

Thank You, ECP Donors . . .

The Employees' Contribution Plan Committee extends its sincerest appreciation to the 6118 employees who made this year's ECP drive the most successful yet. The Committee is particularly gratified that 81.2 per cent of all Sandia employees are now members of the Plan. The result offers continued evidence that the Sandia employee body can be counted on to give full support to those civic projects which are vital to a progressive, growing community.

J. W. HOOK, Chairman
ECP Committee

'62 ECP Campaign Complete Results Are Better Than Ever

Final statistics have been tabulated for the 1962 Employees' Contribution Plan fund drive. Funds raised during the drive total \$183,253, with an increase of \$25,669 over last year's total.

Sandia employees contributing to the Plan total 89.5 per cent of Sandia's population. Members of the Employees' Contribution Plan now total 81.2 per cent, with 77.7 per cent having joined through payroll deduction, and 3.5 per cent, through cash contribution. Participation in the Plan has increased 5.2 per cent since last year.

The average contribution per ECP member totals \$30, with an increase of \$3.18 over last year's average. The average contribution per contributor totals \$27.71, with a \$3.25 increase over last year.

Here's a summary of total funds raised by ECP since inception of the plan in 1957:

Year	Funds Raised	Increase Over Previous Year
1957	\$106,000	\$42,500
1958	121,200	15,200
1959	130,000	8,800
1960	136,740	6,740
1961	157,584	20,844
1962	183,253	25,669

Strong Back-to-School Urge Being Displayed at Sandia

The urge for self improvement has touched 1876 Sandia Laboratory employees this semester. This total includes the 447 Sandia employees attending the University of New Mexico under the Educational Aids Program and Technical Development Program plus the 1429 employees enrolled in Sandia's Out-of-Hours Educational Program.

In the Educational Aid Program, 340 Sandians are studying various subjects. The largest single group—95—is majoring in electrical engineering. Fifty-four are pursuing degrees in mechanical engineering. Chemistry is the field for 13, mathematics for 21, and civil engineering for eight.

Under the Educational Aids Program, Sandia Corporation pays half of the student's tuition.

One hundred and seven Sandians are enrolled in the Technical Development Program. This figure represents two classes, one scheduled to complete the program in 1963 and the second in '64. Electrical engineers number 74 and mechanical engineers number 33 in this program.

Technical and Trades Training Division 3132 administers the Out-of-Hours courses. University level, Technical Institute level, and Trades and Clerical level classes are taught. Instructors are drawn from the entire laboratory and are experts in their fields. Classes are held during the noon hour and after work.

Out-of-Hours courses are offered by Sandia's Training organization because necessary instruction is not available in public institutions at hours suitable to employees.

In the trades and clerical area, 355 Sandians are enrolled in classes designed to support the Laboratory's skills areas and apprenticeship programs.

Technical Institute classes have 325 Sandians enrolled. These courses are especially designed for staff assistants who do not have a technical institute background, and for graded employees interested in obtaining the knowledge. Curriculums are offered in Electronic Technology, and Industrial Technology.

University level courses have attracted 749 employees. Division

3132 concentrated on offering the kind of knowledge needed to keep abreast of new technological advances. Some of these courses are Introduction to Plasma Physics, Nuclear Reactor Control, High Vacuum Technology, Electrons and Phonons, Simplification and Design of Logic Circuits, Survey of Shock and Vibration Analysis and Problems, and Surface Chemistry.

"More and more, Division 3132 is moving in the direction of dealing with special areas of knowledge and interests," Howard R. Shelton, supervisor of Out-of-Hours Training and Education Section 3132-1, said. "In this way, we can feed into the Laboratory staff new knowledge that will help in performing Sandia's complex and exacting job."

Efforts of Many Sandians Contribute to Success of 1962 Goal-Topping UCF Drive

Recent record success of the Albuquerque United Community Fund drive reflects the dedicated efforts of many Sandians. As of the final report luncheon on Oct. 31, the 1962 drive raised a total of \$769,136 for the 25 UCF agencies, some \$65,000 more than the goal of the drive and some returns are still to come. This was the first time since 1957 that UCF contributions had met the goal. (Last year the drive fell approximately \$100,000 short of the goal.)

K. A. Smith, Director of Information, Publications, and Public Relations 3400, served as one of the three community Vice Chairmen. His organization solicited three major divisions: Atomic installations; Schools, Colleges and Hospitals; and government agencies. These efforts raised more than half the UCF goal: \$352,326. Goal for this part of the drive was \$319,900.

Heading the UCF Atomic Division was W. Lee Hancock, manager of the AEC's Sandia Area Office. This Division raised \$256,259, the largest amount of any Division in the drive. Employees of Sandia Laboratory contributed well to UCF. The

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READOUT INSTRUMENTATION for calibrating thermometers is demonstrated by Nancy Starrett (2411), right, to Jean Rogers (7223), left, and Patricia Gleasman (5132). All three are technical institute graduates.

Women Graduates of Technical Institutes Assisting Sandia's Scientists, Engineers

In recent months Sandia Laboratory has added to its staff three young women, summer graduates of technical institutes, who are assisting scientists and engineers.

Only five years ago, nearly all engineering technicians were men. However, high school aptitude tests indicated that many girls could be-

come first-rate technicians, and the female sex has begun to infiltrate technical institutes.

Patricia Gleasman helps J. E. Hesse of Applied Research Division 5152 in the preparation of chemical products for various experiments. She studied chemical technology at Broome Technical Community Col-

lege, where she received an Associate in Applied Science degree. "I went to Broome because it offered the kind of chemistry program I wanted," Pat said.

The campus at Binghamton, N. Y., is only 60 miles from her home at Elmira. During her second year, Pat worked two hours a day in the chemical lab. There were two other girls in her graduating class out of an original enrollment of six.

Jean Rogers and Nancy Starrett were classmates at the New York State Agricultural and Technical Institute at Alfred. They majored in engineering science and also received Associate of Applied Science degrees. There were nine other girls in their class. Both Sandians agree that they chose the school because of the courses offered. Nancy is from Byron, N.Y., 80 miles from Alfred, and Jean is from Andover, seven miles distant.

At Sandia Lab, Jean assists two Staff Members in Advanced Development Division 7223 in their work on an electro-chemical memory device. Nancy is assigned to Physical Standards Division 2411 where she helps calibrate thermometers.

Technical institutes were introduced into the American educational system in 1895 (patterned after the well-established *Technikum* in Germany), but it took the manpower shortages of World War II to point up the need for properly-trained supporting personnel to free engineers and scientists for the development of new design concepts.

The Engineers' Council for Professional Development is responsible for accrediting curriculums at technical institutes which must give qualified students a practical knowledge of fundamental principles in a selected technical field.

total Laboratory contribution was \$145,485. Mr. Hancock also served on the UCF Board of Directors as did S. P. Schwartz, Sandia Corporation President.

W. C. Scrivner, Personnel Director 3100, served as Chairman of the Schools, Colleges, and Hospitals Division. His organization of solicitors raised a total of \$52,383 for UCF. The goal was \$50,400.

W. C. Kraft, manager of Component Test Equipment Development Department 2450, headed a soliciting section in the Major Firms Division B. His group contacted 63 communications, manufacturing, and transportation firms and raised a total of \$13,600. This section's goal was \$7800. G. L. Morrisroe (2625) served as a Captain in this section.

Assisting with the auditing activities of the fund drive were H. V. Catt (6021), L. H. Best (4151), and R. W. Thorp (4123). These three Sandians worked with members of the Albuquerque Chapter of the New Mexico Society of Certified Public Accountants tallying receipts and auditing the drive. This function was kept current as the soliciting sections reported results.

W. R. Rosenberg, Assistant Purchasing Agent, Commercial Department 4360, again headed solicitor training for the UCF drive. He was assisted by George C. Wayland (3433).

A. E. Hall (4221) was a member of the Speakers Division which made presentations to business firm's employees, civic clubs, and other groups. Speakers explained UCF goals, and showed a special Albuquerque UCF film strip.

This visual presentation, news releases, and feature stories were prepared by the UCF Publicity staff headed by J. W. Galbreath, manager of Public Relations and Employee Publications Department 3430. He was assisted by R. C. Colgan and J. E. Mitchell (both 3431), and Lab News photographer B. K. Laskar (3432).

W. H. Chandler (3111) headed the UCF Budget Review committees. These groups reviewed and evaluated the budget requests of UCF agencies and recommended the final goal of the drive.

Other Sandians served as solicitors, and committee members, and contributed greatly to the success of the drive.

Editorial Comment**Veterans Day—A Day to Think**

As an ambulance driver during the fighting on the Italian front in the summer of 1918, Ernest Hemingway made this observation: "There were many words that you could not stand to hear and finally only the names of places had dignity . . . Abstract words such as glory, honor, courage, or hallow were obscene beside the concrete names of villages, the numbers of roads, the names of rivers, the numbers of regiments and the dates."

November 11 will be celebrated as Veterans Day. Before 1954, it was known as "Armistice Day," for it was set aside to commemorate the end of World War I. It is generally celebrated with thoughts about war and peace, and about the price of freedom.

Many words have been written about glory and honor and courage in connection with Veterans Day, so many, in fact, that the original vitality of the words and phrases has been lost.

There is, however, a meaning to be found in the names and statistics for which we paid such a great amount.

Here are some names: Pershing. Foch. Petain. Ludendorff. Chateau Thierry. Ypres. Verdun. Caporetto. Vimy Ridge. Stilwell. Montgomery. Spaatz. Eisenhower. Doenitz. Tojo. Heydrich. Warsaw. Lidice. Stalingrad. Dachau. Bergen-Belsen. Monte Cassino. Katyn Forest. Bastogne. Tarawa. Midway. Iwo Jima. Hiroshima.

Here are some statistics. Total casualties (killed, wounded, missing) for World War I (all nations): 37,490,000. Americans killed in action during World War II: 292,100 (one from each 450 members of the 1940 population). Germans killed and missing for the same conflict: 2,850,000 (one from each group of 25 Germans in 1940). The direct cost of mobilizing 12,000,000 American men during World War II: \$350,000,000,000.

While it is many other things, Veterans Day is also a day to think about these figures, and names of men and places.

A New Christmas Greeting

The greetings of Christmas have long been a tradition. Among peoples who hold the festival of the birth of Christ to be a time for the practice of Christ's teaching, they mean the renewal of fellowship and brotherhood.

In an earlier time, when life was slower, easier, whole families would trudge from household to household to present their Christmas greetings personally. Today, some continue this tradition.

But today many friends are far-off and the personal visit is impossible. The Christmas greeting card still fills our need to extend best wishes to these friends. At the same time a new custom is being created and is followed by an increasing number of people. Demonstrations of compassion for the less fortunate are becoming the method of expressing the Christmas spirit.

For the past several years Sandia employees have pooled funds for projects otherwise too expensive for the individual contributor. Some establish hot lunch programs for children in need of them. Others purchase shoes for children. Many work with local welfare agencies to locate families who need help.

Sandia employees should consider continuing the charitable tradition this Christmas season.

Such charity, practiced with good intent, and bestowed so that we remain anonymous to the recipients of our charity, and they to us, is good. It is a way of re-affirming the lesson of Christmas: all men are brothers.

Closed Chest Heart Massage Is for Experts

By S. P. Bliss, M.D.
Sandia Corporation Medical Director

Closed-chest cardiac massage should only be performed by trained individuals, according to the American Heart Association, the American Red Cross, and the Industrial Medical Association.

In a joint statement, the three organizations noted that: "The closed chest method of cardiopulmonary resuscitation has been proved effective as a medical procedure in certain cases of stoppage or disruption of heart beat. However, it is to be considered a temporary method and additional medical treatment, which may include the use of drugs and an electric defibrillator, is usually required to restore the circulation permanently.

"The heart beat may stop as a result of a variety of conditions or circumstances such as water submersion, electrical shock, asphyxiation, heart attack, or during anesthesia or surgery. Most people who experience sudden cardiac arrest cannot be saved even under ideal circumstances in a hospital. The

least measure of success has been experienced in coronary heart "attack" cases. However, the prompt use of cardiopulmonary resuscitation has enabled lives to be saved which previously might have been lost. The new technique of closed chest massage makes it possible to continue blood circulation without opening the chest, thus greatly extending the possibilities for attempting saving of life. Consequently, it is the desire of all concerned to achieve widespread use of this method where it can be used safely and effectively.

"The public should be advised, however, that the application of closed chest cardiopulmonary resuscitation calls for a working diagnosis of the victim's condition. It is important to be sure that the circulation has actually stopped because the method involves certain hazards. Reported injuries to patients have included damage to the heart and liver, internal bleeding, multiple rib fractures, and puncture of the lungs.

"In untrained hands, the risk of injury is increased. It is particularly important to avoid the possibility of inflicting serious injury on a person under the mistaken impression that cardiac arrest has occurred when the individual has simply fainted or lost consciousness from some other cause.

"Successful application of closed chest cardiopulmonary resuscitation depends on thorough and careful training. One is most unlikely to be able to achieve artificial blood circulation by this method if his only training is from reading written instructions.

"In view of these facts, it is suggested that closed chest cardiopulmonary resuscitation be applied only by carefully trained personnel so that it may be utilized with the greatest safety and effectiveness."

The organizations added that "emphasis should be placed at this time on training physicians, dentists, nurses and especially qualified emergency rescue personnel so that the procedure will become more widely available."

Retiring**Zena Ivey**

Zena Ivey, a Sandia Laboratory employee for the past 11 years, will retire Nov. 30. She is a typist-compositor in Review and Reports Division 7513, where she's been since beginning her Sandia career.

Prior to coming to Sandia, Mrs. Ivey was associated with

Kistler-Collister department stores in Albuquerque. She intends to remain here after retiring.

"I don't plan on travel, other than summer vacation trips with my daughter who lives in Albuquerque, and an occasional visit to Houston, Tex., to visit my other daughter," she said. She plans to spend additional spare time on her hobbies, bridge and gardening.

**Ibre Lee Brazell**

Ibre Lee Brazell will retire Nov. 30 after more than 10 years at Sandia Laboratory. He has been assigned to Labor Support Section 4575-1 in recent years.

For the past 20 years, Mr. Brazell and his wife have owned two and a half acres of land in the

South Valley (at 1421 Lakeview SW). Now there will be more time to devote to raising vegetables, calves, chickens, and flowers.

Mr. Brazell also enjoys visiting his daughter, who raises thoroughbred quarter horses on a ranch near Estancia.

The couple has two other daughters and a son in the Albuquerque vicinity, and a second son in Farmington.

**David M. Reid**

David M. Reid, supervisor of Janitor Service Section 4574-3, will retire Nov. 30.

During 10 years at Sandia Laboratory, much of Mr. Reid's work has been on night shift. "It will be hard getting used to three meals a day instead of a sandwich," he noted.

Mr. Reid and his wife live at 505 Valencia Dr. SE. Their two married daughters also live in Albuquerque.

The couple will probably take a trip to California. Mr. Reid would also like to visit Scotland, his birthplace.

He has been a "rockhound" for some 30 years and both he and his wife enjoy hunting.

**Elauterio S. Torres**

Elauterio S. Torres (4575-2) will retire Nov. 30 after more than 12 years at Sandia Lab.



He was in the janitor service organization most of the time, but for the past two years has been assigned to Grounds Maintenance Section.

Mr. Torres, his wife, and daughter live at 1115 Cerro Vista SW. The couple has two other daughters and a son—all married. One of their children lives in Alaska, but Mr. Torres felt that the "days are too short and it's too cold" to visit there.

He anticipates being kept busy at home: "I think my wife will be the hardest-to-please boss I ever worked for," he said.

Richard M. Sanchez

After 10 years of employment with Sandia Corporation, Richard M. Sanchez will retire Nov. 30. He is a dismantler in Processing Salvage Division 4621.



Mr. Sanchez and his wife will remain in Albuquerque at 1809 Marble NW. They have three married

children residing here and one in San Francisco. They plan an extended visit with their son in California.

Upon return to New Mexico, Mr. Sanchez plans to catch up on hunting and fishing.



Laura Donna Kenna (7146/3126)

Take a Memo, Please

Be aware of safety rules. It takes an accident to awaken some to the realities of safe living.

Sandia Speakers

Following is a list of speakers, titles, and places of presentation for recent talks presented by members of Sandia Corporation:

John L. Colp (7112-1), "The Aerospace Nuclear Safety Program," Naval Reserve Research Company 8-7, Albuquerque, Oct. 3.

Dorris M. Hankins (5412), "The Seismic Waves," Instrument Society of America, Albuquerque, Oct. 11.

B. O. Allen and W. W. Westman (both 2442), "Reliability Assurance for Custom Testers," Western Electric Tester Symposium, Columbus, O., Nov. 7-9. Mr. Westman made the presentation.

E. S. Roth (2564-1), "Dimensioning and Tolerancing of Plastic Parts," Rocky Mountain Section of the Society of Plastic Engineers, Denver, Colo., Oct. 25.

S. L. Johnson (4542), "Design Considerations Affecting Ease of Maintenance and Modification," 1962 Interplant Factory and Plant Engineering Conference, Kansas City, Mo., Nov. 13-15.

Robert L. Johnson (7244-1), "Developments Toward Substitution of an Expendable Light Source for the Mirror System," White Sands Missile Range Section, Society of Photographic Instrumentation Engineers, Nov. 8.

J. H. Banker (7244), "Measurements with Film Plane Image Motion Compensation Techniques," White Sands Missile Range Section, Society of Photographic Instrumentation Engineers, Nov. 8.

Ronald L. Johnson (7244-2), "Common Applications of Plate Cameras," White Sands Missile Range Section, Society of Photographic Instrumentation Engineers, Nov. 8.

G. L. Miller (7244), "Optical Measurements for the Sandia Corporation Rain Erosion Program," White Sands Missile Range Section, Society of Photographic Instrumentation Engineers, Nov. 8.

D. H. Anderson (5132), "Nuclear Magnetic Resonance Studies in Alpha-Fe₂O₃," American Physical Society Meeting, Cleveland, O., Nov. 23-24.

J. R. Brathovde (5414), "A Converging Beam Automatic Neutron Diffraction Assembly," the 20th Pittsburgh Diffraction Conference, Pittsburgh, Pa., Nov. 7-9.

R. T. Meyer (5153), "Chemical Kinetics Research Using a Flash Photolysis-Time-of-Flight Mass Spectrometer Apparatus," Chemistry Seminar, University of New Mexico Department of Chemistry, Oct. 19.

O. E. Jones (5133) and A. T. Ellis, California Institute of Technology, "Longitudinal Strain-Pulse Propagation in Wide Rectangular Bars. Part I-Theoretical Considerations. Part II-Experimental Observations and Comparison with Theory," annual winter meeting, American Society of Mechanical Engineers, New York City, Nov. 25-30. Mr. Jones will present both papers.

Sandia Authors

Current or forthcoming articles authored by Sandia Corporation employees include the following:

W. B. Benedick 5133), O. E. Jones (5133), and F. W. Neilson (5130), "Dynamic Yield Behavior of Explosively Loaded Metals Determined by a Quartz Transducer Technique," November issue, *Journal of Applied Physics*.

Howard Burgess (2444), "Single-Tube, Very High Frequency Receiver," July issue, *Popular Electronics*; also to appear in the magazine's 1962 Year Book.

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Editor: Robert S. Gillespie
Sandia Corporation, Albuquerque, New Mexico
Editorial Offices

Sandia Laboratory
Albuquerque, New Mexico
Employee Publications
Bldg. 610
Tel.: 256-4411, Ext. 25253

Livermore Laboratory
Livermore, California
Publications & Public Relations
Bldg. 912
Tel.: Hilltop 7-5100, Ext. 2395

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Sandia Lab Cleanup Campaign Aimed At Housekeeping for Better Safety

Clean-up at Sandia Laboratory begins Monday, Nov. 19 and will extend through Friday, Dec. 14. A program of the 4500 and 4600 organizations, the clean-up will clear work areas of unwanted or unused equipment and also reduce fire hazards and improve safe working conditions.

Grounds Maintenance Section 4575-3 is already concentrating on clean-up of outdoor areas. The "big push" inside starts next week. All employees are asked to lend a hand.

Material may be sent to reclamation without paper work. Call ext. 38241, Material Handling Section 4614-2, to make arrangements for pick-up of unwanted material.

If accounting credit is desired for items sent to reclamation, attach a tag with the individual's name, organization number, and telephone extension. Organization 4622 will prepare the DTR form and arrange credit. Refer questions concerning this to W. E. Hall at ext. 20262.

Employees are advised to clean

out desks, storage cabinets, and work areas. Small trash should be put in dumpsters; large bulky trash should be placed near a dumpster for pickup. Cardboard cartons are available from Division 4624, ext. 44144.

Employees are urged to have only one day's supply of flammable liquids in buildings, and to discard partially used cans of paint, lacquer, or thinner. Acetone, alcohol, or other flammable liquids should be stored in approved safety cans. Used rags should be placed in approved containers.

Fire inspectors will be checking all buildings, and fire hazards will be reported to supervisors for correction.

Inspectors have noticed excess material in most laboratory areas. Idle equipment to be used in the future should be placed in storage. Call ext. 54208 to arrange for transportation to storage. Material going to storage will require a completed form SC 6370-F.

Christmas Seal Sale Gets Boost from Sandia Volunteers

Christmas seals, the sole fundraising source for the National Tuberculosis Association, will be delivered to 33,000 Bernalillo County homes on Nov. 13.

W. T. Moffat (7240), president of the Bernalillo County Tuberculosis Association, announces that the 1962 goal is \$40,000—an increase of \$5,000 over last year. Of this fund, six and one-half per cent is sent to the national organization; the balance remains here.

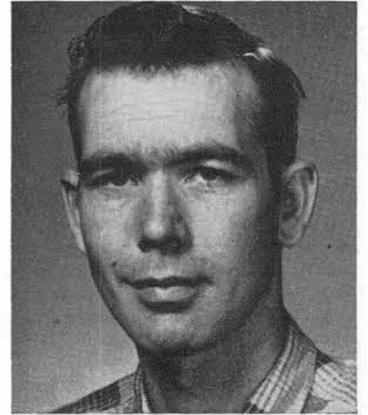
Other Sandians who are active in the Bernalillo County unit are G. A. Fowler (7000) and C. M. Clendenin (7242-3), both members of the board of directors.

Local funds are used in a number of different ways. A permanent clinic, which is held Mondays and Thursdays at the County Health Center, has replaced the former mobile chest X-ray units. The association is responsible for the yearly tuberculin testing of some 6600 food handlers. In addition, school children are given similar tests in the second, fifth, and eighth grades. Parochial schools were added to the public schools in this particular program last year. The Tuberculosis Association also furnished physicians with technical information on all respiratory diseases.

The Bernalillo County Tuberculosis Association is not included among the agencies in the Sandia Laboratory Employees' Contribution Plan.



Frank Statzula



Everett Breeden

—They knew what to do in an emergency—

Two Sandians Demonstrate First Aid Help Does Save Lives

You never know when first aid training might be useful. This was illustrated recently in two separate incidents involving Sandia Laboratory employees.

Frank Statzula (3311) administered aid in a pedestrian-auto accident near the Nevada Test Site; Everett V. Breeden (4513-2) had occasion to use his first aid training after a hunting accident in New Mexico.

Frank was driving from Mercury to Las Vegas, Nev., on a hot afternoon. Near the Lee Canyon turnoff he witnessed the accident. Eight-

year-old John Drown had tried to run across the highway to get a drink of water from a maintenance truck. An approaching car, unable to stop in time, struck the boy.

The youngster received critical head injuries, a broken leg, many contusions, and displayed symptoms of internal injuries. He was in shock and his mother was near hysterics.

Frank calmly took charge of the situation. He refused to permit the child to be moved, brought the hemorrhaging under control, made the boy as comfortable as possible, then soothed the mother's anxiety. When the doctor and ambulance arrived, the physician credited Frank's first aid application with saving the boy's life.

Frank is a retired Navy Chief Pharmacist's Mate and had many years of first aid training, as well as considerable experience.

The hunting accident occurred in the vicinity of White's Peak, northwest of Las Vegas, N.M. Everett Breeden's uncle and another Albuquerque man had shot two bucks. As they approached, the larger buck got to its feet, gored the latter man in the arm, and tossed him into the air. The deer ran on 75 ft. before falling dead. Everett's uncle ran into camp for help. Everett grabbed his first aid kit and went to the scene of the accident.

Everett used an Army-type pressure pack to stop the severe bleeding and bandaged the man's arm. En route to a Las Vegas hospital, he had to use thumb pressure when one of the wounds re-opened.

Everett received his first aid training while in the service six years ago. Last week he began another first aid training course, which is given to men in Sandia Lab's carpentry shop.

Several first aid courses will be given by Technical and Trades Training Division 3132 in coming weeks. The schedule will be announced in the Lab News.

Programmed Learning Methods Used To Train Sandia's New Secretaries

The first requirement of a newly-employed Sandia Laboratory secretary is to become familiar with the Office Procedures Manual. This manual, prepared by Business Methods Department 4110, describes forms, methods, and procedures for handling correspondence at Sandia Corporation. It also contains important chapters on handling classified documents and the operation of accountability stations.

In the past, Technical and Trades Training Division 3132 conducted several classes each year for secretaries to familiarize them with the manual. Mary Williams of the Division taught the classes using standard lecture methods.

Since June of this year, the teaching method has changed radically, but results equal or surpass the lecture method.

Using the principles of programmed learning, Mary reduced the course content to a step-by-step progression of information containing many references to the manual and exercises to test progress. Formal classes are no longer held. New secretaries report to Division 3132 and are issued a workbook. They study at their own pace on their own schedule.

"The workbook text can also be mailed to secretaries at Sandia sites," Mary said, "which provides them training not previously pos-

sible." The program is being evaluated for possible use at Livermore Laboratory.

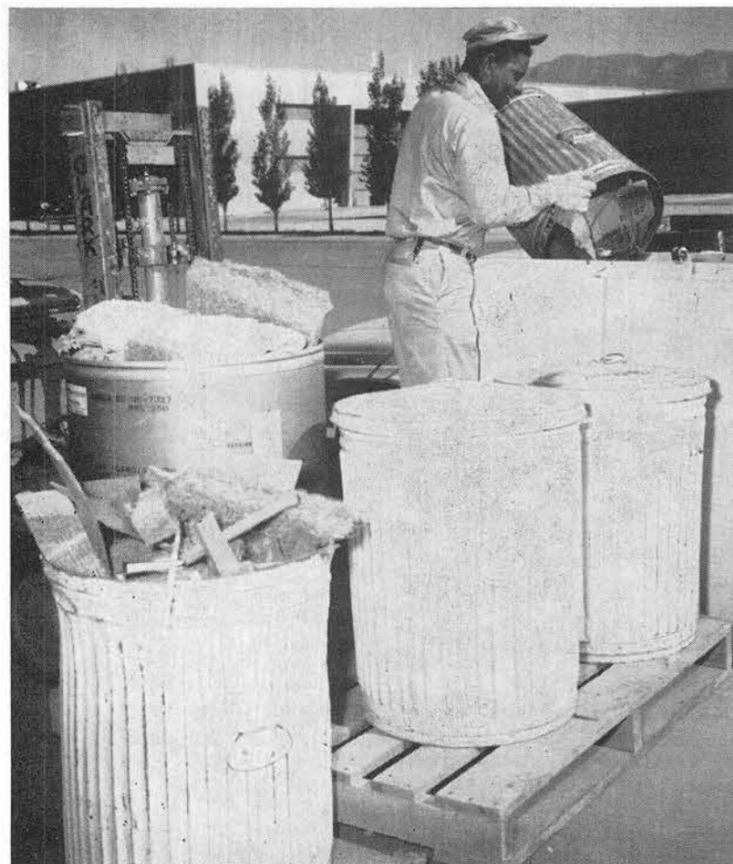
Twenty-one women have completed the workbook since its use began. All have been enthusiastic about the program and have made suggestions for improvements. The material has been revised several times.

"As in all programmed learning," Mary said, "the student's reactions are important. The material must do its job of teaching or be revised until it does."

After completion of the workbook, students can "practically quote chapter and verse" of the Office Procedures Manual and can use it rapidly as an aid in their work.

Mary is now doing additional work on the text to incorporate audio-visual materials. When finished, the "package" will be a completely self-contained teaching unit.

Mary has been at Sandia since 1951 and a member of the training organization since 1953. She had taught commercial subjects in high school and at Moser's Business College in Chicago before joining Sandia. She has held positions as secretary to the Dean of Students at the University of Chicago and secretary to the Educational Director of the Institute of General Semantics.



OUT IT GOES — Trash is emptied into dumpster by Jessie Waddles (4624) as part of a campaign to clean up and put in order Sandia Laboratory areas. Campaign begins Nov. 19, continues through Dec. 14.

Selective Service Classifications Explained by Deferment Advisor

The current world situation has increased the number of inquiries received by Sandia Laboratory's military deferment advisor. Accordingly an explanation of some of the present Selective Service classification numbers is of interest.

"I-A" is the first category in any induction list, but usually a man doesn't know about the six sub-categories. The "1" sub-category comprises delinquents; "2," volunteers; "3," nonfathers of ages 19 through 25 with the oldest called first. These three sub-categories are being called at present. Sub-category "4" is fathers, 19 through 25, with the oldest called first—none of these have been drafted since the Korean conflict. Number "5" is registrants, 26 and older, youngest called first, and "6" is registrants, 18½ and not yet 19, oldest called first.

Other classifications include:

I-D Member of a Reserve Component (usually no prior military service)

I-R Standby Reserve (available for duty)

I-Y Limited duty in an emergency (similar to IV-F)

II-A Occupational Deferment (except agriculture). Almost 200 Sandians fall in this category.

II-S Occupational Deferment Student (a new employee hired direct from college may not receive his change to II-A for several months)

II-R Standby Reserve (not available because of critical occupation)

III-A Dependency Deferment III-R Standby Reserve (not available due to dependency deferment)

IV-A Completed Service: Sole Surviving Son (usually men under 26)

IV-B Elected Officials

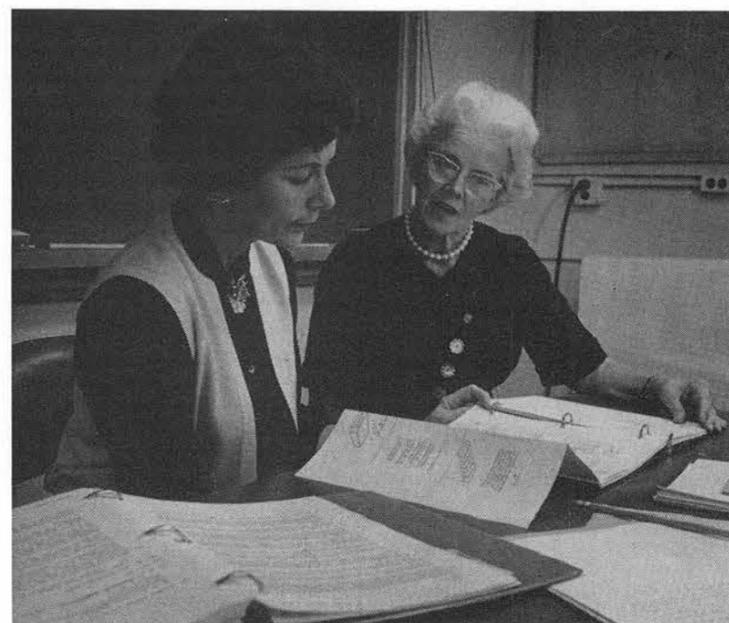
IV-F Unfit for Service

IV-R Standby Reserve (not available)

V-A Over Age of Liability (usually 26 or older)

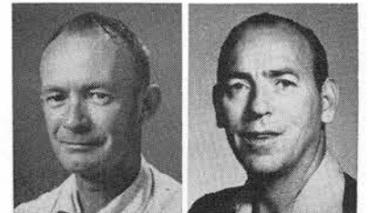
Some Selective Service Boards write in "Not Available" rather than stating the classification II-R, III-R, or IV-R.

Employees are responsible for keeping their Selective Service Board informed within 10 days of any change in status, change in address, or change in dependency. This board is the one where original registration was made. Employees are also requested to inform M. J. Seknan (3121-2), ext. 23155, of any change in military status.



INSTRUCTOR MARY WILLIAMS (3132), right, discusses workbook text with student Ethel Anderson (3126/4342). The programmed workbook has replaced formal classes on use of Sandia's Office Procedures Manual.

Service Awards 15 Years



Kenneth J. Urquhart 1431 Nov. 17, 1947

Burton S. Snow 7254 Nov. 18, 1947



Dorothy C. Willis 4171 Nov. 19, 1947

Lee W. Schulz 1331 Nov. 20, 1947

10 Years

Nov. 10-23

John Miziker 2422, Glenn L. Morter 7147, R. D. Robnett, Jr. 7212, Charles E. Roehrig 3453, Hazel L. Boyden 7512, Pauline A. Lafforest 4234, Kenneth A. Sarason 7183.

Earle B. Anderson 5134, Dorothy Harrington 3421, Cloy B. Knock 2452, Richard M. Sanchez 4621, John J. Simpson 4424, Neith J. Pollard 1413, Myrtle E. Davis 4234, Lewis W. Carl 4253.



UNUSUAL version of the classic Luger pistol is held by John Morgan (2544-1). Other pistols represent years of discriminating collection.

John Morgan's Luger Pistol Study Uncovers Several Strange Facts

"The Luger pistol was invented by a naturalized American, Hugo Borchardt of Connecticut," John Morgan (2544-1) commented recently, "and it was issued as a military sidearm in America before it was issued in Germany."

John has been collecting automatic pistols for 30 years, and he has the Luger's history at his fingertips. "Most people think of it as a German design," he continued. "But only its manufacturing history started in Germany."

After laboring over the design of his pistol, Borchardt could find no one in the United States interested in manufacturing it. So he took it to Germany, his native land.

"He found a manufacturer," John continued, "and in 1893, produced the first commercially successful automatic pistol. Later the Borchardt design was modified by a young engineer named Georg Luger. Borchardt was enraged; he believed his weapon to be perfect. Luger modified the unwieldy Borchardt design into a more compact pistol."

The improved model was known as the "Parabellum"—figuratively, "pistol for war." The name "Luger" was attached by the Americans prior to and during World War I. The Luger design remained unchanged for over 40 years—from 1900 to 1942, when production of the pistol officially stopped.

In 1901 the Springfield Armory purchased a thousand Lugers in .30 caliber, which were issued to the United States Cavalry. The German navy adapted the pistol in 1904; and the German army, in 1908.

"By then, nearly everyone was interested," John commented. "The Luger was adapted as a sidearm by more governments than any other handgun, and its 9 mm. cartridge is still the most widely used in the world. Over three million Lugers were manufactured during the pistol's history."

John's been collecting Luger pistols since 1946, and has over 40 in his collection. "Surprisingly, I found most of them within 500 miles of Albuquerque," he said. "There are several variations I don't have, but I'm always on the lookout for good specimens."

The heart of his collection is one

of the rarest Lugers in existence: a prototype model in excellent condition, submitted for test to the Springfield Armory in 1901. It is the first Luger pistol to be chambered for the 9 mm. cartridge.

The gun has a "pedigree"—the original correspondence regarding its purchase from the government by a New York doctor in 1913. After purchasing it, John undertook a year of research to trace down and verify the pistol's origin. "The strangest part of its history is the circumstance through which I obtained it," John continued. "The pistol was traded in at a local sporting goods store in 1958 for a modern .22 automatic."

Production of the Luger stopped in 1942 because of high manufacturing costs and the availability of the Walther P-38 pistol. Before then, the Luger had achieved popularity—and notoriety—as the official sidearm of many military organizations, including the *Wehrmacht*, Hitler's army; and the *Schutzstaffel*, the dreaded SS.

John doubts that the Luger will ever be produced again. "It's a precision weapon," he concluded, "carefully machined to extremely close tolerances. Few would be willing to pay the price of a new gun—in today's economy, about \$200. Perhaps it's fitting that our interest in it is now mainly historical."

Receive Bids for Water Line Work in Tech Areas

Merritt and Merritt Construction Company of Albuquerque is the apparent low bidder for construction of water lines in Sandia Laboratory Areas II and III, according to the Atomic Energy Commission.

The firm's bid of \$73,691 was the lowest of 13 received for the project. Work includes furnishing and installation of more than 15,000 linear ft. of water lines.

To be completed within 120 days, the job also includes installation of miscellaneous valves, fittings, two concrete valve pits, and minor electrical work and connections to existing systems. C. R. Mills (4543-2) is the Plant Engineering Department project engineer.

Sandian Named Member of Council Studying School Drop-Out Problem

Mel A. McCutchan, supervisor of Technical and Trades Training Division 3132, was recently appointed a member of the Advisory Council on Vocational Education to the State Department of Education.

Purpose of the 15-man council is to assess present vocational course offerings, vocational edu-



cation needs of the state, and state and federal laws concerning vocational education. The council makes recommendations to the State Department of Education.

Mel discussed a serious educational problem facing New Mexico—high school dropouts.

"Of 1000 students who enter the fifth grade in the state, only one

half, or 500, will graduate from high school. Of these high school graduates, only one half will go to college, and of these, only 40 per cent will go beyond the freshman year. This means that 150 students will continue college while 850 students will not."

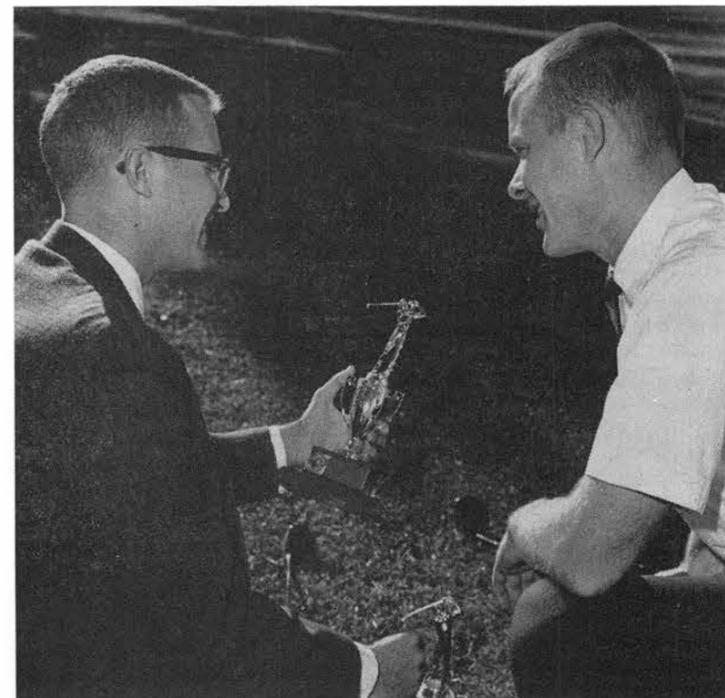
The need for unskilled employees in a rapidly-changing technical society will decrease in the future, Mel said.

"The crucial question," he continued, "is what will the 85 per cent of our students leaving public schools do?"

The answer seems to be in the areas now being investigated by the council—more technical, trades, nursing, sales, consumer goods distribution, agriculture, and home economics training; perhaps another two years after high school of junior colleges or vocational programs.

"In the past three years," Mel said, "two state universities—Highlands and Eastern New Mexico—have started technical institute programs in electronic, electrical, and civil drafting technologies, and are in the process of developing mechanical and design drafting curriculums. Next year, New Mexico State University plans to offer a technical institute program. Still, there are no vocational or trades schools in the state as part of the public schools.

"One of the primary purposes of the council," Mel continued, "is to inform the public of this situation and obtain support for establishing vocational schools for our young people."



COMPARING TROPHIES are James A. Leonard (7147), left, who recently took low gross honors of the Sandia Employees Golf Association tournament, and Kenneth D. Flynn (7164), winner of the President's Cup for low net score. Tournament was held Oct. 27 at the UNM golf course.



TROPHIES COLLECTED — Victor D. Schaeffer (4254), left, took "closest to pin" award of recent Sandia Employees Golf Association tournament. Edward J. Vavro (7323), second from left, won low net award. Winning team members were James A. Leonard (7147), third from left, and Glenn L. Monter (7147), right. Other winning team member, Albin J. Canute (7321), is not shown. Tourney was played at UNM course.

Supervisory Appointments

DON L. GORSLINE to supervisor of Data Section 7241-1, Test Support Department.

A Sandia employee for six years, Don has worked in the same division the entire period except for 18 months when he was on loan to Nuclear Test Department to participate in Phase I of Operation Hardtack in the Pacific.

Before coming here, he attended the University of New Mexico, majoring in mathematics.

Don served four years in the Air Force.

ELDON R. JULIUS to supervisor of Electromagnetic Radiation Section 7331-3, System Test Division.

Eldon has worked in Environmental Testing since he was hired at Sandia in July 1957. His first assignment was in the Instrumentation Division.

He received a BS degree in electrical engineering at Iowa State College where he was a member of Tau Beta Pi, engineering honorary society.

He served a short time in the Marine Corps.

RICHARD T. OTHMER to supervisor of Dynamics Analysis Division 7181, Auxiliaries Engineering Department.

During his seven years at Sandia, Dick has been working in shock, vibration, and structural analysis. He was promoted to supervisor of a section in Structural Analysis Division 7182 in 1956 and two years ago was transferred to head a section in Weapon Compatibility and Applications Division.

Before coming to Albuquerque, he taught Theoretical and Applied Mechanics on both graduate and undergraduate levels at Iowa State College for 12 years.

He received his BS degree in electrical engineering from South Dakota State College, and his MS and PhD degrees in applied mechanics from Iowa State.

During World War II, Dick served four years in the Air Force.

RUSH D. ROBINETT, JR., to supervisor of Range Operations Section 7246-2, Tonopah Test Range Division.

Rush was hired by Sandia Corporation 10 years ago as an electrical engineer. He has most recently been assigned to Ordnance Test Projects Division I, 7212, in Field Testing.

Previously he worked nearly two years for General Electric at both Pittsfield, Mass., and Lockland, O., as a test engineer. He also had a year's experience in Lubbock, Tex., as a junior construction engineer.

Rush received his BS degree in electrical engineering from Texas Technological College, where he was a member of Phi Eta Sigma, Kappa Mu Epsilon, Alpha Chi, and Tau Beta Pi, honorary societies. He also belongs to the American Institute of Electrical Engineers.

He served a year in the Navy and a year on active duty as an Army reservist.



CHAMPIONS of Sandia Laboratory Women's Golf Association fall tournament are (center) Rose Hainlen (4151), low gross, (left) Eileen Zemka (4423), and Evelyn Schultz (4423) who tied for low net honors.

Congratulations

Born to:
 Mr. and Mrs. Wallace Newman (1411) a daughter, Karen Jean, on Oct. 23.
 Mr. and Mrs. D. T. Judd (7331-1) a daughter, Terri Sue, on Oct. 16.
 Mr. and Mrs. Walt Shoemaker (1425) a son, Mathew Lee, on Oct. 22. Peggy formerly worked in the Drafting organization.
 Mr. and Mrs. Bruce E. Ercole (7231) a daughter, Ann, recently.
 Mr. and Mrs. Cleavord N. Giles (7312) a son, Steven Norell, on Oct. 19.
 Mr. and Mrs. J. E. Mitchell (3431-1) a son, Richard Stephen, on Oct. 29.
 Mr. and Mrs. Julio Pardo (2541) a daughter, Karen Sue, on Oct. 3.

Sympathy

To Chester A. Corbin (4224-4) for the death of his mother in Indiana Oct. 8.
 To Bruce E. Ercole (7231) for the recent death of his father in Struthers, O.
 To Mary Ellen Flannigan (7243) for the death of her mother in Tucumcari Oct. 28.
 To A. V. Luhrs (2563) for the recent death of his mother.
 To John Borg (2563) for the recent death of his mother.
 To Bruno Paoletti (4253-3) for the recent death of his father in St. Louis, Mo.
 To T. B. Hanna (3231) for the death of his wife on Oct. 31.
 To Trinidad Montano (4511-3) for the death of his father in Mosquero, N. M. Oct. 22.

Know Your Reporter

Veteran of 11 Years' Sandia Service Writes News of Co-Workers in 3446

Cora Beckes, our Lab News reporter in Publications and Print Distribution Division 3446, has been at Sandia 11 years. "It's essentially the same organization," she explains, "but there have been lots of changes and many different organization numbers."

A native of Chicago, she has adapted readily to New Mexico and the variety of Southwest living. Cora and her husband enjoy fishing, but that sport has taken a back seat since they became grandparents. Now, they like nothing better than visiting their married son and two grandchildren in El Paso.

Cora learned to swim only a few years ago and now she takes a dip every day (during warm months) in a pool near her home.

She also is an enthusiastic card player, but "no bridge, thanks," she adds.



H. L. Williams Died October 27

Harry L. Williams, Jr., died Oct. 27 following a short illness. He was 42.



Mr. Williams, who had been at Sandia Laboratory nearly six years, was a staff member in Programming Division I, 3451.

Survivors include his widow, two sons, three daughters, and his father—all residing in Albuquerque.

Soccer Players Sought for Sandia Team

Arrangements have been completed for a Sandia Laboratory soccer team to compete in a University of New Mexico League. Anyone interested in participating should contact either J. S. Souza (2543), ext. 32233, or H. W. Schmitt (1432), ext. 48245. Previous playing experience is not required.

No job is so important and no service is so urgent that we cannot take time to perform our work safely.

Organization Parties To Take Over for Club's Holiday Season

The Coronado Club's Friday night social hours and buffets with music and dancing until 1 a.m. will continue through Nov. 16. Organization Christmas parties will cover all of the weekends at the Club from Nov. 23 until Dec. 29.

The NORAD Commanders will return to the Club Nov. 22 for dancing from 8 p.m. until midnight. They're fresh from an appearance on the Dinah Shore television show. Admission is \$2 per person. All guest fees are waived for this occasion.

coronado club



Nov. 9 - Nov. 24

Friday 9		Saturday 10				
Social Hour Tom Kelly Buffet 6:30-9:00 p.m. Margot Engler 8:00-12:00 p.m.		Supper Club Margot Engler				
Sunday 11	Monday 12	Tuesday 13	Wednesday 14	Thursday 15	Friday 16	Saturday 17
	Bridge Open Team of 4 7:00 p.m. Invest. Coun. 7:30 p.m.	Dance Instruction 7 p.m.—Basic 8:30 — Advanced	Ladies Bridge 1:15 p.m. ACF Bridge 7 p.m.	Bridge Thanksgiving Party 7:30 p.m.	Social Hour Lee Sprague Buffet 6:30-9:00 p.m. and Sol Chavez 8:00-12:00 p.m.	Supper Club Sol Chavez Dance Class Party No Charge
18	19	20	21	22	23	24
	Bridge Open Team of 4 7:00 p.m. Invest. Coun. 7:30 p.m.		Game Night 8:00 p.m.	Norad Band Dance 8:00-12:00 p.m. \$2.00 person No Guest Fee	Org. Party	Org. Party

EVENTS

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

BEAUTY REST mattress and matching box spring, \$30; Hide-a-bed, \$50. Cashion, 242-3345.
 OVER \$100 in ski equipment for \$60, used 6 times. Lund 6' skis, boots 5 1/2. Cubco bindings, poles, ski glasses. Bascom, AX 9-1662.
 CLOTHESLINE poles, iron, \$4.50; vacuum Hoover, upright, attachments, \$10. Buckley, AM 8-7301 after 5 p.m.
 ROPING SADDLE, sound rawhide covered tree, needs some work, \$30. Taylor, AL 6-3774.
 '61 COMET, 4-dr., automatic transmission, heater, 13,000 miles. \$1750. Russell, AX 8-0840.
 F. M. TUNER in wood mahogany case, overall size 6"x6"x8", \$20. Kreidler, 299-8494.
 '57 LAMBRETTA motorscooter, model 125. Stang, 299-4842.
 ENCYCLOPEDIA AMERICANA, 1962 edition, \$275 with book case. Aker, AX 8-2743.
 RUG, fiber pad, 9'x12', green, \$7.50; bamboo drapes, natural color, fit 6'x4' window, \$3; portable evaporative cooler, \$12.50. Moore, AX 9-3758.

'49 FORD 1/2-ton pickup truck, 3-speed, rebuilt engine, R&H. Rathburn, CH 3-4892.
 USED BOWLING BALL, scratched but fine for beginner, \$5. Devor, 256-6541.
 40" ROPER GAS RANGE, staggered burners, \$20; long 2-piece sectional w/slip covers, \$25. Spacer, AX 9-0211.
 SNOW CHAINS for 7:10x15 tires, might fit some other sizes, set of two, \$4. Asselin, AX 9-9270.
 ZENITH 17" TV w/antenna, gilt stand on wheels, \$45; blond table, 2 end tables, \$20. Deller, 298-3260.
 5 HP James motorcycle, \$65; 2 Cushman scooter frames, 2 transmissions, 5 hp engine and parts, \$65; lawn mower, \$5. Entwisle, 268-3024.
 ANTIQUE MARBLE TOP VANITY; old cast iron bank; Norman forced-air furnace, \$35; swap for old Indian items. Smitha, AX 9-1096.
 '60 PONTIAC 2-dr. hard top, 4-speed trans, 420 engine, positraction rear end; sell or trade for another car. Windsor, 344-8356 after 5 p.m.
 3-BDR HOME, 1 1/2 bath, 1/2 acre land, new, \$250 down, \$72/mo., total sale, \$9950. Cummings, 298-5173 after 5 p.m.
 AMERICAN FLYER train layout w/2 switches on framed 4x8 plywood, \$20. Gardner, DI 4-2547.
 KITCHEN TABLE, porcelain top, 4 chairs, \$20; man's wrist watch, incabloc movement, w/expansive bracelet, \$25. McNeely, AL 6-2553.
 '56 PONTIAC wagon, 9 passenger, new auto. trans, new carburetor and tune-up, w/w tires, tutone. Lucero, 298-3656.
 15" JUKEBOX SPEAKER, manufactured by Jensen, \$12.50. Roberts, 344-7857.
 40" GE push-button range w/warmer oven; yellow formica table w/2 chairs. McDowell, AX 9-6222.
 9 x 12 UMBRELLA TENT w/floor, new, \$42.50; 28" bicycle, Roll-Fast, \$15. Pitti, 836 Georgia SE, AL 6-1629.
 SUPERCHARGER, Judson, all 1955-60 Volkswagen, bolt-on installation, halves acceleration time, too hot for daughter, \$75. Watkins, AX 9-0411.

NEXT DEADLINE FOR SHOPPING CENTER ADS Thursday Noon, Nov. 15

'60 VW CAMPER BUS, 17,000 miles, \$1550. Plumlee, BU 2-3224 after 6.
 KODAK 35 camera w/case, light meter, flash attach; Kling maple double bed and chest on chest. Meyer, AL 6-9038 after 5:30 p.m.
 FIREPLACE SCREEN, draw type, 31" high, 38" wide, brass w/andirons and grate, \$20. Smith, AX 9-6873.
 FREE KITTENS, will deliver. Tatum, TR 7-0997.
 BIG RED coaster wagon, \$5; Admiral portable radio, battery and plug in, turquoise, \$20. Mitcham, AX 9-8425.
 S&W REVOLVER K-38 w/holster, two boxes ammo, \$55. Will trade for German Luger pistol or what have you. Zaluga, DI 4-1564.
 FEMALE SEAL POINT Siamese kitty, \$5; left-hand side curtain for late model Austin Healey, \$15. Shultz, AX 8-2731.
 SUPER DELUX Osterizer blender, \$35. Bierly, 255-9017.
 KODAK EIGHT-33 movie projector w/case, \$20 Osterby, AX 9-4606
 BABY CRIB, standard size, \$20; 5-drawer chest, \$10. Turman, AX 9-3582 after 5 p.m.
 SNOW 3-bdr, separate den w/fireplace, attached garage, walled corner lot, a/c, sell at purchase price and FHA appraisal of \$15,500. Ray, 298-0408.
 DEEP FREEZE, chest type, large. Humphrey, AX 9-0020.
 WEDDING RING SET, 1 large, 8 small stones, appraised at \$350, asking \$150. Haddock, 265-0008 after 5:30 p.m.
 MODERN 2-bdr house, garage, office building, two lots, completely fenced, in

BEDS, bunk or twin, maple w/mattresses, \$230 original cost, sell for \$115, see at 2916 Avenida Nevada NE. Hughes, 299-6674.
 COSCO PLAYPEN and pad, stroller, carbed, baby girl's clothes. Milligan, AM 8-4484.
 TRAIN SET, American Flyer w/track, trestles, transformer, \$10; Boy's 20" bicycle; safety side rail for child's bed. Russell, AX 9-6921.
 VM RECORD CHANGER, \$7.50; portable record player, \$8; living room couch and chair, \$15. Murray, DI 4-5289.
 5 Wheels and tires 600-16 to fit Dodge. Make offer. Shea, 115 Quincy NE, 255-8092.
 COLDSPOT FREEZER, 12 cu. ft., reconditioned, \$75; Ironite ironer, \$75; Necchi portable sewing machine, \$75. Risk, AX 9-7205 evenings.
 COSCO nylon playpen, folding type, in box, \$15; vacuum cleaner w/attachments, tank type, \$5. Bassett, 299-5685.
 WALL HUNG, hinged, 4'x5' HO railroad and motorama layout w/equipment, \$75. Devor, 256-6541.
 3-BDR, BRICK HOME, carpeted, Southwestern landscaping, den, appliances, circular driveway. Pearl, 256-6541.
 '53 BUICK Special 4-dr., low mileage, R&H, five power steering, \$275. Doherty, AX 9-3079.
 RANCH OAK youth bed, box springs and mattress; upright piano. Tarnawsky, AL 5-6356 after 5:30 p.m.
 MOUNTAIN SITE, 1.20 acres, community well, 2 miles south picnic area So. 10; patio blocks; umbrella clothesline; screendoors. Chavez, AL 5-6155.
 '47 UNIVERSAL WILLYS JEEP 4-wheel drive, extra rugged tow bar, bumpers and roll bars. Wright, 10213 Alder Dr., NW, 898-2298.
 BOY'S bicycle, 24" w/tank and lights, \$20. Haskins, AX 8-1997.
 HANDLOADING EQUIPMENT, Pacific "C" press, scales, .38 special dies, primers, cases, etc. best reasonable offer. Netz, AX 9-7036.
 Estancia, N. M., \$5700. Ogden, CH 3-4723.

DEN FURNITURE oriental rattan, coffee table, corner table, 2-piece sectional, 1 year old for half original price. Bland, 268-4913.
 MARLIN .22 model 57 lever action, tubular magazine, Weaver B6 scope, \$45. Small, AX 9-0023.
 '60 BSA Scrambler motorcycle, \$425; Winchester model 71, .348 cal., \$90; 2 760:15 w/w tires, tubes, and wheels for Chevrolet. Wilson, AX 8-0049.
 DANISH MODERN dining room chairs, Philippine mahogany, four for \$15. Burns, CH 2-2407.

WANTED

LATE SET of World Book Encyclopedia. Selp, 877-3651.
 RIDE from Trumbull and Utah to Bldg. 800. Bowen, AM 8-2381.
 HYDRAULIC FLOOR JACK 1 1/2 ton cap. Shea, 115 Quincy, NE, 255-8092.
 TO TRADE gym set, 3 swings. Benderman, AX 9-5831.
 RIDE from Princeton and Santa Clara to Bldg. 838 or 880 parking lot, Milligan, AM 8-4484.
 TRADE 38-44 S&W 7 1/2" bbl for .357 or .44 Magnum single action. Pritchard, AM 8-6430.
 YOUNG MOTHER wishes to care for child of working parents in her home located near base. Bishop, 299-8782.

FOR RENT

2-BDR, gar., newly carpeted and drapes throughout, new refrig and range, extra nice, \$125/mo. Adams NE. Deveney, 242-0134 after 5 p.m.

1-BDR HOUSE, stove, refrigerator, water furnished, walled, yard care provided if desired, \$63/mo., 336 Gen. Bradley, N.E. Balfour, AL 6-3424.
LOST AND FOUND
 LOST—Luna-six exposure meter, Zippo lighter, 6-8 keys on ring. LOST AND FOUND, ext. 29157.
 FOUND—Small silver tie clasp. LOST AND FOUND, ext. 29157.

Solid State Sciences Panel Reviews Sandia Research

"Surprised" and "amazed" were the most frequent words heard regarding the caliber of research at Sandia Laboratory during a recent visit by members of the Solid State Sciences Advisory Panel.

The panel is comprised of leading scientists in the solid state field, representing universities, industry, national laboratories, and government agencies. The group meets at two laboratories twice a year to review the progress of solid state sciences. Thirty-one members of the panel visited Sandia Laboratory on Oct. 31 and Los Alamos Scientific Laboratory on Nov. 1.

The presentation at Sandia Laboratory was in the form of 10-25 minute talks, representative of research programs underway. Morning and afternoon tours of lab facilities in Bldg. 805, 806, and 808 were included.

Richard S. Claassen, Director of Physical Research 5100, who had issued the invitation to the panel, noted afterwards, "The speakers did an excellent job of reflecting the quality of their programs through their presentations."

There was no formal critique of the program. Instead, the panel members frequently made comments during and after the 13

individual talks, many of which covered the work of several scientists.

President S. P. Schwartz spoke about Sandia Corporation's purpose and work during a luncheon at the Coronado Club, and K. F. Hertford, Manager, AEC-Albuquerque Operations Office, was the dinner speaker.

Most of the visitors were previously aware of Sandia's engineering or weapon work rather than scientific studies. They indicated that Sandia has capable people to carry out serious research, and were impressed by plant equipment backing the research effort. Many of the panel members invited individual Sandia staff members to visit their laboratories.

When studies underway here were within the specialty of one of the panel members, there was a worthwhile exchange of ideas. Sandians were informed of research being done elsewhere in parallel fields, or of work performed by the individual panel member.

Among the outstanding scientists in the group were Prof. Harvey Brooks of Harvard University, panel chairman and Prof. Roman Smoluchowski of Princeton University, one of the six original panel members.



TEMPERATURE DEPENDENCE of iron oxide grown at Sandia Laboratory was discussed by D. H. Anderson (5132) during visit of Solid State Sciences Advisory Panel Oct. 31. Visitors included (l to r) Dr. Robert A.

Lad, head, Physics of Materials Section, NASA's Lewis Research Center; Mr. Anderson; Dr. H. P. Frederikse, National Bureau of Standards, Washington, D. C.; and Prof. H. Y. Fan, Physics Dept., Purdue University.



DISCUSSING arrangements for ASME Symposium on Advanced Technology held Nov. 2-3 at University of New Mexico, Sandia Laboratory, and ACF Industries, are members of symposium committee: (l to r) J. A. Engelland (7184-1), publicity co-chairman; W. A. Sebrell (7182-3), publicity chairman; J. D. Cyrus (1332-1), gen-

eral chairman; J. Jacobs (7112), finance chairman; and J. L. Lang (7183-3). Other committee members included C. E. Runyan (4220), program chairman; D. C. Schultz (2543), arrangements chairman; Maj. W. P. Miller, Jr., facilities chairman, H. W. Schmitt 143-4), finance co-chairman. Meetings pointed up progress in technology.



LATEST SKI FASHIONS will be modeled by Daphne McPeters (left) and Anna Lee Stewart (both 3126) during the Coronado Ski Club meeting Monday, Nov. 19, at the Coronado Club. Movies will also be shown.

No Snow So Skiers Eye New Fashions

Fashions for both outdoor and lodge-type skiers will be modeled during the Nov. 19 meeting of the Coronado Ski Club.

Activities will start at 7:30 p.m. at the Coronado Club and will also include a sale of used equipment provided by members. Representatives from several New Mexico

ski areas will be on hand with movies and reports on recent improvements.

President Max Newsom (7164-2) adds that plans will be made for a get-acquainted party Nov. 24. Prospective members are invited to both the meeting and party.



VISITING Sandia Laboratory last week to participate in technical discussions was L. Ray Cook, fourth from left, Engineer of Manufacture, Manufacturing Division, Western Electric Company. From left are G. C. Dacey, Vice President, Research; L. J. Heilman, Director of Pro-

gramming; S. P. Schwartz, Sandia Corporation President; Mr. Cook; L. A. Hopkins, Director of Manufacturing Development; R. A. Bice, Vice President, Engineering for Manufacturing; and R. W. Henderson, Vice President, Weapon Programs. Discussion was held in Area I.

Sandia's Safety Record

Sandia Laboratory HAS WORKED 1,260,000 MAN HOURS OR 36 DAYS WITHOUT A DISABLING INJURY

Livermore Laboratory HAS WORKED 353,000 MAN HOURS OR 68 DAYS WITHOUT A DISABLING INJURY