SANDIA CORPORATION

LAB NEWS

PRIME CONTRACTOR TO THE ATOMIC ENERGY COMMISSION / ALBUQUERQUE, NEW MEXICO / LIVERMORE, CALIFORNIA

VOL. 17, NO. 22, OCTOBER 22, 1965

145 Sandians Participating In Air Drop Exercise

About 145 Sandians will participate in a joint Department of Defense-Atomic Energy Commission non-nuclear air drop excercise in the Pacific area next month. The exercise, similar to that of October 1964, will be conducted by Joint Task Force Eight.

As in the exercise last year, B-52 aircraft will drop instrumented test-simulation objects while NC-135A aircraft in the drop areas simulate gathering nuclear effects data.

The exercises are designed to help maintain facilities, resources, and crew proficiency in a state of readiness to institute promptly nuclear tests in the atmosphere if ever required.

A DOD-AEC announcement on the exercise stated:

"While such readiness is necessary in the interest of national security, the U.S. position has always been that it earnestly hopes that there will never be an abrogation of the limited nuclear test ban treaty, and that its capabilities to resume such testing will not have to be exercised."

The upcoming exercise is expected to be completed by mid-December.

Maj. Gen. John D. Stevenson, USAF, is commander of JTF-8 and Col. Robert E. Belville, USAF, is commander of the exercise task group.

About 1500 personnel from DOD and AEC and its laboratories will participate in the exercise.

L. E. Hollingsworth, director of Field Testing 7200, is commander of the Sandia test group and H. E. Viney, manager of Nuclear Test Department 7250, is deputy commander.

Project officers for the Sandia test group include A. F. Huters, supervisor of Diagnostic Aircraft Operations Division 7255, diagnostic aircraft; A. B. Cole, supervisor of Test Vehicle Operations Division 7256, ground support; J. E. Stiegler, Diagnostic Instrumentation Division 7252, systems engineering; R. S. Millican, supervisor of Diagnostic Instrumentation Division 7252, instrumentation; and C. S. Selvage, manager of NTS Management and Support Department 7260, Johnston Atoll.

C. L. Gomel, supervisor of Field Test Staff Division 7261, is Sandia test group chief of staff and J. H. Davis, supervisor of Test Vehicle Design Division 7253, is alternate project officer of ground support.

The Sandia group is composed of about 100 technical and 45 support personnel. Approximately 30 Sandians will be aboard the aircraft participating in the exercise.

Sandians Participate In Shock-Vibration Symposium Oct. 25-28

A number of Sandians will be participating in the 35th Symposium on Shock and Vibration to be held Oct. 25-28 in New Orleans, La. Host for the meeting will be the National Aeronautics and Space Administration.

R. T. Othmer (1541) will be chairman of a session on data analysis.

Among those presenting papers at the symposium are:

J. T. Foley (1541), "Preliminary Analysis of Data Obtained in the Joint Army/AEC/Sandia Test of Truck Transport Environment."

R. W. Kelley (7334), "Transient Response of Linear Damped Lumped Spring-Mass Systems by Experimentally Derived Transfer Functions."

C. E. Nuckolls and J. V. Otts (both 7334), "Progress Report on Force Controlled Vibration Testing."

W. B. Murfin (1541), "Mathematical Models of Non-Linear Multi-Degree-of-Freedom Structures."

W. R. Kampfe (7326), "Re-entry Overpressure Shock Simuation Test."

W. M. Sigmon, Jr. (7325)), "Shock Testing with High Explosive Initiated Gas Detonations."

R. O. Brooks (7325), "Shock Springs for Pulse Shaping on Impact Shock Machines."

F. H. Mathews (7325), "The Double Force Programmer Shock Testing Method —A New Technique for Controlled Shock Pulse Waveforms."

R. L. Henderson (7311), "Design and Performance Characteristics of a Water Jet Actuator."

14th VEEP Workshop To Start Monday

The 14th VEEP (Value Engineering Education Program) workshop will be conducted Oct. 25-Nov. 5, according to Elmer Devor, supervisor of Value Engineering and Cost Reduction Division 2563. Personnel of the division will conduct the 44-hour course with work divided between workshop and lecture activities.

Participants from various Sandia organizations will be assigned to project teams. The teams apply value engineering diciplines to various pieces of Sandia hardware or Sandia operations in an effort to achieve economy without compromising reliability, quality, or safety.

Pre-Schooner II Liquid HE Blast Staged in Remote Area of Idaho

Western Idaho, for hundreds of miles southwest of Twin Falls, is as desolate and barren as any region of the United States. A small stream called the Bruneau River has cut a deep narrow gorge through the volcanic rock which is the primary geological formation of the area. In some places the Bruneau River Canyon is a thousand feet deep and starts abruptly from the flat desert on either side.

At a remote area near the canyon, some 55 miles west of Twin Falls, an 85-ton charge of nitro-methane, a liquid high explosive was detonated Sept. 30 in an experiment called Pre-Schooner II. The detonation was an effort to establish the cratering and engineering properties of the volcanic rock in the Bruneau River area. In addition, blast pressures at various distances from the explosion were of primary interest. The project was part of the cratering studies of the Plowshare Program and a possible forerunner to a nuclear detonation in the area. The nuclear detonation has not been authorized.

B. C. Benjamin, supervisor of Blast and Earth Motion Division 7242, was project leader for a Sandia Test Group participating in the study. J. W. Reed and L. J. Vortman of Underground Physics Division 5232 were scientific advisors for the experiment. The Sandians were in the area for several weeks preparing for the experiment.

Purpose of the project was to improve knowledge of crater dimensions in hard, dry rock as a function of depth of burst and type of explosive. The data obtained will be useful in the final design of the nuclear cratering experiment and add to the general development of cratering theory. Of specific interest is development of a technique for predicting slope activity and other engineering properties of nuclear cratering for application to future Plowshare projects, such as harbor or canal excavation.

Sandians were responsible for two activities for the experiment—blast measurement and obtaining microbarograph data.

The blast measurement was accomplished through the use of two strings of instrumentation stations positioned on 4000-foot cables held aloft by a 140-foot helium-filled balloon. Sixteen pressure sensing stations were mounted on the cables. In addition,

(Continued on Page Two)

ECP Drive Hits $240,911 Total

With the campaign not quite wrapped up, $240,911 is the current total given by Sandia Laboratory employees to support activities of the United Community Fund and eight other agencies. Some 150 ECP cards from employees on vacation, leave, or Company travel, have not been collected.

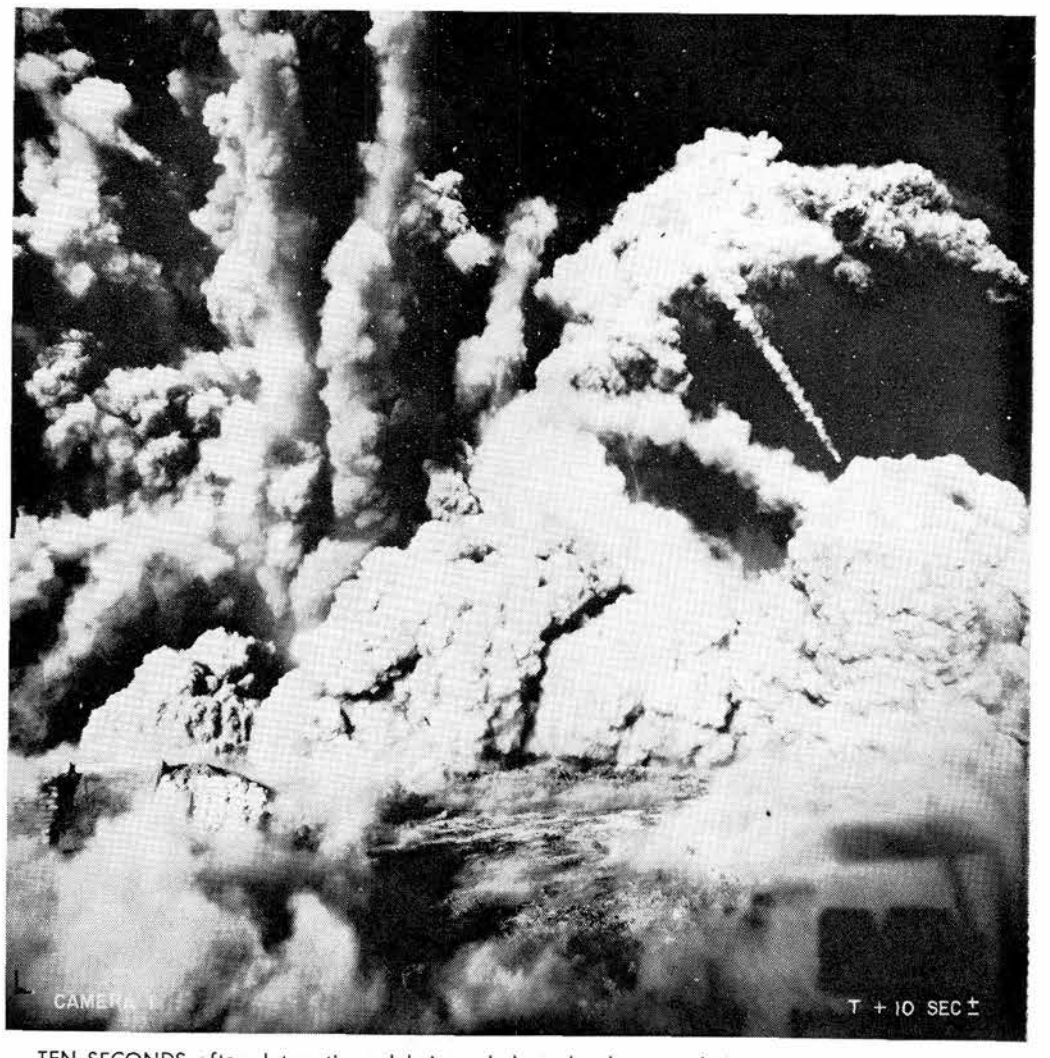
So far, the current contributions have already surpassed last year's total of $220,702 by $20,209.

Average individual contribution is up, also. The average individual ECP gift is $40.20, compared to $36.20 last year.

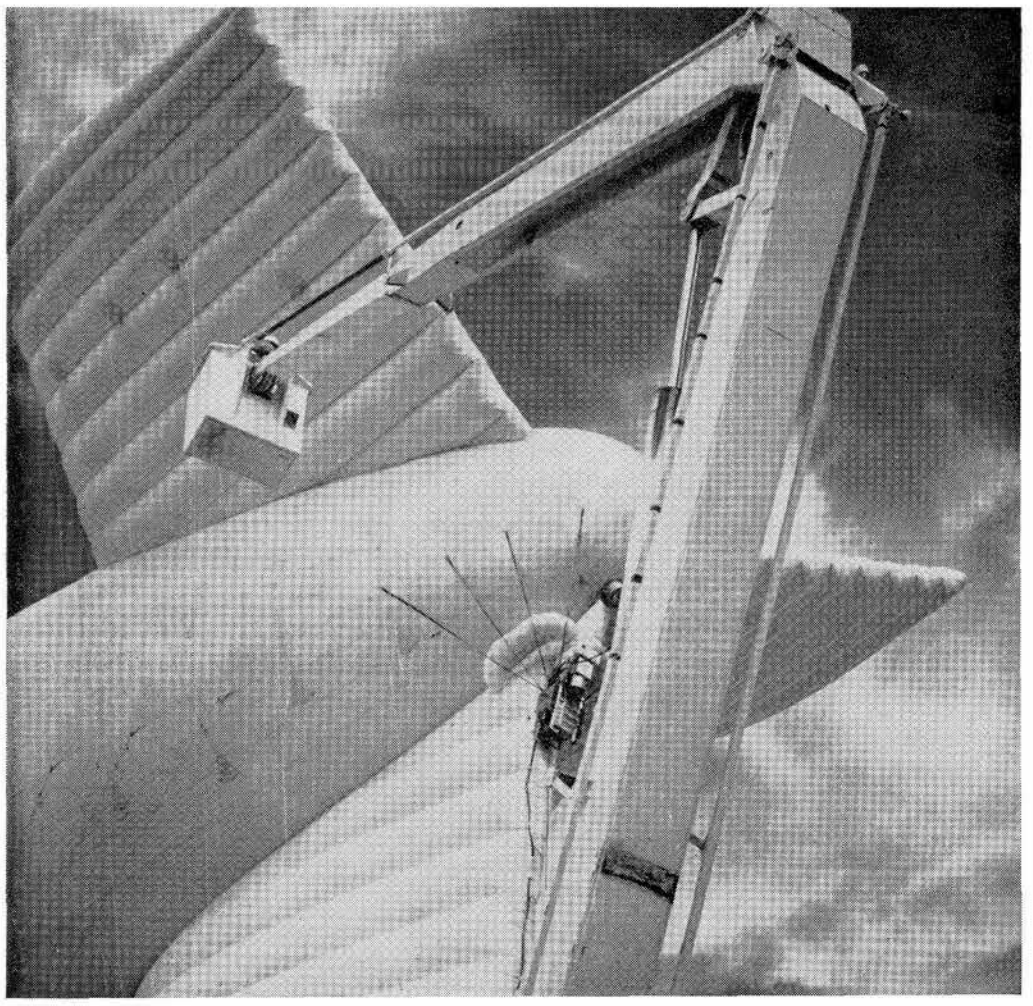
Some 2,335 employees are making Fair Share contributions (one hour's pay per month). One hundred and thirty-five employees are giving one per cent of their income to ECP.

Final tabulation of the current ECP results should be complete by Nov. 5, according to J. M. Wiesen (1440), ECP committee chairman.

PRE-SCHOONER II blast from 85 tons of liquid nitro-methane starts in this photo. Dotted lines are the cables from the balloon which support blast pressure instrumentation stations. White dots are flags attached at 50-foot intervals along the cables.



TEN SECONDS after detonation, debris and dust cloud covered the area. Resulting crater was approximately 200 feet in diameter, about 60 feet deep. The detonation was an effort to establish cratering and engineering properties of volcanic rock.



TAIL SECTION of balloon is serviced by a mobile "giraffe" at test site in Idaho. One man in the bucket section operates the boom controls while the second man adjusts the balloon's electrical blower system. Each fin is about 39 feet high.

Continued from Page One . . .

Pre-Schooner II Project

nine blast pressure measuring ground stations were installed at various distances up to 4000 feet from ground zero.

Microbarograph stations, which measured minute changes in atmospheric pressure, were truck mounted and positioned at locations from 125 to 150 miles from the blast site. Microbarograph calibration charges of 1200 pounds of explosives were detonated before and after the Pre-Schooner II explosion.

The Sandians were stationed at Twin Falls during the operation and commuted to the test site by helicopter. The choppers were also used for hauling equipment and supplies to the site, a two-hour drive on the primitive roads of the area.

Other Sandia personnel participating in the project included:

H. G. Laursen (7242), project engineer for balloon operations, assisted by D. B. List (7242).

K. B. Kimball (7242), project engineer for pressure instrumentation systems, assisted by B. C. Holt (7242). C. R. Eisenhour (7267) handled data systems.

A. B. Church (7262), project engineer for microbarograph systems. Operators were E. L. Norton (7247) E. J. Newman (7213), D. A. McFadden (7262), J. P. Johnson (7262), J. C. Elbert (7262), and A. C. Carabajal (7262). W. E. Holder (7262) and John Fuqua (7262) were responsible for the microbarograph calibration shots.

J. H. Banker (7226) and R. L. Johnson (7226) were responsible for technical photography. Elden Prawitz (2554) was administrative coordinator.

HIGH FLYING BALLOON is about 400 feet above head of D. B. List (7242) who operates winch and cable mechanism. Aerodynamic balloon is 140 feet long, contains 145,000 cubic feet of helium. It flew at 4000 feet altitude during test.

Pre-Schooner II was conducted by the Nuclear Cratering Group of the U. S. Corps of Engineers with the cooperation of the U. S. Atomic Energy Commission. The U. S. Coast and Geodetic Survey also participated by providing eight seismic stations to measure ground effects of the detonation.

Take Note . . .

Members of the Albuquerque Chapter, National Association of Accountants, heard a talk by N. H. Hawkins, Manager of new business marketing, IBM, Los Angeles, during the October monthly meeting. His topic was "Do You Have a Reservation?"

The next meeting will be Nov. 18 at which time John Heath, American Appraisal Company, San Francisco, will speak on "Can You Account for Your Fixed Assets?"

Further information on the meetings or the chapter may be obtained from F. E. Mitchell (4131-4), tel 299-8647. There are 33 Sandia employees who are members of the Albuquerque chapter.

* * *

At a recent information meeting of AEC Contractor Librarians, Mrs. Bertha Allen, supervisor of Sandia's Technical Libraries Division 3421, was discussion leader for a session on "Machine Systems for Library Housekeeping Functions."

Some 65 librarians attended the meeting at Oak Ridge, Tenn., Sept. 21-22.

* * *

"We want your hide," the B.P.O. Elks are saying. Once again, the Elks are asking hunters to donate the skins of deer, antelope, or other game for use in leather crafts programs at Veterans Administration hospitals. The Elk lodges are serving as collection agencies. In Albuquerque, call 243-7895 to arrange delivery.

* * *

Enrollment is still open for a Process Adjustment Techniques course starting Tuesday, Oct. 26, at Highland High School. T. P. Conlon (2514) is the instructor for the course which outlines a statistical technique to aid in the control of high precision, short run manufacturing processes. The class will meet Tuesday evenings from 7-9 p.m. It is sponsored by the Albuquerque Section of the American Society for Quality Control.

* * *

Some 65 scientists from all parts of the country participated in the 11th Annual Bio-Assay and Analytical Chemistry meeting held recently in Albuquerque. Participants were chemists, biologists, and physicists engaged in analyzing biological materials as an index to exposure of humans to radioactive or toxic materials. Topics discussed at the sessions involved new analytical techniques of analysis and means of interpreting exposure data.

Jerry Everett of Environmental Health Division 3311 was co-chairman of the event which was sponsored by Sandia Corporation and Lovelace Clinic.

* * *

The Albuquerque Tutoring Council has put out a call for additional volunteers to help students who have educational problems. The program was initiated a year ago with the general purpose of giving personal help to under-achieving pupils at the request of school principals and teachers.

Last year students were tutored in Lowell and Riverview Elementary Schools, Washington Junior High, and Albuquerque High. This year, Ernie Pyle Junior High, John Marshall Elementary, and possibly the Cañoncito Indian Pueblo will be participating in the program.

Sandians interested in assisting in this effort are asked to contact Gary Montague (3132) for further information.

* * *

Have a little spare time to devote to a worthy cause? The Bernalillo County Tuberculosis Association needs typing help in preparing address labels for this year's mailing of Christmas seals. Money obtained during the annual drive goes to support chest clinics and to provide information about respiratory diseases.

To volunteer, telephone 265-0732.

Blast Vulnerability Conference Attracts Sandia Experts

The Anti-Ballistic Missile Blast Vulnerability Conference, held Oct. 19-21 in Huntsville, Ala., included presentation of several technical papers by Sandians.

N. A. Beauchamp (5231) presented "The Hydrodynamics of High Altitude Bursts" and was chairman of the AEC session.

Other papers included: A. C. Bustamante (9321), "The Sandia Aero- and Thermodynamics Department's Research Program on RV Blast Interaction"; A. N. Blackwell (8146), "Shock Tube Techniques for Blast Loading at Moderate Hardness Levels"; R. G. Clem (8142), "RV Warhead Structural Hardness Study"; W. B. Murfin (1541), "Analytical Techniques in Hardening Design"; and G. W. Zumwalt (Sandia consultant), "Numerical Computations of Shock Wave Interactions with Bodies, Supersonic Flows, and Turbulent Jets."

Marion Clark (2121)

Take A Memo, Please

Fall is the time to clean and repair your gardening tools for safe storage through the coming months, and safe use next spring.

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ALBUQUERQUE, NEW MEXICO • LIVERMORE, CALIFORNIA

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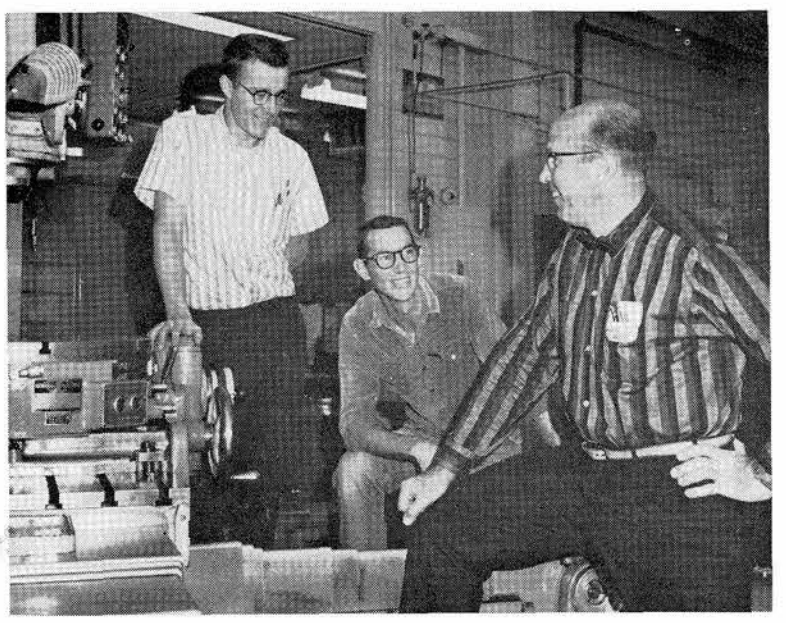
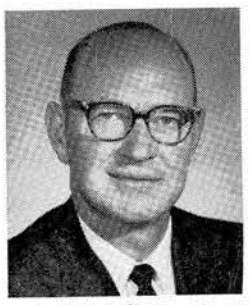


JOURNEYMAN MACHINISTS, who recently completed their four-year apprenticeship training at Sandia Laboratory, are (l to r) Edwin D. Sutherland, Jr., and Theodore Bruggemann, shown with K. R. Dickerson, supervisor of Apprentice Machine Section 4254-2.

JOURNEYMAN ELECTRONIC TECHNICIANS, who recently completed their apprenticeship training, are (l to r) Ronald J. Clouser (7334), Thomas S. Stronach (7326), and James A. Constant (4234), with T. A. Allen, Electronic Apprentice Section 4233-2 supervisor.

LIVERMORE NEWS

C. R. Barncord Heads Hospital Fund Drive



Sandia's C. R. Barncord (8150) has been appointed General Chairman of a valley-wide campaign to raise $800,000 toward a proposed $2.5 million expansion program at Valley Memorial Hospital in Livermore.

A third floor, as well as two wings and an addition to the present ground floor, will more than double the number of beds and square footage of the existing four-year-old facility.

Mr. Barncord, as general chairman, is responsible for the overall planning and direction of the fund-raising campaign.

W. A. Jamieson (8232), a member of the hospital's Board of Directors, has been serving on a three-man Campagin Steering Committee.

Figures Released on United Crusade Drive At Livermore

Employees at Livermore Laboratory generously responded to the needs of health, welfare, and youth agencies in the local and Bay areas by contributing a record $18,674 to the 1965 United Crusade Drive, which ended Friday, Oct. 15.

This was an increase of 19 per cent over last year's contribution, which was $15,686.

According to Gil Rhodes (8215), campaign chairman, individual contributions were about 25 per cent higher this year with an average gift of $24.35 as compared to $19.40.

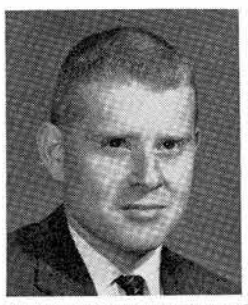
Fair Share contributions also increased from five in 1964 to 60 this year.

"We are pleased with the overall results of the drive," said Gil. "The enthusiastic support of those employees who gave so generously made it a successful campaign. The dollars contributed will benefit many needy people. The Crusade committee wishes to thank all the employees who gave their time, money, and effort to this year's drive."

Congratulations

Mr. and Mrs. John Totten (8111), a daughter, Cynthia Ann, Sept. 25.

J. D. Foster Earns PhD Degree



Jack D. Foster, Acceptance Equipment Division 8162, recently received his PhD degree in engineering sciences from the University of California at Berkeley. His doctoral dissertation was entitled "Fringe Counting Laser Interferometers for Industrial Length Measurement."

Mr. Foster earned BS degrees in both mechanical engineering and physics from Oregon State College in 1958, and in 1962 received his MA degree in physics from the University of California at Berkeley.

During seven years at Sandia, Jack has worked in materials application, project engineering, component preliminary design, and acceptance equipment divisions. Concurrently, he attended school under Sandia's Educational Aids Program.

Jack is a registered professional engineer in California and Oregon. He is secretary of the Mt. Diablo Subsection of the San Francisco American Society of Mechanical Engineers (ASME). Last year he was an advisor for the Livermore chapter of the Junior Engineering Technological Society (JETS) which is assisted by the local ASME organization.

Events Calendar

Oct. 30—Livermore Halloween Festival for UNICEF—the United Nations Children's Fund — Livermore Recreation Center, 6-9 p.m.

Oct. 31-Nov. 4—Grand National Championship Rodeo, Cow Palace, San Francisco. Discount tickets for evening shows available from Employee Benefits.

Nov. 3—Third lecture, LRL Lecture Series, "Los Alamos," by Dr. Norris E. Bradbury, Director, Los Alamos Scientific Laboratory, LRL Auditorium, Bldg. 111, 8 p.m.

Nov. 20—Ice Capades, Civic Auditorium, San Francisco. Discount tickets for 5 p.m. matinee available from Employee Benefits.

Welcome
Newcomers

Sept. 24 - Oct. 8

California
Andrew Cardiel, Tracy 8223
Tamotsu Fukunaga, Berkeley 8252
*Laura J. Loftin, Dublin 8232
Robert G. Moitoso, Tracy 8232
George A. Whittle, Sacramento 8233
Illinois
Marshall D. Meyer, Urbana 8115
Oregon
Harry M. Colbert, Eugene 8148
Pennsylvania
Su Shing Chiu, Center Hall 8147
*Denotes rehire

1965 SLOW PITCH CHAMPIONS—Drafting Division (8252) team, winner for the second year in the Slow Pitch Softball League at Livermore Laboratory, poses for a group shot. In front (l to r) are manager Gary Loucks, Phil Prickett, Kermit Cooper, Warren Zechmeister, and Jim Trantham. Standing (l to r) are Charlie Crawford, Ron Puckett, Gale Hudson, Larry Brown, Vic Ham, Ray Gillette, Dave Elrod, and Tabo Hisaoka. Not shown are Jerry Stewart and Jim Dremalas. Vic Ham also won the league Batting Championship Trophy with a high batting average of .576. Doyle Baker (8124) was awarded the Home Run Trophy, and Don Guisti (8222) took the Outstanding Play Trophy. Jim Kimberling (8115) and Al Wright (8124) were umpires for the seven-team league.

HOLDING A MOSAIC PLAQUE presented by the City of Livermore to its sister city of Quezaltenango, Guatemala, George Perkins (left) and Acting Mayor Senor H. Calderon pose for a picture in the City Hall court at Quezaltenango. George's wife Nola and their daughter Brenda (right) accompanied him on the visit.

George Perkins and Family Visit Livermore's Sister City

Livermore's "sister city" of Quezaltenango, Guatemala, welcomed its first guests from Livermore when George Perkins (8241) and his family visited the city during a recent trip through Central America.

Quezaltenango became Livermore's sister city in June through participation in America's People to People program coordinated by the National League of Cities. The program encourages informational and cultural exchanges, and promotes understanding between sister cities.

In the absence of the Mayor, Honorable Gerardo Hurtado Aguilar, George and his family were immediately ushered into the office of Acting-Mayor Senor H. Calderon. "We felt highly honored," George said, "because arrangements for such an audience usually take a full day or two."

Through an interpreter, the acting mayor extended warm and cordial greetings from the people of Quezaltenango. He displayed a scrapbook of Livermore newspaper clippings and a mosaic plaque which had been sent by the Sister City Committee of Livermore. The plaque had only cleared customs the day before. George explained to Senor Calderon that the plaque was copied from the official seal of Livermore—the City of Energy. He then discussed the meaning of the items on the seal—the cowboy on horseback depicting the "World's Fastest Rodeo" held in Livermore each June, the cluster of grapes representing the local wine industry, and the atomic emblem referring to the nuclear research and development activities in the Livermore Valley.

Acting-Mayor Calderon presented George with a formal certificate of welcome, declaring him an official visitor to Quezaltenango. He also invited the family to stay an additional day for a formal welcome and ceremonies featuring a marimba orchestra. "The marimba is the national instrument of Guatemala," said George. "Some are so large that as many as seven people play a single instrument at one time.

"We were impressed with the beautiful landscape of the area," George related. Quezaltenango is a city with 40-50,000 people of a predominantly Mayan Indian culture. It lies in a lush green valley surrounded by 10,000-foot mountains. These mountains are made more picturesque by the terraced slopes on which the Indians grow corn and wheat. "They resemble stairways to the stars," said George.

"Everything about the city was neat and clean, but the most outstanding impression was the exceptional friendliness," said George. "As we drove into the city, both the young and old, carrying heavy loads to market on their shoulders or strapped on their heads, would stop to smile and wave a greeting."

While in the sister city, George and his family visited the central outdoor market place to purchase some of the serapes, blankets, shirts, and other wearing apparel woven by the natives.

After returning to Livermore, George's wife Nola noted, "Of all the towns and places we visited in Mexico, Guatemala, and El Salvador during our five-week trip, Quezaltenango would be the city I'd chose for a home."

Sandians Pearl R. Stewart (8244-4) and James R. Wimborough (8161), who are members of the Livermore Sister City Committee, welcomed the Perkins family's report on Quezaltenango.

Livermore Notes . . .

Roger Baroody (8154) will chair the Applied Mechanics Division Session at the 15th Annual Society of Mechanical Engineers (ASME) Joint Professional Divisions Conference in Palo Alto, Calif., Oct. 25. The conference is being co-sponsored by the San Francisco and Santa Clara Valley Sections of ASME. Arlyn Blackwell (8146), speaker at the session, will discuss "High-Explosion-Driven Shock Tubes."

* * *

Technical illustrator Evelyn Bachman (8233) presented an illustrated speech entitled, "Art in Industry," as part of the recent Career Night Series co-sponsored by the American Association of University Women and the Rotary Club in Livermore. The theme of the series was "Stay in School; Learn Today; Earn Tomorrow."

* * *

Ferne Saylors (8253-3) presided as "Mistress of Ceremonies" at the first annual "Bosses Night" held recently by the Livermore Valley Charter Chapter of the American Business Women's Association. Approximately 75 Chapter members and their bosses attended the dinner event at Castlewood Country Club. Sandians present were Ferne, Jim Brock (8253), Irmal Brown, and Truman Casson (both 8116).

* * *

Don Knaple (8252) bowled six straight strikes in the "King of the Hill" tournament at Livermore's Granada Bowl recently, to win a jackpot which had been accumulating over a period of 40 weeks. Each week the tourney bowler with high handicap series becomes "King of the Hill" and can take the jackpot by bowling six straight strikes in his next tournament game.

The East Bay Subsection of the Institute of Electrical and Electronics Engineers (IEEE) is sponsoring a field trip to the San Francisco Bay Area Rapid Transit District (BARTD) test facility at Concord, Calif., on Oct. 25. The tour group will visit a test location where a full-scale model of the BARTD car may be viewed. Dinner at the Concord Inn will precede the trip. Complete information is posted on Laboratory bulletin boards.

* * *

Organization 8100, with an average of 77 strokes, won the 8100 vs. 8200 straight handicap golf tournament at the Hayward Golf Course, Sept. 25.

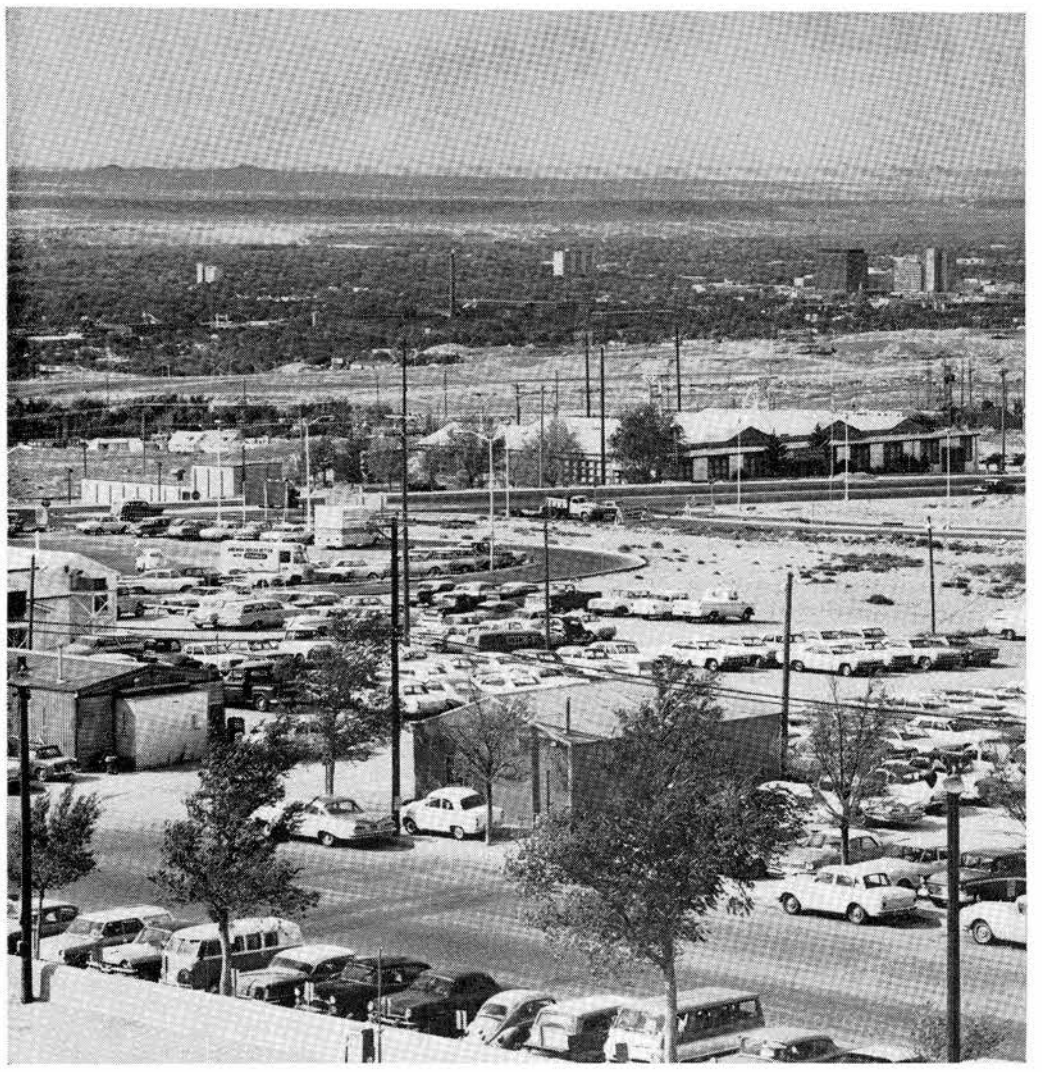
The first place tourney trophy went to Glen Funk (8168) with a net low score of 64. Ron McClellan (8153) and "Ollie" Olivotti (8117) tied for second place with scores of 69. Elmer Smith (8162) and Ron McClellan tied for the "Fewest Putts" award by finishing with 28 putts. Elmer Smith also won a special award for coming closest to the pin at the No. 8 hole.

* * *

Newly-elected officers of the Twin Valley Sports Car Club include Carl Schoenfelder (8115), president; Andy Gross (8126), member of the board of governors; and Andy's wife, Jackie, secretary/treasurer.

The club holds business meetings the fourth Wednesday of each month at 8 p.m. at the Rock House in Livermore. Social activities, auto rallies, and auto crosses are regular events.

Membership is open to those interested in sports cars; however, members need not own sports cars. For further information, contact Carl or Andy.



VIEW of the city "seen" by Sandia's 70-mm camera is shown above. The time-lapse photographs made by the camera will record air pollution buildup and dissipation over the downtown area.

Sandia Helps Study Air Pollution in Albuquerque Area

The first camera to be used in a joint city and county study of air pollution in the Albuquerque area was placed at the Sunport last week by C. E. Robertson and J. H. Banker of Photometrics Division 7226.

Sandia is cooperating with city and county officials by providing cameras to take time-lapse photographs of pollution buildup and dissipation. The pictures will be used to study air pollution in connection with weather conditions.

Operated by timing systems, the cameras will take photographs during daylight hours at pre-determined intervals—initially one exposure every five minutes. The camera is encased in a weather-proof housing, and will be serviced about once a week.

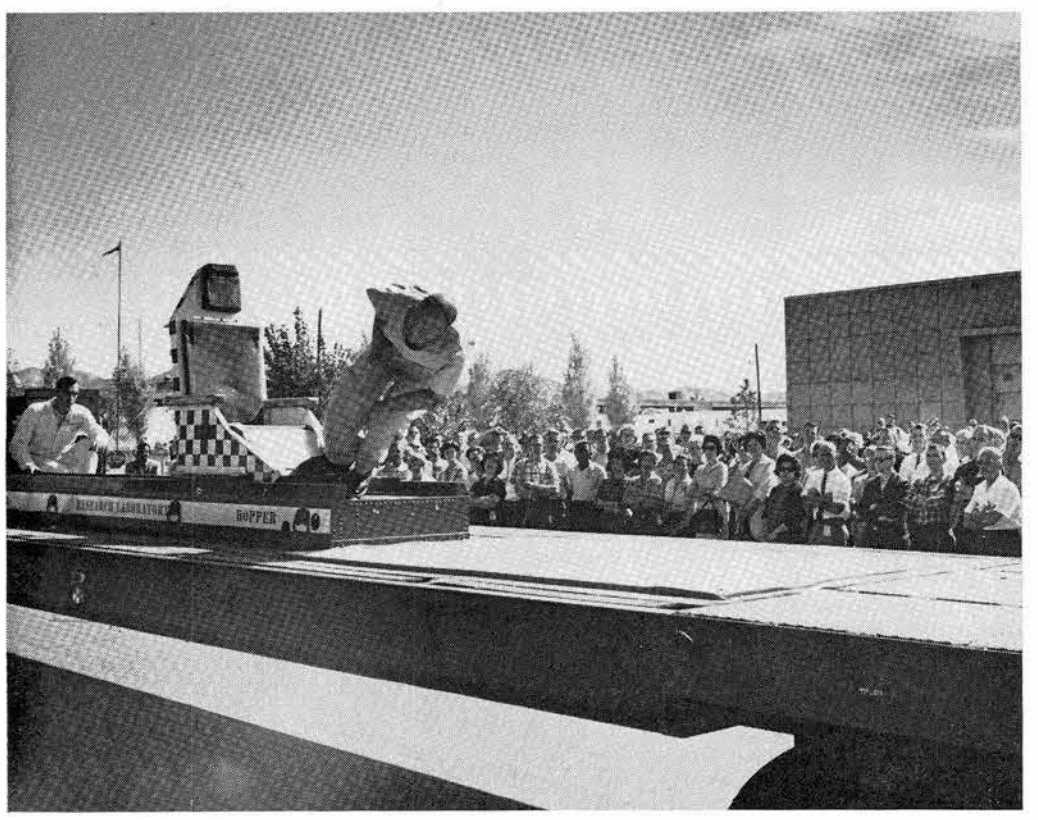
The camera with a pulsing shutter uses 70 mm film, which is about 2¾ inches wide.

Other cameras will be placed on the East and West Mesas. A fourth station on Sandia Crest is also being considered.

The Sunport camera will provide pictures of the downtown area. Mesa stations will take large area photographs of the Valley.

Sandia is providing the cameras on a non-interference basis with regular laboratory projects.

70-mm CAMERA is installed at the Albuquerque Sunport by Clarence Robertson, left, and John Banker (both 7226). The camera will be used in a joint city and county study of air pollution. It will make photogarphs every five minutes.



SAFETY DEMONSTRATIONS last week in Tech Area I provided graphic evidence for wearing seat belts in automobiles. The dummy, simulating a man, flew through the air when the sled (traveling about 15 mph) was brought to a sudden stop. Second demonstration, with a man strapped in the carriage with a seat belt, proved safe and harmless at this speed. Demonstration was provided by a team from Holloman Air Force Base.

Bell Telephone Labs Founded Forty Years Ago

Editor's Note: Bell Telephone Laboratories was formed just 40 years ago. Recognizing this anniversary seems a fitting and proper way to initiate a series of LAB NEWS articles on BTL, Western Electric, AEC-ALOO and the ALOO contractor complex, all of which are interrelated with and affect Sandia.

* * *

It is customary to mark an anniversary of a company by pointing out the major accomplishments over the years. During the past 40 years Bell Telephone Laboratories has made many outstanding contributions to science and communications technology.

Less obvious, but no less important, has been the evolution of BTL's aims and philosophy in research and development. For here they have been not only a contributor, but a major influence.

Bell Telephone Laboratories was organized in 1925 as an outgrowth of the Western Electric Company engineering laboratories in New York. Then there were relatively little industrial research and few industrial laboratories. Today, there are more than 5000 non-governmental industrial laboratories devoted to research and development in the United States. And over 500 of them, big and small, are active in communications, in electronics, and in other fields directly revelant to these areas.

BTL has helped to set standards for science and communications technology —standards dictated by requirements for superior communications service.

History

The reorganization in 1925 was the start of a highly efficient, centralized research and development branch of the Bell Telephone System. The new company was then and still is jointly owned by Western Electric and the American Telephone and Telegraph Company.

At the time of the transition to Bell Labs, engineers at Western Electric were busy with such developments as electromechanical switching systems, high-frequency amplifiers for overseas transmissions, and carrier systems for openwire lines. Some laboratory personnel were in New Jersey—at Deal Beach, Cliffwood, and Elberon—experimenting with overseas radio transmission. Others were at the Hawthorne Works in Chicago, working on lead-covered cable, and a few were scattered elsewhere across the nation and around the world on specialized assignments.

Bell Laboratories is the working home of 14,500 people. Approximately 2300 members of the Bell Labs staff hold masters' degrees in science or engineering, and about 800 of these also hold doctorates. This is the largest number of people with advanced degrees in any private business in the world.

Staff

Of the 14,500 employees, about a third are engineers and scientists on the technical staff. Another third are members of the assistant technical staff. The rest serve on the administrative staff, including many who are professionals in various other aspects of business.

These men and women work at 17 locations in nine states—New Jersey, New York, Pennsylvania, Massachusetts, North Carolina, Ohio, Indiana, Maryland, and New Mexico—and at Kwajalein Island in the Pacific. In 1966, Illinois will be added to this list as Bell Laboratories opens its new Indian Hill Laboratory near Naperville, Ill.

Bell Laboratories' four major locations are Murray Hill, N.J., the company's administrative headquarters and center of much of its research and development work; Whippany, N. J., devoted mainly to military projects; a communications development center at Holmdel, N. J.; and the original Laboratories birthplace at West Street in New York.

Major Activities

The work at Bell Laboratories falls into three general areas: Research; Systems Engineering; and Development and Design for Manufacture.

Bell Laboratories has organized a comprehensive research program designed to explore areas of science that hold promise of yielding discoveries of value to the communications industry. The research is uninhibited but sensitive to practical needs.

Scientific research has been more than a tradition in the Bell System since the invention of the telephone. It is a necessity. Without the basic knowledge acquired through research and exploratory development, continuing progress in communications technology would be impossible.

The second major area of Bell Laboratories activity is Systems Engineering. Its major responsibility is the study and determination of functional and economic objectives for new communications systems, the broad technical plans to be followed, and the costs and schedules to be met.

Development and Design is the third general area of technical work at Bell Laboratories. Based on the plans developed by Systems Engineering, Development and Design engineers take new science coming from Research and translate it into properly functioning models of components and systems—from the telephone itself and thousands of miles of land and sea cable to the complex switching mechanisms and transmission systems of a nationwide communications network.

In addition to its responsibilities to the Bell System, Bell Laboratories devotes part of its effort to military projects. In these, the company concentrates on areas where its special background and experience in communications and electronics have qualified it to make significant contributions. Typical of its military projects are the Nike family of anti-aircraft and anti-missile defense systems, and their radio command guidance system also used so successfully on so many launch vehicles associated with various space programs.

Major Achievements

Bell Laboratories has a long history of pioneering accomplishments done by its scientists and engineers which have brought many honors and awards from prominent American and foreign scientific and professional bodies.

These include two Nobel Prizes in Physics—one in 1937 to C. J. Davisson for the codiscovery of electron diffraction and the wave properties of electrons; and the second in 1956 to Walter Brattain, John Bardeen, and William Shockley for investigations on semi-conductors and the discovery of the transistor effect. The invention of the transistor opened the era of modern electronics, an era in which Bell Laboratories has played a major role.

Another invention was the Bell Solar Battery, which has been the source of power for all long-lived earth satellites to date.

The principles of the lasers were first described by a Bell Labs researcher, Dr. Arthur Schawlow, working with Dr. Charles Townes of Columbia University. Later, the first continuously operating gas and solid-state (ruby) lasers were created by Bell Labs scientists.

The concept of communications by satellite was first proposed scientifically by Dr. John Pierce of Bell Laboratories. Later, the TELSTAR communications satellite, which stirred the world when it first spanned the Atlantic with live television in 1962, was engineered, constructed, and successfully tested by Bell Labs development engineers.

Other achievements by Bell Laboratories' technical staff include side-band transmission, the condenser microphone, wave filters, sound motion pictures, high fidelity recording, the first demonstration of intercity television, the beginnings of radio astronomy, the basis for modern digital computing, zone refining of metals, permalloy, the negative feedback amplifier, information theory, important discoveries in superconductivity and its applications, and the solid-state maser.

Many of these discoveries, inventions, and developments have had valuable applications, not only in communications, but in many other areas of science, technology, and industry.

Supervisory Appointments

GEORGE E. TUCKER to supervisor of Electronics and Dosimetry Division 3313, Environmental Health Department, effective Oct. 16.

George has been with Sandia 10 years, working the first three years at a site, and the balance of the period in Environmental Health Department.

Prior to employment here, he served four years in the Air Force, stationed the majority of the time at Manzano Base. He also taught high school mathematics for two years in Pennsylvania.

He was graduated from Washington and Jefferson College (in Washington, Pa.) with a BA degree in math and has taken graduate study at the University of New Mexico.

George is a member of the Health Physics Society and American Industrial Hygiene Association.

CHESTER S. WOLOWICZ to supervisor of Design Definition Division C 2213, Design Definition Department, effective Oct. 1.

Chet has been in drafting work since joining Sandia at Albuquerque in 1950. He transferred to Livermore Laboratory in 1957, where most recently he has been supervisor of Electronic Design Drafting Section 8252-3.

Formerly he was employed as a design draftsman for seven years by Westinghouse Electric Co. in Bloomfield, N. J., and before that was a draftsman and foreman for a hardware manufacturing company.

Chet is a graduate of Brooklyn Vocational School and Brooklyn Evening Tech and Trade School.

COST IMPROVEMENT efforts of Elmer Devor, left, and members of Value Engineering and Cost Reduction Division 2563 were commended last week in a letter presented by S. P. Schwartz, Sandia Corporation President. The letter said in part, "Recently the AEC passed on to Sandia compliments received from President Johnson on the AEC Cost Reduction Program and the part Sandia played in it . . . I am particularly pleased at the program's reception by our technical staff and the way all have worked to make these gains possible. I would like to commend you and your 2563 staff for their efforts in carrying on the program organization as well as the training sessions in Value Engineering which have been so well received." Sandia cost improvement actions during the period Jan. 1, 1965, through June 30, 1965, reported to the AEC total $1,951,900.

SANDIANS John Gardner (left) and George Dalphin (both 3421) gathered this material for display at the recent Second Annual Governor's Conference on Industrial and Economic Development.

Sandians Participate in Governor's Development Meet

Persons attending the recent Second Annual Governor's Conference on Industrial and Economic Development saw a collection of appropriate reference material gathered by Sandians John Gardner and George Dalphin (both 3421).

Included was the "Gateways to Information" display, shown by the Rio Grande Chapter of the Special Libraries Association at that group's annual meeting in Philadelphia. In addition, printed material was provided by the New Mexico Department of Development, U.S. Small Business Administration, UNM Bureau of Business Research, and the Albuquerque Industrial Development Service.

During one of the workshop sessions, M. A. McCutchan, supervisor of Employee Training and Education Division 3132, spoke on "Vocational Education in Relation to Public Education Concepts."

Credit Union Audit Made, Statements Mailed

As part of the annual audit of the Sandia Laboratory Federal Credit Union, the auditors mailed quarterly statements to all members with account numbers 10,000 through 10,999 on Oct. 12, 1965.

If your account number is in this series and you have not received your statement, please notify R. W. Foster (4352), chairman of the Credit Union Supervisory Committee.

Retiring . . .

Carrie Vick, an accounting clerk in Vouchering Division 4135, will retire the end of October after nearly 14 years with Sandia.

Mrs. Vick has lived in Albuquerque and Mountainair many years and plans to remain here (at 4121 Mesa Verde NE). She has one son in California and two sons here—one of whom is C. M. Vick (2521)—and six grandchildren.

During the years she has worked, Mrs. Vick has found time to be active in her church and to sing in her Eastern Star chapter's choir. "Now," she says, "I'll be able to devote even more time to these activities and also be more with my family and friends." She enjoys attending concerts, and likes to sew, knit, and crochet.

Congratulations

Mr. and Mrs. Bruce Nevin (7333), a son, Ronald B., Oct. 7.

Mr. and Mrs. A. D. Bridegam (2223), twin daughters, Libby Ann and Meggin Ann, Oct. 9.

Diabetes Detection Program

Sandia will participate in a national program of diabetics detection to be conducted next month. From Nov. 15-26, the Medical Organization 3300 will offer diabetes detection tests for all employees.

A chapter of the American Diabetes Association, Inc., is being organized in Albuquerque, and its second meeting will be held at the Rehabilitation Center, 1023 Stanford NE, on Nov. 4, at 7:30 p.m. All interested persons are invited to attend.

Outdoor Eating Area Added to Tech Area Cafeteria, Bldg. 839

Like to eat outdoors these pleasant fall days? The Tech Area cafeteria (Bldg. 839) is adding an outdoor dining area.

The 32- by 32-foot area is on the south side of the building and is sheltered by a six-foot-high redwood louvered fence. Reed matting will be added across the top next spring to provide protection when the sun becomes too warm for comfort.

The outdoor dining area will accommodate 80-90 persons.

Luncheon menus for the week for both the Coronado Club and the Tech Area cafeteria are now being posted on bulletin boards throughout Sandia Laboratory.

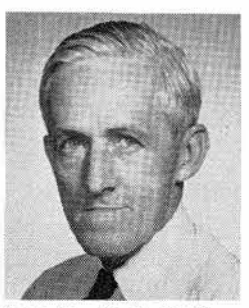
ASQC Honors J. M. Wiesen

John M. Wiesen, manager of Reliability Department 1440, has been elected a Fellow of the American Society for Quality Control.

ASQC is an international professional society composed of some 20,000 scientists and engineers specializing in the fields of quality control and reliability engineering.

Mr. Wiesen has been a major contributor to the book "Reliability Training Text," published by the Institute of Electrical and Electronics Engineers and ASQC, and has served as chairman of the Albuquerque Section of ASQC and as past District 14 representative of the national society.

Death . . .



Carl W. Franz, a Sandia employee for nine and a half years, died Oct. 5 after a short illness. He was 61.

Mr. Franz was an electrical technician in Timers and Special Devices Division 1321.

He had been active in Civil Defense and had been an amateur radio operator for years.

Survivors include his widow, a married daughter in California, and three grandchildren.

Sandian to Head Sessions At International Conference Of Users of Computers

J. L. Tischhauser, manager of Programming Department 9420, will be attending an international meeting of CO-OP in Paris Oct. 26-28. The purpose of this organization is to facilitate cooperation between installations using large-scale CDC computers. (Control Data Corporation has only honorary membership in the group.)

The meeting will be hosted by the Societe D'Informatique Appliquee and some 125 persons are expected to attend. The organization has members in the United States, Australia, Switzerland, Norway, the Netherlands, France, India, Canada, and Israel.

Mr. Tischhauser is chairman of CO-OP's Operations Committee. In this capacity he will be chairman of sessions on Operations Management, Computer Usage Reports, and Operations Reports. Other members of his committee will lead sessions on Newcomers Orientation, Computer Series 3400 Operations, and Machine Maintenance and Modifications.

Mr. Tischhauser has been at Sandia since 1951 and has worked with Sandia Laboratory's computers since they were first installed.

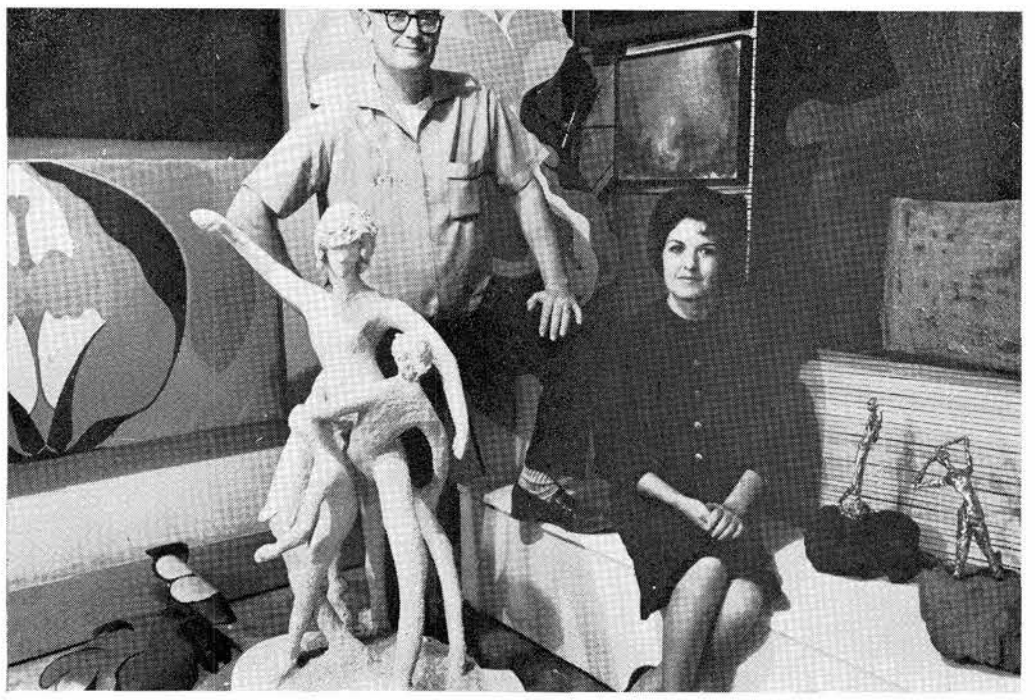
Education Courses Offered To Sandians by Military

The Sandia Base Military Education office has invited Sandia Corporation employees to attend their courses on a space-available basis. Courses to be offered include: History of the United States II; High School Algebra II; French I; Applied Psychology; History of Western Civilization I; Electricity and Electronics; Real Estate; Physical Science; and Auto Mechanics, I, II, and III.

The courses are scheduled to start in November and December as enough people enroll for each. There is no charge, and textbooks are furnished. Each class meets two evenings a week for two hours for a course total of 48 hours. Most of the classes meet in Bldgs. 339 and 340.

In addition to the above-mentioned classes, there are refresher courses in high school English and mathematics which meet from 10 a.m. to noon every day for five weeks. These courses are offered to second-shift employees only.

Information regarding enrollment may be obtained from Jean Miller (3132), tel. 264-6538.



PAINTINGS AND SCULPTURE are displayed by artists Dick (1132) and Lorraine (3126) Cook in their garage studio. Dick is working on an art degree at the University of New Mexico, Lorraine sculpts for fun.

Painting, Sculpture

Art Is Consuming Interest of Sandians Dick and Lorraine Cook

Dick Cook (1132) is a thoroughly dedicated art student who attends classes evenings at the University of New Mexico. His wife, Lorraine (3126), became an artist in self defense.

Dick took a roundabout path to find his interest. Lorraine was thrust into it. Both are producing paintings and various kinds of sculpture in their garage studio.

Recently, a piece of sculpture by Lorraine earned the top prize in the amateur division in New Mexico State Fair competition. Before the show closed, the sculpture was purchased by a collector from Taos.

Lorraine considers this a tremendous achievement for her first effort. Dick agrees. He's proud of her. And, in a way, this relieves an area of conflict in the family.

"When one member of a family has an exclusive consuming interest," Dick says, "the other members may feel resentment for the amount of time spent on it. And creating paintings or sculpture takes a lot of time."

Lorraine wanted to find out for herself. With some help from Dick, she tackled plaster sculpture. She constructed a wire framework and covered it with wet plaster. As it dried, she worked on the finishing texture. The finished piece was a small oval, basically curved, but with flat planes and angles.

Lorraine worked on it in her spare time for a period of three weeks.

"She worked fast, too," Dick says. "But sculpture doesn't come rapidly. The shape has to be right for the mass. The lines must flow and fit together. The finish should be consistent with the design. There are a myriad of things to be concerned about."

Dick, who works as a staff assistant in Ceramics Materials Division, finds sculpture his "natural" preference for self-expression. Knowledge of the materials and techniques used in his job are applicable to creating sculpture.

"I can concentrate on design and less on technique," he says. Dick finds that his past experience in automobile body work is also helpful along with the techniques he learned as an arranger in a florist shop, and the mechanical assembly jobs performed at Sandia.

"Everything contributes," he says. "This is an exciting time for artists. The old categories of watercolor, oil, metal sculpture, stone sculpture, ceramics, and crafts are becoming diffused. Nowadays artists work in mixed mediums. Op and pop artists are borrowing things from optometrist's eye charts and from comic strips to relate the work of art to the culture.

"The thing that makes art exciting to me," Dick says, "is not only the diffusion in art media but the diffusion of art throughout all fields. Technical people—engineers, statisticians, technicians—are finding art intellectually stimulating and rewarding as an area to make personal statements.

"Communications has gained importance again in art," Dick continues. "For a long time, much art was just decoration. Artists are trying to say recogizable things again. . . ."

"You've said enough," Lorraine comments. "The thing is that creating art is fun."

Britisher Reports Ups and Downs Of Unusual Accident

Currently making the rounds of various industrial publications is the following story which was most recently published in THE DOW CORRAL, the bi-weekly publication of the Rocky Flats Division, The Dow Chemical Company.

Though humorous, the report serves to remind us that accidents can be precipitated in that split-second of thought-lapse. And, that once started, an accident can develop into a series of mishaps in an extremely short time.

In a letter to his employer, a British construction worker reported:

"When I got to the building, I found that the hurricane had knocked some bricks off the top. So I rigged up a beam with a pulley at the top of the building and hoisted up a couple barrels of bricks. When I fixed the building, there were a lot of bricks left over. I hoisted the barrel back up again and secured the rope at the bottom, and then went up and filled the barrel with the extra bricks. Then I went down to the bottom and cast off the rope.

"Unfortunately, the barrel of bricks was heavier than I was and before I knew what was happening, the barrel started down, jerking me off the ground. I was too high to jump, so I hung on to the rope. Halfway up I met the barrel coming down and received a severe blow on the shoulder. I then continued to the top, banging my head against the beam and getting my fingers jammed in the pulley. When the barrel hit the ground it broke and all the bricks spilled out.

"I was now heavier than the barrel and so started down again at high speed. Halfway down I meet the barrel coming up, and received severe injuries to my shins. When I hit the ground, I landed on the bricks, getting several painful cuts from the sharp edges.

"At this point I must have lost my presence of mind because I let go of the rope. The barrel came down giving me another heavy blow on the head. I'm in the hospital now, and I respectfully request sick leave."

Lots of Sand in N. Mex. But No Shells Like These

Collecting sea shells when you live in a semi-arid inland area seems like a strange hobby, especially in the case of John A. Anderson (1524), who virtually ignored shells the many years he lived in southern Florida.

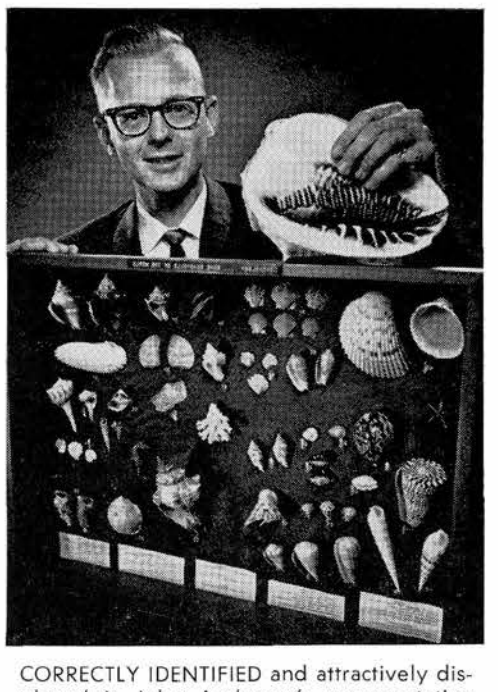
But, as John explains, "Over 6000 kinds of mollusk shells have been discovered so far and over 100,000 species have been identified. No other animals are as widely collected, traded, or bought and sold because of their beauty and attractiveness.

"This summer," he said, "I returned to Florida on vacation after an absence of many years, and spent a day on the beach at Marco Island on the Florida West Coast. The variety of shells abundantly available on this unspoiled beach aroused my interest. Upon returning to Albuquerque, I decided to learn more about them and to attempt to classify and identify the shells I had brought home."

John collected more shells on the Pacific coast later in the summer and fellow Sandians have brought him many other fine Pacific specimens. Stu Asselin (1522) contributed a Hebrew Cone, Snakehead Cowrie, Money Cowrie, Commercial Trochus, and a junior-size Giant Clam (it measures 1½ inches across), all from Kwajalein.

The rarest shell in his collection is an Eyed Auger found by Harold Maciolek (1531) on Johnston Island. In the accompanying photograph, it is the second shell from the left, bottom row. The strangely marked shell above it near the edge of the display box is a Noble Shell from Nicaragua or Venezuela. With a close look you can identify Roman numerals and Greek letters on its sides.

"I find that an amateur study of conchology can lead into biology, geography, history, art, and evolution," John notes.



CORRECTLY IDENTIFIED and attractively displayed is John Anderson's representative collection of Atlantic and Pacific sea shells. He's holding an Emperor Helmet, native to southern Florida and the West Indies.

Sandia Authors

G. A. Samara (5132) and A. A. Giaradini, University of Georgia, "The Compressibility and Electrical Conductivity of Cadmium Sulfide at High Pressures," Oct. 7 issue, PHYSICAL REVIEW.

J. M. Peek (5121), "On the Use of Approximate Functions in Evaluating the Born Matrix Element for H^+_2," Aug. 30 issue, PHYSICAL REVIEW.

R. E. Nettleton (5155), "Four-Phonon Interactions Among Acoustic and Optic Modes in Strontium Titanate," Nov. 15 issue, PHYSICAL REVIEW.

Albert Narath (5150), "Zero-Field ^{53}Cr NMR in Ferromagnetic CrI_3: Renormalized Spin-Wave and Green Function Analysis," a November issue, PHYSICAL REVIEW; "Antiferromagnetism in $CoCl_2 \cdot 2H_2O$. II. Chlorine Nuclear Magnetic Resonance and Paramagnetic Susceptibility," Oct. 18 issue, PHYSICAL REVIEW.

G. W. McClure (5121), "Differential Angular Distribution of H and H+ Dissociation Fragments of Fast H^+_2 Ions Incident on H_2 Gas," Nov. 1 issue, PHYSICAL REVIEW.

L. M. Barker and R. E. Hollenbach (both 1115), "Interferometer Technique for Measuring the Dynamic Mechanical Properties of Materials," November issue, REVIEW OF SCIENTIFIC INSTRUMENTS.

R. S. Reynolds (9233), "An Unattended Seismological Observatory," special geophysical issue, IEEE PROCEEDINGS.

C. W. Harrison, Jr. (1425) and C. H. Papas, professor of electrical engineering at California Institute of Technology and Sandia consultant, "On the Attenuation of Transient Fields by Imperfectly Conducting Spherical Shells," November issue, IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION.

R. A. Lefever (5154), "A Further Investigation of Factors Influencing Domain Configurations in Yttrium Iron Garnet," September issue, JOURNAL OF PHYSICAL CHEMICAL SOLIDS.

Sandia Speakers

Osborne Milton and J. L. Wentz (both 1134), "Correlation of Electrode Geometry and Test Area to the Electric Strength of Several Casting Resins," Annual Meeting of the Conference on Electrical Insulation (sponsored by the National Academy of Science's National Research Council), Oct. 25-27, Buck Hill Falls, Pa.

R. D. Andreas (2421), "The Problem of System Evaluation," Systems Science Conference, Oct. 18-19, Cleveland, Ohio.

W. K. Paulus (2421), "Methodological Aspects of Problem Formulation," Systems Science Conference, Oct. 18-19, Cleveland, Ohio.

R. I. Butler, B. W. Duggin (both 7325), and R. C. Dove (ex-Sandian), "Evaluation and Calibration of Accelerometers in the 10,000g to 100,000g Range," Instrument Society of America, Oct. 4-7, Los Angeles.

C. M. Vick (2512), "Tonopah Test Range Facilities and Activities," Inter-Range Missile Flight Safety Group meeting, Sept. 29, Wallops Island, Va.

Bruno Morosin (5151), "X-ray Diffraction Studies on Iron Group Halide Dihydrates," Department of Metallurgy seminar, University of Utah, Oct. 29, Salt Lake City.

Paul Slepian (5256 summer hire), "The Number of Trees in a Network," Third Allerton Conference on Circuit and System Theory, Oct. 20-22, Monticello, Ill.

G. J. Lockwood and G. L. Cano (both 5241), "Response of CsI(T1) Crystals to Low Energy Heavy Ions," 12th Symposium of Institute of Electrical and Electronics Engineers, Oct. 18-20, San Francisco.

J. L. Gardner (3421), "SCAN—A Cheap, Computer-Produced Announcement Bulletin with Variable-Size Type," Special Libraries Association Regional Workshop on the Report Literature, Nov. 1, Albuquerque.

E. D. Woolsey (5256), "'La Fortranita'—A Fortran Compiler for Teaching Fortran on the 160-A" and "Dynamo— A One-Dimensional Dynamic Allocation Program," SWAP Conference (users of small-scale CDC computers), Oct. 3-5, Minneapolis.

V. E. Blake, Jr. (9310), "Aerospace Nuclear Safety," First AIAA Rankine Cycle Space Power System Specialists Conference, Oct. 26, Cleveland, Ohio.

A. R. Sattler (5211), "The Ionization Produced by Silicon and Germanium Recoil Atoms from Neutron Elastic Scattering," Los Alamos Scientific Laboratory Physics Colloquium, Oct. 7, Los Alamos.

A. D. Bridegam (2223), "Digitizing Printed Circuit Layouts for Automatic Artwork Generation," Fall Seminar of the Institute of Printed Circuits, Sept. 30, Chicago.

L. S. Nelson (5234), "Combustion of Zirconium Droplets Studied by Flash Heating and Time-Resolved Spectroscopy," 1965 Anachem Conference (Association of Analytical Chemists, Inc.), Oct. 19-21, Detroit.

S. B. Martin (1322) and E. R. Phillips of Univac, "Fluid Timer Development," Third Fluid Amplification Symposium, Oct. 26-28, Washington, D.C.

J. W. Hughes (4362), "Purchasing at Sandia Corporation," Purchasing Workshop, Oct. 12-13, Dallas, Tex.

M. L. Glaze (8234), "Small Value Buying of Special Designed Fabrication," Oct. 12-14, Ninth Annual AEC Contractors' Purchasing Conference, Brookhaven National Laboratory, Upton, N. Y.

E. C. Hirt (2232-1), "Microfilm Quality Control," 3-M Microfilm Symposium, Sept. 27-29, St. Paul, Minn.

C. J. McGarr (4600), "Management by Objectives," General Services Administration Management Institute, Oct. 25, Denver, Colo.

Welcome Newcomers

Oct. 1-15

Albuquerque
Wanda L. Davis 4623
*Louise H. Dow 3126
Judith A. Gaunce 3126
*Virginia R. Golding 3126
*Reba Jo Hitchcock 4152
*Richard L. Reed 4122
J. Dennis Rex 3415
Rosalie K. Sorrels 4333
Dolores M. Weinberger 4314
New York
George C. Smith, Ithaca 5213
Oregon
Jerry F. Cuderman, Corvallis 5241
*Denotes rehire

Service Awards

15 Years


C. N. Allen
3242


F. A. Bentz
4373


F. S. Brooks
3241


R. M. Cash
3242


Carl Cianciabella
9222


Arthur Castillo
4151


H. L. Cole
1333


W. B. Davis
4153


J. E. Eslinger
4513


J. M. Fisher
4114


T. V. Gallegos
4514


I. N. Humble
4541


Ernest Lovato
4234


Ray Lucero
4613


D. R. McGiboney
3312


Miguel Montoya
4545


J. K. Nakayama
1513


A. L. Pearson
8222


D. A. Quayle
4221


M. A. Reynolds
4135

20 Years


G. A. Fowler
9000


I. R. Sanchez
4221


J. A. Sanchez
4575


A. L. Simpson
4513


E. S. Smith
3242


P. D. Welker
4212


R. W. Whitson
2111


B. L. Workman
4573

10 Years

Oct. 22 - Nov. 4

J. J. Ryan 4233, Lorraine W. Torres 3428, R. A. Bailey 8252, Benito Marquez 2121, J. R. Windham 7311, Floyd Hursh 7522 C. Gutierrez 4513, A. J. Pino 4575, H. R. Johnston 8122.

Sandia's Leader Dog 'Retires'; New Dog Is Learning Routine

Kelly, the Leader Dog for Berenice Henry (3411), has been "retired" after nearly nine years of service, and there isn't one employee in Bldg. 818 who won't miss Berenice's devoted friend.

The handsome collie was returned to the Leader Dogs for the Blind school in Rochester, Mich., where he received his specialized training. His future will depend upon his health (his retirement was necessitated by incurable ailments).

Through the years he became a familiar figure as he escorted Berenice from the Women's Officers quarters on Sandia Base, down Main Street, and through the Sandia Corporation security gate to her work location. There were shorter jaunts to Bldg. 802 and to eating facilities.

The cost of Kelly's training and Berenice's original training in use of a Leader Dog was borne mainly by various charitable agencies. When it was determined that Kelly would have to be replaced, Berenice found she would only have to pay for her transportation to and from Rochester, Mich. The day before she left Joe Sieglitz (4516) presented her with $230 which had been contributed by her friends to cover this cost.

"We all just did what we wanted to do," Joe explained. Major contributors included $50 from the Elks Club, $20 from Labor Support & Grounds Maintenance Division 4575, individuals in Departments 4510, 4540, 4120, 3240, 3410, Division 3428, and others from various groups in Bldg. 802. Joe added, "Berenice didn't want to take the money, but we asked her to think of it as 200 boxes of candy from her friends."

Berenice and Kelly flew to Michigan Oct. 9 and Berenice's preliminary training with her new Leader Dog should take two weeks —"If I haven't forgotten too much," she added. When she left, she didn't know what breed her new companion would be. The dogs are donated to the school, and breeds commonly used include German shepherd, Labrador retriever, golden retriever, malamute, Belgian sheep dog, and some crossbreeds.

Kelly was a friendly, affectionate dog, and he did his job well. Until the new Leader Dog learns his responsibilities equally well, the school suggests the following: Remember that the Leader Dog is a working dog and must not be diverted from carrying out his very important job. Petting—or offering the dog food—may be a distraction; so is calling the dog by name from a passing car.

If it is apparent that Berenice is having difficulty, a person nearby could simply ask, "May I assist you?" Motorists are asked to proceed cautiously in the regular traffic pattern if Berenice and her new dog are waiting at the curb since they will cross only when the street is clear. Berenice normally walks to work about an hour before starting time.

It usually takes about four or five months before complete cooperation can be expected between woman and dog.

LEAVING THE TECH AREA for the last time is Kelly, collie Leader Dog for Berenice Henry (3411). Security guard Harold Bigley watches them leave.

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Deadline: Friday noon prior to week of publication unless changed by holiday.

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1. **Limit: 20 words**
2. **One ad per issue per person**
3. **Must be submitted in writing**
4. **Use home telephone numbers**
5. **For Sandia Corporation and AEC employees only**
6. **No commercial ads, please**
7. **Include name and organization**
8. **Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.**

FOR SALE

AKC registered white Toy Poodles, terms. Hoffert, 299-6531.

'59 SUPER 88 OLDS, 4-dr. HT, PB, AC. McKelvey, 865-9280 (Los Lunas).

GARAGE SALE: baby furniture, refrigerator, cooler, rug, washer, table and chairs, fertilizer, GMC truck maintenance manual '60-61. Fisher, 299-9235.

'61 INTERNATIONAL SCOUT, full cab, 6-ply tires, new battery, heater, 4-wd, 25,000 miles, $800. Kopp, 255-3393.

'59 FIAT 600cc, $150. 3006 Dakota NE, Huddle, 265-6248.

PUPS, ½ Afghan Hound, ½ Greyhound, will make excellent coursers. Crosby, 898-0705.

WESTINGHOUSE roll-about dishwasher, $75. Cox, 255-5076 after 5:30.

BELLHAVEN, 3-bdr., 2½ baths, den, all electric kitchen, dbl. garage, 2200 sq. ft, carpeted, drapes, landscaped, $1600 under FHA appraisal, $3000 down. Crumley, 299-5293.

3-BDR., 1¾ bath, many features, FHA appraisal $15,800, 10108 Chapala. Cramond, 298-2660.

'64 FRIGIDAIRE 30" electric range, used less than one yr., $185, cost $235. Switendick, 265-0345.

AKC registered Miniature Poodles, male, black and chocolate, Veterinary approved, $60 and up, terms. Willis, 255-5814.

MOBILE HOME, 10x47, 2-bdr., AC, forced air heat, $2200 furnished, $1900 w/appliances only. Patterson, 877-3158.

MOTORCYCLE '64 Honda Dream, 305cc, 2000 miles, black and chrome, $500. Kefauver, 255-8270.

HOTPOINT electric range; Maytag wringer washer. Garrison, 256-7267.

KEYSTONE MODEL K-45 magazine load 8mm movie camera w/standard f1.5 lens and telephoto lens, $30 complete. Busby, 299-6450.

'54 CORVETTE, $850 or best offer. Spencer, 298-5061 after 5.

'50 DODGE PICKUP. Judd, 299-6536.

ROLLEIFLEX CAMERA, 4x4cm (127 film) w/ Schneider Xenar f3.5 lens, about 6 yrs. old, w/case, $35. Winter, 299-4746.

AIRPLANE, single seat, open cockpit, fully aerobatic. Reynolds, 299-0709.

WEIGHT LIFTING SET, 5½' bar w/accessories, 8 vinyl-coated weights, 80 lb. set, $12. Navratil, 299-3355.

STEEL CASEMENT WINDOW w/sill and glass, 50"L x 34"H; 4 window shutters; 6-gal. Mercury gas tank. Dollahon, 299-8107.

PARADE DRUM, snare w/stand, carrying box, sheet stand, practice pad, and beginners sheet music, $45. Montoya, 298-3830.

AWNING, 8' x 20' aluminum patio awning, never unpacked, $90. Thompson, 296-1646.

TENT TYPE TRAILER, Higgins Boat Co. Mfg., $250. Paris, 298-2939.

'55 LINCOLN CAPRI, 2-dr. HT. Hastings, 344-6818.

TRAVLER TAPE RECORDER, high fidelity, dual speakers, $65. Leyba, 265-7065.

JEEP transmission and transfer case, complete overhaul and new parts, $150. Jones, 298-3849, 10913 Los Arboles NE.

EQUILIZER HITCH, bar and springs, $15, can be reworked to fit any car or truck. Asturias, 299-4173.

'60 FORD station wagon, factory air, AT, new tires, below NADA. Cyrus, 344-9538.

'64 CHEV. 4-dr. HT, factory air, PS, extras, low milage, bronze color, below book. Morgan, 299-2850.

CAMERA Voigtlander 35mm, Prontor SVS, 2.8 lens, lightmeter, Norwood Director, $65, cases for both. Ghion, 298-9514.

HOFFMANTOWN BRICK, 3-bdr., 2 bath, carpeting, drapes throughout, fireplace, cedar closets, attached studio workshop and storage. Sandy, 299-0120.

'51 DODGE CORONET, R&H, seat belts, $150. Garcia, 255-3201.

3-BDR., family rm., dbl. garage, walled, AC, dbl. fireplace, built-in stove and dishwasher, carpet, 1401 Gretta NE. McClelland, 299-0372.

SELL OR TRADE: furnished cabin in Manzanos, screened porch, separate bunkhouse, on fenced 1-acre lot. Schelby, 344-5522.

ENCYCLOPEDIA AMERICANA w/yearbooks, 2-volume dictionary, and bookcase, $100. Smith, 10109 Maya Court NE, 299-6873.

KENMORE 30" electric range, $35; Hand cultivator and attachments; timer and parts for Kenmore washer or trade for 26" girl's bicycle. Richardson, 298-6527.

ROBERSON 3-bdr., den, landscaped, AC, hw/floors, pitched roof, 4¾ VA loan or FHA. Coonce, 296-1089.

24" GIRL'S BIKE, $20; portable sewing machine, $20; matching Samsonite suitcases, $10/ea. Leslie, 299-2040.

FIRESTONE TIRE, 9:50x14, deluxe champion, $5; antique Indian moccasins, full beaded, $12; Colt .38 revolver, $40. Smitha, 8607 Menaul, 299-1096.

'60 FALCON station wagon, new battery, rebuilt engine, R&H, $500. MacDougall, 299-8496.

'61 CUSHMAN scooter, needs first gear; 24" girl's bike; 10-gal. aquarium, needs bottom glass. Gleicher, 344-6028.

'53 FORD; Magic Chef gas range and Coolerater refrigerator, best offer. Michaels, 256-3655 after 5.

'57 RAMBLER 4-dr., original owner, 50,000 miles, AT, 6-cyl., light blue color. Weir, 299-1160.

'58 PLYMOUTH Belvedere 4-dr. V-8, PS, $395; Remington standard typewriter, $45. Chaves, 255-6155.

SUEDE WESTERN JACKETS, ladies size 12, man's size 40, new western dress slacks, size 30 waist. Wolcott, 255-0663 after 6.

BLOND DINING ROOM SUITE. includes extendable table and leaf, 6 chairs, buffet and hutch, $75 or best offer. Yarbrough, 255-4087.

KENMORE TOP LOADING automatic washer, $25. Short, 299-9494.

3-BDR., 1¾ bath, den w/fp, dbl. garage, 1700 sq. ft., equity $2800, take over payments, balance under $17,500. Watkins, 516 Hillview Ct. NE, 298-3667.

4-WHEEL DRIVE, '42 Military model Jeep w/cab. $450. Riordan, 268-1132.

ONE PAIR Corcoran combat boots, size 8½D. Williams, 298-2671.

VW TRANSISTOR RADIO for sale or trade on 12-volt transistor radio. McCoach, 298-5960.

BICYCLE, boy's 26", $20; gas range, $15; ironer, $10; Isetta, best offer; slide, $5; child's rocker. Strixrud, 298-0478.

MARQUISE CUT DIAMOND RING, .80 ct. blue-white, will sell below Fogg's appraisal. Flower, 298-0136 or 265-0689 after 5 or weekends.

TWO-WHEEL utility trailer, 4 x 8 metal box, tail and directional lights, spare wheel and tire, $50. Klecotka, 299-8198.

NAVAJO CHIEF BLANKET, very rare, 100 yrs. old. Hicks, 877-0735 after 5.

MALE PEKINGESE PUPS, AKC reg. Naumann, 298-3559.

TRAVEL TRAILER, 13' '63 Cardinal, $675. Neiman, 298-0889.

NORGE electric dryer, $35. Weber, 299-1389.

AQUARIUM, fish everything, $30; child's electric car, T-Bird, $45; mattress, box springs, $20; soft water conditioner, Ward's, $65. Chandler, 10212 Chapala NE, 298-1114.

MOTOROLA portable radio, AM and FM; Motorola TV blond cabinet; portable typewriter, needs repairs. Morrissey, 247-1130.

GE ELECTRIC RANGE, 4-burner, 30" oven. Grant, 255-6105.

BRICK, 3-bdr., den, 1¾ + ¼ bath, 1690 sq. ft., detached dbl. garage, $2000 down and assume $16,000 or refinance, or rent $135/mo. 7702 Don Dr. NE, Snowdon, 298-2190.

'51 PONTIAC, 55,000 miles, $175. McKinley, 268-4779.

USED CARPETING. beige wool Wilton, two large sections, 15 x 15 and 11 x 11, make offer. Kubiak, 265-6525.

AMMO in .270, .30-06, and .22 LR calibers; also 6mm, .270 and .30 caliber bullets at $2.50/100. Flesner, 256-6173.

STORKLINE CRIB and mattress, $25; Wonderland of Knowledge encyclopedia set, $15. Lowe, 299-7725.

AKC black male Poodle, choice of litter, very small, champion stock, 2½ months old. Myers, 877-4616.

'65 CHEVROLET IMPALA SC, FA/C, AT, R&H, PS, PB, double eagle tires, $3000. Holloman, 921 La Luz NW. 344-3274 after 5.

HOFFMAN television, 12", $60. Moya, 247-9679 after 5:30.

3-BDR. HOUSE, 1½ baths, newly decorated, capeted, north of Hoffmantown, $88/mo., $12,800 total. Mozley, 299-4204.

PLAY PEN and stroller w/adjustable backrest and removable handle. Carter, 344-6563.

DOUBLE rollaway bed, $25; apt. size refrigerator, $35; TV w/record player, $35. Browne, 344-9675.

'55 PLYMOUTH, 2 new tires and battery, R&H. Hendrix, 299-8872.

'51 OLDSMOBILE, AT, R&H, new seat covers, $150. Cox, 298-4885.

UPRIGHT PIANO, Cable-Nelson w/bench, rebuilt 1 yr. ago by Clevelands, will deliver, $200. Wilken, 299-7515.

CAST IRON circulating heater, burns coal and wood, $15; large radio cabinet, $3. Ash, 243-1869.

'58 FORD 3-speed, V-8 pickup, $425; '57 Ford 312 engine, rebuilt Fordomatic, Fairlane 500 body and differential; '58 Ford 3-speed pickup transmission. Workman, 298-8201.

'59 MUSTANG motorcycle, extra motor, $125; '60 Cushman scooter, needs work. Robert, 125 El Pueblo Rd. NW, 898-0491.

3-BDR., 2 baths, paneled den w/fp, dbl. carport, $14,000 will carry note w/low down. Butler, 299-5626.

OFFICE DESK, drop center, metal, typist type, 34" x 60" hard rubber top, 4 regular, 1 large drawer, $10. Olson, 299-0617.

'59 CHEVROLET 8, ½-ton pickup, $695; '52 CHEVROLET ½-ton pickup, 4-speed w/home-made camper. $400. Cherry, 877-3403.

FISHER XP-1 hi-fidelity bookcase speaker system, walnut, sell $50. Fergesen, 299-1501 after 5.

'55 CHEVROLET pickup, R&H, 6-cyl., 3-speed, $375. Eslinger, 298-8340 after 5.

TWO KNIGHT STEREO speaker systems w/walnut cabinets and three speakers per unit. Errickson, 256-7990.

'63 VESPA 150cc scooter, $225. Gluvna, 299-8027.

APARTMENT SIZE gas range, used 1 yr., $50. Waite, 298-2065.

SKI BOOTS, man's size 9E, Swiss-made Henke, double construction, $12. Burns, 242-2407 evenings.

LADIES 13-lb. bowling ball, Brunswick. Blakely, 299-5249.

PORTABLE SINGER zig-zag sewing machine, decorative stitching, sews on buttons, uses two needles, 3 yrs. old. Portlock, 299-3240.

17" PICTURE TUBE, used approx. 1½ yrs. Dobias, 4615 Inspiration Dr. SE, 256-7476.

HOLIDAY PARK, 3-bdr., family rm. 1¾ baths, AC, carpeted, draped, dbl. garage, walled, landscaped, assume FHA for $2650. 11605 Palm Springs NE. Howard, 298-7083.

HOTPOINT automatic washer, 1 yr. since overhaul, including new motor, $25. Caskey, 256-9701.

'64 CHEV. IMPALA 4-dr., HT, PS, AT, R&H, air, light blue, 19,000 miles, $2195. Dauphinee, 255-6367.

DEER RIFLE, .30-06 Enfield military rifle, $27.50; clothes dryer, Universal gas type, $35 or best reasonable offer. Summers, 299-4674.

YOUTH BED, Kant-wet mattress; 2 black and 1 gray kittens, Siamese mother. Rose, 298-6238.

TYPEWRITER, Royal Futura, deluxe model portable w/case. Bircher, 268-0726.

¼ CARAT DIAMOND, solitaire wedding set, white gold, $175; appraised value $275. Bartolucci, 256-6797.

CAMPER-TRUCK cambination, '58 ¾-ton Chevrolet equipped w/10' Dreamer cabover camper coach. Hansen, 898-3173.

RCA CONSOLE RADIO; electric room heater; child's musical rocking chair; child's booster seat for auto. Reinman, 256-9737.

AKC reg. Boxer puppies, show quality, excellent bloodlines, 1617 Utah NE. Bewley, 298-5728 after 6 and weekends.

'57 CHEV. 4-dr. Belair, AT, V-8, PS, R&H, Positraction, padded dash, tinted glass, $650. Weinmaster, 298-1620.

GE PORTABLE DISHWASHER, $40; K-22 revolver, $55; '59 Puegot, $300; 7' Head skis, $40, w/Cubco bindings, $30 without. Shunny, 265-1620.

'59 BUICK, 4-dr., AT, PS, PB, 40,000 miles, $795; 4-speed record changer, $22; air purifier, $9; 17" TV, $25. Johnson, 298-7020.

'51 CHEVY, 2-dr., $150. Clark, 298-7871.

CASHMERE COAT, ladies size 16 short, grey casual wrap around style, $11. Duvall, 299-8744.

FREE KITTENS, 1 male, 1 female, 8 wks. old, healthy, playful, raised to live outdoors. Lynes, 268-0144.

TV, $50. Sanger, 298-6019.

WANTED

'57 FORD V-8 engine. Gonzales, 247-1916.

26" Girl's bicycle reasonable. Richardson 298-6527.

BABY SITTING in my home, prefer pre-school-age, companion for 3 and 4-year-old boys. Garcia, 298-6312.

SMALL CEMENT MIXER, will trade Isetta or cash. Strixrud, 298-0478.

WANT to rent a building (preferably w/electricity) for storing 1-3 16' boats. Lassiter, 268-1039, or Westman, 255-6048.

VW SEDAN, body condition not important, mechanical condition good. Dunaway, 299-1422.

HOMES FOR KITTENS, orange striped and tiger striped, will deliver. Tatum, 877-0997.

SPINET OR consolette piano, prefer walnut or maple. Butler, 299-5626.

FOR RENT

NEW 2-bdr. house, $75/mo., unfurnished. Amador, 242-7728.

FURNISHED or unfurnished 2-bdr. apt., redecorated, no pets, two children limit, 8322 Trumbul SE, $90 or $70. Villella, 255-7416.

15' CAMP TRAILER for deer season, sleeps 5. Cook, 299-7509.

LOST AND FOUND

LOST—Pin of gold leaves w/pearl, prescription glasses in brown case, ceramic earring, turquoise and silver pin, man's gold Timex wrist watch. LOST AND FOUND, tel. 264-2757.

FOUND—LADIES silver ring w/diamond, ladies black gloves, white nylon scarf, tri-focal safety glasses, silver link bracelet. LOST AND FOUND, tel. 264-2757.

READY FOR THE HALLOWEEN Costume Party at the Coronado Club on Oct. 30 are (left) Dot Ives and Unis Kinoshita (their husbands Gene and George work in 5621). Both will help decorate the Club for this special event.

Halloween Party, Scandinavian Evening Big Coming Events

Two big dinner dances are on the schedule for Coronado Club members and their guests —the Halloween Costume Party on Saturday, Oct. 30, and an Evening in Scandinavia on Saturday, Nov. 6.

Join the fun Oct. 30 by wearing a costume. Prizes will be awarded for the best disguises and there's bound to be plenty of laughs. The chuckwagon buffet will be served from 7:30-8:30 (roast round of beef cut to order, shrimp creole, assorted salads, etc.), followed by dancing to the Don Lesman Combo until 1 a.m. Tickets are $2.50 for members, $3 for guests. Reservations are requested by Oct. 27 at the Club office. tel. 264-4561.

If you're a gourmet or even a little bit adventuresome when it comes to food, don't miss An Evening in Sandinavia. The menu lists Kod Boller, Bbenelose Fugle, Fleskesteg, Banke Kod, Rodkaal, Risengrod, Stegte Kartofler, Earter og Guberoden, Rodbeden Salat, Agurk Salat, and Able Kage, but don't be alarmed, something is bound to look familiar. The smorgasbord will be available from 7-9 p.m., followed by dancing to the Arlen Asher Orchestra. Tickets are $3 for members, $3.50 for guests. Reservations are due by Nov. 3.

Other Club Activities

Social Hours

A Mexican buffet and music by the Lamplighters will highlight tonight's social hour at the Club. On Friday, Oct. 29, El Nuevo Brass will play for dancing and the seafood buffet will be served. These buffets are $1.25 for adults and $1 for children.

Teenage a Go Go

Especially planned for teenager's enjoyment will be Saturday evening's Teenage a Go Go party at the Coronado Club. A spaghetti buffet will be served from 6:30 to 7:30 and there will be music for dancing from 7 to 10 p.m. The price—50 cents per person.

Coronado Club Announces New Lower Dues

The Coronado Club Board of Directors has announced lower fees for membership and season swimming tickets.

In a letter to Club members, the Board points out that the quality and variety of services that the Coronado Club can offer its members is closely related to the number of members belonging. "This last year has been a very successful year, and we intend to make the next one even better," the letter continues.

Effective Jan. 1, 1966, the Federal excise tax on dues will be removed, and this savings will be passed on to members. Monthly dues will be reduced from the present $3 to $2.50. Semi-annual dues will be $13, and annual dues $25.

Next summer, season swimming tickets will be only $5 per family or $2.50 per individual for persons who have been members continuously since Nov. 1, 1965. (Swimming fees during the 1965 season were $28 per family and $8 per individual.)

From now until Jan. 1, 1966, former members may rejoin the Club by just paying a month's dues—the penalty provision usually applied in such cases has been waived.

During noon hours, Oct. 25-29, Club memberships will be on sale in the Tech Area I cafeteria and in the lobby of the Club.

With an increased membership, spurred by the price reduction of dues and swimming tickets, the Club Board plans to increase the variety and quality of Club activities.

The popular entertainment schedule will continue throughout the winter featuring Saturday night dances alternating with special theme dinner-dances once or twice a month; social hours and buffets every Friday; and a wide variety of special activity groups (bowling, skiing, bridge, swimming, and Sanado Women's Club).

The recently redecorated Eldorado room is available for small parties and meetings.

Sandia's Safety Scoreboard

Sandia Laboratory:

116 DAYS
4,060,000 MAN HOURS
WITHOUT A
DISABLING INJURY

Livermore Laboratory:

127 DAYS
628,500 MAN HOURS
WITHOUT A
DISABLING INJURY

Sandia Director Is Session Chairman at Air Force Symposium

T. B. Cook, Jr., Director of Nuclear Burst Physics and Mathematical Research 5200, was chairman of a session during the 12th Annual Air Force Science and Engineering Symposium held Oct. 12-14 at Brooks AFB, Tex.

He was chairman of a classified technical session on Weapons and Weapons Effects and represented the U.S. Air Force Scientific Advisory Board. He has been a member of this board since April 1964 and for several years prior was a consultant to the same group.

The Office of Aerospace Research was host of the symposium in connection with the Air Force Systems Command.

Events Calendar

Oct. 23—Grand Ballet Classique de France, Community Concert series, Civic Auditorium.

Oct. 24—Peralta Canyon, N. M. Mountain Club, leader Hans Baerwald, tel, 298-1526.

Oct. 27—Jan Peerce, Albuquerque Civic Symphony Benefit Concert, Civic Auditorium.

Oct. 23-27—Second Biennial Crafts Exposition of Albuquerque Designer-Craftsmen, Botts Memorial Hall, 423 E. Central.

Oct. 30—Football, UNM vs. San Jose State, 1:30 p.m., tel. 277-0111.

Thru Oct.—Aspencades in wooded areas of northern New Mexico and southern Colorado.

Oct. 31—Ghost town of Hagan, N. M. Mountain Club, leader Homer Musgrave, tel. 255-5152.

This listing is for the convenience of employees. No endorsement is implied.

AL WINKELJOHN (9313), left, leads the national Jaycee convention parade in Buffalo, N.Y. His work in the Jaycees was instrumental in placing the New Mexico organization in the number one position.

Jaycee Al Winkeljohn Helps Lead New Mexico in 'Parade of States'

"Earth's great treasure lies in human personality . . . Service to humanity is the best work of life."

—From the Jaycee Creed

Al Winkeljohn (9313) loves a parade. Especially when he's leading it while carrying a banner proclaiming the New Mexico Junior Chamber of Commerce the nation's number one Jaycee state organization. The parade was staged last summer on the main street of Buffalo, N. Y., during the national Jaycee convention.

Al played a "Key Man" role in earning the honor for the New Mexico Jaycees. Al started the year by being elected a vice president of the Albuquerque Chapter, but he resigned in mid-year to participate in Sandia's RFD-2 operation. (Al was with the Aerospace Nuclear Safety Division III personnel stationed at Wallops Island, Va., for two months.) When he returned to Albuquerque, the state Jaycee organization was conducting an extensive membership campaign. Five new chapters had been established in the state and someone was needed to give the new clubs guidance in building organizational strength. Al accepted the job and spent the rest of the year "on the road" during weekends and off hours.

He traveled extensively visiting the new clubs. When not on the road, he ran his own "paper mill" of correspondence and guidance. Al was responsible for implementing programs in the new chapters to develop leadership abilities in individual members, structuring committee functions, and introducing the "basic 10" programs which Jayee chapters must conduct to keep their national charter. The programs include participating in local government, developing youth recreation activities, accepting broader responsibilities in the local community, and training membership.

These programs are the areas that are judged by the national Jaycee organization for position in the "Parade of States" national ranking of chapters. Al's work was instrumental in obtaining the number one position for New Mexico.

The Jaycee Key Man Award was presented to Al by the state president this year. This award is given each year to no more than three men who have made significant contributions to the state organization. It represents hours of work and the highest idealism.

"Like most new members," Al says, "I joined the Jaycees for dinner and a night out once a week. But it doesn't work that way. Service organizations such as the Jaycees have a way of promoting awareness of individual community responsibility and offer innumerable ways to make a contribution. I did things that I wanted to do, things that I felt were important, and I enjoyed every minute of it. You get a real sense of satisfaction from these activities."

Al is currently State Director for the Albuquerque Jaycees. He is a member of the Board of Directors of the state and local organizations, and is responsible for a number of state Jaycee programs, including the "Howdy Amigo" project. On this project, Jaycees promote subscriptions of NEW MEXICO MAGAZINE in support of economic and industrial development of the state. The Jaycees hope to double the national distribution of the magazine to 100,000 copies.

On the local level, Al is involved in preparations for the upcoming 1966 United States Indoor Track and Field Championships which the Albuquerque Jaycees will sponsor here Mar. 4-5. For the first time in 40 years, the meet will be held outside New York City.

"This will be a national event," Al says, "and already there is much interest in it. Entire sections of Tingley Coliseum have been sold. Seats in a center reserved section are available to Sandia employees. Call me at home, tel. 292-1592 for reservations."

In addition to the state Key Man award, Al holds several other citations from the Albuquerque Jaycees, and the "Sparkplug" and "E" (for Chapter Extension) Award from the National Jaycees. He has been active in Jaycees for six years.

(One other Sandian—Don Graham (3432)—holds a state Jaycee Key Man award, earned in 1959.—Ed.)