

Sandia Helps Stage Science Banquet for Student Competitors

Sandia Corporation employee time and talent gave strong support to the First Annual North-western New Mexico Regional Science Fair held at the University of New Mexico last week.

Among the official judges of the 300 science exhibits were J. R. Banister (5150), L. M. Berry (1621) R. G. Elsbrock (3361), R. C. Hildner (5122), and G. W. McClure (5152).

Other Corporation activities, carried out by the Public Relations Division 3431, centered around the Awards Banquet Saturday evening. The Division decorated the Student Union ballroom for the banquet attended by teen-age exhibitors and their sponsors.

Sandians installed a closed circuit TV system between the ballroom and the Chemistry building. R. W. Galbraith (1615), directed the installation of this system which permitted parents and friends to view the proceedings. Sandia also provided programs for the event.

Winners in this regional science fair will participate in the state science fair to be held in Socorro, April 9, and in the national science fair in Indianapolis, May 11-14.

Seeking Bids to Modify Area III Air Gun Facility

The AEC last week invited bids for construction to modify Sandia's Air Gun Facility in Area III. The new construction will include earth barricades, concrete slabs and walkways, underground electrical cables and other miscellaneous electrical work and minor modifications to two buildings.

Work is to be completed in 45 days after the contractor receives notice to proceed.

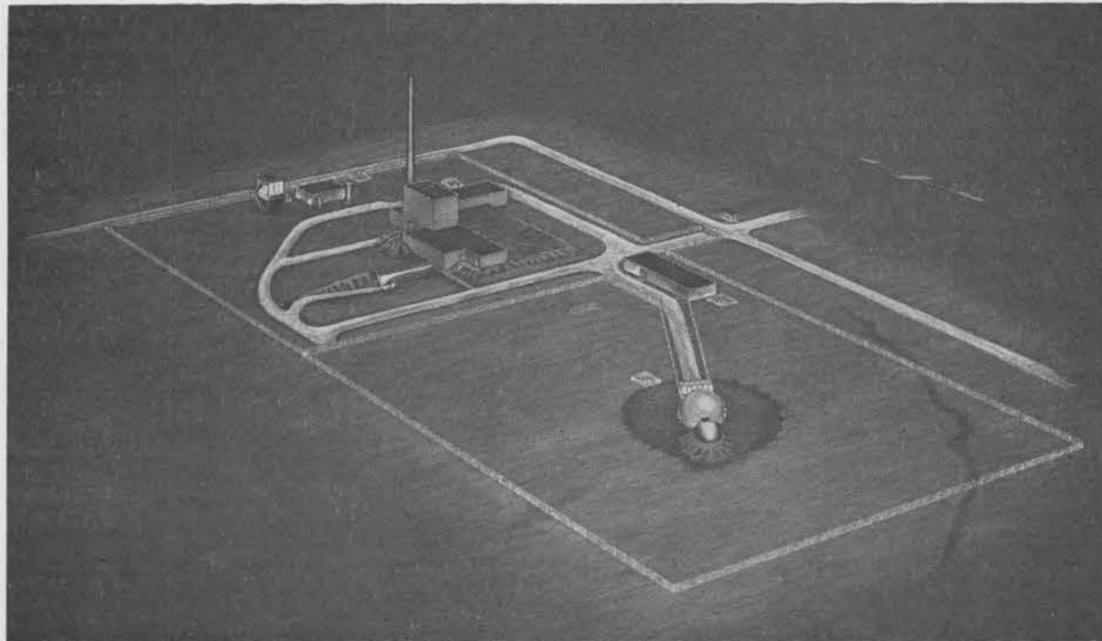
Fire Prevention Inspector Urges Spring Clean-up

"Warm weather means spring clean-up time," Ted Rosenwald, fire prevention inspector from Division 4542, says. "Now is a good time to round up and remove all unnecessary flammable liquids or materials from work areas."

Push to the drive will be added this week when a booklet, "Fire—Public Enemy No. 1," will be distributed and a poster proclaiming "Better Clean Up for Fire Safety" will be posted.

"It might be wise, too," Ted says, "for employees to take a look around their homes and remove any flammable material that could be a fire hazard."

Second Sandia Reactor in Design Stage



SANDIA CORPORATION REACTOR FACILITIES in Area III will resemble this artist's sketch when construction is completed in 1961. In the foreground is shown the new pulse reactor which will be housed inside the concrete sphere. SERF (Sandia Engineering Reactor Facility) is in background.

A second nuclear reactor for use in research programs by Sandia Laboratory is now being designed and is expected to be in operation in 1961. The device is to be a prompt critical reactor patterned after a similar facility which has been operating at Los Alamos for several years. The Los Alamos device is nicknamed Godiva.

Sandia will use the new reactor to investigate the effects of short, high-intensity pulses of neutrons on various materials. Data obtained from such studies will complement the information which will be gained in the irradiation of materials in the five megawatt Sandia Engineering Reactor Facility now under construction and scheduled for completion next year.

Costs \$550,000

The new facility will cost approximately \$550,000, including engineering, construction and equipment. At the present time it is in the design stage and bids for construction are expected to be called by the Atomic Energy Commission in July. Architects for the project are Kruger, Lake and Henderson of Albuquerque.

The facility will be located near the larger reactor now being built in Tech Area III, several miles south of Sandia Laboratory. A dome-shaped building 40 ft. in diameter with concrete walls five ft. thick will house the reactor.

Conceptual design for the new pulse reactor was done by Facilities and Equipment Section of the Nuclear Facilities and Operating Division 1626 headed by D. M. Ellett.

Responsible Personnel

Personnel of Operations Section 1626-2 will operate the new reactor.

Radiation Effects Studies and Testing Division 1628 under A. W. Snyder will plan the test programs.

Plant Engineering Department 4540 prepared preliminary design and layout of the facility. Project Engineer was V. E. Kerr (4543-3). Plant Engineering is currently coordinating the preparation of final plans with the architect-engineering firm employed by the AEC.

Three Sessions Are Scheduled For Colloquium

Prof. Erwin W. Mueller, Pennsylvania State University, will speak on "Field Emission and the Atomic Microscope" at a Sandia research colloquium on Wednesday, April 6, at 9:30 a.m.

"Characteristics of the Controlled PNP Rectifier" will be discussed by R. G. McKenna, Texas Instruments, at a development seminar on Thursday, April 7, at 1:30 p.m.

Two scientists from the U.S. Navy, Washington, D.C., will speak at a research colloquium on Wednesday, April 13, at 9:30 a.m. Dr. Charles C. Bates will discuss "Structure of the Ocean and the Ocean Floor" and Benjamin Rosenberg will talk on "Detection and Tracking in the Ocean." Tickets are required for this meeting.

All sessions will be held in Bldg. 815. For further information contact Craig Hudson (5113), colloquium chairman.

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Sandia's New Solar Furnace Tests With 'Thermal Shock'

A second Sandia Laboratory solar furnace went into operation last week. Located at the east mesa test area adjacent to Sandia's original solar furnace, the new device will be used primarily for materials testing.

Its highly polished five-ft. mirror concentrates the sun's rays into a tight circle of intense heat. The furnace can instantly subject materials to 7000 degrees Fahrenheit and sustain this temperature as long as the sun shines.

This "thermal shock" effect is difficult and expensive to achieve with any other type of test device.

Materials will be compared in the solar furnace to determine their ability to withstand high temperature. Other tests will show effects of high heating rates on the internal transformations of

crystalline materials. High purity melts of refractory materials can be made in solar furnaces because there are no combustion products to contaminate the melt and the material can act as its own crucible. The conversion of solar energy to useful power may also be given consideration.

The new furnace was designed as a permanent facility and is housed in a unique circular building that can rotate 360 degrees. A slot in the roof and side of the building with a sliding cover permits the sun's rays to strike the solar furnace.

The mirror was constructed from an army surplus searchlight. The original parabolic reflector of the searchlight was refinished with a coating of bright aluminum. The mirror is mounted on an equatorial stand that automatical-

ly compensates for the rotation of the earth to keep the mirror constantly tracking the sun.

Materials to be tested are placed on a mount about 25 in. from the surface of the mirror for maximum heat. By moving the test sample closer or further away the temperature can be varied and controlled. Maximum energy output of the solar furnace is 1500 BTU per sq. ft. per second. An iris diaphragm and shutter in front of the mirror can be used also to vary energy output or can be opened suddenly for the "thermal shock" effect.

A five man team from Optical Development Section 5224-1 and Electronic Development Section 5221-3 designed the new facility. Members were C. A. Coonce, Dan Fenstermacher, T. L. Pace, J. T. Lannon and R. W. Deltenre.

Sandia's Development Shops fabricated the furnace.

The facility will be operated by personnel of Materials Properties Test Section of Materials Analysis and Test Division 1622. Russ Acton is project engineer for the new furnace.

Sandia's original solar furnace, which went into operation in January 1956, was not designed as a permanent facility. However, it will remain in operation and continue to be used for materials testing.

New Committee at Livermore Lab Studies Tech Development Program

A technical development program for engineers at Livermore Laboratory is being studied by the Laboratory's new Educational Committee, headed by L. E. Hollingsworth (8120).

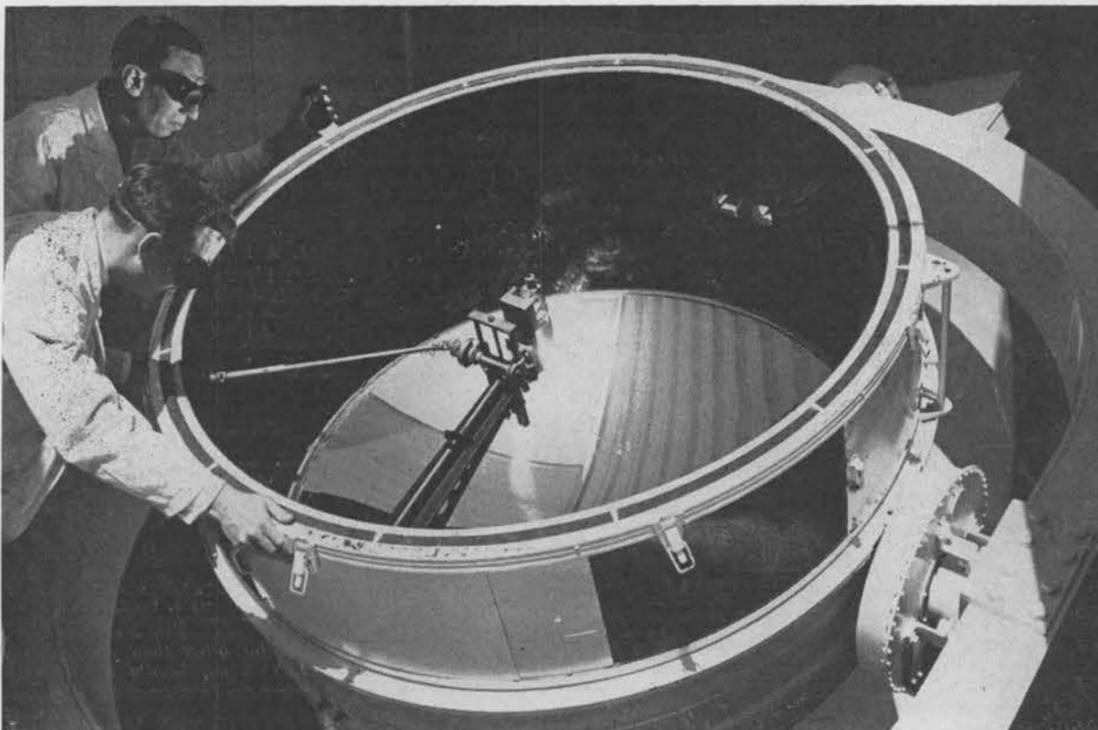
The program would provide a comprehensive two-year course of graduate study for EE and ME graduates with Bachelor's degrees. The program is expected to be in operation at Livermore in 1961.

In addition to the technical development program, the Livermore committee has been set up to co-

ordinate other programs, such as educational aids, technical orientation, and evening school, all of which are under study.

Serving on the committee with Lee are L. E. Davies (8150), Ray Brin (8110), Paul Rowe (8143), and Bill Jamieson (8212). Phil Leiserson (8212-2) serves as ex-officio secretary to the committee.

Lee and Ray are also members of the Sandia Corporation Educational Committee, headed by G. A. Fowler (5000).



LARGE MIRROR, fabricated from a surplus army searchlight, measures five ft. in diameter. It is mounted on an equatorial stand with a clock drive that automatically compensates for the ro-

tation of the earth while the furnace tracks the sun. Frank Francis, top, and Russ Acton are shown operating the furnace. Hot tungsten which has been ignited by sun's heat.

Editorial Comment

Let's Delete These Decibels

The Gallup Poll provides us with the information that the main peeve of the American is the proclivity of his fellow man for honking automobile horns in front of houses.

The immediate reaction is to foist the responsibility onto the teen-ager who is known to spurn the use of doorbells in favor of horn tooting.

In defense of the drivers of this age bracket it is well to point out that theirs is not the honking we hear somewhere around the hours of 7 or 7:30 in the morning. This is the driver summoning his car pool riders for the trip to work. This is truly the noise that disturbs. This is the horn tooting we can do without.

Do You Have The Habit?

Activity reported by Sandia Corporation library staffs indicates a high level in technical reading by employees. Apparently those at Sandia who already know much are seeking to learn more.

However, the reading habits of the average college graduate are not to be praised.

One study found that 17 per cent of American adults were reading books. In Canada the record was 31 per cent, 34 per cent in Australia and 55 per cent in England. The study also found out that 57 per cent of American high school graduates and 26 per cent of the college graduates had not read a single book in the preceding year.

These statistics sadly demonstrate that many who retain their degrees do not retain their education.

Ralph M. Besse, chairman of the Cleveland Commission on Higher Education, says, "An education can survive in the midst of modern forces . . . only if it is continually maintained. It cannot be maintained without the book reading habit. Our college graduates do not have this habit."

Salton Sea Security Inspector Has Spare-Time Hobby of Public Service

Civic activities keep James H. Hall, Jr. (4581-2) busy at Westmorland, Calif.



Jim, a security sergeant at Salton Sea Test Base, is a Westmorland city councilman and also serves as president of the Chamber of Commerce.

A graduate of Brawley Union High School, Jim has resided in Westmorland since his return from Navy service during World War II.

In April 1958 he was elected to serve a four year term as city councilman. During his tenure the Council has worked with problems of refuse collection and is presently in the process of trying to obtain a loan of \$100,000 from the Federal Government to develop a water works.

Just recently Jim was voted president of the Chamber of Commerce, for which he was previously secretary. The chamber's pet projects include a sheep shearing competition and a swimming contest. This summer the group hopes to sponsor swimming classes for youngsters. Since Jim has five children of his own, he's enthusiastic about this project.

Jim has been a security inspec-

tor for Sandia Corporation at Salton Sea since September 1952. His father, James H., retired last August after nine years' employment with Sandia.

Sanado Club Members To Present Art Show At April 5 Meeting

The Sanado Club will present its annual Art Show Tuesday, April 5, at 1:45 p.m. at the Coronado Club.

Judging the exhibits of Sanado students who were taught by Walter Bambrook and Joe Morello will be Ralph Leurs, Kitty Sadock and Lez Haas.

Senora Concha Ortiz y Pino de Klevin will introduce Pablita Velarde who will speak on "Earth Painting."

Refreshments, handled by Mrs. J. C. Hart, will be served at the end of the afternoon activities. Mrs. W. S. Sharp is in charge of the program. Mrs. Robert Hooper, president, will conduct a short business meeting.

Mrs. J. V. Durant is chairman of the decoration committee. Pouring will be Mrs. W. O. McCord, Mrs. Arthur Hasenkamp, Mrs. O. B. Cashion, Mrs. L. H. Stratford, Mrs. T. B. Sherwin and Mrs. J. C. Eckhart. Hostesses are Mrs. J. P. Molnar and Mrs. B. S. Biggs.

Legionnaires Honor Lorenzo Rivera For 35 Years Membership Service



Lorenzo Rivera
—35 years with American Legion—

Congratulations

Born to:

Mr. and Mrs. A. F. Beck (1313-2) a daughter, Elizabeth Anne, on March 15.

Mr. and Mrs. Charles Ray (4152) a daughter, Rima Marcela, on March 3.

Mr. and Mrs. R. A. Randall (1322) a son on March 19.

Mr. and Mrs. Phil Rogers (2712-1) a daughter, Jeanete, on March 6.

Mr. and Mrs. Ed Shaefer (8114-1) a daughter, Donna Marie, on March 19.

Mr. and Mrs. R. L. Read (8123-2) a daughter, Glenna Pauline, on March 12.

Mr. and Mrs. E. R. Newton (8222-2) a son, Andrew Grant, on March 18.

Mr. and Mrs. Paul Souder (1262-2) a daughter, Penny, on March 19.

Sympathy

To Helen Sanchez (4131) for the recent death of her father.

To Chuck Gebert (1411) for the death of his mother in Delaware, Md., on March 13.

To Marrian Salomon (1414) for the death of her father on March 7.

To F. L. McFarling (2533) for the death of his father in Albuquerque on March 15.

To Peter J. Cook (5532) for the death of his father-in-law recently.

To George Chaffee (2722-3) for the death of his father in Brookfield, Mo., recently.

To Betty Lou Crocker (8123-3) for the death of her father in Los Angeles on March 16.

To John C. Ludington (8116-2) for the death of his father in Redlands, Calif., on March 11.

To Tony R. Lopez, Jr. (4212-3) for the death of his sister March 25.

Thirty-five years as an active member of the American Legion is quite a record! Lorenzo Rivera (4251-1) was honored for this accomplishment recently when Post 72 in Albuquerque presented him with a pin and a certificate.

Lorenzo was one of the first volunteers from Socorro to join the Army back in 1917. He served at Ft. Bliss and in France during World War I and participated in the battles of St. Mihiel and Argonne Forest. He was a member of the 7th Division of the 34th Infantry Regiment.

On the last day of the war Lorenzo was in battle position when the Germans released gas over the battlefield. Even with the protection of his gas mask mustard gas injured his throat and he spent more than two years in various army hospitals.

Lorenzo has been at Sandia in the Development Shops organization since January 1951. He will retire next year.

New Type Alumni Club

Eleven hundred miles away from home and friends behind? Silas Shane (4511-1) is seeking former residents of East Alton, Ill., especially those who formerly worked for Olin Mathison or Western Cartridge Co.

Silas would like to arrange a get-together to talk over old times. Call him at AL 5-5673.

Daughter Honored

Among proud fathers include Stan Pickens (4582-1) of Salton Sea, whose daughter, Charlene, recently obtained membership in the California Scholarship Federation.

She was one of 42 students at Brawley Union High School to achieve this honor based on high scholastic standings.



June Williams (3126)

Take a Memo, Please

The measure of a person usually can be determined by the way he drives a car: he shows consideration for others, heeds the signs and signals, and obeys the rules of the road.

Science Fair Winner

Peggy Snodgrass, daughter of L. E. Snodgrass (2561), was awarded first place in the mathematics division of the Woodrow Wilson junior high school science fair for her giant model of a slide rule. The four-ft. wooden model reproduces the scales of a conventional slide rule and is accurate for calculations. She competed in the regional science fair held at UNM last week and her exhibit was among those chosen to compete in the state science fair to be held in Socorro, April 9.

St. Patrick's Style Note

St. Patrick's day brought out the Irish in the wearing of the green, and it even went to the heads of some. Howard Sloane (2732-2) showed up for work with green hair and a very large orange tie, to show he was unhappy with no one.

Back from Service

Back from military service is Curtiss Moses, a mechanical engineer in Project Division 1217.

Curtiss had been working for the Corporation a little over a year when he was called into service. He was in the Air Force two and a half years — most of the time stationed at Kirtland AFB.



Curtiss Moses



S. P. Marsh

Back at Sandia after nearly two years in the Army is Sherman P. Marsh (3462).

He served in the Army Signal Corps, stationed mainly at Fort Gordon, Ga. Sherman first came to work at Sandia in July 1957.

Speedy Recovery

A speedy recovery from his bout with an infection is extended to Wayne Janssen by his co-workers in 8234-3.

Get well wishes are extended to C. J. Henry (1431), who is convalescing at home after a recent operation.

New Heirs

Congratulations to Mr. and Mrs. Tom Moody (1432) who recently adopted a young son, William James.

Little Kathi Anne was welcomed to the home of Mr. and Mrs. J. R. Perkowski (8211-2) on March 9. She was born on Dec. 10, 1959.

Engagement



Carol Trevor Evans (3452-3) and Frank C. Comiskey (4153-2) recently announced their engagement. A late summer wedding is being planned by the couple. Carol has been with Sandia since October 1958 and Frank, since June 1956.



THREE DAYS of floating down the Rio Grande were enjoyed by this hardy crew: (back row, l to r) H. H. Patterson (5230), Jack Hinde (5213), Hilda Patterson, Helen Steck, W. T. Smith (5256), George Steck (5511), W. C. Myre (5252) and (front row)

R. D. Robinette (5253), G. A. Fowler (5000), Mary Alice Fowler, H. E. Harling (3428), J. H. Scott (5252). Photographer was B. C. Benjamin (5216). Four rafts were launched at Lajitas, Tex., and passed thru Santa Elena Canyon in Big Bend Natl. Park.

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AEC Approves Construction For Plowshare Project Gnome

The Atomic Energy Commission has approved initiation of construction and site preparation for Project Gnome in the salt beds about 25 miles southeast of Carlsbad, New Mexico. The project is part of the Commission's Plowshare Program to investigate the feasibility of using nuclear explosives for peaceful purposes.

During the current nuclear test suspension negotiations in Geneva, the U.K., the U.S., and the USSR have agreed in principle on the use of nuclear explosions for peaceful purposes. The scientific results of Project Gnome, like all Plowshare projects, will be made available on a world-wide basis and the United States will welcome observers from the United

Nations or any of its member countries which are interested in the project.

The construction phase of the project calls for a shaft 1,200 ft. deep and, leading off from the bottom of the shaft, a tunnel 1,100 ft. long in which a nuclear explosive of about 10 kiloton yield, the equivalent of 10,000 tons of high explosives, would be detonated. The construction is estimated to cost about \$1,000,000 and is expected to take about one year. Final authorization to detonate the nuclear explosive will be the decision of the President.

List Objectives

The experimental objectives of the project are four-fold:

1. Explore the feasibility of

converting the energy from the nuclear explosive into heat for the production of electric power;

2. Investigate the practicability of recovering useful radioisotopes for scientific and industrial applications;

3. Expand the data on characteristics of underground nuclear detonations to a new medium (salt) which has marked differences from the tuff (a volcanic rock) at the Nevada Test Site in which previous underground detonations have been conducted; and

4. Make neutron cross-section measurements which will contribute generally to scientific knowledge and to the reactor development program.

Sandia Corporation will be responsible for arming the nuclear device, if the test is made. Corporation personnel also will make measurements to determine ground motion and temperature.

Heading Sandia's participation as senior representative in the field for Project Gnome is Dean Thornbrough of Nuclear Burst Simulation Division 5112, as scientific advisor, the experiment and for analyzing and reporting the results. E. S. Ames (5231) is project leader for instrumentation and R. J. Tockey of Livermore Laboratory's Test Data and Nuclear Support Division 8123 is project leader for device arming and circuit safety.

To Record Temperature

Sandia's temperature recording instrumentation will be placed near the device and at various distances from the zero point.

Other Sandia instrumentation located at various depths and distances from the zero point will record ground motion.

Test Data Department 5240 will reduce the data recorded.

Detailed studies and experiments in which Sandia participated have been conducted to assure the safety of this project. The detonation will be completely contained underground. Results of these studies and experiments have been reviewed by a panel of experts.

Technical work is being carried out by the University of California's Lawrence Radiation Laboratory, Livermore, Calif., and the planning is under the supervision of the Commission's San Francisco Operations Office. Project manager for the experiment is James E. Reeves of the Commission's Albuquerque Operations Office and the technical director is Dr. Charles E. Violet, Lawrence Radiation Laboratory, Livermore, Calif.

Sandia Conducting Plowshare HE Tests at Nevada Site

A series of chemical high-explosive (non-nuclear) tests to acquire data on the use of explosives for excavation in connection with the Plowshare program is being planned by the Atomic Energy Commission at the Nevada Test Site. Sandia Corporation personnel will conduct the tests.

The tests will range up to 20 tons of high explosives. They are expected to provide information on the effects of depth of burial, charge weight and type of rock on crater size and shape.

The series is to be in two parts. One is to be a basalt cratering experiment in which 15 charges of 1,000 lbs. each and three 40,000 lb. charges would be used. The other is to be the use of small

multiple simultaneous detonations to provide information on excavation effects.

These tests are expected to start in April 1960 and continue for several months.

Scientists for the project are L. J. Vortman, R. H. Carlson and R. E. Smith of Sandia's Nuclear Burst Simulation Division 5112.

Test Group Director is H. R. MacDougall of Nuclear Test Division III 5234. Experiment Coordinators are W. E. Cordek and B. S. Snow also of 5234.

The AEC has advised contractors that bids will be opened April 14 in the Las Vegas Branch Office for drilling 20 holes in basalt rock for the cratering study program. The holes will be drilled on a mesa in the northwest quadrant of the test site and will consist of eight-inch, 36-inch, and 48-inch diameter shafts in depths ranging from a few feet to 65 feet. High explosives are to be detonated at the bottoms of the holes. Plans and specifications are available at the Las Vegas office and at the Los Angeles office of Holmes and Narver, Inc., architect-engineer for the work.

Club Seeks Members

The Merry Mixer's Club is seeking additional members. Prospective members must be single and between the ages of 35 and 50.

Activities of the club include parties, dances, dinners and card parties.

For additional information contact Robert H. Thompson (5253), AL 6-0044 or Dorothy Lee (3466), AX 9-7035.

AEC Lets \$279,000 Contract For Construction Work at Tonopah Range

A contract to construct additions to the AEC's Tonopah Ballistics Range in Nevada was awarded to General Contracting Corporation of Salt Lake City, Utah, the AEC has announced.

The \$279,195 contract includes construction of five prefabricated metal buildings, an earth-covered metal igloo for rocket motor storage, about 5000 sq. yds. of concrete paving, gravel-surfaced road work and miscellaneous utility services and minor construction.

The facility is operated by Test

Range Department 5260 under A. P. Gruer. The new facilities will be used in the ballistic measurement and the firing areas of the range.

Work is to be completed within 90 days after the contract is received notice from the AEC to proceed.

Plant Engineering Department 4540 project engineer for the construction is R. G. Piper (4543-3). Plant Engineering prepared the preliminary design and layout for the project.

T. E. Shea - Former Sandia V. P. - Heads New U.S. Navy Study Group

Western Electric Engineering Division Vice President Timothy E. Shea recently was named by The National Academy of Sciences to head a study group on shipbuilding and modernization formed at the request of the U. S. Navy.

The new group was established to consider present and future composition of The Fleet, its shipbuilding and modernization plans for the next few years, and possible developments in new types of vessels, such as deep hull, sonar types, hydrofoil, and new submarine designs.

Fourteen other engineers, scientists and leaders from universities and industry are members of the study group, which met March 18-27 at the Naval Air Station, Jacksonville, Fla., under the auspices of The National Academy of Sciences and The National Research Council.

In recognition of his exceptional services to the submarine forces of the U. S. Navy, he received a presidential citation and also the Medal of Merit, the highest civilian award.

Mr. Shea has been a Bell System engineer since 1920, when he joined Western Electric at the



T. E. Shea

Hawthorne Works. He has had charge of engineering work as vice president of Bell Laboratories, vice president of Electrical Research Products Inc., vice president of Sandia Corporation, and in various capacities in Western Electric. He became a Western Electric vice president in 1954.

Sandia Employees Present Papers For Reading at Scientific Meeting

Seventeen scientific papers by members of Sandia's Physical Sciences Research Department 5150 and Physical Research Department 5130 are scheduled for presentation during a meeting of the New Mexico Academy of Science, April 9.

Five more papers by Sandia authors in other organizations will also be presented.

The meeting will be held on the campus of New Mexico Institute of Mining and Technology in Socorro. It is being held in conjunction with the New Mexico Science Fair. Student members of the Academy will attend the sessions.

Papers from 5150 include: "Dynamical Theory of Electrodeposition of Polarizable Particles," Crawford MacCallum; "The Infrared Absorption Spectra of Metal Acetylacetonates," Kathryn E. Lawson; "Experimental Nuclear Temperatures of Fe, Cd, Sn, Ta, and W," Ronald I. Ewing; "Lifetime in n-Type Electron Irradiated Germanium," W. H. Closser; "The Study of Irradiation Induced Lattice Defects in Semiconductors Using Volume Change Measurements," F. L. Vook.

"Radiolysis of Methylene Blue," Irving Auerbach; "Kinetics of Free Radical Formation and De-

cay in High Density Polyethylene," Irving Auerbach and Lois Sanders; "Irradiation Study of Esaki Tunnel Diodes," H. H. Sander and Asher Kantz; "Transitory Electrical Properties of n-Type Germanium After a Neutron Pulse," H. J. Stein.

"The Stark Effect and Dipole Moment of the OH Radical," Richard T. Meyer; "The Impulse Tube: A Separation of Magnetic Driving and Ohmic Heating," John R. Banister.

Papers from 5130 include: "Earthmoving by Nuclear Explosives," M. L. Merritt; "Study of Stress Waves Using Dynamic Photoelasticity," S. E. Whitcomb; "Cratering in Sand with Explosives," W. E. Taylor; "The Physical Basis of Learning," Iben Browning; and "Ferroelectric Properties of Barium Titanate," J. W. Northrip.

Other papers being read are: "An Improved Tensile Bar Design," M. M. Karnowsky (1626); "Equipment for Remote Handling in a Radiation Test Facility," John Colp (1626); "History and Development of Etched Circuits for Electronic Devices," R. S. Lemm (4230); "Soil Displacement Induced by Air Blast," W. R. Perrett (5112) and J. W. Wistor (5232); and "The Sandia Corporation IBM 705 Serv-Ur-Self Series," Donald Robbins (3453).



NEWLY-ELECTED OFFICERS of Toastmasters Club No. 765 are shown above with Robert Nelson (4421) who won Speaker of the Year trophy. They are (1 to r): Fred Villa (1332), secretary; Robert Nelson; Bob Hagan (1221), sergeant-at-arms; Art Kellom (1247), treasurer; Ed Boyan (3211), educational vice president; Lee Stinnett (2531), historian, and Bob Sylvester (2543-1), president.

Volleyball Tourney Will Be Played at Base Gym 11-14

The first all-star invitational volleyball tournament will be held at Sandia Base Gym April 11-14. Participants are Sandia Corporation, Sandia Base, Manzano Base and Kirtland Air Force Base.

Two games will be played each evening, starting at 7 and 8 p.m.

Sandia Corporation's all-stars are being selected now, according to George Banos (3122), Employee Services representative.

Dixieland Dance At Club April 8

McCoskey's "Dixieland Allstars" will be featured at a Coronado Club dance on Friday, April 8, from 9 p.m. to 1 a.m.

Tickets are priced at 75 cents for members and \$1.25 for guests. Door prizes will be awarded during the evening.

Teenagers are invited to attend a free dance on Friday, April 15, from 8 to 11 p.m. Parents must pick up tickets for the youngsters at the Club office.



MEMBERS OF THE WESTERN ELECTRIC Chief Auditor's Organization, who comprise the accounting audit team for Sandia Corporation, are presently spending six weeks in Albuquerque. The team includes (front row, 1 to r) S. W. Holt, R. D. Watkins, K. Boscopomi (second row) D. D. Westermeyer, R. C. Winzenread, A. P. McDermott and D. B. Reichart. J. O. Roller, Eastern Superintendent responsible for the Sandia audit, and J. W. Bonnell were not available when the photo was taken. The audit is made yearly under terms of the contract between Western Electric and the government. The auditors are drawn from the Hawthorne and Indianapolis Works as well as the New York City headquarters.

And they're required by law

Answers Are Most Important As Census Takers Begin Work

During the month of April census takers will be knocking on doors throughout Albuquerque—and the nation—for the 18th decennial count of population.

The City of Albuquerque will have 10 crew leaders with 181 enumerators, who make the actual door-to-door contacts, working under them.

Sandia Base will have its own census headquarters in an enumerator's home, according to Richard B. Laing, district supervisor for northern New Mexico. This enumerator will take the census for persons living in houses and apartments on Sandia Base.

This year the Bureau of Census will use a new approach in mailing to householders a form upon which can be listed persons living at the address, relationship of these persons, sex, age, marital status and nationality. In addition every fourth household contacted by the census taker will be asked information concerning housing, schooling, employment status, occupation, salary, military service, etc.

Processed in Indiana

After the forms are gathered by the district census office they will be forwarded to Jeffersonville, Ind., where the information from each form will be fed into a Univac and compiled information will appear on high speed printers.

"Under ideal conditions," Mr. Laing said, "statistics for a city the size of Albuquerque could be compiled in five hours."

The first national census in the United States was taken on Aug. 1, 1790, under provisions set up by Article I, Section 2, of the Constitution. This mandate was an outgrowth of the controversy during the Constitutional Convention between small and large states over representation in the proposed government.

Even so, the idea of counting noses was not new. In days of the Roman Empire, and even prior, a periodical enumeration was taken mainly for taxation and conscription purposes.

In addition to determining electoral distribution based upon population, the modern census provides an instantaneous picture of community structure and also a basis for comparison with past conditions.

Need Right Answers

It is important to give correct answers to the census taken so that when all the results are tallied an accurate picture may be possible.

For the benefit of householders reluctant to reply there is a printed box at the bottom of the

mailed census form which states: "The law requires that the inquiries be answered completely and accurately, and guarantees that the information furnished will be accorded confidential treatment. The Census report cannot be used for purposes of taxation, investigation, or regulation."



RECOGNIZE ANYTHING? These items displayed by Shirley Heller (8212-2) are some of the things turned in to Lost and Found in Employee Services. Yours may be among them.

Livermore Lab's Lost and Found Is Keeping Busy

Anybody lose a glove, keys, a baby picture, eye glasses, cuff links, a knife?

Chances are that it's been turned into Lost and Found in Employee Services (8212-2). Shirley Heller is keeper of the keys (lost ones) and other miscellaneous items found by Sandians. She has several pair of gloves, earrings, tie clasps, pins and a pipe.

Sandians who lose or find such items should report them to Shirley who will make every effort to reunite the owner with the article. Items not claimed in three months will be returned to the finder.

Sandia Corporation Employees Show Interest in Albuquerque JP Contests



L. E. Bowen



J. J. Malpas



W. E. Myers



P. G. Rosopo



H. V. Shroer

The primary election for Justices of the Peace in Albuquerque has attracted the interest of numerous Sandia Corporation employees.

In addition to the four listed in the last issue of the Lab News, other Sandians who are candidates for these public offices are:

Larry E. Bowen, Jr. (4254), precinct 46, Democrat; Dennis S. Chavez (2462), precinct 17, Democrat; John J. Malpas, Jr. (4254),

precinct 40, Democrat; Walter E. Myers (4254), precinct 2, Democrat; Peter G. Rosopo (4254), precinct 38, Republican, and Henry V. Schroer (4232), precinct 44, Democrat.

Sled Track Model Wins Honors in Junior Science Fair

A model of Sandia's sled track won a first place for James Hampson in the Woodrow Wilson junior high school science fair recently. James first viewed Sandia's track during a student tour of Area III.

Later, after deciding on his project for the science fair, he contacted his tour guide, Fritz Hannah (3131), who with Denny Krenz (1615) arranged for an official pass for James to see an unclassified test firing of a rocket sled.

Denny also spent an evening with James checking his plans for the model sled track.

Anything from ping pong balls to dummy bombs can be found in the warehouses at Livermore Laboratory, operated by the Supply Services Division II (8225), headed by R. E. "Smokey" Maxwell.

The ping pong balls and other sports equipment are drawn upon for noon-hour recreational use. The dummy bombs, used for orientation purposes, are kept in a security area of the warehouse.

Warehouse facilities provide a total of 30,000 sq. ft. of storage area, where more than 5,000 items, including such things as maintenance repair parts and weapon components are kept in readiness for eventual use. Included in the Laboratory's storage area are two warehouses maintained at nearby Parks Air Force Base. Riding herd on all of this area are only two men, Ray Walker and Bob Baldwin (both 8225-1).

Like many other activities at Livermore Laboratory, several operations are combined in a single organization, Smokey said. "We are responsible for warehousing, self-service stores, receiving, general stores, shipping and material handling," he said.

The section operating the warehouse, headed by K. J. Bennett (8225-1), also operates the self-service stores and all receiving operations at Livermore Laboratory.

General Store

The self-service stores, located in Bldgs. 912 and 913, can be likened to the oldtime rural general store. Here a variety of more than 2,500 items, each valued at less than \$5, is available for employees to draw upon as the need arises. Items stocked include stationery, forms, and electronic and mechanical parts needed in day-to-day operations. Storekeeper for this Laboratory "shop" is Lowell Bayless, who sees to it that the shelves are kept filled.

Clearing House

Receiving operations at Livermore Laboratory are somewhat unique, since Sandia Corporation

does no manufacturing and does not require a large inventory of material. Rather, it acts more as a clearing house for other AEC contractors, providing support material for Sandia contractors and for development programs at Livermore Laboratory. Last year, the number of receipts increased from 839 shipments during January to 1476 in December.

Much of this material is later relayed to the Sandia contractors in the Bay Area by the Shipping Section, headed by D. B. "Red" Sparger (8225-3). The section averages 80 to 100 pick-ups and deliveries each month in doing business with manufacturing firms in the Bay Area. To speed delivery of needed items, the section operates four radio-controlled trucks which are dispatched in a radius of 150 miles from Livermore.

Radio Network

The communications network ties in the field units with two-way radios in the warehouse, shipping area, receiving dock, general stores and the engineering organizations. This way, according to Smokey, all interested organiza-

Patent Granted In Name of AEC To W. F. Nielsen

W. F. Nielsen (1424) has been awarded a patent in the name of the AEC for his invention, "random pulse generator producing fiducial marks."

The device utilizes a pulse generator that produces a continuous series of pulses of random length and spacing which form a non-repetitive pattern.

One of the applications of the device is in recording telemetered data during tests. From a central station the pulse generator broadcasts its patterns to other stations and they are simultaneously recorded with test data. Later, on playback, exact matching of the data of the different stations can be achieved by aligning the patterns of the pulse generator.

The patent number of the device is 2,923,588 and it was issued Feb. 2, 1960.

Mr. Nielsen has been at Sandia for eight years engaged in electronic circuit design and development in field test and component development organizations.

J. M. Wiesen Reads Technical Paper to Texas ASQC Sections

Last week J. M. Wiesen (1442) presented a technical paper at four meetings of American Society for Quality Control sections in Texas. Title of the paper was "Quality, Reliability and Professional Recognition in Quality Control."

The ASQC meetings were held in Waco on March 21, San Antonio, March 22, Houston, March 23, and Dallas, March 24.



GOLD DUST by the pound is kept in the precious metals depository in General Stores (8225-2). Measuring out a quantity from a \$900 jar is H. L. "Leo" Adams (8225-2) while R. E. "Smokey" Maxwell (8225) watches. The gold is used in electroplating processes.

tions can prepare for quick delivery of needed items.

Operating the general stores facility at Livermore Laboratory is Section 8225-2, headed by H. L. Adams. Just about all material needed for the day-to-day operation of Livermore Laboratory is handled by General Stores. More than 11,000 items, valued at \$1,200,000 (including \$750,000 worth of field test equipment), are maintained by the section's seven employees. They process an average of 150 items a day, ranging in size from tiny transducers to tons of raw metal stock, used in the development of prototype weapons.

Perhaps the most valuable items kept in General Stores are the gold, silver and platinum, used in plating work. The combination of the safe is known only by two people, and they aren't talking. In fact just about everything needed in the daily operation of Livermore Laboratory can be found in General Stores, which is so proud of its varied stock that its motto is:

"If we haven't got it We can get it."



REMINDER of security monitoring duties is this plastic hand shown here with its inventor, John Neuberger (8142). The hand is given to a new security monitor in 8142 weekly.

'Hairy Hand' Helps Livermore Lab to Keep Security

The hairy hand, the well-known security bugaboo, has reared its ugly fingers at Livermore Laboratory where it is assigned to security monitors in organization 8142.

The effectiveness of this security reminder is evident in that the organization has not had a security violation.

Originator of the idea was John Neuberger, who gave a rubber glove to Paul Coronado in the Plastics Lab (8223-3) with instructions to doctor it up. Paul filled the glove with silicon foam and then removed the glove when the foam dried. The result was the hand pictured above.

Welcome Newcomers

March 14-25

Albuquerque	
William E. Farrar	4233
*Paul L. Hargeshimer	2451
Louise E. Lasley	3126
Wendell A. Nelson	4152
Charles L. Ray	4152
Georgia	
Richard M. Curlee, Atlanta	1627
Illinois	
Raymond J. Holesinger, Chicago	1332
Gary B. Wolcott, Chicago	1424

* Denotes rehired

Livermore-Pleasanton Residents to Launch New Hospital Fund Campaign

A supplementary hospital fund campaign will be launched in the Livermore-Pleasanton area April 19 to attain additional money for the completion of the Valley Memorial Hospital, it was announced by Lee Hollingsworth (8120), vice chairman of the hospital board of directors.

The new campaign will be aimed at those newcomers who did not have the opportunity to contribute during the last campaign, and at others who may wish to participate.

Goal of the supplementary campaign is to raise \$445,000 needed to complete the \$1,744,000 hospital. Rising construction costs since the hospital was first planned

prompted the need for additional funds.

Sandians working on the new campaign are Art Eiffert (8130), who is in charge of the residential drive, and Bill Ryan (8211), industrial campaign chairman. Sandians at Livermore Laboratory pledged \$37,436 during the previous campaign held in October 1958. Seventy-seven per cent of those on the rolls at the time, or 366 employees, contributed. A Corporate gift of \$10,000 was pledged by Sandia Corporation in addition to the employees' contributions.

Work on the new 46-bed hospital began last month and it is expected that it will be in operation in July of next year.

Unique Gun Rack Prompts Sportsman To Turn Talents in New Direction

Not all shootin' irons are used for shootin'.

Bill Stephenson (1411) wanted something different for a gun rack, so he built one out of two old rolling block rifles, which is a type of firearm used in the late 1800's.



GUN RACK which Bill Stephenson (1411) made from two old rolling block rifles provides a unique setting for his collection.

The Remington Company, manufacturer of the rifle, exported large numbers of them to South America many years ago. Quite a few ended up in arsenals where they became rusty and unusable. In recent years, an arms company bought these rifles and brought them back to the U.S. to sell by the pound as junk. Bill read about them and bought several in various conditions and pieces.

After successfully building his gun rack, Bill sent an illustrated how-to-do-it article to "The American Rifleman" magazine and it was accepted for publication at a future date.

Another conversation piece of Bill's is a lamp which he made out of a .22 rifle. Wiring the lamp was easy for him since he has a home electronics workshop.

Of course, not all the guns are used for racks or lamps. He enjoys big game hunting, and some mounted antlers next to his gun rack show he's been successful.

Bill has been at Sandia about three years, and before that was a student at Valparaiso Technical Institute.

Southwestern Authors to Be Present At Sandia Base Library Open House

Outstanding southwestern writers will be guests of the Special Services Library, Sandia Base, when its "Meet Your Authors Open House" is held Sunday, April 3, from 3 to 5 p.m.

From Albuquerque the library is expecting Erna Fergusson, Frank Hibben, Vern Countryman, Ross Calvin, Colonel Alfred McCormick, William A. Keleher, Lucille Mulcahy, John Sinclair and Frank Reeve.

Other New Mexico authors invited to the open house include Fray Angelico Chavez, Dorothy Pillsbury, Laura Gilpin, Mary Mian, Elliott Barker, Clare Newberry, Virginia Comer and Marjorie Batchelder.

Hostesses for the event will be the "Kachinas," a ladies' writing group whose husbands are stationed at Sandia Base, or work for Sandia Corporation. Sandia Corporation wives are Mrs. R. E. Butler (5524) and Mrs. R. O. Heinz (1424).

J. P. Molnar to Speak At Worcester Polytech Scientific Conference

"Tomorrow's Weapons, A Challenge to American Industry," is the topic of a talk to be presented by J. P. Molnar, president, Sandia Corporation, at a management conference at Worcester Polytechnic Institute on April 6.

The one-day conference, with the theme "A Scientific Briefing for Tomorrow," is designed to give the management of New England industries an insight into some of the recent scientific and technological advances.

Mrs. T. J. Raftery (whose husband works in 5243) and Mrs. R. R. Preston (whose husband works in 2543) are members of the Sandia Base Women's Club garden group planning flower arrangements for the occasion.

The Open House is being held in honor of National Library week, April 3-9. All Sandia Corporation employees are invited to attend.

ASME Members Hear Investment Specialist Apr. 13

New Mexico Section of the American Society of Mechanical Engineers will meet on Wednesday, April 13, at La Posada in Santa Fe. A social hour will start at 6:30 p.m. followed by the buffet dinner at 7.

Speaker will be A. Wayne Carlton, an account executive with the Amarillo, Tex., branch of Merrill Lynch, Pierce, Fenner and Smith, Inc., investment brokers. His topic will be "Investing Your Money—The Stock Market."

For further information and dinner reservations (\$2.75 per plate), contact Walt Dauphinee or Harold Maciolek (both 2533), ext. 28233.

An inspection trip to the Santa Fe Railway Company Shops has been arranged for the Section, including student members, on Saturday, April 16.

For further information on this inspection trip, contact Harold Schildknecht (1331), ext. 22159.



PAPERBOUND BOOK catalogs which are available in the Technical Library, Bldg. 802 for employees' perusal are shown above by Jo Sena of 3421.

Inexpensive Book List Is Available to Sandia Employees

Sandia Laboratory's Technical Library has available several catalogs of paperbound book offerings for employees who would like to buy inexpensive books for their personal use.

Generally ranging in price from \$1 to \$1.50, the books cover a variety of subjects including art, biography, economics, fiction, history, literature, philosophy, poetry, reference, religion and science.

One of the catalogs is called **Paperbound Books in Print** and is published twice a year. The current issue has 6500 titles in it, listed by author, subject and title.

Another catalog, **Books to Come**, is issued monthly, and has a special section devoted to paperbound editions. Besides giving current offerings, it lists books that will be published within the next three or four months. Books are listed by subject and an abstract is included.

The **Dover Catalog** provides information in paperbound covers.

Employees can personally place a book order by using a special post card supplied by the Library. It enables them to order almost any type of book at a discount from two New York book services.

These cards may be obtained from Jo Sena, secretary of the Technical Library Division 3421, who is located in Room 138, Bldg. 802.

This service will soon be available at Livermore Laboratory.

Speaks at Livermore

Mary Strickland, supervisor of the Secretarial Services Section II, 8212-5, recently addressed the Business and Professional Women's Club of Livermore on the topic, "Employment Opportunities for the Mature Woman."

Sandian Who Serves

John Hueter Ends Five Years As Head of Albuquerque Parks Board

This is another in a series of articles describing the community activities of Sandia employees.

Albuquerque's parks and recreation program has expanded considerably in the last five years, and John Hueter (2562) has played an important role in this growth.

As chairman of the Parks and Recreation Board of the City of Albuquerque for five years, John saw the number of parks increase from 75 to 103; the number of developed parks grow from 23 to 47; acres of park land from 325 to 673, and acres of developed land from 144 to 389.

"The expenditures of the Parks and Recreation Department from 1900 through the first half of 1953 totaled \$1,940,000 and since that time \$3,617,000 has been spent," John noted.

Although he recently stepped down as chairman, he was reappointed by the City Commission to serve another four-year term as board member.

"The Parks and Recreation Board serves in an advisory capacity to the City Commission," John says. "We study regulations, policies, development and programs and then make recommendations to the Commission."

Working with the Parks and Recreation Department, the Board helps to survey the city to determine park locations. "Out of this came the priority plan for the development of parks and recreation areas," John pointed out.

One of the biggest projects has



John Hueter

been the Los Altos Park, which includes an 18-hole golf course, a nine-hole short course, driving range, putting green, swimming pool, tennis, horseshoes and other recreational activities.

The four Community Centers, another city swimming pool in Rio Grande Park and the Albuquerque Zoo also are handled by the Parks and Recreation Board.

"Our purposes in planning now are to develop areas that will provide recreation for the whole family, and to make activities self-supporting," John says.

John, who has been at Sandia three years, also serves on the Board of Directors of Goodwill Industries, and is a member of Kiwanis.

Sandia Employees Take Top Honors In ASQC Technical Writing Contest

Three Sandia employees were winners in a recent technical paper writing contest among members of the Albuquerque chapter of the American Society for Quality Control.

"Some Acceptance Sampling Plans Based on The Theory of Runs" by W. J. Zimmer (1442) and R. R. Prairie (1442) took first place honors.

"The Engineering Contribution to Product Quality" by W. C. Kraft (2450) placed second in the contest.

The papers were rated on the originality of the work, the usefulness of the application, factual content and the manner of presentation.

W. E. Boyes, local chapter chairman of ASQC and member of the judging committee, said of the winning paper: "The paper presents a new set of sampling

plans supported by their mathematical derivation. The plans appear to have good utility and are presented quite clearly. With minor additions, the Committee believes that this paper should be published by either Industrial Quality Control or Technometrics."

Other judges for the contest were J. Gaskins (ACF), vice chairman; L. E. Snodgrass (2561), secretary; O. D. Belden (2715), treasurer; C. W. Quillen (2715) and J. R. Costello (5513).

Receives Commendation

Hy Young (4422) recently received a letter of commendation from the New Mexico State Fire Marshal for an article he wrote which appeared in the **Baptist New Mexican**. The article was entitled "Make Your Church Safe from Fire."



FOUR FINE ALLEYS—but empty. The Coronado Club alleys are used by bowling teams, but the alleys are empty and open for bowling by members and guests on Saturdays, 1-6 p.m., and on Monday, Wednesday and Thursday evenings 9-11:30 p.m. Cost per line has been set at bargain price of 35c.

Calendar Scientific and Technical Societies

April 2
Instrument Society of America
Herdon Room, Hilton Hotel
Ladies Night and Style Show
Dinner: 7 p.m.
Style Show: 8 p.m.
Guests Invited

For further information contact
Nick Sannella (1411), ext. 45138
Reservations required

April 11
American Institute of Industrial Engineers
Hoyt's Dinner Hall
6:30 p.m.
Speaker: Dr. James J. Calvert, Director,
Human Resources Institute
Also election of new Chapter officers
For further information contact
Bill Asher (4542), ext. 24165

American Society for Quality Control
Albuquerque National Bank
Washington and Central NE
8 p.m.
Speaker: J. Y. McClure, Director,
Quality Control, Convair-Division,
General Dynamics Corp., Fort Worth, Tex.,
Vice President and Fellow of ASQC
Topic: Vendor Quality Control
Evaluation Program

For more information call
John Gaskins, ACF, CH 7-0361, ext. 452

April 13
American Society of Mechanical Engineers
La Posada, Santa Fe
Social hour: 6:30 p.m.
Dinner: 7 p.m.

Speaker: A. Wayne Carlton, Account Executive,
Merrill Lynch, Pierce, Fenner and Smith, Inc.,
Amarillo, Tex.

Topic: "Investing Your Money—
The Stock Market"
For further information contact
Walter Dauphinee or Harold Maciolek
(both 2533), ext. 28233

April 14
American Welding Society
W. L. Childers Mfg. Co., 2010 Sixth NW
Technical Meeting: 7 p.m.

Speaker: Robert Scott, District Manager,
Linde Air Products
Topic: "Short Arc Welding"
(Demonstration of equipment on aluminum
and stainless steel)

For more information call
V. G. Nelson (1621), ext. 32246

This information is compiled by the New Mexico
Council of Scientific and Technical Societies.



STACKS OF PERIODICALS arrive daily at Sandia Laboratory. Hugh Howe, above, separates the magazines and then attaches routing slips for circulation throughout the laboratory. Total circulation of periodicals reaches a total of 8000 monthly at Sandia.



PERIODICAL READING ROOM in Bldg. 802 has constant stream of visitors daily. New periodicals are displayed on the racks. Reference librarian talking on telephone is Ruth Farley (3421-1).

Players Must Sign Up By April 8 to Belong To Golf Association

Deadline for joining the Sandia Corporation Golf Association for 1960 is Friday, April 8. Employees should send their names to George Banos (3122), Employee Services representative.

Golfers interested in participating in the annual best ball tournament which will be played at Socorro Saturday, April 9, should submit their names to George by April 4. A two dollar entry fee will be charged for this event.

Coronado Club Dress Requirements Eased For Sports Fans

Members of Sandia Corporation-sponsored sports teams may now use the facilities of the Coronado Club following games, the Club's Board of Directors has announced.

The patio will be set up in favorable weather, or the La Cana room will be available during inclement weather. Team members may come dressed "as they are."

Only one person in the group need be a Club member. Wives and children are also invited.

Mountain Club to Tackle 'The Prow' in Juan Tabo Bowl

Climbs in the Sandia Mountains will be conducted by the New Mexico Mountain Club during the next two weekends.

The Prow, a massive rock that stands alone on the upper slopes of Juan Tabo bowl, will be climbed on Sunday, April 3.

The following Saturday, April 9, members and guests will take the Canyoncito Trail to the rim of the southern part of the range. The trail begins on the eastern side of the mountains near the Cole Spring picnic area and winds through the woods. The ascent takes about two hours.

Both trips start at Nob Hill at 8 a.m.

Reservations must be made with Peter Harris, AL 6-7130, for the April 15-17 trip to Canyon de Chelly in northeastern Arizona.

New Homes

Moving into a new home in Livermore is Marvin R. Hunt (8213-1) whose address is 402 Lincoln Ave.

Another new home owner is C. W. Harrison, Jr. (1424) at 2808 Alcazar NE.

Labs' Libraries Are Getting Full Mileage From Magazines

Sandia employees are avid readers of technical magazines.

Into the Sandia Laboratory Technical Library pour some 2500 periodicals monthly. They are routed to 8000 readers. Obviously, many Sandians read more than one periodical.

At Livermore Laboratory 200 periodicals (many in multiple copies) have a circulation within the Laboratory of more than 2700, an average of three periodicals per employee.

Titles of periodicals range from *Prikladnaia Matematika i Mekhanika*, the Russian journal of applied mathematics and mechanics, and *British Interplanetary Society Journal* to *The Executive*, *A Guide To Reading for Top Management*.

At Sandia, *Scientific American* is the most popular periodical. Twenty-two copies are routed to 126 employees. At Livermore, *Aviation Week and Missiles and Rockets* top the popularity poll. Other most circulated magazines at both libraries include *Electronics*.

Most of the periodicals in the libraries are of a technical nature containing specialized information for scientists and engineers. Other titles are special interest magazines for administrative personnel. Reading racks make available copies of general interest and news magazines.

Routing Is Big Job

At Sandia the big job of handling the routing of the periodicals is performed by Hugh Howe and Amy Kahoiwai who fill out and attach a routing slip to each copy of a publication circulated.

The list is usually held to six recipients for each copy with the general goal of circulating a monthly publication in one month. After circulation the publication is returned to the library and filed for a year.

Bound copies of the more permanently useful periodicals are

shelved by the libraries and are available to check out.

"Circulation keeps going up," Bea Allen, supervisor of Library Section 3421-1, says. "We receive more and more requests from Sandians to be added to the circulation of various publications and more requests for new publications. Total circulation has doubled in the last two years."

At Livermore Laboratory, routing of the publications is handled by Lu Nelson (8233-2). Until last month when the system was automated with IBM equipment, Lu addressed the routing slips by hand. The IBM system has reduced routing time required by two-thirds. Lu has been at Sandia for two years and has spent a total of eight years in library work.

Library Expansion

With the recent expansion of the library facilities at Sandia Laboratory in Bldg. 802, the library is better able to keep up with demands placed on it. Another help is a new system which provides reading space and display racks for specialized periodicals within various departments.

Into Sandia Laboratory's reading rooms in Bldg. 802 come between 500 and 700 visitors each day. Fifteen new individual study booths are usually filled throughout the day.

The new reading room in Bldg. 802 contains complete index services to periodicals ranging from Chemical Abstracts, Engineering Index, and Metallurgical Abstracts to the standard index, Reader's Guide. In addition, listings of dissertations by recipients of doctor's degrees are available.

Special requests for obscure publications are often received, Mrs. Allen says. These can usually be borrowed from other libraries.

Information service is the purpose of the libraries. As Lu Nelson in Livermore says, the goal is "getting the right information to the right person at the right time."



ROUTING PERIODICALS at Livermore Laboratory is Lu Nelson (8233-2), who uses special IBM routing forms to speed distribution. More than 200 technical periodicals are circulated throughout the Lab each month.

J. S. Tamer Named To National Post in Photography Society

James S. Tamer, Optical Measurements Division (5216), has been notified of his appointment to the Society of Motion Picture and Television Engineers' national committee on Photographic Instrumentation and High Speed Photography.

The appointment was made by Deane R. White, director of research for the E. I. du Pont Co., and the engineering vice president of the society, and by Mr. Morton Sultanoff, chairman of the highspeed photography committee and also a research engineering executive with the Ballistics Research Laboratory, Aberdeen, Md.

Mr. Tamer will serve for the years 1960-61 in which time he will aid the committee in its work of developing and promoting the use of photographic instrumentation in industry and science.

Livermore Reclamation Strives To Keep More Material in Use

Just as a housewife strives to use leftover foods to keep family expenses down so does Livermore Laboratory attempt to reuse materials whenever possible.

Take, for instance, the 35 ton "pinch" of scrap metal reclaimed since the reclamation organization (8224-2) was founded last July. The metal was turned back to public use through reclamation channels.

"We attempt to reclaim everything we can to save taxpayers' money," says Art Hopper, who heads up reclamation activities at Livermore.

"Anything which becomes surplus in an organization eventually finds its way to us," Art said. If the material is usable, a description of the item is circulated throughout other organizations at Livermore and Sandia Laboratories where it may be needed.

Assisting Art in the reclamation activity are Cecil Calhoun and Orval W. Wallen. Orval checks out all materials turned into reclamation to determine condition. He also prepares the original lists of items to be circulated. Cecil maintains the salvage yard which is located immediately south of Livermore Laboratory's technical area.

Many of the items turned in to the reclamation organization are classified and must be altered in some way to disguise their purpose. If no use is found for them at the laboratories the items are then broken up and handled as scrap or they are melted down for commercial use. Precious metals used in some weapon components are shipped to Sandia Laboratory

where they are reclaimed in the foundry.

Reusable items, such as meters, switches, electronic tubes, valued at less than \$25, are kept in a "reclamation small value store" where interested organizations at Livermore Laboratory may inspect them and request them for Laboratory projects. A small quonset hut near the reclamation yard is being modified to store the material, Art said.

Livermore now has in surplus stock several bottles of peanut oil, that were used in a special plastic process. They hope someone will read this and take them off their hands.

Organizations interested in inspecting the material may contact Art at ext. 2302.



SALVAGED OSCILLOSCOPES are checked out by Orval W. Wallen (8224-1), before posting them for sale with other government agencies and schools.

Seek Books to Send To Greece for Use by Grade School Children

Non-fiction, educational type books are being sought by Daughters of Penelope, auxiliary of a fraternal order, to be sent to Greece.

Joyce Martin (2724-2), who is assisting in the project, said that the books may be on any subject (reference, history, biography, autobiography, etc.), but must be in English. Books used by children of grade school age are sought as well as those through college ages. Only books with hard covers are desired.

For additional information, call Joyce evenings at ext. 21143.

Welcome Back

Department 2560 welcomes back Jack Sublett who recently underwent surgery.



ALWAYS USE THE RIGHT TOOLS, EVEN ON APRIL FOOL'S DAY. Demonstrating this rule is Karen Griffiths (8212-3) who frees Dick Ballard (8212-2) from becoming all wrapped up in his work.

Service Awards

10 Years



Roseanne Bascom
3122
April 4, 1950



Nora C. O'Neill
4000
April 6, 1950

Five Years

April 2-15

Mahlon Baker 5142, James W. Carroll 2444, Edward J. Krapf 2722, Fae M. Parker 5243, Charles I. Westmark 1431, Irvin L. Gasser 5534, Robert J. Leslie 5322, Edmon J. Holderman 8161, James L. Pennington 3462, Peter Bortniak 5213.

Paul L. Hansen 2442, John L. Kay 4413, Richard W. Koppel 5524, Robert M. Petrone 5322, L. W. Mecklenburg, Jr. 1222, James G. Hawley 5262, Muriel B. Milligan 4421, Helen A. Neubauer 4400, Robert L. O'Nan 1423.

New Titles Announced For Sandia Employees Noon Movie Program

Sandia Laboratory's noon hour movie schedule for the coming two weeks is:

April 4-5-6

"Written on the Wind" with Rock Hudson, Dorothy Malone, Lauren Bacall

April 7-8

"Ceiling Unlimited" (Prudential's Award Winning TV Series "Twentieth Century.")

April 11-12-13

"Kind Hearts and Coronets" with Alec Guinness and Joan Greenwood

April 14-15

"Veils of Bagdad" with Victor Mature and Mari Blanchard.

All movies begin at 12:10 p.m. in the Sandia Base Little Theater, located south of the military cafeteria on Main St. Length of showings averages about 35 minutes.

Faded or Damaged Base Decals Should Be Replaced Now

The Provost Marshal of Sandia Base has advised employees that warning tickets are being issued to drivers operating vehicles with defaced or faded decals. Failure to have the decal replaced after such warning will result in the issuance of a citation.

Dep't Recreation Representatives Named at Livermore

Eight departmental representatives have been appointed at Livermore Laboratory to coordinate recreational activities in their organizations, Jack Bonetti, Employee Services (8212-2), announces.

The representatives and their organizations are: Bob Eisele, 8110; Ralph Morrison, 8120; Ed Daugs, 8140; H. Isaacson, 8150; Jim Eagan, 8160; Don Wagner, 8210; Don Knudsen, 8220, and Dick Durham, 8230.

Activities planned for the remainder of the year include a singles horseshoe tournament, golf tournament in April, loeball league, women's and mixed bowling events in May, tennis tourney in June, Laboratory picnic and badminton events in July, horseshoes and volleyball activities in August, football and bowling league events in September, table tennis tournament in October, basketball league events in November and Christmas dance in December.

Flying Club Memberships

Memberships are open in the Crossroads Flying Club, where Tripacers and Cessna 172's are available. A private license is required. Call Wilbur McGuire, CH 3-6982, for information.



SINGLES CHAMP Tommy Kelly (2451-3), right, defeated Gene Chavez (2722-3), left, in the finals of the Sandia Laboratory ping pong tournament last week to remain undefeated in tourney play. Win marked the fourth consecutive year that Tommy has won.

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

- '59 ALLSTATE MOTORCYCLE, 1300 miles, pillow seat, 10 hp, \$375. McFall, AX 8-1552, 10428 Love Ave. NE.
- '52 PLYMOUTH Concord 2-dr. (6), stand. trans., new seat covers, easy on gas. Horden, AM 8-3108 after 6 p.m.
- '56 PONTIAC 4-dr. Chief, R&H, \$1000. Potter, AM 8-5451.
- 3 BRM HOME, HW floors, pitched roof, detached garage, 1/2 acre land, landscaped, fenced, SW valley, \$11,500. Salazar, CH 3-9740.
- CHINA, Rosenthal Bavarian, complete service for eight, \$100. Pruitt, AX 9-7723.
- NYLON RUG, 9x12, rose-beige; Bendix radio-TV combination. Vancil, AX 9-7211.
- MAGNAVOX RADIO-PHONO console, solid lined oak cabinet, contemporary styling, AM-FM, 3-speed changer, space for record storage and 17 in. TV chassis, \$100. Newman, AL 5-8090.
- TAPE RECORDER, Webcor, plus five tapes, dual speed 3 1/2 and 7 1/2. Weir, AX 9-1160.
- 4 BRM HOME, 3 baths, den, built-in stove, disposal, dishwasher, carpeted, sprinklers, AC, 4 1/2% loan, 1900 sq. ft. Martin, AX 9-7045.
- CORNER LOT, 100 ft., Kirtland addition utilities available, \$1295. Chavez, AL 5-5461.
- '50 MERCURY 9 pass. sta. wagon, all metal body, overhauled 14 mos. ago, \$250 or best offer. Simon, DI 4-4465.
- GARAGE DOOR w/hardware, \$25. Silva, AL 5-3723.
- WOOL RUG, 9x22, foam base, green w/multicolor tweed, \$50. Harper, AX 8-0146.
- "PEERLESS" CENTRIFUGAL PUMP, few mos. old, 1 1/2 HP (1 1/2 in. section; 1 1/4 in. discharge). Weinreich, ext. 48148.
- BOY'S BICYCLE, Schwinn 24 in., \$25. Houghton, AX 9-3386, 1413 Guaymas Pl. NE.
- 5 1/2 ACRES, \$3600, abstract furnished. Write A. B. Schmidt, Bernalillo Post Office.
- SUNLAMP TABLE model, \$5; 1/2 HP motor, 120 v., \$6; medicine cabinet, \$5; electric guitar w/case less amplifier, \$35. Cashion, CH 2-3345.
- '57 ELGIN OUTBOARD, 30 HP, \$200; 12 HP '57 Elgin outboard, \$150. Meikle, AX 9-4640.
- WASHER, Bendix automatic, non-bolt-down, \$80; sewing machine, cabinet, electric Eldredge, \$50. Collis, AL 5-0470, 420 Carlisle SE.
- SMITH & WESSON 22, 4 in. barrel, w/holster, \$60. Ford, ext. 52275 after 5:30 p.m.
- '51 NASH Statesman as is, \$75 or best offer. Wilson, CH 7-2122, 308 60th NW.
- RATTAN LIVING ROOM furniture, 4-piece, \$20; GE autom. dishwasher and sink, \$50; GE garbage disposal, \$25. Clark, DI 4-1460.
- '59 ADMIRAL ELECTRIC range, Ebaugh, AX 8-2170.

- BABY CRIB, mattress and sheets; folding high chair; drafting board, T-square and instruments. Preston, AX 9-1948 after 5:30 p.m., 2921 Nevada NE.
- '56 PLYMOUTH Belvedere 4-dr. sedan, 187 HP, PB, nylon tires, one owner, \$900; \$90 over wholesale. Shock, CH 3-8068, Box 341, Route 6.
- BAMBOO TRI-BAND CUBICAL quad complete, 45 ft., triangular mast and rotator, \$60. Lovelace, AM 8-2956 after 6 p.m.
- FM-AM RADIO, Philco, \$15; 3/4 HP repulsion induction motor, \$40. Henry, AL 6-2467, 1828 Florida NE.
- '55 MERCURY hardtop, 35,000 mi., autom. trans., R&H, WW, 2-tone, foam Vinyl seats \$895. Pollard, AM 8-1709.
- '59 FORD STATION wagon 4-dr. country sedan, V8, 8000 mi., R&H, WW, PS; will trade for '54-'56. Smith, CH 3-5054.
- JIG SAW 18 in. Craftsman, with 1/4 HP motor and stand; Craftsman 6 1/4 in. electric hand saw. Calvery, AX 9-5800.
- '51 STUDEBAKER Champion, heap of junk but runs, '60 plates, \$50 or trade for skill saw, go-kart, etc. Cook, AX 8-0851, 11109 Morris Pl. NE.
- '51 FORD Six Tudor, overdrive, new brakes; maple double bed, Jenny Lind, spring, mattress; 2-cushion maple lounge chair. Alden, AL 5-4827.
- HAWAIIAN GUITAR, electric steel, Magnaton with amp, case, stand, complete, \$75. Metz AM 8-7989.
- 4 BRM HOME, brick, near all schools. Reed, AM 8-8839.
- '52 BUICK 4-dr., R&H, \$250. Richard, AL 5-1576.
- SHIRTS, boy's short-sleeved, size 8, \$.25 ea. Hicks, AM 8-8640.
- CAMPING TRAILER, 15 ft. Mercury deluxe, sleeps 5, butane stove and oven. Skender, 314 12th St. NW.
- 3 BRM BRICK, \$800 down, 1 1/4 baths, HW floors, CH, AC, sprinklers, landscaped, walled, patio, priced below FHA appraisal. Seay AX 9-5270.
- TELESCOPE, 4 in. Dynascope reflecting, 3 eye pieces, tripod, \$35. Abbott, AX 9-8860.
- 3 BRM HOME, 1 1/4 baths, large den and hobby room, AC, CH, HW floors, newly decorated, landscaped, \$15,500 FHA. Glass, AL 6-2485 after 5 p.m.
- SWIVEL DESK CHAIR \$30. Craig, AX 8-1215.
- '53 OLDSMOBILE 98, '55 engine, lucite paint, full power, new upholstery; will consider trade. Mathes, AX 8-1706.
- MIDGET RACER, 2 1/2 HP Clinton, pedal brakes, pedal throttle, X wide track wheels w/12 x 4.00, 10 x 3.50 tires, \$135. Pennypacker, AX 9-1547.
- FEMALE CHIHUAHUA, 10 wks. old, \$25 or best offer; complete Cub and Boy Scout uniforms, sizes 8 and 12 yrs. Browning, AM 8-1474.
- CAMPING TRAILER, 15 ft. Westerner; '55 Ford 4-door, reasonable. Marrs, AL 5-7383.
- BABY CRIB w/innerspring mattress, \$25; baby stroller, \$5; 26 in. girl's Schwinn bicycle, \$25. Heuer, AL 5-6158, 1104 San Pablo NE.
- ENCYCLOPEDIA AMERICANA, 35 volumes including annuals, bookcase, 17 volumes science and geography, \$195. Radman, ext. 35273.
- 12 ROOM HOME, 15 acres on US-31, SW Michigan, will trade for Albuquerque property. Kostka, AM 8-8793.
- CONSOLE, mahogany, containing record changer, new stereo cartridge and diamond needle, 17 in. TV, AM-FM, 12 in. speaker, \$205. Hueter, CH 2-1620.
- ANTIQUA DESK, solid cherry w/small drop leaf, Victorian, original finish, \$125. Taylor, AL 6-3774.
- CHILDREN'S TABLE and chairs, \$5; rocker, \$2.50; sandbox, \$2; large swing set, \$20. Rhodes, AL 5-6806, 2846 Solano NE.
- GAS RANGE, 36 in., Western-Holly, \$45. Prestby, AX 9-4947.

- NEXT DEADLINE FOR SHOPPING CENTER ADS Friday Noon, April 8
- SUNBEAM MIX-MASTER w/juicer; Prest-O deep fryer w/wire basket; total price, \$40. Hayes, AX 9-5491.
- '57 PLYMOUTH Savoy 6, 4-dr., std. shift, TG, \$795. Welker, AX 9-1179, 8510 Flower Pl. NE.
- GIRL'S BIKE, 26 in., needs paint and tires, \$8. Harness, AX 9-6639 after 6 p.m.
- MOTOROLA TV, 21 in., w/stand, blond cabinet, \$60; Stromberg Carlson 17 in. TV, \$20. Wyant, AX 8-0371 after 5 p.m.
- MAPLE DINING table, \$35; reducing couch, \$40; refrigerator, 13 1/2 cu. ft., \$100; golf clubs, bag, cart, men's, \$80. McKay, AL 5-9779 after 5 p.m., 1013 Dakota SE.
- PING PONG TABLE, folding, 3/4 in. top and equipment, \$35; 8x30 binoculars, \$15; deep fryer, \$5. Boling, AX 9-1346, 1025 Lester NE.
- ELECTRIC RANGE, 30 in. GE, 1 yr. old, \$105; 140 x 200 lots in North Valley. Padilla, AM 8-7476 or DI 4-0094.
- SEWING MACHINE, white Rotary, treadle type, \$15. Pinkerton, AL 5-2505.
- '48 CADILLAC model 62, 4-dr., \$175. Stromberg, AL 5-6131.
- SMITH & WESSON K-22 w/holster, cleaning gear, inletted walnut blocks, 200 rounds, \$60. Holck, AL 6-6993.
- DINING TABLE and six chairs, cherry wood, drop leaf gate leg table, \$45. Fisher, AL 6-2569.
- 3 BRM HOME, landscaped, lots of built-in storage, extra large garage, no qualifying, vacant, \$12,500. Dieruf, AX 9-6526, 9904 Arvilla NE.
- 3 BRM HOFFMAN, 2 baths, brick, sprinklers, AC, patio, garage, landscaped, almost new carpets. Vick, AX 9-2949, 2717 Los Arboles Pl., NE.
- DRESS FORM, adjustable sizes 12-16, \$6; several handknit bulky sweaters, worn a few times, size 14, reasonable. Southerland, AM 8-5865.
- LAWN MOWER, Craftsman electric, reel type w/automatic cord return, \$45. White, AX 9-3095 after 5:30 p.m.
- KOHLER, gas-electric plant, 110 volts, 1500 watts, excellent condition, \$100. Hertford, ext. 51190.
- EVAPORATIVE COOLER, portable, replaceable filter, circulating pump, \$15; 9 x 12 gray Deltax fiber rug, \$5. Doyle, AL 5-1483, 3524 Florida NE.
- COLT AUTOM. PISTOL, 38 super, \$50; Winchester 92 carbine, 44 magnum, \$95; trade for old guns, knives or coins. Zoluga, DI 4-1564.
- '57 GOLIATH station wagon; '49 Ford coupe. Costello, AX 9-0563, 1828 Blume NE.
- GOLF CLUBS, McGregors, 3 woods, 9 irons, new cart and bag, \$75. Stark, AM 8-7750.
- FREEZER chest type, 13 1/2 cu. ft., \$150; custom trailer hitch for '55 Pontiac, \$5. Frank, AX 9-1370.
- '59 LAMBRETTA SCOOTER, LD-150, windshield, \$325; high chair, table type, \$10. Caulkins, AX 9-1879, 1325 Parsifal NE.
- WASHING MACHINE, Speed Queen wringer, \$20; baby carriage, converts into car bed, \$12; baby swing, converts to car seat, \$5. Mischler, ext. 32276.
- FOX TERRIER PUPS, AKC registered; GE electric stove, 30 in. oven. Burt, DI 4-6530 after 5 p.m., 3836 Rio Grande NW.
- '58 RAMBLER custom 4-dr. sedan, R&H, overdrive, 20,000 mi., \$1495. Creveling, CH 2-3790.
- SPEEDWRITING BOOKS, complete set, cost \$30, sell \$10. Gragg, AX 8-0267 after 5:30 p.m.

- '53 STUDEBAKER Commander club coupe, new brake linings and seat covers. Gallagher, ext. 47255.
- 14 FT. RUNABOUT and 25 HP electric start, pulls 2 skiers; complete w/accessories and "A" frame trailer, \$985. Longfellow, AL 5-5334 after 5 p.m.
- BABY CRIB (6 yr. size), Simmons w/proof mattress and bumper guard, \$25; Baby Tenda chair-table, \$12, playpen, \$5. Gross, AL 5-7327.
- 2 BOY'S BICYCLES, 20 in. and 26 in. size, \$15 ea., or both for \$25. Kochmann, AX 9-5133.
- AUTOMATIC WASHER, Kenmore, bolt-down type, \$25. Pawley, AL 5-8435.
- MAPLE BUNK BEDS, can be used as singles, extra springs for one, \$35. Calvert, AL 5-4190.
- WINDOW FAN, 24 in., w/1/4 HP electric motor, \$25; TV antenna, Finney geo-metric model L-25 w/10 ft. mast, installation hardware, \$15. Gelder, AX 9-0134.
- DESK, wood, large size, completely re-finished in mahogany, \$50; safety shoes, worn once, size 8 1/2 E, \$5. Singleton, AX 9-1613, 9512 Snow Heights NE.
- '57 OLDS "Fiesta" station wagon, hydraulic, PS & PB, R&H, W/W, 2-tone gray and white, most extras, \$1795. Sandy, AX 9-0120.
- '56 PLYMOUTH Belvedere sedan, \$900; '56 Oldsmobile Holiday sedan, \$1350; both have R&H, autom. trans., PB, nylon tires. Shock, CH 3-8068.
- VIOLIN w/case and bow, \$50; piano key accordion, 80 bass, \$75. Alexander, AX 9-0898 after 5 p.m., 2724 Alcazar NE.
- CUSHMAN "HIGHLANDER" motor scooter, w/windshield, speedometer, locking type gas cap, sacrifice, \$170. Wank, AX 9-3450.
- 1/2 HP MOTOR with shaft; soldering gun set. Pitti, AL 6-1629.
- '59 CUSHMAN Mustang, \$400. Chandler, DI 4-6609, 4007 San Andres NE.
- ELECTRIC RANGE, GE, \$75; 3-cushion couch, \$50; drop leaf cherry table w/leaves, \$125; 4-dr. chest, \$50. Becker, AX 9-0609.
- '53 WILLYS Aero-Ace, 4-dr., overdrive, R&H, w/w tires, 2-tone. Bewley, AL 5-8024, 1104 Alcazar NE.
- 3 BRM HOME, 2400 sq. ft., den plus 2 acres of land, 2 yrs. old, Route No. 1, Box 153-E, Belen. Sanchez, ext. 36232 or Belen 4-8878.
- CUSTOM RIFLE 30-06, Enfield action, K2.5, scope, fancy stock, \$85. Vaughn, AL 6-0341.
- GO-KART, less engine, excellent for Class C racing. Edwards, AX 9-5496.
- LAND—15 acres off St. 217, 2 acres off Frost Rd., 6.5 acres and 2 acres on Old 66, Lane, P. O. Box 962, Tijeras, N. M.
- '59 FORD Convertible Galaxy 500, Fordomatic, R&H, turquoise, w/w tires; will take trade. Schowers, 429 Mesilla NE.
- FLOOR LAMP, reasonable; set of 2 stand lamps; Encyclopedia Americana, half price; picture mirror; large beveled mirror. Didero, AX 9-2476 after 5 p.m.
- '57 PLYMOUTH Belvedere, 6 cyl., stand. trans., R&H, TG, new paint job, motor recently overhauled, \$1095. Salas, AM 8-3538.
- LELAND PIANO, solid cherry, full keyboard, 52 in. high (small upright), \$140; can assist delivery. Robnett, AL 5-6083.
- ALUMINUM BOAT, 14 ft., trailer, 7 1/2 HP Mercury motor. Llamas, AL 6-3935.
- BLACK POODLES, registered, \$75. Long, AL 6-9112.
- MODERN SOFA. Webb, AL 6-6626.
- 2 STEEL FRAME WINDOWS w/screens, w/large center pane w/2 crank out side panes; 38 x 69, \$25; 38 x 54, \$20. Knutson, AX 9-6183.
- TWO 7.50 x 20 in. tires, 10 ply mounted on 5-hole budd wheels, \$20 ea. Souder, BU 2-3274.
- WINDOW, steel casement, 16 light; various interior, exterior doors; venetian blinds. Vandi, AL 5-0685, 1843 Cagua Pl. NE.

- HOME, 1450 sq. ft., drapes, w/w carpeting, AC, workshop, sprinklers, 4 1/2% loan, Mark Twain school district, open Sat. and Sun. Massey, AM 8-1660.
- REFRIGERATOR, Kelvinator 10 ft., self-defrosting, \$100; cotton rug, 11 x 12, sage green, w/heavy-duty pad, \$50. Porter, AL 5-8495.
- MIMEOGRAPH MACHINE, Model 100, A.B. Dick Co., motor driven, automatic counter. Cost over \$200 new, sell for \$60 or best offer. Runyan, AL 6-2467.
- FOR RENT
- 2 BRM APARTMENT, new, unfurnished, 544 San Pablo SE. Stymiest, AX 9-6090.
- 3 BRM HOME, unfurnished, built-in range and oven, refrigerator, AC, garage, Princess Jeanne Park. Peres, AX 9-9119.
- 4 BRM HOME, unfurnished, 1 1/2 baths, double garage, near schools, carpeted, immediate occupancy, \$125 mo., Northeast. Colquitt, AX 8-2113 or AL 5-1868.
- 2 BRM HOME near Highland High, walled yard, wired for electric range, adults only. Causey, AX 9-0089.
- WANTED
- WILL TRADE 12-in. Karlson speaker enclosure for power hand saw, belt sander, or what have you. Takahashi, AL 6-0743 after 5 p.m.
- ELECTRIC ADDING MACHINE in good condition to do sums w/reasonable accuracy; no digital computers or 705 electronic brains. Davis, AL 5-1824.
- CHILD CARE in my home, children under school age, near base. Nevada, AL 6-1064.
- TO MEET YOUNG WOMEN interested in tour of Mexico during month of June. Southerland, AM 8-5865 after 5:30 p.m.
- PROPER HOME for 3-year-old registered Irish Setter male, all shots, doesn't like small children. Will give away. Asher, AX 9-1668.
- BABY SITTER for two children, ages 4 and 6, with or without light housework. Monson, AM 8-5001 after 5:30.
- TO RENT 3 bedroom home, unfurnished, w/stove and refrigerator. NE Heights preferred. Anderson, AX 9-5447.
- LOST AND FOUND
- LOST—4 keys in brown leather case, Stromberg dress grey hat, black rim sunglasses, gold loop earring, trigonometry book, cartridge Scripto pen chrome and plastic, blue Parker 51 fountain pen, 5 year SC pin. LOST AND FOUND, Ext. 26149.
- FOUND—One large key on ring, ladies white glove, long black wool gloves, tea pot earring, 4 keys in brown leather snap case. LOST AND FOUND, Ext. 26149.
- FOR SALE AT LIVERMORE
- MATTRESS & BOX SPRING, Serta-Pedic, retail \$79.50 ea., sell \$70 for set; garbage disposal, GE, new blades and shaft, \$25. Sorenson, ext. 2359.
- ELECTRIC RANGE, Kenmore, double oven, deep well cooker, fully automatic controls, best offer. Tooker, HI 7-3383.
- REFRIGERATOR, Coolerator, 8-9 ft., freeze compartment, \$25; refrigerator, 6 ft., \$25; Kenmore washer \$75; Frigidaire washer, \$50. Henderson, HI 7-4417.
- '55 OLDSMOBILE 88 Holiday, 4-dr., auto. trans., R&H, new tires, battery, \$900; accept older car for down payment. Jackson, ext. 2544.
- TABLE LAMPS, two, 28 in., white w/ivy design, \$15; dinette set, 5-piece chrome, gray formica foam padded chairs. Cooper, JE 7-0280.
- '59 RENAULT DAUPHINE, blue, heater, new battery, tubeless tires, recently tuned, \$1350. Abrahams, ext. 2509.
- 3 BRM HOME, 2 baths, family rm., fireplace, electric kitchen, corner lot near school, \$18,750, \$2750 down, 4 1/2% GI. Odell, ext. 2504.
- SEWING MACHINE, Premier, standard size, carrying case, many features, \$50. Cutts, ext. 2204.

Planning Now Underway For Second Phase of Building 861

Architect-engineering work for a new laboratory building for Sandia's research organization is now underway. The AEC announced last week that W. C. Kruger and Associates, Santa Fe, had been selected as architect-engineer for construction of the three-story building.

Designated Phase II of Bldg. 861, the new laboratory will extend north beginning about 20 ft. from the west end of the present Bldg. 861. It will contain 60,000 sq. ft. of floor space and be similar in construction to Bldg. 861.

The Kruger firm will prepare plans and specifications for the building and contractors will be

invited to bid on the project in July. Construction is currently scheduled to start in August 1960 and be completed within 330 days.

A partial basement to the new building will house mechanical and electrical equipment. The building will be completely air conditioned to meet strict temperature, humidity and dust free requirements.

V. E. Kerr (4543-3) is project engineer for Plant Engineering Department for the new building. Plant Engineering prepared preliminary design and layout and is currently coordinating final plans and specifications with the architect-engineering firm.

Sandians Take Part in Program of Computing Machinery Association

Several Sandians will be participating in a one-day regional meeting of the Association for Computing Machinery, Rio Grande Chapter, to be held at the Student Union Building, UNM, on Friday, April 15.

Banquet speaker will be Iben Bowning (5131) who will talk on "Some Aspects of Brain Structure and Function." His subject con-

cerns an attempt to relate what is known and surmised about brain structure and function to future computer-type devices. Suggestions will be made about how to use biological principles to increase memory capacity of machines and possibly to achieve true machine intelligence.

Other papers to be presented include "Some Useful Applications of OR'ed Index Registers" by C. M. Williams (5126); "Some Aspects of Character Recognition" by W. W. Bledsoe (5120), and "A Semi-compiler Program for Theoretical Trajectories" by Jim Alenworth (5242).

"New Mexico Educational Kit Type School Computer" by S. Stearns (UNM and 1521); "Microscopic (10⁻⁷ cubic inches) Rectifier Switch for Information Storage" by R. C. Swyers (5131), and "Microscopic Conductors with Automatic Connectors for Access to Rectifier Switches" by J. M. Lohse (5131).

Don Morrison (5126), president of the Rio Grande Chapter, will preside over the meeting. For banquet reservations (\$2.75 per plate) and further information contact Bert Lindsay (5126), ext. 27147. The meetings and banquet are open to the public.

New SCI Reports Type of Material For Bulletin Boards

Sandia Corporation Instruction 1007, which was issued this week by Business Methods, pertains to bulletin board policies and procedures.

Guides concerning material which employees may place on unofficial bulletin boards are now being posted on those boards. It should be noted that political advertising is not among material designated for the boards.

Employees having any questions concerning what can be posted should check SCI 1007 which may be obtained from their supervisors. Responsibility for monitoring Sandia Laboratory bulletin boards rests with Employee Publications Section 3431-1.



SPRING IS FOR HORSESHOES as these employees at Livermore Laboratory demonstrate. The recently completed pits and the warm weather prompted Bob Schaefer (8153-2), John Neuberger (8142-1), Ben Raiche (8234-2), and Jim Russell (8161-2), to go out for a lunch time fling, as the spring season recreation program got underway.



CHAMPION TEAM of the Sandia Basketball Association is pictured above. The 4100-4200-4500 team beat 1200-AEC for the title in a hard-fought final game last week. Team members from left are Joe

Costales, Flavio Gonzales, Tom Patterson, Frank Comiskey, Robert Banks, Gil Baca and Maury Chavez. Standing is hard working team manager Clarence Ray who helped the team to victory.

Champs Crowned in Employees Basketball League Play-off

Coming from behind in the last minute of the game the combination team of 4100-4200-4500 took the championship of the Sandia Employees Basketball Association by defeating 1200-AEC 45-42 in a close hard-fought final playoff last week.

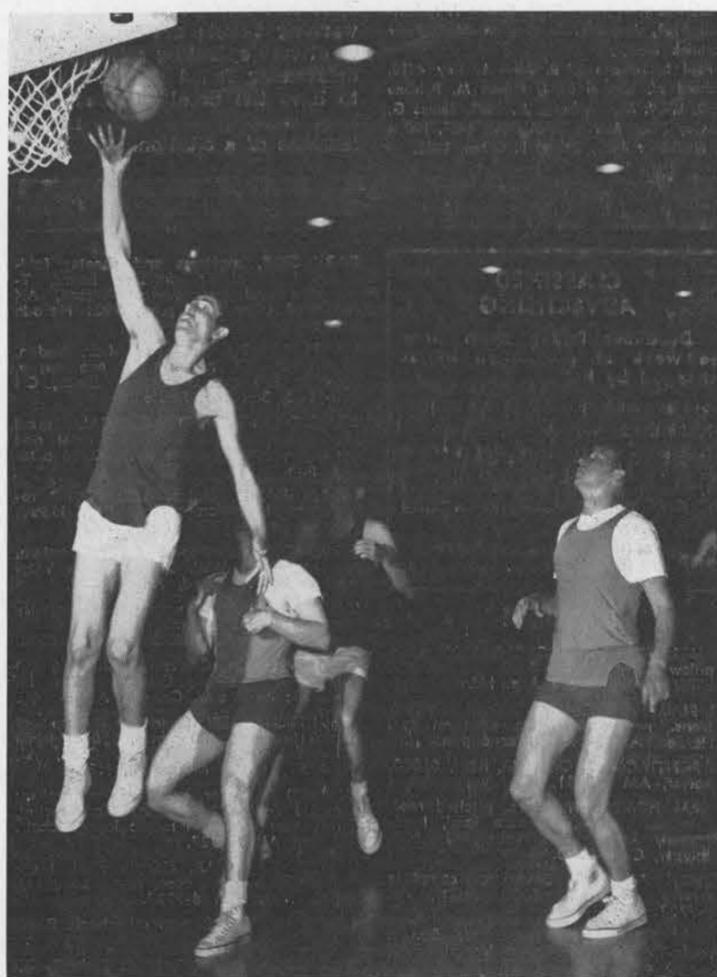
The playoff became necessary when both teams completed league play with identical records of 16 won and 2 lost.

The 1200-AEC team grabbed an early lead in the game. Score at the end of the first quarter was 16-5. The champs slowly began closing the gap and by half-time 1200-AEC led 24-20.

George Banos, Services and Benefits Division 3122, said, "It was a terrific game to end the season. Plaudits are in order for Paul Hersey, Ken Flynn, Jack Thompson and Herb Filusch who guided 1200-AEC. Frank Comiskey was the leading scorer of the game with 27 points.

"Tom Patterson, in addition to scoring, was a workhorse on the backboards for coach Clarence Ray's champion team."

A large traveling trophy was presented to 4100-4200-4500 at the game and will be displayed in the trophy case in Bldg. 802. Team members will receive individual trophies.



FAST ACTION in the Sandia Basketball league. Gil Baca of the champion 4100-4200-4500 team makes a jumping throw as Herb Filusch, Robert Banks and Paul Hersey are outmaneuvered.

National Photo Contest Open to All Sandia Corporation Camera Fans

Sandia Corporation employees at both Laboratories are eligible to enter a national photo contest sponsored by the National Industrial Recreation Association. First prize in the open category is a week in Mexico City for two.

The contest runs the full calendar year of 1960 and is open to any amateur photographer and his family. Each contestant may submit as many entries as he desires in either or both contest classifications: Open and Recreation.

The open division places no restrictions on subject matter while entries in the recreation division must have been taken of some phase of Sandia's recreation program.

Open Division Winner

The Mexico City trip will be awarded to the winner of the open division and includes expenses for air transportation, meals and lodging. Winner of the recreation division will receive \$25 in choice of photo equipment plus having his winning photo on the cover of the March 1961 issue of Recreation Management magazine.

Second through fifth place win-

ners will receive camera equipment, film or accessories.

Entries may be submitted any time prior to midnight Dec. 31, 1960. Black and white pictures only are acceptable. No print more than 10 in. in its longest dimension will be accepted. Developing and printing may be done by a photofinisher or by the entrant. No art work or retouching is permitted on the prints or negatives entered.

Where to Mail

No one is eligible for more than one prize.

Mail entries to Photo Contest, National Industrial Recreation Association, 203 N. Wabash Ave., Chicago 1, Ill. On back of each photo, print your name and address, plus the words "employed by Sandia Corporation, Albuquerque, N. Mex., Recreation Director, J. N. Johnson, and a short description identifying the subject.

All entries will become the property of NIRA unless a stamped, self-addressed envelope accompanies the entry. Do not send negatives.

Further information may be obtained from Services and Benefits Division 3122, ext. 29157.



FRANK COMISKEY, right, was top scorer in Sandia employees basketball championship game with 27 points. Ron Flury, 1200-AEC, is shown with him.

VOLLEYBALL STANDINGS As of March 23, 1960

Team	Won	Lost
Thunderbird League		
1300, 1400, 2400-I	3	0
1600-I, 2700	2	1
5200	2	1
1200-I	1	3
5500	0	3
Rainbird League		
5100	4	0
1200-II	2	1
1200-III	2	2
3100	2	2
1300, 1400, 2400-II	1	2
1600-II	1	3

Sandia's Safety Record

Sandia Laboratory HAS WORKED

9,160,000 MAN HOURS OR 257 DAYS

WITHOUT A DISABLING INJURY

Livermore Laboratory HAS WORKED

2,923,000 MAN HOURS OR 1503 DAYS

WITHOUT A DISABLING INJURY