

noel

The Spirit of Giving

Many of us bemoan the commercialism of the Christmas season: the somewhat premature appearance of Santa Claus on Thanksgiving, the "I want this" and "I want that" of our children, the too zealous sales promotions, and a sometimes forced spirit of yuletide.

And yet joy and warmth still pervade our society during this holiday season—the season of "good will toward men," and "the season to be jolly."

The spirit of giving prevails. Not evidenced simply by gifts beneath the tree, but evidenced by people at work, at home, and in the community, as understanding, tolerance, and respect are extended to one another.

During this hectic period of last-minute shopping and Christmas card mailings, the better qualities of human nature survive, and the "Bah, humbug!" of Ebenezer Scrooge remains buried in fiction.

Would it be possible, we wonder, to make our first New Year's resolution a pledge to maintain throughout the year these better qualities—this Christmas spirit of giving of ourselves, of tolerance, of understanding, and of good will toward men?



o each of you..

our best wishes for Christmas
and the New Year!



S. P. Schwartz R. W. Anderson R. C. Fletcher B. S. Biggs R. L. Bee



Bluma Fabel F. H. Drager R. H. Paul R. W. Campbell F. Cheston

Tranquilizers, Drugs Dangerous When Combined With Alcohol

by S. P. Bliss, M.D.

Sandia Corporation Medical Director

There is a common motto which states: If you drive, don't drink—if you drink, don't drive. Much less publicized, but equally important, is the tenet: If you take drugs, don't drink—if you drink, don't take drugs.

Recently the deaths of three well-known personalities have been attributed to the ingestion of the combination of sedatives and/or tranquilizers and alcohol. There probably have been many deaths attributed to this cause which have not come to the notice of the public.

Alcohol is primarily a central nervous system depressant. In acute fulminating poisoning by this agent, death is often the result of complete depression of the respiratory center in the brain. Alcohol also depresses and interferes with operation of the liver, an organ which has many functions including the all-important one of detoxification.

All sedatives and many of the tranquilizers are central nervous system depressants. Thus, the alcohol/sedative/tranquilizer combination increases these depressions to a dangerous level. Furthermore, the decrease in the liver function caused by alcohol ingestion allows the sedative/tranquilizer to exert a greater de-

pressant effect, for there is more of the drug available to circulate in the blood stream.

At the present time, there are many tranquilizers and sedatives on the market which are prescribed by doctors. The majority of patients who are taking these types of drugs are not aware of the dangers of adding alcohol. The following rules should be followed in order to avoid the possibility of unfortunate events:

1. Don't ever take any sedative or tranquilizer without a doctor's order.
2. Don't take any sedative or tranquilizers when you have ingested any alcohol.
3. Don't drink if you have already taken a sedative or tranquilizer.
4. Check with your doctor on the advisability of drinking if you regularly take any sedative or tranquilizer.

Generally, most drugs and alcohol do not mix well and, therefore, one should abstain from drinking while being medicated.

Organizations Continue Their Interest in Charitable Projects

As the time gets closer to Christmas, more charity projects are being organized throughout Sandia Laboratory. It is a Sandia tradition to help others during the holidays instead of exchanging Christmas cards with fellow workers.

Materials and Process Development Organization 1100 is collecting money to be donated to All Faiths Home (or any other specific organization an employee may designate). Secretaries throughout the organization will be accepting contributions for this purpose through Dec. 20.

The New Mexico Boys' Ranch at La Joya will be the recipient of food, clothing, and money collected by members of Employment and Personnel Department 3150, Wage and Salary Administration Department 3110, and Organization and Manpower Development Department 3130. The donations will be taken to the school this weekend. Committee workers include O. L. Puccini, Dolores Downs, Esther Allen, J. E. Davidson, Walt Dodd, Ruth Bontrager, and Mollie Miller.

In Design Information Center 2200, employees are concentrating their efforts on getting money to purchase food baskets for needy families. Last year, Design Definition Department 2210 raised \$443 to feed 30 families. John Bewley (2211-4) is in charge of that department's project this year.

Tomorrow, the annual United Unions-sponsored Christmas party will be held at Riverview Elementary School. Both members of the three bargaining unions and non-union employees have contributed to the success of this yearly event. Santa Claus will arrive at the school yard by helicopter after which gifts will be distributed to the children, and there will be refreshments and entertainment.



NOBEL PRIZE WINNER Dr. Charles H. Townes (right) spoke before the Sandia Research Colloquium Monday on "Interactions Between Intense Light Beams and Optical Media." He was introduced by Dr. R. C. Fletcher, Vice President 5000. Dr. Townes received the Nobel physics award in 1964 for his idea of the MASER.

SANDIA CORPORATION

LAB NEWS



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LIVERMORE NEWS



VERIFYING A REQUEST for a visit to another classified installation, Judy Oliveira (left) and Imogene Kelly (both 8241) compare the short information request form submitted by the employee with the AEC-277 form Judy has removed from the facsimile Teletype machine. Transmission on the newly-established Teletype facility between Sandia, LRL, and AEC/SAN is restricted to unclassified information.

Visitor Control Teletype System Used Between SCLL, LRL, and AEC

Livermore Laboratory's Visitor Control and Travel Section 8241-1 is now processing unclassified requests for visits to or from other classified installations (Form AEC-277) via a direct tie-line Teletype facility established between SCLL, LRL and AEC/SAN in Berkeley, Calif. Previously the Teletype circuit operated only between LRL and AEC/SAN, while Sandia used telephone communication for these requests.

Under the new three-station Teletype network, a facsimile machine transmits the visit request information. As information is typed at the machine onto the AEC-277 form, it simultaneously appears in identical form at the receiver's station. A copy of the form then goes to the requester for his record. A tape capability is available to keep machine use time at a minimum. Information as typed can be perforated onto a tape for later transmission at a rate of approximately 100 words per minute.

With the system in operation, many hours of telephone communication are

eliminated, not only between Sandia and AEC but also between the line organizations and Visitor Control.

Other important features include eliminating the possibility of verbal errors and reducing the volume of paper work and effort by both Visitor Control and the line organizations. There is no further need for Visitor Control's logbook of incoming and outgoing visits, and secretaries are no longer required to process form AEC-277 to request visits to other classified installations. Instead a short information request form (LS-2740-A) is sent to Visitor Control by the employee planning a visit. This information is the authority and basis for direct input into the facsimile machine. Visitor Control notifies the employee when security arrangements have been completed.

According to Jim McMinn, supervisor of Security Administration and Operations Division 8241, the new Teletype facility is proving to be highly successful. "Installation of the system has simplified the whole visitor request and certification procedure," he says. "Its implementation is one of the major advances in the visitor control area during my five years in the security field at Livermore Laboratory."

Congratulations

Mr. and Mrs. Ted Sneddon (8162), a son, Timothy William, Nov. 22.

Mr. and Mrs. Stefan Folkendt (8162), a son, Bryan Thomas, Nov. 27.

Mr. and Mrs. Jerry Nigg (8156), a daughter, Shari Lynn, Nov. 23.

Mr. and Mrs. Dick Demo (8252), a son, Mark Edward, Dec. 4.

Mr. and Mrs. Hal Norris (8148), a son, David Michael, Dec. 8.

Sympathy

To Vern Hudgins (8121) for the death of his infant son in Walnut Creek, Nov. 17.

To Howard Schmale (8116) for the death of his mother in Portland, Ore., Nov. 14.

To Irmal Brown (8116) for the death of her husband in Castro Valley, Nov. 30.

Welcome Newcomers

Nov. 18 - Dec. 3

California
 *Dale G. Alstrom, Sepulveda 8154
 *Patricia A. Carothers, San Lorenzo 8253
 Victor S. Dominguez, Livermore 8232
 Larry A. Elkins, Castro Valley 8222
 *Denotes rehire

Three Sandians Become Registered Professional Engineers

Three Livermore Laboratory employees were recently registered as professional engineers in the State of California following a written examination held in August.

Larry Bakken (8147) was registered a professional civil engineer; Bernard Kraemer (8111), a professional electrical engineer; and Ron McClellan (8153), a professional mechanical engineer.

To qualify for registration, applicants must present evidence of satisfactory engineering experience and pass a written examination, consisting of two separate divisions. The first division of the examination is in engineering fundamentals, and is known as the "Engineer-in-Training" examination. The second division is called the "Professional" examination. Its purpose is to examine the candidate in the specific branch of engineering for which his application is made.

Sandian Appointed to Chabot College Advisory Committee



Lorena Schneider (8234) has been appointed a member of the Secretarial Advisory Committee to the Technical - Vocational Education and Business Education Departments of Chabot College in Hayward.

The Advisory Committee is one of 20 occupational committees which have been established to promote closer relationships between the college and the community.

Composed of representatives from business and education, the committee will meet periodically to review current vocational and business curriculum and to suggest new programs which may be needed.

Lorena has worked at Livermore Laboratory as a secretary to the Director of Systems Development and is currently a staff assistant in the Public Information Division. She joined Sandia in Albuquerque in April 1952 and transferred to Livermore Laboratory in January 1957.

Lorena attended Bryant and Stratton Business College in Buffalo, N.Y., and Diablo and Chabot Colleges in California.

Livermore Notes . . .

Walt Frykholm (8212), Personnel Representative and College Relations Coordinator at Livermore Laboratory, addressed the Education and Vocational Planning graduate class at California State College in Hayward on Nov. 29.

He spoke generally on Sandia's employment policies as they pertain to education, emphasizing the use and need for technical institute graduates.

Students enrolled in the class include school teachers working toward a counseling certificate or high school counselors seeking additional course work.

Tickets are on sale for a new series of foreign and American films sponsored by the Lawrence Radiation Laboratory Recreation Association Film Society for LRL or Sandia employees and members of their immediate families.

Twelve films will be presented beginning Jan. 13, 1966, at 8 p.m. in the LRL Auditorium, Bldg. 111. All foreign language films have English sub-titles.

Further information and tickets at \$2.50 per person for the entire series are available from LRL Personnel Services, Pat Jordan, ext. 7051.

The Livermore Duplicate Bridge Club of the Lawrence Radiation Laboratory Recreation Association is expanding its activities by offering a weekly Thursday night game in addition to the regular Monday night game. The club meets at 7:30 p.m. in LRL's west cafeteria, Bldg. 199. Those interested may obtain additional information by contacting Don Groves, LRL ext. 7321.

Jerry Jones was re-elected president of the Student Education Loan Fund (SELF) of Livermore for 1966 at the annual membership meeting held recently.

At the same meeting Jerry Maloney (8112) was elected vice president and Mrs. Eleanor Reed (wife of Howard Reed, 8111) was elected corresponding secretary for the year.

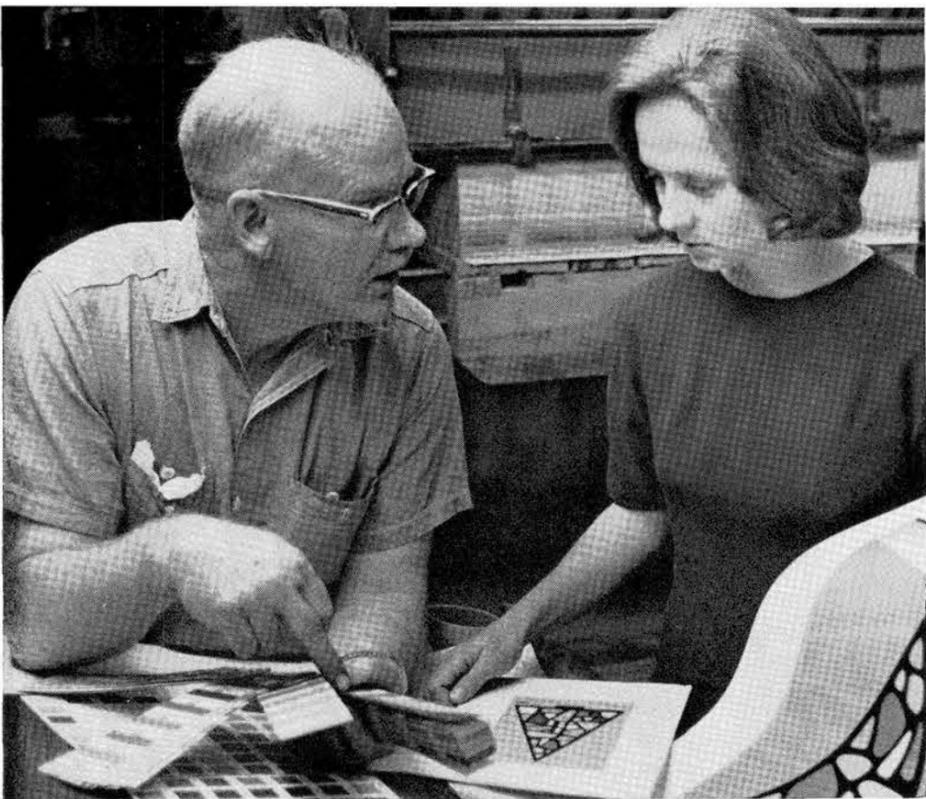
SELF provides money for deserving students from the Livermore area who need funds to continue their education. Loans totaling \$1200 were awarded last year.

Interest-free loans are granted on the basis of the student's application, a personal interview by the awards committee, and recommendations. "Because of the successful fund raising drive conducted this summer, there is presently about \$6000 in the treasury," said Jerry. Applications may be obtained by contacting Livermore or Granada High Schools or Jerry Jones, ext. 2801.

VISITING LIVERMORE LABORATORY recently for general orientation and a review of patent activities was C. H. Nanz, Assistant to the General Patent Attorney for Western Electric Company. Pictured here during a tour of technical areas are (l to r) A. D. Pepmueller, Manager, Technical Information Department 8230; G. C. Newlin of Patent Department 6010; Mr. Nanz; and J. D. Foster (8162), who demonstrated the principles of operating the laser interferometer.



CHRISTMAS CONTRIBUTIONS—Gene Helz (8163) makes a charity contribution while Katie Heineman holds gay collection can she decorated for the project. Livermore Laboratory employees are continuing the tradition of helping others rather than exchanging Christmas cards. Funds collected go to the Livermore Council for Social Planning (also known as the Holiday Bureau) to assist those in need in the area. Deadline for contributions is Dec. 22.



CHECKING COLOR REPRODUCTION at Ward Anderson Printing Company, where the LAB NEWS is printed, cover artist Janet Jenkins talks with A. R. "Whitey" Rudolph, Offset Department foreman. Multi-colored cover was achieved economically through various screens of three basic colors—black, yellow, and red.

Universal Symbol of Christmas Depicted by Cover Artist

This year's LAB NEWS color cover was designed by Janet L. Jenkins who used pictorial suggestions of stained glass and

traditional tree to carry out the universal symbol of Christmas.

Janet is a graphic designer in Commercial and Animation Art Section 3463-3. She worked at Sandia as a summer employee in 1960 and returned last July on a permanent basis. In the intervening period, she painted in Europe, was an arts and crafts director for U.S. Army Special Services in Verdun, France, traveled extensively throughout the world, and worked as a commercial artist in San Francisco.

She has a Bachelor's degree in Fine Arts and a Master's in Art from the University of New Mexico. This fall she won the top print award at the Biennial Fiesta Exhibition of the New Mexico Fine Arts Museum.

Promotions

Antonio Garcia (4575) to Laborer
 Leo C. Chavez (4611) to Stockkeeper
 John L. Gunby (4512) to Refrigerator and Air Conditioning Mechanic
 George W. McClure (4512) to Refrigerator and Air Conditioning Mechanic
 C. P. Thomson, Jr. (4512) to Refrigerator and Air Conditioning Mechanic
 Henry J. Flowers (4518) to Refrigerator and Air Conditioning Mechanic
 Lawrence E. Wells (8222) to Helper Trades
 Claudia J. Garlick (3126) to Typist Clerk
 Donald W. Cook (3415) to Messenger
 Warner Jones (9411) to Messenger
 Dorothy Kreitzer (4135) to Invoice Clerk
 Mary K. McElfresh (3126) to Secretarial Steno
 Julia P. Larsen (3421) to Typist
 Bernadine Sullivan (7521) to Record Clerk
 James L. Duran (3415) to Mail Clerk
 Martha Bruno (2234) to Service Clerk
 Virginia Weirauch (4615) to Service Clerk
 Theresa C. DeBaca (2231) to Record Clerk
 Janet Davis (2231) to Record Clerk
 Rose L. Gonzales (2231) to Record Clerk
 Esther Morgan (2231) to Record Clerk
 Alice Rodriguez (2231) to Record Clerk
 Eunice Savage (2231) to Record Clerk
 Frances M. Sheaffer (2231) to Record Clerk
 Donald E. Bates (9411) to Tabulating Equipment Operator
 Patricia Sanchez (3415) to Mail Clerk
 Jacob E. Aragon (4153) to Investigator
 Donald L. Tyler (3465) to Camera Operator
 Donald J. Loehle (4615) to Property Clerk
 Patricia Howard (7216) to Mathematic Analyst
 Charles R. Sage (8245) to Stockkeeper
 Theodore Koch (8226) to Inspector
 Susan G. Winchester (8142) to Secretarial Steno
 Janet Wikkerink (8211) to Typist
 Karen C. Yung (8253) to Communications Operator
 Patricia Leigh (8211) to Senior Clerk
 Marie J. Brenton (8116) to Editorial Assistant
 Donald R. Rich (8144) to Computer Operator
 Sylvia Schaefer (3153) to Typist
 E. Jean Shaffer (1310) to Secretary
 Margarito Martinez (7324) to Laboratory Assistant
 Richard B. Hosley (9414) to Staff Assistant Administrative
 Linda L. Anderson (8143) to Staff Assistant Administrative
 Carole Lou Celoni (8144) to Staff Assistant Administrative
 Louis Baca Flores (7332) to Staff Assistant Technical
 Kenneth R. Edwards (7332) to Staff Assistant Technical
 Robbie Chapman (7332) to Staff Assistant Technical
 Cecil M. Lang (7233) to Staff Assistant Technical
 Johnnie Duran (1131) to Staff Assistant Technical
 Emery Postenrieder (2531) to Staff Associate Administrative
 Donald Benthussen (8122) to Staff Associate Technical
 Joe Chavez (4000) to Staff Member Administrative
 William C. Riggan (1414) to Staff Associate Technical
 Joseph H. Lackey, Jr. (2212) to Staff Associate Drafting
 James A. Hawkins (2126) to Staff Assistant Technical
 J. D. Creek (2126) to Staff Assistant Administrative
 Fred S. Brooks (3241) to Staff Assistant Administrative
 Clarence W. Hansen (3241) to Staff Assistant Administrative
 Donald J. Knaple (8253) to Staff Assistant Administrative
 Martin L. Dieter (9212) to Staff Assistant Administrative
 Josephine B. Hanna (4000) to Secretary (Executive)
 Dennis R. Benedict (4622) to Receiving Clerk
 Conrad G. Stayner (8222) to Utility Operator
 Joseph M. Marques (8222) to Helper-Trades
 Roy Palmer, Jr. (3428) to File Clerk
 Michael A. Chavez (3415) to Messenger
 James E. Lyons (3415) to Messenger
 Cloie G. Baran (4135) to Invoice Clerk
 Bonnie D. Conley (3126) to Secretarial Steno
 Adana M. Echer (3126) to Secretarial Steno
 Donna M. Yaple (3126) to Secretarial Steno
 R. C. Jaramillo, Jr. (9411) to Data Processing Clerk
 Eloy D. Cota (3415) to Mail Clerk
 Robert E. Vaughan (3415) to Mail Clerk
 Tom O. Cordova (2232) to Reproduction Service Clerk
 Edmund W. Starr, Jr. (2232) to Reproduction Service Clerk
 Rosie Jo Hayden (4135) to Invoice Clerk
 Carol Ann Harger (2234) to Record Clerk
 Amy R. Kahoiwai (2234) to Record Clerk
 Beatrice Schowers (2234) to Record Clerk
 Norman R. Grandjean (7216) to Data Reduction Clerk
 Wendell H. Grimsley (9411) to Tabulating Equipment Operator
 Joe Montoya (9411) to Tabulating Equipment Operator
 Robert H. Roth (2534) to Property Clerk
 Don H. Odell (2552) to Property Clerk
 Robert L. Tirnetta (8245) to Stockkeeper
 Jeffri M. Ambrose (8223) to Technician
 Laura J. Loftin (8233) to Secretarial Steno
 Florence P. Lenz (8232) to Library Assistant
 Robert G. Moitoso (8144) to Data Processing Clerk
 Jerry C. Clough (8232) to Mail Clerk
 Hazel L. Willyard (8144) to Tabulating Equipment Operator
 Grace L. Matuska (8252) to Service Clerk
 Alan L. Richards (8144) to Computer Operator (7090)
 Charlotte L. Freedman (4114) to Secretarial Steno
 Michael J. Kmatz (7323) to Laboratory Assistant
 Gloria A. Geibel (4100) to Secretary

Sandia Speakers

P. J. Chen (1116), "Acceleration Waves in Rheological Materials," seminar at Louisiana State University, Nov. 22, Baton Rouge, and Tulane University, Nov. 23, New Orleans.

H. M. Meidal (4232-4), "Surface Plate Inspection Techniques and Equipment," ASQC Inspection Workshop, Dec. 9, Albuquerque.

C. L. Stoner (2452), "Inspection Through the Use of Coordinate Measuring Machines," ASQC Inspection Workshop, Dec. 9, Albuquerque.

R. A. Graham, J. R. Holland, and O. E. Jones (all 5133), "Identification of the Shock-Wave Induced Solid-State Transition in Ge," American Physical Society meeting, Dec. 20-22, Los Angeles. Mr. Graham will make the presentation.

M. M. Robertson (1122), "Airborne Infrared Investigation of the Flash Spectrum and Corona during the May 30, 1965, Eclipse" and "Airborne Photoelectric Coronal Intensity Measurements during the May 30, 1965, Eclipse," Solar Eclipse Symposium, Dec. 16-17, Moffett Field, Calif.

N. C. Anderholm (9233), "Sandia Aircraft and Expedition Summary," Solar Eclipse Symposium, Dec. 16-17, Moffett Field, Calif.

F. K. Truby (5122), "Applications of ESR Techniques to the Study of Energy Deposition Processes in Organic Solids," Highlands University seminar, Nov. 18, Las Vegas, N. M.

Congratulations

Mr. and Mrs. R. C. Fletcher (5000), a son, Russell Grant, Nov. 16.

Sympathy

To Ralph W. Ambrose (4517-1) for the death of his wife in Albuquerque, Dec. 7.
 To L. G. Wise (5234) for the death of his infant daughter in Los Lunas, Dec. 10.

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LAB NEWS

DECEMBER 17, 1965

Psychologist Assists African Country In Selecting Best Qualified Students

Three months in a new African nation helping the natives of that country solve their own problems was an assignment recently completed by Fred O. Carleton.

Fred was granted a leave-of-absence from Sandia to serve as a consultant to the U. S. State Department's Agency for International Development (AID) program in Nigeria. At Sandia, he has worked as an industrial psychologist in the training organization and is presently assigned to Clinical Psychology Division 3342.

AID was established by Congress in 1961 to assist underdeveloped countries to maintain their independence and become self-supporting. It follows other post-World War II economic or technical assistance programs offered to foreign countries: United Nations Relief and Rehabilitation program (UNRRA), European Recovery Program (Marshall Plan), the Point IV program, etc.

The fundamental U. S. interest in the 30 independent African countries is to help these new nations achieve effective self-government, economic and social growth, and the ability to respond to the needs and aspirations of their people. Each AID project must be something the foreign country wants and is willing to contribute to both financially and by providing native specialists for training and leadership.

Fred's specific job was to help set up an aptitude testing program suitable for use in selection of students for various levels of education. "This is an important function," he explained, "because due to the shortage of teachers and facilities, there may be 5000 applicants for a trade school which can only accommodate 100 students. A way must be found to select the best qualified students who can benefit the most from the education."

A National Aptitude Council has been established and by 1967 is expected to test at least 200,000 persons per year for academic sources (universities, trade schools, and technical institutes) as well as for business, commerce, and industry. The American AID specialists work with Nigerian counterparts to help them develop the capability to continue the program unaided.

The office is located in Lagos, the capital of Nigeria, and includes three or four Nigerians who recently completed a graduate-level training program at the University of Pittsburgh. The balance of the native staff of 30 includes clerical help and a data processing group. Tests are scored both by hand and by machine.

C. L. Stoner (2452), "Inspection Through the Use of Coordinate Measuring Machines," ASQC Inspection Workshop, Dec. 9, Albuquerque.

Two afternoons a week the Council gives standard clerical tests for various Nigerian industries. Tests are also being adapted to select the best candidate for a commercial pilots training program and for schools for radio and ground maintenance.

Fred spent a few days in Ghana conferring with officials of VALCO (Volta Aluminum Company), a Kaiser-Reynolds-Alcoa combine which will use hydroelectric power from the Volta dam when it is completed. The plant will eventually employ 5000 persons and tests are being worked out to make sure training will be



NATIONAL APTITUDE TESTING UNIT is located in this building and helps to assure qualified students for the limited schools and universities in Nigeria. The unit is operated by funds from U. S. AID program and Nigerian Ministry of Education.



DOWNTOWN LAGOS has modern buildings and traffic problems the same as any American city.

given those best able to use the knowledge.

Since Nigeria is a former British colony, English is the official language and Fred found many conditions in Lagos similar to those in American cities. There are supermarkets offering a wide variety of frozen and canned foods, and both local and imported meats are available, although local beef is not well aged. The open markets are used mainly by the Nigerians. "Housing was modern but expensive. In most cases, Americans have to pay two or three years rent in advance and forfeit the balance if they don't remain that long," he said. Fred was quartered in a large, modern apartment which was sublet from the Ford Foundation and paid for by the Nigerian Government. His family did not accompany him.

He described the weather as "similar to summer in New Orleans, with temperatures between 70-90° and intermittent showers." His stay extended over two months of the rainy season.

ALTHOUGH SUPERMARKETS, with stocks of canned and frozen foods, can be found in Lagos, the natives prefer the centuries old marketplace. The women easily balance large loads on their heads.



Double-Barreled Program

Sandia Accrues \$3,200,000 in Cost Improvements

Sandia Corporation cost improvements of \$3,189,900 accruing over the two-year period ending Dec. 31, 1966, have been reported to the Atomic Energy Commission by Value Engineering and Cost Improvement Division 2563.

The savings were the result of a Company-wide program for cost improvements, coordinated by Division 2563, and the Value Engineering workshops attended by more than 800 Sandia technical personnel. In addition, some 200 persons from Lawrence Radiation Laboratory, ACF, military, and other government contractor personnel have attended the Sandia VE training sessions.

Using a double-barreled approach of encouraging all Sandians to be cost conscious in their day-to-day activities plus teaching value engineering techniques to Sandia's technical and administrative personnel, the Company is confident that Sandia can achieve even more effective use of budgeted funds. All Sandia employees are eligible to submit cost improvement actions.

According to the cost improvement criteria devised by Sandia's Cost Improvement Policy Committee, cost reduction actions must save appropriated or programmed funds and have an impact on a firm financial plan. The action must reduce the cost of an existing product or method of operation. Cost improvement actions are credited as cost avoidances if they reduce the amount of additional funds needed or avoid the expenditure of funds. Savings can be claimed upon implementation of an action saving \$100 or more, and savings are projected through a two-year period.

Not acceptable as true cost improvement are actions made as a routine or obvious choice, curtailments of programs or schedules, postponement of expenditures, or corrections of errors. Other factors are also considered by the Cost Improvement Policy Committee before the proposed cost improvements are approved and reported to the AEC.

Substantial Savings

Typical of the 42 cost improvement cases which achieved the \$3 million figure reported to the AEC are the following, which are indicative of the kinds of activities which result in substantial savings.

H. C. Psillas (2541), manufacturing development engineer for a component, as part of a cost improvement effort, re-examined the tooling required for the production of an end cap. The end caps were being produced one at a time from a single mold. Mr. Psillas discovered that the mold could be redesigned to yield two end caps instead of one for the same labor costs. Accumulated savings amounted to \$8,700.

Cost Avoidance

Another cost improvement action, classified as cost avoidance, involved the modification of an existing oscilloscope rather than purchasing a new special purpose oscilloscope. The idea was suggested by G. S. Mills (2443).

Rather than buying a \$3000 dual-beam oscilloscope which was needed for a project, Mr. Mills determined that a Tektronix type 507 oscilloscope, which Sandia had in stock, could be modified to use a dual-beam. New parts and labor for the modification amounted to \$502, thus avoiding an expenditure of about \$2500.

Other cost improvement actions reported to the AEC ranged from conducting approved programs on a more austere basis and specifying less expensive materials or components, through improving management methods, or making changes in administrative procedures.

Approximately \$500,000 of the total cost improvement actions reported to the AEC were the result of the Value Engineering training workshops conducted by Division 2563.

VE Workshops

Since the Value Engineering program started at Sandia in May 1964, 15 two-week workshops have been conducted with a total attendance of 505, and 21 four-hour orientation sessions have been conducted with a total attendance of 512. Eventually, the training will be extended to all of Sandia's technical staff and to many of the administrative staff.

Value engineering transcends traditional cost reduction activities by applying new techniques to determine the basic function and the functional worth of a product.

Goal is to provide the required product function at the lowest sound cost without compromise of quality, reliability, or safety.

In the training workshops, participants are divided into teams and apply the VE techniques to current Sandia projects or procedures. Although training is the primary purpose of the VE workshops, the participating teams have made recommendations which have resulted in significant savings. Other recommendations of the VE teams are being considered for implementation.

Typical of the team's work is the cost improvement study performed by R. S. Summers (2443), John Kirby (2132), J. F. Durrie (1543), Joseph Suknot (2211), and R. E. Wonderlich (2562). The group was formed during the 11th VE Workshop conducted in May 1965.

The group was assigned a protective device, part of a handling equipment system, as its project. Function of the device, a rear cover plate, was to retain the plate and protect personnel in case of inadvertent firing of an explosive switch.

The system used four blast-shield assemblies, each consisting of a foamed aluminum honeycomb cylinder, a steel backup washer, a countersunk bolt, and a high-strength internal wrenching bolt. These assemblies were constrained by a chain assembly which also contained the part identification number and a warning flag.

Workshop Activity

First phase of the team's VE activity was to examine each of the 43 parts of the device, determining their functions, and production costs. At that time, a complete assembly cost \$93.38 to produce.

Second phase of the VE activity is called the speculation phase. During this period, team members developed 78 ideas as possible methods of performing the same function at less cost.

Each of these ideas was analyzed during the third phase of the activity and the more promising possibilities were selected.

During this analytical phase, the VE team concentrated on eliminating the foamed aluminum honeycomb cylinder which functioned as a shock absorber to cushion a possible blast. This part accounted for the major portion of the production cost of the protective assembly.

The team ran a series of functional tests, evaluated the results, and determined that the honeycomb cylinder could be eliminated by redesigning the bolts. Costs of changing the design, issuing change orders to the supplier, and furnishing new tooling were computed.

The team determined that the change could be accomplished and that the delivered production assemblies would cost about \$13.50, saving about \$80 per assembly. After deducting the cost of the design change, a net savings of about 85 percent could be realized.

The project engineer for the protective assembly, J. O. Phillips (1543) determined



BOB SUMMERS (2443), right, team leader for a VE Workshop project, discusses the team's recommendations with J. O. Phillips (1543), project engineer for a protective device on a handling system. The team's efforts effected an \$80 per unit savings in the production of the assembly.



DISPLAY BOARD highlighting examples of cost improvement actions of Sandia employees will be displayed in various Laboratory buildings in coming weeks. Al Smailer (2563) reports that the examples will be changed periodically to recognize new cases. The program accrued approximately \$3,200,000 in cost improvements over a two year period.

that the change would not alter the function or design intent of the protective assembly. He approved the team's proposal and issued the necessary change orders.

In another VE workshop project, a team challenged all requirements and specifications for explosive valves. Investigation of destructive test requirements and consultations with reliability engineers and the project engineers resulted in a recommendation to reduce destructive tests by 60 percent. This could be achieved without sacrifice of reliability. D. H. Swanson (8126) and G. R. Waymire (8168) implemented the team's proposal for an estimated savings of \$427,000.

Members of the workshop team were C. T. Duffey (8156), M. E. Brown (8142), H. L. Brumfield (8115), and D. R. Christensen (8116).

These two examples illustrate the kind of savings that can be accomplished with value engineering techniques. As more and more Sandia personnel are trained in their use, the VE evaluations will be performed earlier in the design stages of hardware systems accomplishing more effective use of budgeted funds, the goal of the VE training.

Consulting Studies

In addition to the training activities, Division 2563 has conducted several value engineering studies at the request of project groups.

Any Sandia organization that desires to have a VE study performed may request the assistance of Division 2563 in organizing and conducting the study. The Division works with the requesting organization in securing a four- to six-man team from appropriate Sandia organizations and provides a member of the Division staff to serve as the VE team leader.

The team then operates independently, reporting its recommendations directly to the requesting organization for consideration and possible implementation.

To date, five such VE studies have been conducted and several of the proposals are being implemented.

Elmer Devor is supervisor of Value Engineering and Cost Reduction Division 2563. The division's staff includes Glenn Anderson, John Hueter, Reuben Minter, Ken Sarason, Al Smailer, and Lee Stinnett. The men alternate training assignments with auditing cost improvement cases. All are available as consultants to other Sandia organizations to help with cost improvement studies.



GENE DORNEMAN (2212) displays Wood Badge, "the PhD of Scouting," which he earned recently. He serves on the Kit Carson Council's Neighborhood Commissioner's staff.

E. T. Dorneman Earns Scouting Wood Award

The Wood Award, "the PhD of scouting," was awarded recently to Eugene T. Dorneman (2212). To earn the award, Gene completed the requirements of a three-phase program of service, camping, and writing a "thesis" on the philosophy of scouting.

Gene is currently serving on the Neighborhood Commissioner's staff of the Kit Carson Council working primarily with training programs for adult scout leaders. He averages about 18 hours each week on scouting activities.

Before coming to Albuquerque in July 1963, Gene served seven years as an assistant scout master and one year as a scout master in Hazleton, Pa.

"It was the same troop that I belonged to when I was a kid," Gene says. "Scouting meant a great deal to me then; it still does. I want to pass on the same feeling I had to other boys. The Scouts have a fine program for character building, citizenship training, and physical fitness."

As a Scout, Gene earned Eagle Scout rank and the Explorers Silver Award. He also holds the Scout Training Award for adult service.

"I have more fun than the kids," Gene says.



READY TO GREET the New Year in appropriate style are Mr. and Mrs. O. B. Tjeltweed. Tickets are now on sale for the Coronado Club's annual New Year's Eve party. Ozzie (5632) is president of the Coronado Bowling Club and his wife, Millie, is an ex-president of Sanado Woman's Club.

Favors and Fun At Coronado Club New Year's Eve

Greet the New Year with congenial friends at the Coronado Club. The Club's popular New Year's Eve party will feature hats, noisemakers, and confetti for all, and a bottle of champagne for each couple to make toasts in 1966. There will be two bands for dancing from 9 to 1: Mike Michnovicz and his MBC Trio will be playing in the main ballroom; in the Eldorado room, it will be Tommy Kelly and his combo. After midnight, a New Year's Day breakfast will be served. Tickets are \$3.75 for members and \$5 for guests, and must be picked up in advance at the Club office.

Other Club Activities

Christmas Parties

Organization Christmas parties continue to keep the Coronado Club jumping. Tonight Division 3232 and Department 9220 will be using the Club facilities, and organizations 5600 and 4500 will have their annual holiday season festivities on Saturday. The last such party before Christmas will be on Dec. 23 when Organization 9400 will sponsor a get-together.

Social Hours

There are no social hours during December, but social hour prices are in effect at the Club from 5-6:30 p.m. on Fridays.

Dec. 25

Members are reminded that the Coronado Club will be closed Christmas Day, Dec. 25.

Bowl Games

For a full day of entertainment (with empathetic sports fans), plan to watch the football bowl games on New Year's Day on the Coronado Club's color TV set. The games will start at 11 a.m. and continue until 10 p.m.

Game Nights

There will be no Game Nights during December, but this regular Wednesday night event will resume Jan. 5.

Events Calendar

- Dec. 18-19—"Sleeping Beauty" pantomime by Sandia Showmakers, Bldg. 204, Sandia Base. Matinee both days at 2:30 p.m. Dec. 18 evening at 8 p.m. Tickets at door, adults 50 cents, children 25 cents.
- Dec. 19—Cabezon Peak (volcanic neck in the Rio Puerco Valley), N. M. Mountain Club, leaders Jack Kutz, tel. 255-9781 and Gary Holcomb, tel. 298-3802.
- Dec. 24—Annual luminaria tour through the Country Club area and other parts of Albuquerque.
- Dec. 25—Indian dances after Christmas church services at some of the Pueblos.
- Thru December—"Three Cultures of New Mexico," Museum of the Albuquerque Historical Society, 316 Romero NW.
- Thru December—Trout fishing in the Rio Grande.

Dick Dillon New Head of State CAP Activities

Dick Dillon of Advanced Systems Studies Staff 5590 is the new Commander of the New Mexico Civil Air Patrol. The announcement was made last week by the National CAP Board at a meeting at Ellington Air Force Base, Tex., concurrently with Dick's promotion to the CAP rank of Colonel.

Dick joined the CAP as a pilot in Albuquerque Senior Squadron 2 in 1958. He first held the office of Special Projects Officer then Director of Emergency Services, both at the Wing (or state-wide) level. He has been commander of Senior Squadron 2 since October 1963. He holds multi-engine, single engine land, single engine sea, and instrument ratings in the CAP.

Major objectives of the CAP, which marks its 24th anniversary this month, are to promote general safety in flying, conduct search and rescue operations, and promote aviation education.

H. A. Moculesski (2533) as CAP Wing Deputy for cadets, helps direct a state-wide program for young CAP cadets, both boys and girls, between the ages of 13 to 18.

Austin Glover (3433) is the new commander of Squadron 2. Other Sandians who are officers in the squadron include H. H. Patterson (9230), wing standardization/evaluation officer; Howard Wicke (5261), safety officer; Wes Roberts (9312), PIO officer; Harry Mason (9232), personnel officer; Roger Everett (9322), finance officer; Tom McConnell (9233), assistant maintenance officer; Jim Morewood (9212), assistant personnel officer; Dick Gossett (9232), administrative officer; and Zack Ortiz (5151), supply officer.



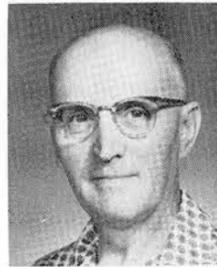
FIRST AND SECOND PRIZES in recent National Association of Industrial Artists competition in Washington, D. C., were won by these members of Technical Art Division 3463 (l to r) Gordon Snidow, R. J. Mickey, T. I. Baggett, and J. B. Walston (seated).

Deaths . . .

J. Verlin Hunt, a retired Sandia Corporation employee, died Nov. 27 in a Chicago hospital.

At the time of his retirement in August 1959, Mr. Hunt was a staff assistant in Control Department 4210.

Survivors include his widow, Ruth, also a former Sandia employee who lives in Spiceland, Ind.; sons in Honolulu and Phoenix; a daughter in Phoenix; and a sister, Mrs. Martha Nicholson of Albuquerque.

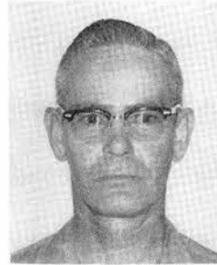


James A. Skidmore, a Sandia employee for more than six years, died Nov. 29 at the age of 48.

He was a refrigeration and air conditioning mechanic in Maintenance Section C, 4512-3.

Survivors include a brother, S. B. Skidmore of Albuquerque, two brothers and a sister in Shamrock, Tex., and two sons—Danny, 14, and Randell, 12—in Amarillo, Tex.

Burial was in Shamrock.



Robert E. Dunlap, supervisor of Technical Information Division II, 3412, died at his home Dec. 8. He was 46.

Mr. Dunlap was employed initially by Sandia in 1952 as a technical writer. From 1958-62 he worked here on a part-time basis, and in 1962 resumed full-time duties in the Technical Information organization. He was promoted to division supervisor last April.

Survivors include his mother, Mrs. W. C. Dunlap, two sisters—Mrs. Jean Chamberlin and Mrs. Barbara Cox, all of Albuquerque, and a brother, Dr. William C. Dunlap of West Newton, Mass.



Student Groups Tour Sandia Laboratory

Two student groups toured Sandia Laboratory facilities recently.

On Dec. 8, 20 members of the Valley High School Future Business Leaders in America visited Sandia's IBM 7090 computer facilities and the Sphere of Science.

On Dec. 13, about 50 members of the Junior Science Club of Los Lunas toured wind tunnel and plasma jet installations in Bldg. 865 and the Sphere of Science.

Both tours were arranged by Community Relations Division 3433.



DON FISHER (3134) displays the trophy which his team won in the recent Sandia Open Team of Four Bridge Tournament. The annual event originated in 1960 and has always been a close contest. The winning team won by just a half point.

Life Master Don Fisher Leads Victory Team In Bridge Tourney

Don Fisher (3134), Life Master of the American Contract Bridge League, led the Sandia Laboratory championship open team of four to a half point victory in the recent Sandia tournament. Other team members were Dick West (1422), Ernie Bowman (1425), and George Arnot (1422). Eleven teams competed for the title.

Don is the only Life Master at Sandia, one of 50 in Albuquerque, and one of 7000 in the country. To earn Life Master status, a bridge player must have accumulated 300 master points in both local and national competition.

Newly elected officers of the Sandia Laboratory Bridge Association are Joe Connell (2113), president; Dick West (1422), vice president; Gloria Putnam (5530), secretary-treasurer; Ira Holt (9324), past president; Gene Rios (4211) and Mr. Arnot, board members.

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LAB NEWS

DECEMBER 17, 1965

National Industrial Art Awards Won by Members of Div. 3463

Examples of industrial art created by members of Sandia's Technical Art Division received a number of awards during the third annual exhibit of the National Association of Industrial Artists in Washington, D. C.

The display will hang in the main lobby of the U. S. Department of Commerce building through December after which it will go on tour for a year. The itinerary includes Minneapolis, Wichita, Houston, Providence, R. I., Cleveland, Detroit, and Indianapolis.

J. B. Walston won first place in the category Visual Aids, Displays. His entry was a safety slogan card which folded into a box.

Second place awards went to T. I. Baggett for Line Rendering, Assembled Views; R. J. Mickey for Line Rendering, Exploded, (he also won a "third" in this category); and Gordon Snidow for his entries in three classifications—Visual Aids, Displays; Visual Aids, Posters; and Visual Aids, Projectorials (also a third).

Other third prize ribbons were won by Leo Ortiz for Continuous Tone Rendering, Technical Color, and by a T. M. Clark/C. L. Hawk entry in Line Rendering, Assembly.

Those receiving honorable mention were T. I. Baggett/Harkey Boling entry, M. K. Hamm, W. R. Entwisle, and J. B. Walston/R. H. McHarney entry.

Service Awards

15 Years



Wilma Archbold 4234 H. H. Baxter 4542 Marion Brown 4517 D. C. Cordova 4615 F. B. Cossell 4514 E. C. Dow 2121 A. E. Dutz 4213
 B. M. Eagan 2443 J. M. Farmer 4254 G. C. Gaskill 4632 N. E. Hansen 3428 J. F. Hayes 3463 V. O. Henning 3152 Richard Kidd 1513
 H. F. Kingsbury 4513 E. S. Kuroski 8244 J. D. Mafit 3244 W. S. McElvaney 4232 B. A. Montoya 4231 J. J. Perea 4575 R. T. Rivera 2551
 L. A. Robinson 4513 F. L. Shea 4253 K. D. Smith 2534 E. W. Starr 4613 Barbara Wheelerlock 7250 R. O. Work 1432

10 Years

Dec. 17-31

Margaret V. Taylor 4250, J. S. Gallegos 4575, Audrey M. Kroesche 3415, R. G. Clay 1544, R. M. Ferguson, Jr. 3465, and R. E. Demo 8252.

Welcome Newcomers

Nov. 15 - Dec. 10

Albuquerque	
Rosaura A. Aldridge	3126
David D. Allen	7226
Sherron A. Anderson	3154
Josephine M. Arnold	3126
Ernest Costales	3415
Thelma G. Harrell	3126
Vincent D. Koettler	3415
Mary Margaret Paxton	2213
Geraldine E. Rivera	3126
Reba F. Shaw	4135
Eleanor H. Shaykin	4373
Estelle D. Simmons	3126
Robert J. Sorace	7226
Nestor Zamora	3153
Illinois	
Frank F. Dean, Downers Grove	9422
William V. Ormond III, Chicago	3111
Phillip D. Walkington, Chicago	7325
Missouri	
Jeryl L. Smith, Roby	7522

*Denotes rehire

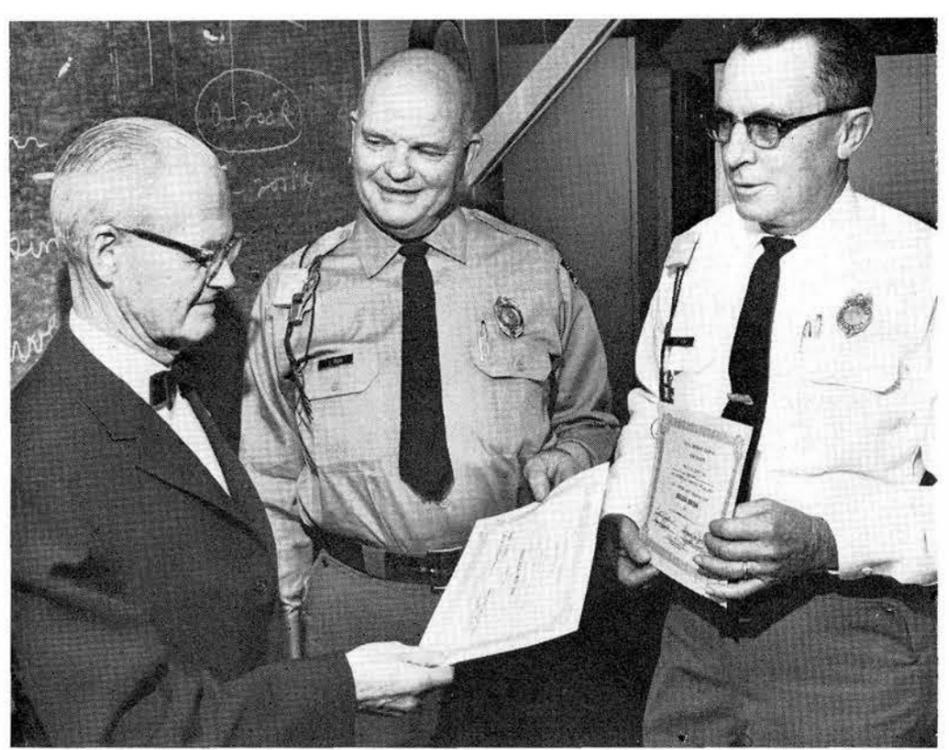
Retiring . . .



Esther Donaldson, a Sandia employee for 17 years, will retire Dec. 30. She has been assigned the entire time to Test Data Division 7267, working mainly with theoretical trajectories. Miss Donaldson's interests and hobbies include gardening, photography, and traveling. Next summer she and her sister plan to visit Europe for the first time, and before that they may go to New Orleans for Mardi Gras.

Upon her retirement, Miss Donaldson will devote more time to church activities and to Volunteer Services at Bernalillo County-Indian Hospital.

Her home address will remain 613 Madeira SE.



RECEIVE CERTIFICATES—Final class of security inspectors complete 16-hour Radiological Monitoring course. Certificates are presented by Clinton M. Roth (left), director of the local Civil Defense Organization, to Jack Rich and B. L. King (both 3242). A total of 132 security inspectors completed the course.

Part of a Continuing Program

Security Force Completes Course In Radiological Monitoring

The final group of Sandia's Security force completed this week a 16-hour Civil Defense course in radiological monitoring. Part of a continuing education program to meet emergency situations, the course was in addition to earlier sessions on fallout shelter management and on radiological hazards.

A total of 132 Sandia security inspectors have received certificates from Col. Clinton M. Roth, director of the Civil Defense Organization of Albuquerque and Bernalillo County. The course used standard texts and training materials prepared by the Department of Defense, Office of Civil Defense.

Course material, instrumentation, and radioactive sources were under the supervision of George W. Dunham, local Civil Defense Training, Education, and Radiological Officer. Instructors were Mr. Dunham and Justin S. Fuller. They were assisted by George Thorne and Glen Goodloe of Emergency Planning Division 3245.

Course content included familiarization with Civil Defense radiation measuring equipment—survey meters and dosimeters—and the techniques for measuring gamma and detecting beta radiation. Part of the course was a problem-solving exercise in conducting emergency missions in a radiation environment.

In the event of an emergency, Sandia's security force would augment Health

Physics personnel or direct emergency activities during non-operational hours.

"Interest and enthusiasm for the course was maintained at a high level," Mr. Thorne said. "Our guard force is quite receptive to this kind of training. Future refresher courses will continue the training and keep Sandia extremely well-prepared for emergency situations."

Take Note . . .

The Sandia Base Protestant Chapel Choir will perform the Christmas part of Handel's The Messiah at both 9 and 11:15 a.m. services on Sunday, Dec. 19. Chaplain Charles Arnold will assist in the service.

Mrs. William Simpson (whose husband works in Division 2552-3) is minister of music at the chapel and will be at the organ for this presentation. Soloists will include two other Sandia wives: Mrs. O. L. Wright and Mrs. R. M. Elder. O. L. Wright (4610), Marie Ream (3100), and K. E. Sutton (3222) will sing in the choir.

Early Deadline

Due to the forthcoming holidays, there will be an early deadline for Shopping Center ads for the Dec. 31 issue of the LAB NEWS. The next deadline will be Tuesday noon, Dec. 21.

SHOPPING CENTER • SHOPPING CENTER • SHOPPING CENTER • SHOPPING CENTER • SHOPPING CENTER

CLASSIFIED ADVERTISING
 Deadline: Friday noon prior to week of publication unless changed by holiday.
 A maximum of 125 ads will be accepted for each issue.

RULES

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

FOR SALE

MAYTAG automatic washer, \$30; baby playpen w/pad, \$5; 2 table lamps and shades, \$15; Bell, 299-9415.

'57 FORD Fairlane 500, 4-dr., AT, PB, back-up lights, R&H, one owner, 60,000 miles, \$500. Dean, 344-9068.

3-BDR., den and fireplace, 2 baths, covered patio, carpeting, drapes, near grade, high, and Univ., 410 Richmond Pl. NE, \$14,500, below FHA. Everett, 256-3703.

BICYCLE, Schwinn boy's 24", \$25, 211 Richmond SE, Shelton, 898-7089.

BICYCLE, girl's 28" w/balloon tires and basket, \$8; car luggage rack, aluminum tubing, \$5; Burroughs adding machine, \$10. Hesselbarth, 256-1720.

PORTABLE TV, RCA '59 model, needs a couple of tubes, \$25. Kubiak, 265-6525.

VIOLIN, three-quarter size, bow and case, \$35. Cox, 299-2393.

'64 CHEV. IMPALA 4-dr. HT, R&H, AT, PS, air, still in warranty, \$350 under NADA. Dauphinee, 255-6367.

MALE AKC toy poodle, silver, \$100. Whitlow, 299-6623.

'60 LINCOLN sedan, factory air, full power, best offer. Meahl, 282-3681.

PUPPIES, Collie and Dalmatian, six weeks old, Eiffert, 898-0324.

CAMERA, Minox w/flash, \$80 or best offer. Geck, 299-5095.

23" screen '63 Admiral console TV, mahogany cabinet, \$85. Horner, 282-3697.

NEW CAMPER, cartop or ground, accommodate 6 people, alum. and plywood, carpeted, never used, orig. cost \$645, sell for \$375. Montoya, 242-0127.

CRIB w/mattress, \$20. Savage, 256-3030.

K&E surveyor's transit and tripod; Bundy clarinet w/case; boy's shoe ice skates, size 5; chemistry glassware, half price; men's cowboy boots, size 8D. Spacer, 299-0211.

'54 MERCURY 2-dr. sedan, 73,000 miles, \$225. Reis, 299-3808 evenings.

'57 DESOTO, \$250. McDermott, 298-5865.

AKC registered male German Shepherd, proven champion background, Riley, 256-9722 after 5:30.

ELECTRIC RANGE, Kenmore deluxe model, fully automatic; 2 tires, re-caps, size 7.50x14, not used. Pitti, 256-1629 after 5:30.

REGISTERED Airedale male pup, 6 wks. Sowards, 865-7104 Los Lunas.

ELECTRIC GUITAR w/2 pickups and case and 2 channel amplifier w/vibrato, both for \$125. Robie, 255-9063.

55 WATT Heathkit amplifier and preamp, make offer. Wenz, 299-5488.

ORGAN, Conn Caprice, blond wood, double keyboard, \$600. Crosby, 299-1459 after 5.

MOUNTAIN CABIN, Grass mountain 20 miles north of Pecos, adobe fireplace, log siding, Forest Service land, \$3000 cash. Weir, 299-1160.

DISHWASHER, Kitchenaid, portable or permanent, meat chopping block top, front loading, \$100. Breehl, 256-1350.

ADMIRAL UPRIGHT FREEZER, 11 cu. ft., \$125; full size violin, \$25. Daniel, 3415 Aspen Ave. NE, 268-8335.

21" TV, GE table model w/service manual, \$20. Stuckey, 255-2442.

EXERCISER, rowing machine, \$10, original cost \$25. Stoner, 299-6892.

'59 PIPER Tri-Pacer, 650 hrs., top chrome, new paint exterior, full panel, ceconite wings, \$4000. Breckenridge, 298-0042.

'59 DODGE CORONET 4-dr. sedan, AT, V-8 engine, PS, one owner, \$350. Andrews, 256-7328.

WHEELBARROW, large contractor size, \$20; baby bed, \$15. Eden, 10312 McKnight NE, 299-7421.

FLATWARE, Dirilyte golden-hue, 4 settings, extra pieces, chest; HO engine, track; HO autos, track, 1/2 price. Merrilat, 242-4873.

PALOMINO GELDING, 11 yrs. old, good saddle horse, \$175. McKinley, 268-4779.

DESK w/chair, 35x17x28 1/2, solid birchwood, four drawers, slide board, \$35. Baars, 255-9051.

'64 CORVAIR MONZA, silver blue, 2-dr., bucket seats, 4 speed, low mileage, still warranteed. Begley, 256-6692.

ROBERSON 3-bdr., den w/tp, wood floors, dbl. garage, front sprinklers, corner lot, AC, extras, under \$19,500. Duvall, 299-8744.

HAM GEAR, DX 100, NC 300, desk, \$150. Tillet, 299-9691.

SCHWINN bicycle, girl's 20", \$25. Zownir, 256-3717.

2 CHESTS OF DRAWERS, matching, blond, 4-drawer, \$15 ea., both for \$25. Yarbrough, 255-4087.

STEEL SHELVES; train set w/accessories; Cushman Highlander. Halsey, 299-6418.

BICYCLE, boy's Royal Scot, \$30, mirrors, rear-view wrap-around w/s, \$8; elk bowling shoes, 10 1/2 D, \$3. Hansen, 265-0156.

BICYCLE: girl's 24" Schwinn, \$15; boy's 24" Schwinn, \$12. Frye, 1405 Georgia NE, 255-8364.

'61 F-85 Oldsmobile, compact, 4-dr., R&H, AT, new tires, \$700 or take older car in trade. Villella, 268-4731.

2 TRAIN SETS, make offer; car set, \$10; Barbie doll and accessories; bay mare, trade. Causey, 299-0089.

'65 CADILLAC Calais, 4-dr., HT, metallic green, all power & air, 9400 miles, original owner. Henderson, 255-1941.

3-BDR., 1 1/2 bath, den w/tp, dbl. garage, 1700 sq. ft., equity \$2800, take over payments, balance under \$17,500. Watkins, 516 Hillview Ct. NE, 298-3667.

DRESSING TABLE, w/mirror and bench, Nichols, 247-2564.

'62 FORD convertible, PS, PB, R&H, new window, \$1100. Cassidy, 500 Kentucky SE, 255-5940.

COLT WOODSMAN and S&W K-22 revolver, trade for old fancy hunting knives or pay cash for knives. Smitha, 299-1096.

CAMERA, J66 Polaroid, carrying case, instructions, \$50. Campbell, 299-8071.

GUITAR, hollow body, electric, single pickup, amplifier, \$100; rifle, .22 cal. single shot, bolt action, \$10; Britannica Junior, year books 1951-61, \$50. Reed, 255-2010.

1931 REO 4-dr. sedan in running condition, has two side mount spares, has no dents or tears. Wilson, 282-3225.

SMITH & WESSON K-38 masterpiece. Long, 265-6360.

ADMIRAL FREEZER 11 cu. ft. capacity, upright model, \$75. Flinchum, 344-1072 after 5.

LARGE WONDER SPRING HORSE, \$10. Dubbins, 299-5562.

STEREO, Silvertone blond oak console, \$65. Hensinger, 265-4203.

BOY'S 20" bike w/puncture proof tubes, extra handle bars and seat post. Martin, 256-6785.

POOL TABLE, 4x8 ft., \$110; elec. chord organ, \$35; gym mat, heavy duty, 15x20', \$270. Treon, 298-1066.

HEATHKIT 12-watt monaural amplifier model EA-2 \$10. Giddings, 298-6221.

HOUSE, 3-bdr., den, wb fireplace, 1 1/4 bath, brick veneer, Cole, 255-7921.

AFGHAN HOUND PUPS, outstanding bloodlines, will be ready for weaning by Christmas. Crosby, 898-0705.

HEXAGONAL ARMY TENT, can sleep 6, water-proof nylon w/removable cotton liner; pole, stakes, and carrying case, \$35. Riggins, 299-7778.

LADY'S ski boots, size 7 1/2, double construction, Italian make, \$15. Frauenglass, 345-0119.

'54 FORD 6, 0D, \$150; crib and mattress. Tuffs, 255-9663.

'62 RAMBLER Custom Classic 6-cyl., automatic, low mileage, make offer. Nogle, 299-3863.

CHILDREN'S play equipment: doll bed, play stove and refrigerator, small 2-wheel bicycle, large boy's bicycle, unicycle. Jennings, 255-5950.

BELGIUM, GERMAN Shepherds, 6 wks. old, \$50, \$75; rabbits, \$1.50; new rollaway bed, \$25; baby buggy, \$6; refrigerator w/freezer across top, \$35. Browne, 344-9675.

CHILD'S ROCKER, \$1; large slide, \$5; boy's 26" bike, \$15; gas range, \$15; S. M. uniform \$5. Stixrud, 298-0478.

LESLIE ORGAN SPEAKER, big organ sound w/this 2-channel 50-watt amplifier and 4-speaker system. Bircher, 268-0726.

LADIES suits, dresses, slacks, 2 pc. outfits, and coat, size 12; men's raincoat, size 42. Flury, 299-7473.

JIG SAW, \$5; pair of wood 5'10" strap-on skis; \$2. Everett, 298-3994.

POOL TABLE, 8' Den-Ricks, \$75; ping pong table, \$20; small pool table, \$5; fire place screen w/accessories, \$25; hobby horse. Boyden, 268-8767.

WONDER HORSE, large size, Knight, 299-3783

'56 4-dr. HT. MERCURY Montclair, power seats, PB, PS, PW, factory air, \$350. Hopkins, 268-0885.

'56 JEEP STATION WAGON, new engine, hubs, 6-ply tires, electric fuel pump. Streeter, 298-3566.

4 1/2 ACRES, 1 1/2 miles E. city limits, well, city school buses, large trees, borders stream, good for horses, \$3500/acre. Hiller, 299-7573.

'56 PONTIAC 4-dr. HT, PS, PB, wsw tires, \$150. Boyd, 299-4968.

FOR RENT

LARGE furnished room w/bath and fireplace, kitchen privileges, 1 or 2 females, NE Heights. Yates, 299-7166.

WANTED

RIDE from Salem Road near Menaul and Eubank to Bldg. 880. Dyer, 299-5329.

GUITAR for beginner, must be reasonable. Papineau, 243-2036 after 6.

ACCORDIAN, must have at least 7 treble and 3 bass switches, prefer intermediate size, pay up to \$300. Martin, 282-3794.

RIDE vicinity of 308 Wilshire Dr. SW to parking lot north of Bldg. 880 or south 892. Vigil, 242-4069.

USED Jungle Gym. Trump, 299-5162.

WANT TO RENT 2 or 3-bdr. and den home, unfurnished, year lease, SE or NE heights, occupancy starting Jan. '66. Write James P. Young, 249 E. New St., Lancaster, Pa.

35MM SLIDE projector, reasonably priced and in good operating condition. Adams, 256-7265.

RIDE from Leyendecker NE to Bldg. 880, approx. location Eubank and Menaul. Hodges, 298-9018.

FOLDING DOOR for 80" high by 48" wide doorway. Everett, 298-3994.

ELECTRIC TRAIN, Gilbert American Flyer, diesel engine, passenger car type, other accessories desired. Arnot, 242-5025.

LOST AND FOUND

LOST—Men's safety glasses, gold earring clip, men's bi-focal safety glasses, ladies long brown kid gloves, men's sunglasses in red case, man's yellow scarf. LOST AND FOUND, tel. 264-2757, Bldg. 610.

FOUND—Prescription glasses, rabbit's foot. LOST AND FOUND, tel. 264-2757, Bldg. 610.

Nat'l Award Honors Tech Training Efforts Of M. A. McCutchan

M. A. McCutchan, supervisor of Employee Training and Education Division 3132, received national recognition last week for his activities in the field of vocational education. He received the American Vocational Association's Award of Merit for "significant contributions to the nation's vocational-technical education programs."

The award was presented during the group's annual convention in Miami Beach, Fla.

Mr. McCutchan currently serves as chairman of the New Mexico Vocational Advisory Council and chairman of the State's Manpower Commission. In the past, he has held key positions in various city, county, and state committees working for the establishment of three vocational-technical institutions in the state.

State Legislative Delegation Tours Sandia Laboratory

Members of the Bernalillo County State legislative delegation visited Sandia Laboratory yesterday for a briefing by S. P. Schwartz, Sandia Corporation President, and a tour of Laboratory facilities.

Mr. Schwartz discussed the mission of the Company, current projects, and applications of Sandia Corporation developments to private industry. The group viewed the movie, "Clean Air is a Breeze," at the Sphere of Science and then toured Sandia clean room facilities adjacent to Bldg. 892.

After a luncheon at the Coronado Club, also attended by AEC officials and members of the Sandia small staff, the legislators toured Environmental Testing facilities in Area III.

The tour was arranged by Community Relations Division 3433.

Accident at Sandia

A Sandia employee in Heavy Equipment Section 4573-3 was injured on Dec. 1 when the road grader he was operating struck a large rock buried on the Coyote Canyon Road.

The grader came to an immediate stop, and the employee was pitched forward against the angle iron windshield and a metal lever. The accident caused a possible brain concussion and a neck strain. He was released from Bataan Hospital on Dec. 3, and ordered to remain off work for several days. He is now back at work, although under some work restrictions.

The Sandia Laboratory record was at 5,678,680 man-hours (159 days) at the time of the accident.



Claudia Garlick (3126)

Take A Memo, Please

When the Christmas tree is brought inside and trimmed, watch out for dryness, burning from the bulbs, frayed cords, and open flames.

Former Sandian Jack Howard Returns For Visit as Chairman of MLC Group

Many old friends and former associates of Jack Howard caught a fleeting glimpse of him as he led a group of Washington visitors through a whirlwind briefing at Sandia one afternoon last week. The "man in motion" is one of Sandia's most distinguished alumni, busy carrying out a vital assignment in Washington.

The Honorable W. J. Howard, Chairman of the Military Liaison Committee to the Atomic Energy Commission and Assistant to the Secretary of Defense for Atomic Energy (his official title), was accompanied by some 15 high ranking officers, most of whom are members or alternates on the Military Liaison Committee. The orientation and briefing took them first to Livermore on Tuesday where they visited LRL and Sandia Livermore Laboratory personnel, then to Albuquerque for a one-day, three-phase briefing which started in the morning at Los Alamos and ended with tours of Sandia Laboratory and Defense Atomic Support Agency. They visited Pantex at Amarillo Thursday before returning to Washington.

For Mr. Howard, who was appointed to his position as Chairman of the Military Liaison Committee (MLC) by President Kennedy in November 1963, the visit to Sandia was one of several during the past two years. For some members of the Committee, however, it was a first-time visit. The Chairman is insistent that they know as much as possible about the activities and capabilities of Sandia and the other weapons development laboratories. By law the MLC is designated as the link between the military (DOD) and civilian (AEC) agencies concerned with the use of atomic energy for military purposes.

The Atomic Energy Act of 1946, referring to the MLC, says: "The Commission (AEC) shall advise and consult with the Department of Defense through the committee (MLC) on all atomic matters which the Department of Defense deems to relate to military applications of atomic weapons or atomic energy, including the development, manufacture, use, and storage of atomic weapons; the allocation of special nuclear material for military research, and the control of information relating to the manufacture or utilization of atomic weapons; and shall keep the Department of Defense, through the Committee, fully and currently informed of all such matters before the Commission."

With 17 years experience in the weapons development business at Sandia—the last seven as Director of Systems Development at Livermore—Mr. Howard was a natural choice to succeed Dr. Gerald W. Johnson of LRL as chairman of the Military Liaison Committee. He has worked in the weapons program since 1946, when he joined the Sandia staff shortly after his discharge from the Army at the end of World War II. He held a succession of supervisory appointments before going to Livermore in 1956 to head up the new Sandia facility there.

R. W. Henderson, who led the Sandia Corporation portion of the MLC briefing in the absence of President S. P. Schwartz, voiced the view of all Sandians when he said:

"Sandia and the AEC are fortunate indeed to have a man of Jack Howard's experience and understanding in the job of Chairman of the MLC. His personal knowledge of the problems associated with the development of nuclear weapons, and his appreciation of our capabilities, help us do a better job for the DOD."

A big "plus" factor for Mr. Howard, in carrying out his heavy responsibilities, is his long association with Harold Brown and John Foster, both former heads of the Lawrence Radiation Laboratory at Livermore. Mr. Foster recently replaced Mr. Brown as Director of Defense Research and Engineering. Mr. Brown is now Secretary of the Air Force. Mr. Howard works closely with DDRE in his capacity as Assistant to the Secretary of Defense for Atomic Energy. This phase of the job is a most demanding one and that is why he spends more of his time in his Pentagon office than in the MLC office at AEC headquarters in Germantown, Md.

Shuttling back and forth between the two offices is an inconvenience taken in stride by the youthful (43 last August) Mr. Howard. "They taught me in the Army to always present a moving target," he said with a grin. "Actually, the new belt-



VISITS SANDIA—W. J. Howard (left), Assistant Secretary of Defense for Atomic Energy and Chairman of the Military Liaison Committee to the AEC, visited Los Alamos and Sandia Laboratories last week with a group of military officials from Washington. Mr. Howard has been with Sandia since 1946 and was Director of Systems Development at Sandia Livermore Laboratory when he was appointed to the Washington post in 1963. Shown with him outside Bldg. 892, where part of the briefing was conducted are: Maj. Gen. Austin W. Betts, a member of the Military Liaison Committee and former head of the AEC's Division of Military Application; L. P. Gise, Manager, Albuquerque Operations, AEC; and R. W. Henderson, Sandia Vice President, who was in charge of the Sandia briefing.

way around Washington, D. C., makes it possible to get back and forth fairly quickly, and I can get some work done while someone else drives."

Heading the MLC staff in Germantown—preparing the agenda for the weekly meetings of the Committee—is Col. Sidney C. Bruce, one of the group at Sandia last week, who serves as executive secretary.

Members of the MLC in the party with Mr. Howard were: Maj. Gen. Arthur C. Agan, USAF; Maj. Gen. Austin W. (Cy) Betts, USA; and Brig. Gen. Donald G. Grothaus, USA. Each branch of the armed forces has two members on the Committee. The other members were unable to make the trip.

Also in the party were: Brig. Gen. Glenn A. Kent, USAF alternate; Col. W. K. Benson, DASA (observer) alternate; Col. N. J. Oswald, USAF, JCS (observer) alternate; Capt. A. B. Smith, Jr., USN, Navy alternate; Col. H. V. Scarborough, USMC, member of MLC staff; Col. Roger Ray and Col. C. F. Byers, for USAF ASTD(AE) staff; Col. F. F. Hart, USAF staff; Maj. J. M. VanderVoort, Jr., MLC staff, and Maj. E. J. Shattuck, Jr., USAF, MLC staff.

Participating in the briefing in the Training area, Bldg. 892, with Mr. Henderson was Larry Gise, Manager, Albuquerque Operations, AEC. Several Sandia supervisors made brief presentations on specific projects.

Asked how he likes Washington, Mr. Howard said: "I didn't go there for that purpose." He admits he finds the daily routine a bit hectic, especially the traffic, but Washington has advantages. His wife, Georgia, and son Andy (a 7th grader) are fascinated by the national historical shrines and cultural attractions. They are avid followers of history in the making and try to take in all the important functions, such as the inauguration, Congress in action, the Supreme Court.

The family is looking forward to Christmas holidays at their home in Alexandria, Va. Daughter Melissa, a freshman at Occidental College, Los Angeles, will be home for the holidays.

Mr. Howard, a graduate of New Mexico State, Las Cruces, and a booster of the Land of Enchantment, expects to be back in New Mexico some day. He is on leave from Sandia to fulfill his important assignment.

Sandia's Safety Scoreboard

Sandia Laboratory:

14 DAYS

490,000 MAN HOURS

WITHOUT A

DISABLING INJURY

Livermore Laboratory:

183 DAYS

912,500 MAN HOURS

WITHOUT A

DISABLING INJURY