL 5-2304.

BUTANE TANK, 200 gallon, underground, \$100; kittens to give away. Archbold, CH 2-6896.

TABLE SAW, \$25; portable ironer, \$30; white leather jacket, size 18, \$20; ultra violet ray machine, \$5. Eversgard, AL 6-6345.

DINING ROOM or kitchen set, 5 piece, blond, \$20; studying desk w/shelf bookcase built in, \$15. Smatana, AX 9-3669.

REAL ESTATE CONTRACTS, two, total face value \$4100, drawing 6 per cent interest, will sell for \$3275. Dixon, AL 5-5312.

TRICYCLE, 13 inch, new, still boxed, \$13. Moore, AL 5-2110.

'49 DODGE, 4 door, R&H, runs fairly well, nice second car. Swinney, DI 4-4240 after 6 p.m.

BUNK BEDS w/mattresses, maple, 3 months old, paid \$160, sell for \$95. Bradley, Ext. 25275.

KITCHEN LIGHT, 4 tube fluorescent, \$7.50. Johnson, AL 5-5427.

STEEL WINDOW, 3'x3', glazed, screens, w/hardware, \$15; 42" fluorescent light fixture, \$15. Harlow, AX 9-1495.

GONSET CONVERTER 30-40 MC. McGriff, CH 2-6503.

'51 HENRY J., \$275. Wiesch, AL 5-8563, 306 Monroe NE.

GARAGE DOOR, overhead w/hardware, \$25. Goncher, AM 8-1360.

SOLAVOX TYPE A keyboard and amplifier unit, \$50 complete or \$25 plus trade for amplifier. Shaum, AL 5-1904.

LOVESEAT ROCKER, maple, \$60; glass top for 48" round table, \$10; Venetian blind, 100"x50", \$10; fireplace screen, 30"x30", \$5. Elder, AL 6-1848.

RIFLE, 30-06-A3-03, \$40 or trade for good .22 cal. target rifle. Pritchard, AL 6-5667.

DISHWASHER, Hotpoint deluxe maple top, portable or permanent installation, \$150. Cundiff, AL 6-4649 after 5.

MINIATURE POODLE, AKC registered, black and white, \$50. Sanchez, CH 2-7910.

'52 PONTIAC 8, Chieftain deluxe, 2 door, R&H, below NADA book price. Millsap, Ext. 4-7257.

'55 BUICK Roadmaster, 4-door, power equipment, back-up lights, WW tires, selectronic radio, air conditioning, window washers, turquoise and white, \$1795. Davis, AL 6-4962.

FEMALE BOXER, registered, about 1½ years old, reasonable. Nelson, AX 9-3205.

BUSCH-TRESSMAN, 2¼x3¼ camera and accessories. Morison, AX 9-5698.

FIELD AMBULANCE, Army, 4-wheel drive, sleeps 3, goes where jeeps can't, new engine, brakes, extra gas, water tanks, \$635. Shunty, AX 9-2787.

REFRIGERATOR, '55 Norge, 9.2 cubic foot capacity, 40 lbs. freezer chest. Holliday, Ext. 24283.

LEICA IIIif w/f2. Summitor lens; 3.5 35mm wide angle lens and Leica enlarger, all for \$270. Goering, Ext. 46268 after 4:30.

'56 BUICK Estate Wagon, 12,000 miles, \$2295. Cowan, AL 6-7885 after 5 or weekends.

RACE CAMSHAFT, three quarter, for TC, TD or TF, MG, \$12. Goris, AX 9-2924.

YOUTH BED w/mattress and bedspread, \$25; chest w/9 drawers, \$20. Sanchez, CH 2-7910, 1922 Trocadero SW.

'41 PLYMOUTH coupe, freshly painted, nice interior, \$125. Fox, AX 9-4506 after 5.

MOBILE HOME, Pacemaker, 35 ft., 2 bedrooms, reasonable terms to responsible party, sacrifice \$2900 equity for \$600. Lister, AL 6-7791.

ROCK DRILL, "Pionjar" portable gasoline; grip hoist, 3300 lb. capacity; sample crusher, jaw type; Brunning civil engineer's drafting machine. Schiess, AL 5-3252.

NEXT DEADLINE FOR SHOPPING CENTER ADS Thursday Noon, Nov. 7

HAM RECEIVER, 600kc-60mc, crystal filter, tuning indicator, electrical bandspread; Pan-Adapter, 3-in. tube, 455kc input, both for \$60. George, AX 9-3147.

MINIATURE CORVETTE, pedal type, \$17, or trade for boys 24" or 26" bike; tricycle, \$5. Chaves, AL 5-6155 after 5.

TYPING TABLE, metal, \$12; Web-Cor two-speed tape recorder, \$85; Web-Cor two-speed automatic record changer, \$20; electric shaver, \$8. Hughes, Ext. 37255.

3 BR. HOME, 1¾ baths, carpeted, draped, den w/fireplace, dining room, large living room, utility, storage, sprinklers, walled. Loucks, AX 9-3790.

BABY BASSINET, \$6; bathinet, \$7.50. Everett, AL 6-2642.

RANGE HOOD, new w/light and fan, worth \$50, take \$30. Rushing, AX 9-4796.

2 BR. HOUSE, one bath, near "U" in Sandia foothills. Shown by appointment only, \$12,950, good terms. Davis, AL 6-1119.

3 BR. HOME, central heating, completely landscaped, HW floors, near schools, buses, \$12,750, low down payment. Pasko, AX 9-6542, 817 San Pedro SE.

ENCYCLOPEDIAS, new Funk & Wagnalls, \$25; two closed metal cabinets, four shelves in each, both for \$10. Archer, AL 6-1025.

17" TV, portable, Sears, never used, cost \$139, sell \$80; ladies 16 lb. bowling ball w/bag, \$22. Meissen, 232 Utah St. NE.

SIAMESE KITTENS, registered, house broken, \$15 each; '55 Mustang motorcycle, \$255; '50 Nash Ambassador, \$100. Uhl, AM 8-1855.

ELECTRIC TRAINS, two American Flyer w/layout; GE phono-cartridge w/diamond and sapphire stylus. Hodges, AL 6-5097.

DUTCH OVEN, Maytag; kitchen range with light on back, \$85. Grant, AL 6-5730.

JIG SAW, 12", without motor, \$12; clothes hamper on casters, \$2.50. Pitti, AL 6-1629.

'41 NASH Custom Club Coupe, R&H, \$50; baby bed complete (to six years), \$15. Duimstra, AX 9-6106.

PICTURE FRAMES suitable for framing 2-year certificates, professional licenses, etc., \$1.20 and \$1.59 each. Elliott, AL 6-7909.

FORD convertible, must sell or trade immediately, fully equipped, \$1275. Hole, Ext. 2-4146 533 Alcazar SE Apt. D.

26" BICYCLES, 2 boys. Murphy, AL 5-4706, 5712 Euclid Ave. NE.

'53 OLDS 98, WW tires, new paint, power steering, power brakes, fender skirts, visor, electric eye, \$1050. Armijo, AM 8-2326.

WINCHESTERS, 270 and 308 Model 70. Gregory, AL 5-8066.

30-40 KRAG, Sporterized, \$40. Miller, Ext. 4-5275.

'41 BUICK, R&H, \$95. Hillenbrand, AL 6-4715 after 4 p.m.

AIR CONDITIONER, Sno-Breeze, 3500 CFM, odorless, recirculating pump, louvered window adapter w/indoor switch, faucet adapter, \$85. Jenkins, Ext. 52198 after 5.

DACHSHUND PUPPIES, red, AKC registered, sired by Monitor, reasonably priced. Anaya, 638 La Vega Rd. SW.

GE REFRIGERATOR, 6 cu. ft., \$40 or best offer. Nissen, AL 5-5657, 629 Alvarado Dr. SE.

3 BR. HOUSE, 1¾ baths, photo darkroom, block stucco, walled corner lot, sprinklers, brick patio. Odell, CH 2-8727, 6009 Bluewater Rd. NW.

.22 REVOLVER, new "Ruger" single action, \$60 or will trade. Galbraith, AX 9-6554.

HEAT LAMP, combination, \$10; Westinghouse roaster w/grill, table, and plastic cover, \$25; Thor portable ironer, \$10. Curtin, AM 8-0065.

TYPEWRITER, Remington-Rand, needs a ribbon, \$40 or best offer. Freshman, AL 6-7853.

WIRE FENCE, 80 ft., heavy, 6' high, \$12; 7 big pipe posts, \$1; high chair, \$5. Calkins, DI 4-5914.

'56 FORD convertible, loaded, \$1600, or trade for older car. Dalton, AM 8-1313, 410 Charleston NE.

ICE SKATES, Canadian Flyer hockey, size 5, \$5. Leuders, AL 6-4919.

VACUUM CLEANER, new, compact. Lopez, AX 9-0941.

16mm PROJECTOR, Keystone make, \$40 or will trade. McCabe, AL 5-6872, 712 Dakota SE.

AUTOMATIC WASHER, Kenmore, "C" flute, ladies figure skates, size 6½, men's hockey skates. West, CH 2-8981.

STEEL GUITAR, Gibson electric w/amplifier, double neck, 16 strings, \$150. Hitchens, AL 5-1974.

'57 FORD, Del Rio Ranchwagon, power brakes, power steering, Thunderbolt special engine, R&H, red-white tubone. Colp, AM 8-8035.

WANTED

CHILD CARE in my home, all ages, anytime, reasonable, NE of fairgrounds. Bice, AM 8-8671.

TO SHARE APARTMENT. Two girls would like one more girl to share furnished apartment with them. Bode or Scott, AM 8-2157, 1822 Alvarado NE.

STUDENT DESK. Kindschi, AL 6-0531.

OLD PISTOLS and revolvers for private collection, will pay cash. Smitha, AX 9-1096, 8607 Menaul NE.

OLYMPIA TYPEWRITER; Nikkon or Contax lens, buy or trade. Have Konica, '47 Buick, electric lawn mower, hunting tractor. Jensen, AL 5-8382.

BABYSITTING, daytime, by day or week. Stixrud, Ext. 28253, Palo Duro NE.

HOMES FOR KITTENS, three, dark tiger, white face and feet. Hanley, 2711 Gen. Chenaunt NE.

BABY SITTER at my home. Cordova, AL 6-9596 after 5:30.

FOR RENT

MOUNTAIN CABIN, modern, bath, gas heat, \$55 month (lights included), carport to Sandia and University. Souder, Ext. 34161.

CAMPING TRAILER, 15', butane lights and stove, sleeps 5, hunters make your reservations now. Nelson, AL 6-6300.

TRAILER HOME, 1 bdr., wall-to-wall carpet, TV, \$60 month, available Nov. 1, Western Trailer Court, Space No. 26. Savvae, AL 6-1881.

LOST AND FOUND

LOST—Safety sunglasses, maroon fountain pen, blue-grey plastic rim glasses, grey suede knit gloves, sterling loop earring, red plaid thermos bottle, gold loop earring for pierced ears, square grey metal clip on earring, key w/No. 3, keys in leather holder w/Black-Briscoe. LOST AND FOUND, Ext. 26149.

FOUND—Lady's grey glasses, pearls, SKF slide rule, jewelers gold plated eye loop, lady's horn rim glasses, Ray-Ban glasses, silver-chrome clip earring. LOST AND FOUND, Ext. 26149.

Man-Years Increase In EDPM Program De-bugging

Fourteen man-years have gone into programs now being de-bugged here at Sandia Corporation. And it's only the beginning.

This is not mortal combat with the insect world, but the term refers to the massive job of preparing programs for the Electronic Data Processing Machine (IBM 705) which will be put into use here next spring.

Observing all the elaborate preparations now underway for this newcomer one would think we expect visiting royalty. Perhaps the 705 is among the royalty of

computers, but it is also the work-horse of the computing sciences. However, this workhorse works only if it is given orders (programs) consisting of instructions including all logical steps the 705 must follow to solve a problem or give a simple answer.

Long Programming Job

"This is where the 14 man-years have come in," says Frank H. Grubbs, manager of the Electronic Data Processing Department. "We have already spent this much time preparing programs and putting them on the shelf waiting for the day we throw the switch on the 705."

For months, persons in the EDPM department have worked on these programs. When completed, they are taken back to New York City and put on the 705 in IBM headquarters for a "test flight."

"Sometimes the machine will run three seconds and then hang up," Frank relates. Then it is a question of finding what wrong instruction was given. The 705 will not take improper instructions then come up with a wrong answer. It just stops operating.

When the hang-up occurs, these programming teams pore over their work until they find the bug. Then back it goes to the 705. This process continues until the program is proven ready for the computer.

Proving Program

The activity is designed to perfect the programs and assure that they are workable. In fact, the answers to the test problems are determined in advance by tedious and laborious methods. Then the program is prepared and given to the 705. After the program is proven all is ready.

The original effort is necessary, but will not continue after a program is prepared. In one situation two people worked two weeks to reach the answer to a problem. After it was programmed, the 705 solved it in a matter of seconds.

The mass of work to be turned out by the 705 after programming reaches full speed is tremendous.

This so-called mechanical brain is no brain at all and is completely at the mercy of man. But once man supplies the electronic wizard with data the fabulous processes are underway.



AN EDPM PROGRAM is de-bugged by running test cases on the 705 and correcting errors as they appear. Here is a group of Sandia employees work-

ing with IBM employees perfecting a program at IBM headquarters in New York. Bug after bug is removed from the program until it is perfect.

Technical Notes Appears As New Sandia Publication

Reporting Sandia Corporation technical news notes, a new publication made its first appearance on Oct. 17. **Technical Notes**, edited by Technical Information Division 7223, will appear each Thursday with items of interest on research and development technology at Sandia Corporation.

An "official use only" publication, its circulation will be limited to staff members and supervisors in Organizations 1000, 5000, 7000, 8000, and Manufacturing Engineering departments.

To request additional copies or to report items of interest, contact the Technical Information Division, ext. 35143 or 26136.

Bernard Ostle Author Of Article Appearing In QA Magazine

An article appearing in the September issue of "Industrial Quality Control" is under the joint authorship of Bernard Ostle (1292) and a former student of his.

Work on "An Evaluation of the Maytag Double-Line Chart" was started when R. L. Madison, now with Aeronautical Radio Inc. in Washington, D. C., was one of Mr. Ostle's students in Statistics at Iowa State College in Ames.

Mr. Ostle also taught at Montana State College immediately before joining Sandia Corporation as a staff member last July. He is a member of the American Society for Quality Control.



EDPM PROBLEMS are pondered by F. H. Grubbs (left), EDPM Department Manager, and L. E. Mahuron, division supervisor in the department.



CONTROL CONSOLE of the 705 is studied by Sandia EDPM specialists. The console permits the operator to supervise 705 functions.

Sandia Base Provost Marshal Gives Explanation of Citation Practices

Military Police issue two types of tickets for traffic violations on the Base, according to office of the Provost Marshal. One is a traffic citation which instructs the violator to appear before U. S. Commissioner Owen J. Mowrey. The other is a notice of traffic violation which indicates that you have been observed committing a minor traffic violation and usually no action is required.

However, three such warning notices will result in a summons to report to the Commissioner. A file of all traffic violations is kept in the Provost Marshal Operations Office.

For the more serious traffic citation the violator must report

at the date and time specified to the Commissioner's court held in Bldg. 360, next door to the Sandia Base Branch of the Bank of New Mexico. When a plea of "guilty" is made before the Commissioner, he will pass sentence at this time. If a plea of "not guilty" is made, the Commissioner will normally reschedule the hearing one week later to enable the necessary witnesses to be present.

If the violator is unable to appear at the time designated, arrangements may be made for a later date by calling ext. 42221 and explaining the situation.

For repeated or flagrant violations the Base Commander may remove Sandia Base driving privileges according to Sandia Base Regulations, paragraph 41.

Livermore Branch Moves Into New Tech Area Bldg.

Sandia Corporation's Livermore Branch began its move to the first building of its new facility Oct. 26-27.

W. J. Howard, Director of Systems Development, and R. E. Poole, Vice President at Livermore, will both have their offices in the new administration building. Organizations to move include personnel, purchasing, accounting and business methods, typing pool, security, procurement and plant engineering.

The remainder of the Livermore staff will continue to occupy the present UCRL buildings until additional structures in the permanent facility are completed.

Cost of the administration building was \$300,000 and it contains 17,700 square feet.

Livermore Employees Raise \$1,926 for Community Chest

Livermore Branch's 1957 Single-Fund Drive resulted in \$1,926 being raised for the Livermore Valley Community Chest agencies, not counting the Corporation's gift.

Employee participation totaled 95.41 per cent. Contributions averaged \$8.84 per employee solicited and \$9.26 per contributor. There are 234 employees at the Livermore Branch.

Funds were sought for the following agencies: Boy Scouts, Girl Scouts, USO, American Cancer Society, Alameda County Heart Association, Twin Valley Association for Retarded Children, Red Cross, Salvation Army and Livermore Welfare Agency.

Completing 'Sandia Story'

Movie Unit Shoots at Sandia



Allen G. Siegler, director of photography for Lookout Mountain Laboratories, leads the crew working at the Centrifuge installation in Area III. The movie unit will be at Sandia Corporation for the next few weeks completing "The Sandia Story." Sequences will be filmed in the Model Shops, Standards Labs, Research and Development activities and Field Test activities.

Footage will also be filmed of scenic and historic places in Albuquerque. George Pratt is the Lookout Mountain director while Tom Zudick of the Public Relations Division 3125 is coordinating the movie for Sandia Corporation.

Last summer the movie unit filmed Corporation activities during the nuclear tests of Operation Plumbbob in Nevada and also Sandia activities at Salton Sea and the Tonopah Test Range.