

General Attorney Admitted to State Bar

F. C. Cheston, Jr., Sandia Corporation's General Attorney, Secretary and Treasurer 6000, was admitted to the Bar of the State of New Mexico Aug. 15. His admission was approved on motion through reciprocity with other states.

Mr. Cheston came to Sandia July 1, 1962, from Western Electric Company, where he was an attorney.

He graduated from Princeton University in 1935 with a BA degree. In 1938, he received a Bachelor of Laws degree from Harvard

Law School. Shortly thereafter, he joined the firm of White and Case in New York as an attorney.

He began his Western Electric career in 1953 as an attorney at the Company's headquarters in New York.

Plant Engineers to Hold Two-Day Discussion at Sandia Laboratory

A meeting of the AEC Integrated Contractors' Plant Engineers will be held at Sandia Laboratory, Sept. 10 and 11. Some 20 representatives of AEC Integrated Contractors are expected to attend the meeting. Personnel of the Albuquerque Operations Office of the AEC and Sandia Corporation's Livermore Laboratory will participate.

The meeting will provide an opportunity for plant engineers to discuss problems and topics of mutual interest. Representatives of the following contractors will attend: ACF Industries, Inc., The Bendix Corporation, The Dow Chemical Company, General Electric Company, Los Alamos Scientific Laboratory, Mason and Hanger—Silas Mason Company, Inc., Monsanto Research Corporation,

Union Carbide Nuclear Company, and E. I. DuPont de Nemours and Company, Inc.

Presentations during the meeting will include a Sandia Plant Orientation, H. H. Pastorius (4540); Sandia Plant Engineering and Maintenance Operations, S. L. Johnson (4542); Plant Safety, E. R. Turnquist, Dow Chemical Co.; Testing Cable Life of High Voltage Cable, Emmett Patrick, ACF Industries; Sandia Procedures for Preparation of Construction Budgets, R. M. Officer (4541); AEC Requirements for Preparation of Construction Budgets, E. T. Russell, AEC/ALO; and The Davis-Bacon Act, L. A. Jacobvitz, AEC/ALO.

The contractor representatives will also tour facilities at Sandia Laboratory and at ACF Industries.

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A firm commitment of the Administration

Maintain Quality, Vitality of Weapons Laboratories

Deputy Secretary of Defense Roswell Gilpatrick has reported to Sen. Richard Russell, Chairman of the Senate Committee on Armed Services, that Sandia Corporation and other nuclear laboratories will continue to play an important part in "the conduct of comprehensive, aggressive and continuing underground nuclear test programs designed to add to our knowledge and improve our weapons in all areas of significance to the military."

Following are excerpts from Sec. Gilpatrick's message to the Committee Chairman:

"The President in transmitting the (Test Ban) Treaty to the Senate, August 8, said, 'The United States has more experience in underground testing than any other nation; and we intend to use this capacity to maintain the adequacy of our arsenal. Our atomic laboratories will maintain an active development program, including underground testing, and we will be ready to resume testing in the atmosphere if necessary. Continued research on developing the peaceful uses of atomic energy will be possible through underground testing.' Later in the same message, the President referred to 'our determination to maintain our own arsenal through underground tests.' In a press conference the President described the program of the last two years and added, 'We are going to continue to carry on, as I've said, a vigorous series of tests.'

"... The underground test program will expand over that currently programmed for FY 64 ..."

"... The underground test program will be comprehensive ... vigorous ... continuing. It will exploit to fullest capabilities of AEC and DOD weapons laboratories ... Standards governing type and magnitude of tests will not be more restrictive than spirit of treaty limitations."

Sec. Gilpatrick further reports that the United States intends to "safeguard the maintenance of modern nuclear laboratory facilities and programs in theoretical and exploratory nuclear technology which will attract, retain and insure the continued application of our human scientific resources to these programs on which continued progress in nuclear technology depends."

"There are three major facilities in which programs in theoretical and experimental nuclear warhead design technology are currently conducted and seven major DOD Laboratories engaged in nuclear weapons effects research. AEC facilities operating under contract are:

Sandia Laboratory, Albuquerque, New Mexico

Los Alamos Scientific Laboratory, Los Alamos, New Mexico

Lawrence Radiation Laboratory, Livermore, California

Major DOD Laboratories:

Air Force Cambridge Research Laboratory, Bedford, Mass.

Air Force Weapons Laboratory, Kirtland AFB, N. M.

Armed Forces Radiobiological Research Institute, Bethesda, Md.

Ballistics Research Laboratory, Aberdeen, Md.

Naval Ordnance Laboratory, White Oak, Md.

Naval Radiological Defense Laboratory, San Francisco, Calif.

Nuclear Defense Laboratory, Edgewood, Md."

Sec. Gilpatrick reported on the government's facilities. "Approximate capital in-

vestment at each laboratory for FY 63 was:

Los Alamos—226 million dollars

Livermore—118 million dollars

Sandia—122 million dollars

The approximate capital investment in support of the weapons effects program of the seven major DOD weapons effects laboratories is 153 million dollars."

Further assurances were stated by Sec. Gilpatrick:

"... The President, Sec. McNamara and Dr. Seaborg have all expressed firm commitment of the Administration to maintaining quality and vitality of our weapons laboratories."

Sec. Gilpatrick expressed the need for "Maintenance of the facilities and resources necessary to institute promptly nuclear tests in the atmosphere should they be deemed essential to our national security or should the Treaty or any of its terms be abrogated by the Soviet Union."

"The following steps are illustrative of what has been done and what is being done in this important area:

"Improvement of test support facilities, including preparation and maintenance of off-continent support bases and test sites, is now underway. Approximately \$55,000,000 is now committed by AEC and DOD for FY 1963 and FY 1964 for improvements to Johnston Island to provide a partial overseas test capability.

"To provide an airborne nuclear test capability, suitable for most weapons proof and development tests, the following needs are being satisfied: Diagnostic aircraft (being accomplished by AEC and DOD); instrumental device or weapon drop aircraft (being accomplished by AEC and DOD); sampler and other support aircraft from the Air Force on short notice (being accomplished by DOD)."

Sec. Gilpatrick listed further steps being taken: "Suitable operating bases on Johnston Island are being held for surveillance, weather, sampler, and sampler return aircraft (Joint AEC/DOD construction is underway), and in the Hawaiian area.

"For a high altitude nuclear weapons effects test capability the following steps are being taken: an overseas base at Johnston Island with adequate area and suitable facilities to support the tests, such as rocket launch pads, assembly areas, etc. (Joint AEC/DOD construction underway); instrumented ships and aircraft available on short notice from the Navy and Air Force.

"Further, the AEC and DOD test organization—the Nevada Operations Office and the Defense Atomic Support Agency, including a nucleus joint task force—will be maintained at strength. This Task Force will be somewhat larger than the standby unit currently maintained.

"It is planned that the regular continuing laboratory programs will include development of those devices which may at some time require atmospheric testing; that the laboratories will be encouraged to carry their ideas and studies to the point where final device construction can be achieved in a time comparable to the time necessary to implement an actual atmospheric test should such tests be authorized; and that development of instruments needed for support of an atmospheric test program will be continued by the laboratories.

"The President has assured the nation that a high state of readiness-to-test will be maintained. In his television address on July 26, he announced, 'Secret preparations for a sudden withdrawal are possible, and, thus our own vigilance and strength must

be maintained as we remain ready to withdraw and to resume all forms of testing, if we must.' And in his message transmitting the Treaty to the Senate he stated, 'We will be ready to resume testing in the atmosphere if necessary.' He amplified the point in his press conference Aug. 20, stating, 'Already we have begun to prepare Johnston Island for that unhappy eventuality, if it should occur ... We are dredging the harbor, we're building some piers; there are ... two dredges already out there, so I can assure you that we are going ahead very rapidly in that area.'

"The position was supported by Secretary McNamara before the Senate Foreign Relations Committee on August 13. Dr. Seaborg's remarks on August 14 were to the same effect.

"On being asked how long after a treaty violation it would take the U.S. to begin testing, the Secretary of Defense gave the following reaction times as the objectives to be attained: Proof tests within two months from the decision to test, development tests within three months from the decision to test, and effects tests within six months from the decision to test. He explained that such an effects-tests readiness posture—the most difficult one to maintain—could be achieved by about a year from now.

"With regard to logistics and finances, Secretary McNamara emphasized that it was important to keep up and expand the facilities of Johnston Island. He reminded that 'We can provide a standby capability by utilization of the approximately 200 million dollars in funds that the Atomic Energy Commission and the Defense Department have requested for Fiscal 1964 for test purposes, and by possible supplements to those funds for further standby facilities.'

"The programs are designed to meet the following criteria with respect to the maintenance of a readiness-to-test posture:

"—The readiness-to-test program will be established on a government-wide basis in support of a plan common to all participating agencies. The required resources and facilities will be maintained in a state of readiness, or earmarked, so that plans can be implemented within the reaction times established.

"—Reaction times for resumption of testing in the prohibited environments will be established and maintained within the constraints of military requirements and reasonable costs. Reaction times will vary for the broad-categories of testing. As an immediate objective, we should be able to conduct proof tests of weapons in stockpile in about two months; operational systems tests in about two-to-three months; weapons development tests in about three months; and weapons effects tests in about six months.

Sec. Gilpatrick further quoted Sec. McNamara, who said we should safeguard "The improvement of our capability, within feasible and practical limits, to monitor the terms of the Treaty, to detect violations, and to maintain our knowledge of Sino-Soviet nuclear activity, capabilities, and achievements."

"The United States now has substantial capabilities to detect, identify, and to some extent diagnose nuclear tests. These capabilities exist in the resources of our conventional intelligence community and in the resources of the Atomic Energy Detection System (AEDS).

"The role played by the Intelligence Community was discussed with the Senate

Foreign Relations Committee on August 16 and with the Senate Preparedness Investigating Subcommittee on May 22 by Mr. McCone, Director of Central Intelligence. The Intelligence Community, under the direction of the United States Intelligence Board has increased its activities and will continue to increase its activities to cope with the new conditions under the Treaty.

"Secretary McNamara, in his testimony before the Senate Foreign Relations Committee on August 13, stated that 'Our examination concluded that the Soviet Union could obtain no major results by testing in the atmosphere and deep space or underwater without incurring high risk of detection and identification.' He pointed out that 'The advantages of illegal testing in the three prohibited environments would be either to develop weapons with yields in the multimegaton range (since designs for weapons with yields up to 10 megatons or more can be checked by lower yield tests underground) or to determine the weapons effects of explosions which cannot be carried out at all, or not so well, underground. There will probably be no cost advantage to illegal testing in the prohibited environments because keeping the tests secret will add to the expense and difficulty of the experiments.' In answer to a question about the future, Secretary McNamara referred to augmentations of the detection and identification system which have already been approved and to further augmentations which are under consideration—expanding upon the statement of the President in his message of August 8 transmitting the Treaty to the Senate: 'There is further assurance against clandestine testing in our ability to develop and deploy additional means of detection ...'

"Dr. Seaborg, in his summary before the same committee on August 14, said that 'Systems to detect possible violations of the Treaty will be maintained and continually improved.'

"The Administration—as indicated in the detailed testimony of Defense and ACDA officials before the Senate Preparedness Investigating Subcommittee on May 9 and 15—has under consideration proposals by which our present AEDS resources can be augmented to enhance our capabilities.

"The standards for the program and plans are these:

"—The current capability of the United States to detect and identify nuclear tests conducted by the Sino-Soviet Bloc will be improved to a degree which is both feasible and remunerative. (Specific proposals for this purpose are currently under consideration.)

"—A vigorous research and development program will be pursued in order to improve equipments and techniques for nuclear test detection and identification.

"—Conventional intelligence sources will continue to complement the scientific intelligence techniques.

"In conclusion, the following important factors must be borne in mind in connection with the concern about clandestine tests: First, the possibility of Soviet clandestine tests is lessened by the fact that they can test legally underground. Second, although there can be no guarantee that we will be able to identify all possible violations of the Treaty, the Soviets cannot guarantee that we will not identify such violations. Put another way, the Soviets will never be sure of the threshold for successful evasion of our expanding and improving detection system. And third, as the President stated in his message to the Senate of August 8, we are determined to maintain our own arsenal through underground testing and our readiness to resume atmospheric testing if the actions of others so require."

Editorial Comment

Technical Societies and Self-Improvement

As the Fall Season approaches and technical societies prepare for a new series of programs, a fine opportunity is offered persons in the fields of engineering and science. Here is an exceptional way for them to keep up to date with the latest developments in their respective areas of interest. All persons working in engineering and science are faced with the increasing problem of keeping current with today's technology.

Not only is this keeping-current a personal challenge, it is an absolute prerequisite to the maintenance of Sandia's present reputation as a competent technical organization and to the improvement of this reputation. We cannot stand still. To continue making headway we must constantly improve our proficiency.

However, mere membership in technical societies does not improve a man's proficiency. It takes more than that. It takes participation. One profits from the association in proportion to what he contributes to the association.

Attendance at local meetings is one important mode of participation. It is also a pleasant way to improve one's self. Figures compiled from last year's technical society meetings show that attendance ranged from as low as five per cent of the membership to seldom over 50 per cent. A good many people were missing opportunities to improve their proficiency when they stayed away from meetings.

If properly planned and fully supported by members, programs are a valuable and enjoyable way of keeping up to date both in societies serving a primary area of interest and in those offering programs of corollary interest.

It's easy to keep in touch with the schedule of technical meetings. Consolidated advance notices are distributed regularly in Albuquerque on a city-wide basis. At both Livermore Laboratory and Sandia Laboratory, meeting notices are posted on bulletin boards.

We speak now of technical meeting attendance because it is timely, but there are other ways of enhancing one's proficiency. Reading, study, experimentation on an individual basis permit one to gain this self-improvement at his own pace, in areas of his own choice and at times most convenient to him.

Proficiency improvement also may be attained through continuation of university-level work or participation in other available out-of-hours courses.

Self improvement is necessary and its benefits are many. Not only does it broaden the background of the engineer or scientist, but it assists Sandia Corporation in its mission.

A Word of Appreciation

The staff of the **Sandia Corporation Lab News** is indebted to Sandia employees.

The Association of Nuclear Editors (ANE) has presented to Sandia Corporation a certificate of merit earned by the **Lab News** in recognition of the publication best fulfilling the purpose of the Association.

ANE is an organization of editors responsible for publications of industries in the field of nuclear energy. The purpose of the organization is to raise the standards of editorial presentation in industrial publications of the nuclear energy field so that their communications will contribute more effectively to the progress of the American economy and society.

It was possible for the **Lab News** to earn this award only because of the generous cooperation given by all Sandia employees. The appreciation of the staff and the members of the Editorial Committee is extended to everyone who has helped.

CERTIFICATE OF
MERIT
THE
ASSOCIATION OF NUCLEAR EDITORS

Member of International Council of Industrial Editors

awards this Certificate of Merit to

Sandia Lab News

Sandia Corporation

this 17th day of June, 1963

in recognition of the publication which best fulfills the purpose of ANE.

H. B. Lindberg
President, ANE

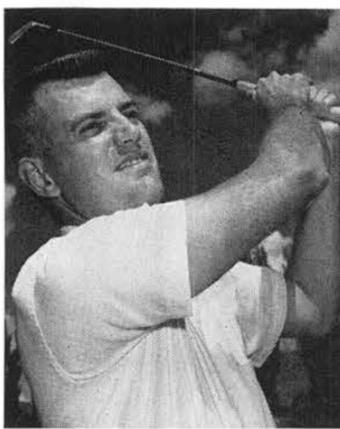
Ski Club Members Prepare for Snow Season

Tonight, following the social hour and buffet at the Coronado Club, a party is being held for Coronado Ski Club members and their guests. Charge for guests is 50 cents.

Main attraction of the party will

be swimming from 8-11 p.m. and free refreshments.

According to Bill Lemmon (1414-2), Ski Club president, new memberships will be taken tonight. Bill suggests that persons interested in joining the ski club attend this party and get acquainted.



HOLE-IN-ONE — Al Schonberg (4341) couldn't believe it. On Aug. 3, on the eighth hole, University of New Mexico golf course, he got his first hole-in-one. The rest of the foursome — Jack Reynolds (4342), John Hart (4325), and Ken Smith (2642) — had to convince him that it really happened.

Mixed Bowling League Winners Are Announced

As the 11-week summer season wrapped up for the Sandia Lab Mixed Handicap Bowling League, winners were announced and officers elected for next year.

Division A winning team was the Alley Catts — members were Don (4511) and Helen Peacock, and Norm Elliott (2423) and Bea Bartlett. Thelma Carpenter (4431) took High Series honors for women, L. T. McKenzie (3242) took the men's High Series. Patte MacPherson (2624) took the High Game Award for women while the men's High Game competition was won by Andy Wilkens (2423).

Trophy winning team in Division B was the Four Speeds. Members were Bill (4413) and Dorothy Myers, and Zern (4413) and Margot Phillips. Women's High Series award went to Ruth Deaton. Gordon Snidow (3463) took the men's competition. High Game Award for the men went to James Winter (4512); Fran Lincoln took women's High Game honors.

Helen Peacock will head the league next year as president. Jane Dancy (3421) is vice president. Paul Martinez (1414) is secretary-treasurer.

Congratulations

Born to:

To Mr. and Mrs. L. B. Broadway (1311), a daughter, Alicia Lyn, July 27.

To Mr. and Mrs. Dale R. Leonard (4413-2) a son, Dale Richard, Aug. 3.

To Mr. and Mrs. Thomas S. Rathke (7334-3) a son, Michael Thomas, Aug. 3.

To Mr. and Mrs. Bennie Montoya (4231-1) a daughter, Lisa Marie, Aug. 3.

To Mr. and Mrs. Laurence Woolrich (7322-2) a daughter, Lora Jeanne, Aug. 6.

To Mr. and Mrs. Roger W. Berger (2561-1) a son, Randall Keith, Aug. 8.

To Mr. and Mrs. Lyle C. Pollett (1423-1) a son, Brian Clark, Aug. 9.

To Mr. and Mrs. Max Bleakney (2452) a daughter, Dinah Kay, Aug. 11.

To Mr. and Mrs. Clinton Tuthill (4224-5) a daughter, Terri Lyn, Aug. 14.

To Mr. and Mrs. Robert L. Henderson (7311-2) a son, Monte Loel, Aug. 14.

To Mr. and Mrs. John C. Crawford (5131) a daughter, Lynn, Aug. 15.

To Mr. and Mrs. Paul A. Silva (4614) a daughter, Tammy Paulette, Aug. 10.

To Mr. and Mrs. Francis J. Graham (4121), a son, Michael Edward, on Aug. 21.

To Mr. and Mrs. Charles P. Salazar (4254), a son, Matthew, on Aug. 15.

To Mr. and Mrs. K. C. Goettsche (1111-1), a daughter, Angela Katherine, on Aug. 17.

To Mr. and Mrs. R. R. Rozelle (4413-1), a son, Ronald Raymond, on Aug. 16.

To Mr. and Mrs. David R. Shafer (7214), a son, Thomas David, on Aug. 14.

To Mr. and Mrs. A. L. Shaut (7222-2), a son, Jeffrey Aaron, on Aug. 12.



STORY HOUR — Although he has a ranch in Cuba, N. Mex., Al Montoya maintains a home in Albuquerque to be near his grandchildren—22 live here, four others are in Kansas. Al retired from Sandia Laboratory in May 1961, since then has been living "good life" in retirement.

Alfredo Montoya Has Retired Still Leads 'The Good Life'

People, hard work, and travel are the keys to Alfredo I. Montoya's full retirement. He retired from Sandia Laboratory in May 1961 after 10 years as a tool attendant in the Development Shops.

Now, at 68, he is "busier than ever." Last weekend, he was camping and fishing in Cimarron Canyon. His summer project has been constructing a new room and completely remodeling his ranch house in Cuba, N. Mex. He has repaired, painted, and added to the six-room house. In addition, he has worked on the yard buildings and repaired fences. He will be purchasing some cattle soon to graze on the 160-acre ranch.

Home in Albuquerque

Al also maintains a home at 507 San Clemente NW in Albuquerque. He comes in on weekends to be with his grandchildren—22 live here. Four others are in Kansas.

"This is the life," Al says. "I'm getting the ranch in shape and there's plenty of work to do. I have long weekends to spend with the kids and go fishing. It seems to me that being busy is the same thing as being happy. I feel I'm accomplishing things at the ranch and I feel my family needs me."

Al likes to travel, too. Last year, he and Mrs. Montoya with one of their daughters and son-in-laws took an extended trip into Wyoming, Montana, and Idaho. Yellowstone National Park was a high point of the trip.

"There is always something to look forward to," Al says. "In a couple of months, it will be hunting season. Last year, I got a 230-lb., 10-point buck."

Planned Ahead

Al started thinking about retirement several years before he

reached 65. "I didn't want it to sneak up on me," he says. "I started making plans for the ranch a long time ago. And I dreamed about the trips I'd take."

For a retired person, health is a major consideration, Al believes. He underwent surgery soon after retiring and for several months remained inactive. "It's not much good to be restricted," he says. "Luckily, I've fully recovered but I still get periodic checkups from the doctor. Anyone nearing retirement age should see a doctor regularly."

Al is active in the Northminster United Presbyterian Church in Albuquerque. He has many friends here and in Cuba. "People become more and more important," Al says. "Treasure your friends and family."

Ralph Morrison Heads Committee At ISA Conference

Ralph Morrison (8118-1) will head the committee on shock and vibration measurement instrumentation at the Instrument Society of America's 18th annual conference and exhibit in Chicago Sept. 9-12.

As chairman, Ralph organized two sessions on current work in the field of shock and vibration measurement, selecting session chairmen and papers to be presented. An aim of the sessions will be to help standardize measurement techniques in industry.

One session will concern shock and vibration instrumentation in the aerospace industry; the other will deal with shock and vibration measurements in the transportation industry.

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ECP Planners Take Candid Look At Problems of Successful Drive

While pondering the annual Sandia Laboratory Employees' Contribution Plan drive last week, ECP Committee members reviewed findings of a questionnaire sent to first-line supervisors.

The supervisors were asked for suggestions on making the ECP campaign more effective. Thoughtful, sincere replies pointed to this fact: There is no simple and easy way to convince people to give more money to the 36 health and welfare agencies which participate in the plan.

The consensus was that the majority of Sandia employees recognize the community need and are contributing generously through ECP.

However, it may be noted, Sandia is no longer the pace-setter in the community. Other firms outdo Sandia in participation per employee.

Since its inception as a "once and for all" drive in 1957, the program has worked well. It has provided an organized, efficient method of giving over an extended period through payroll deduction. With new material, the same techniques in conducting the campaign will be used this year, the committee decided.

The expectations of the drive are the same—a fair share gift from every Sandia employee. A guide to fair share giving has been set at one hour's pay each month. If every Sandia employee contributed his fair share, the Laboratory's total gift would amount to \$330,000. Last year, the most successful of all ECP campaigns, the total ECP contribution reached \$168,000.

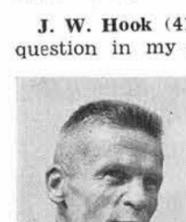
As one Sandia supervisor stated on his questionnaire, "We need to counteract the impression that Sandia contributes more than its fair share."

Aspects of this problem were explored by committee members.

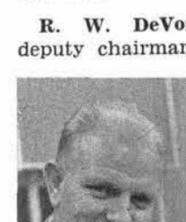
Carl King (3234): "Sandia employees' past record in this area is tremendous. Each year the plan has been in operation has brought another increase. We contributed \$168,000 last year—a major portion of the money raised in Albuquerque. However, there was also a great increase in community giving. We are the major company in the city. Ours is a greater responsibility and a greater potential. I feel that Sandia employees will continue to contribute generously."



J. W. Hook (4110): "There's no question in my mind or anyone else's who has visited ECP agencies that they are doing a great job. Individual cases that are given meaningful and significant help number in the thousands. Pain, suffering, and poverty are relieved. The agencies are doing a remarkable job. The professional staffs of the agencies carry a tremendous workload. The plain and simple fact is that the workload is increasing as Albuquerque's population increases, and more money for additional staff and facilities is needed."



R. W. DeVore (2630), ECP deputy chairman: "The Employees' Contribution Plan gives each of us the privilege of thoughtful service through systematic contributions. The pledged funds are managed by representatives from all segments of the



Laboratory. ECP provides the most effective distribution and allocation of our service dollars. It's a good plan."

M. D. Tucker (4131), ECP treasurer: "The thing that impresses me is this—many Sandians are giving more than their fair share of one hour's pay per month. This generosity is appreciated. However, if every Sandian gave his fair share, the total ECP funds would not be \$168,000 as last year, but would be \$330,000. This is a significant difference."



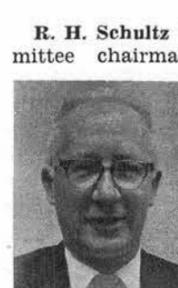
R. N. Reed (3433), ECP coordinator: "It seems to me that the nature of the work at Sandia and security requirements give Sandians little opportunity to demonstrate that they do, in fact, work as a team. The Employees' Contribution Plan offers the only opportunity for everyone to join hands to lend a helping hand to those in need of the services performed by the 36 community agencies supported by ECP."



R. D. Golding (1124): "The privilege of service is something that each of us here at Sandia recognizes. I believe our ECP helping hand symbol shows everyone's desire to do his part. ECP helps support many fine agencies in our city. I've visited most of them. If you could see some of the children that I've seen, then I'm sure you would agree that the privilege of service is important to each of us. Our help is desperately needed."



R. H. Schultz (7320), ECP committee chairman: "Albuquerque continues to grow and so does the need for expanded community service. Our teen-age population is overflowing schools and recreation facilities. At least one-half of the agencies in the Albuquerque United Community Fund are engaged in some form of service to our youth. Additional funds are required to expand the youth work in these agencies in this difficult field where so much needs to be done."



M. J. Sektan (3121): "If ECP had dual filters, reduced cavities, gave relief in seconds, and was packaged in frost-free pop-top containers with bucket seats, the Committee would have an easy promotion job. Instead, ECP's attributes are health and a better lot in life for fellow citizens, most of whom the Sandia employee will never know. While visits to the agencies or participation in the ECP activities is a 100 per cent effective sales clincher for those few involved, practical limitations make a Lab-wide visit impossible. That leaves us with our old standbys—printed or audio-visual materials to tell the ECP story. This is a rough task, but, fortunately, most Sandians help sell themselves."



Betty McKinstry (3462): "For a long time, I objected strenuously to one of the agencies supported by ECP for personal reasons. Now, after working with the ECP committee and getting a first-hand knowledge of the scope of the agencies and the fine work being done, I support the ECP all the way. Even if one agency is objectionable to someone, this is a puny excuse for denying the very real needs the other agencies serve. I wish there was some way for those who don't belong to ECP to see the way Albuquerque benefits from the work of the agencies. I'm sure they would be proud to belong to ECP."



C. W. Allen (2313): "The fact that many Sandians increase their payroll deduction each year without solicitation is indicative of the deep sense of community responsibility that Sandia employees feel. Basic idea of the ECP program is to eliminate the time and effort of a person-to-person solicitation. Payroll deductions make it easy to give and the majority of Sandians use this method. Solicitors will only contact those people who give cash donations or those who are not members of the ECP."



Janice Sharp (4423): "The ECP drive will start Monday, Sept. 30 and last three days. Payroll deduction cards will be mailed to ECP members at that time. This gives us only a few weeks to give serious consideration about increasing our contributions to ECP. Others who are not members will be given the opportunity to join. Let us each help ourselves as we help others to make ours a better community for everyone."



Communication Course For Secretaries to Be Presented by University

Oral and Written Communication for Secretaries, a 12-week course offered by the University of New Mexico Extension Division, will start Sept. 26. The course is presented by the University in cooperation with the Albuquerque Chapter of the National Secretaries Association.

The class will meet from 7 to 9 p.m. on Thursdays in room 115 of Mitchell Hall, UNM. Instructor will be Dr. Wayne C. Eubank, Chairman, Department of Speech. Objective of the course is to train secretaries to express their thoughts in a clear, concise, well-organized manner both orally and in writing. Instruction will be given on the delivery of short speeches and the organization of information.

Additional information is available from the UNM Extension Division.

Warning—Contaminated Drug

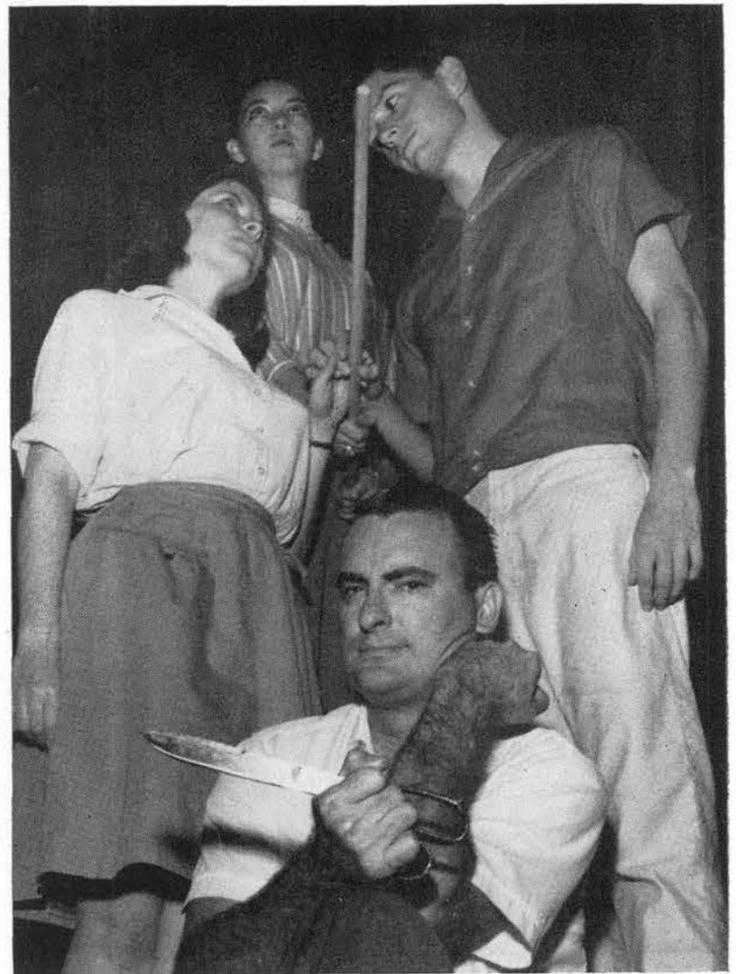
State Health Departments are alerting the public to a contaminated lot of Maalox. The lot number is printed in red below the directions for use. This particular lot is numbered 46413. Anyone possessing Maalox bearing such a number is asked to return same to manufacturer—Wm. H. Rorer, Inc., Fort Washington, Pa.

Walter W. Tillman Retiring from Sandia; To Live in Albuquerque

Walter W. Tillman, a Sandia employee since November 1950, retires today. Mr. Tillman is a grinder in Division 4254. Before coming to Sandia, he was employed by the Master Lock Co., Milwaukee, Wis. He also worked at Picatinny Arsenal in Dover, N. J.



Mr. Tillman was born in Daaden, Germany, in 1898, and moved to Kenosha, Wis., in 1905. "I'm going to get an acre of good land," he says, "build a home as my wife and I want it, raise my own vegetables, and take off on a fishing trip when I please."



DILEMMA—Alan D. Swain (1443), foreground, portrays an irate father in a forthcoming production of the Albuquerque Little Theatre. Al's problem in the play is to insure that his son marries the girl next door while pretending that he's against the idea. "Fantasticks" opens Sept. 6.

'And There I Was on Stage—A Principal in Fantasticks'

Even as a psychologist, Alan Swain (1443) can't explain it. "There I was," he said, "attending Little Theatre tryouts with my wife Jeanne who is company manager. All of a sudden I found myself on stage singing and reading lines."

Alan makes no pretense at being an actor. Yet, he has one of the major roles in the forthcoming Albuquerque Little Theatre production of "Fantasticks." It will be a first time performance for him.

"Just a natural-born extrovert," Alan says. (PhD Psychologist Swain does mathematical modeling of human behavior in systems studies for Sandia's Reliability Department.)

"A character," his wife, Jeanne says.

"A very good performer," Little Theatre Director Bernard Thomas says.

"Fantasticks" is a musical comedy written by Tom Jones with

music by Harvey L. Schmidt. It opened four years ago off Broadway and is still running in New York.

Alan will play an irate father who tries to prevent his son from marrying the girl next door. Yet, it's all a gag—the father really wants his son to get married and uses this method to insure the happy event.

The show opens Sept. 6 and will run through Sept. 14 except for Monday, Sept. 10. Reservations are being taken now at the Little Theatre box office, phone CH 2-4750.

Other Sandians helping with the production include Dick Foster (3465), who is technical director. He's in charge of set design, sound effects, and lighting. Paul Becht (5315) is chairman of the stage management committee. Margaret Reese (3321) is assisting with makeup, and Ed Reilly (3465) is a member of the backstage workshop.

Sandia Engineers Help Plan Int'l Telemetering Meeting

Three Sandians will be participating in the International Telemetering Conference in London Sept. 23-27. A. P. Gruer (7530) has been instrumental in arranging the conference and serves as North

American Chairman. T. J. Hoban (7212), as Program Chairman for the National Telemetering Conference held in Albuquerque last May, helped coordinate the ITC program. N. F. Sinnott (7225) will present a technical paper, "Performance and Applications of a Miniature Roll Stabilized Platform."

The British Institution of Electrical Engineers is host of the ITC. Other sponsoring organizations include the American Institute of Aeronautics and Astronautics, Institute of Electrical and Electronics Engineers, Instrument Society of America, and British Institution of Radio Engineers.

After the conference, Mr. Gruer will travel to Tokyo, Japan, to start preliminary work on the next International Telemetering Conference to be held there in 1965.

Walter W. Tillman Retiring from Sandia; To Live in Albuquerque

Walter W. Tillman, a Sandia employee since November 1950, retires today. Mr. Tillman is a grinder in Division 4254. Before coming to Sandia, he was employed by the Master Lock Co., Milwaukee, Wis. He also worked at Picatinny Arsenal in Dover, N. J.

Mr. Tillman was born in Daaden, Germany, in 1898, and moved to Kenosha, Wis., in 1905.

"I'm going to get an acre of good land," he says, "build a home as my wife and I want it, raise my own vegetables, and take off on a fishing trip when I please."

Sympathy

To J. W. Sims (4114-4) for the death of his father-in-law.

To R. M. Hawk (4111-3) for the death of his father.

To W. D. Parsons (4112-1) for the death of his father.

W. A. Gardner Named Fellow By IES Board

Sandia Corporation's Director of Environmental Testing 7300, W. A. Gardner, has been elected a Fellow of the Institute of Environmental Sciences. His election took place at a meeting of the Institute's executive board in Chicago, July 15.

There are some 1600 members of the IES. Twenty-seven of these are Fellows of the organization and two are honorary fellows.

Mr. Gardner served as chairman of the IES National Symposium in Los Angeles last April, and participated in several planning meetings before that time. He has spoken before many of the IES chapters throughout the United States on environmental test philosophy.

Patent Issued AEC For Device Invented By Ralph O. Work

A patent for a quick-release device has been assigned to the Atomic Energy Commission in the name of Ralph O. Work (1432-2). The device is a positive-mating connector capable of being readily and rapidly disengaged.

The invention provides a connector in which the mating parts are normally engaged with each other through a bayonet-type joint and uses a mechanical release for selectively rendering the joint incapable of maintaining the engagement. The release is activated by means of a straight pull.

In some operations it is highly advantageous to provide for rapidly and positively releasing or disconnecting the mating elements of the connecting means, for example, in air lines between a tractor and a trailer or circuits between an electrical system and a power supply. Mr. Work's invention aims to attain such results.

The patent, issued May 17, 1963, is No. 3,100,655.

Welcome Newcomers

Aug. 6-22

Albuquerque		
Judith R. Gaines	3421	
Marilyn S. McCall	4135	
Joann Mathews	3126	
Belinda Moseley	3421	
John T. Sandoval	3427	
California		
Mark T. Davis, Oakland	1121	
Connecticut		
Grant J. Lockwood, Hartford	5413	
Florida		
Michael Heck, Gainesville	1322	
Indiana		
John M. Portlock, Evansville	7435	
Massachusetts		
Kenneth L. Irby, Cambridge	3423	
New Mexico		
Donald R. Vickrey, Portales	4122	
New York		
Richard P. Doriguzzi, Ballston	4543	
Judith N. Shafer, Rochester	1433	
Ohio		
Calla A. Crepin, Cleveland	3421	
Oklahoma		
Milton S. Cotter, Jr., Miami	4332	
Utah		
Alvin E. Arave, Salt Lake City	2441	
Returned from Leave		
Dorothy Ham	3427	
Joan D. Morrow	4413	
* Denotes Rehired.		



FORMER STUDENTS of E. R. Harrington and graduates of the Albuquerque Public Schools now employed at Sandia Laboratory line up for a group portrait on the steps of Bldg. 800. A man of many talents, Mr. Harrington has been a summer hire in Division 1314 for four years. He holds a number of college degrees.

E. R. Harrington's Students His Inspiration

"I have a life invested in my former students. It's a very worthwhile investment."—Eldred R. Harrington, Director of Secondary Education, Albuquerque Public Schools.

Publication recently of "The Albuquerque Public Schools," a history written by Eldred R. Harrington, called attention to the number of Albuquerque public school graduates employed at Sandia Laboratory. Many of these are former students in physics, mathematics, and chemistry classes instructed by Mr. Harrington, who has performed several careers simultaneously for years. He has been a summer employee at Sandia for four years. This year he is assigned to Component Development Division 1314.

Educator, engineer, chemist, geologist, mathematician, physicist, and athletic coach are labels that

apply to Mr. Harrington. He is also author of more than 250 magazine articles and many western stories.

He holds a BS and MS degree in civil engineering, BS and MS degrees in geology, a PhD in physical chemistry, and a MA in secondary education. He has also completed work for BS and MS degrees in chemistry, a BS in physics, a BS in mathematics and would be awarded the degrees if he would pay the diploma fees.

His refusal to do so is one of his many admitted eccentricities. He rides to work on a motorcycle and uses the vehicle to visit remote ghost towns in the state. He

sleeps only four hours a night. For forty years he has conducted free tutoring classes for anyone who seeks his help. These classes usually meet at 5 a.m.

He is a superb storyteller and is in demand as a speaker for many diverse groups. He plays a piccolo.

He is a machinist and still carries his union card. He earned his way through many summer sessions of colleges and universities throughout the United States working nights as a machinist.

He originated many firsts in education. He started, and for 25 years, conducted the "Envoys of Science" program, a series of science shows presented to elementary and junior high schools by selected teams from high schools, which is now a national

program. He originated the "Dawn Patrol" for science students. The group met for three hours at 5:30 a.m., five days each week to secure additional classroom and laboratory work. The program was conducted continuously for 23 years. His free tutoring service is unique. More than 800 students have been helped this way.

Mr. Harrington has received many honors and recognitions. His energy is phenomenal. He has worked 20 hours a day for 40 years except for six days spent in a hospital.

His greatest reward? "People," he says. "People are my primary interest, pleasure, and satisfaction. It is always a thrill to see former students. I can see my work still growing and this is the greatest satisfaction in living."

Out-of-Hours Classes Start For Sandia Employees Sep. 16

Classes in Sandia Laboratory's Out-of-Hours educational program start Sept. 16. Deadline for enrollment is Sept. 6. A schedule of courses is contained in the Out-of-Hours booklets which are in the racks now. Enrollment cards are also contained in the booklets.

Employees desiring to take scheduled classes should fill out the enrollment cards. The employee's supervisor approves the application and signs the card before it is sent to Technical and Trades Training Division 3132.

"The courses are specifically designed to present job-related information which is immediately useful to employees on their job," H. R. Shelton, supervisor of Technical Training and Education Section 3132-1, says. "Aim of the Out-of-Hours program is to make information on latest develop-

ments in technology available to Sandia personnel. Key man in this process is the Sandia instructor."

Of the 56 instructors teaching Out-of-Hours courses this year, all but one are Sandia employees. They are specialists in the subject matter of the courses. Twenty of the instructors have PhD degrees and another 20 have Master's degrees. The majority have had previous teaching experience.

Classes are held during the noon hour and after work. The students are expected to meet the high standards of the program. Homework and examinations are part of the courses. Successful completion of a course is noted on the employee's personnel record.

Anyone with questions or needing additional information is urged to contact Division 3132, Bldg. 813, ext. 47255.



VISITING SANDIA LABORATORY recently was Russell S. Poor (second from right), Director, Division of Nuclear Education and Training, Atomic Energy Commission, Washington, D. C. He is shown with, from left, G. A. Fowler, Vice President, Development; D. J. Jenkins, Manager of Personnel Research, Training and Education Department 3130; and R. B. Powell, Vice President, Personnel.

Supervisory Appointments

WILLIAM H. KINGSLEY to manager of Environmental Health Department 3310, effective Sept. 1.



Bill started his Sandia career in 1947. He organized Sandia's Environmental Health Division 3311 in 1948, and has been associated with it since that time.

Before coming to Sandia, he was employed by Eastman Kodak Co. in Rochester, N.Y. During the war, he headed a chemical group at Oak Ridge, Tenn., and, in 1946, was engaged in bio-medical research at Los Alamos Scientific Laboratory.

Bill is a graduate of Syracuse University with a BA degree in chemistry and physics. He also did graduate work in physiology at UNM.

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

Bill served as a consultant on processing of radioactive material at the Florida plant of General Electric.

In 1960, he was selected by the International Atomic Energy Commission to fill a consultant position as Health Physicist for Egypt and Iran.

L. E. MAHURON to manager of Electronic Data Processing Department 3450, effective Sept. 16.



Len came to Sandia Laboratory in December 1948, when he worked in the Field Test organization. He was appointed supervisor of EDPM Division 4114 in

December 1956.

Before coming to Sandia he was a commercial pilot for two years on local charter flights out of Amarillo, Tex. He served five years in the Army as an instrument training instructor on Link trainers.

His Bachelor's Degree in mathematics is from Hardin-Simmons University. He is a member of the Mathematical Association of America, and the Association for Computing Machines.



ACTIVE in the recent New Mexico Gun Collectors Association annual show were, from left, John Morgan (2544), Dick Zaluga (1323), and Bob Seeley (1112). The three are charter members of the group.

Today's Antibiotics Make Rheumatic Heart Disease Less Apt to Be Fatal

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

In people with rheumatic heart disease and inborn heart defects, the heart lining (endocardium) and the heart valves sometimes offer a foothold to bacteria carried in the bloodstream. The resulting infection of the endocardium is called bacterial endocarditis.

This disease used to be almost always fatal. Today, however, thanks to antibiotics, most people who get the disease are saved. In prevention, too, there have been important advances. Doctors have been successful in preventing bacterial endocarditis by prescribing antibiotics in connection with certain procedures that allow bacteria to enter the bloodstream. This may include any dental treatment that breaks the gums; removal of tonsils and adenoids and any other surgical procedure in the mouth, nose or throat area; childbirth; and surgery of the gastro-intestinal or urinary tracts.

Thomas Meagher Will Present Paper At ISA Conference

Thomas F. Meagher (8121-2) will present a paper, "The Conversion of Electromagnetic Energy Into Shock Pulses," Sept. 11 at the 18th annual conference and exhibit of the Instrument Society of America. The conference will be held in Chicago.

Deaths

Robert A. Harris

Robert A. Harris, a retired Sandia employee, died Aug. 8 in Fort Worth, Tex. He was 69.

Mr. Harris was formerly employed as a sprayer at Sandia Laboratory.

He is survived by his widow, Mrs. Alpha Harris; four sons, Robert, Charles, Tom, and Ben; two daughters, Mrs. Marion Croft of Fort Worth, and Mrs. Robert Shelton of Gallup, N. Mex.; and four sisters.

Howard A. Keever

Howard A. Keever, a staff assistant in Manufacturing Development Support and Budget Section 2624-2, died on Aug. 10. He was 50.

Mr. Keever is survived by his wife, Adelaide, and three children, James D. Keever, Richard S. Keever, and Marilyn Dakin.

William R. McClurken

William R. McClurken, a retired Sandia employee, died in Albuquerque, Aug. 18. He was 72.

Mr. McClurken was formerly a stockkeeper in Section 4212-1.

A veteran of World War I, he is survived by his brother, Louis McClurken, and a sister, Caroline M. Jolly.



CHAMPIONS — Winners of the recent Sandia Laboratory's Women's Golf Association tournament held at Socorro are Barbara Harwi (7431), left, and Pat Anderson (7241). Barbara took low gross, Pat, low net.



COMMODORE of the Little West Fork Creek Navy, E. R. Clark (7511-2), center, shows Official Document appointing him Commodore of the unit to A. F. Cone, manager of Quality Assurance Department 7510.

Dick Clark Earns Commodore Rank in Tennessee LWFCN

On June 24-25, E. R. Clark (7511-2) journeyed to Clarksville Base, Tenn., to present a course on Inspection Reports and Technical Publication to personnel at the base.

Several days ago, he received a parchment in the mail; it was headed with the shield and device of Clarksville Base, and it notified him of his appointment as Commodore of the Little West Fork Creek Navy. It was signed by Admiral John D. Bulkely, Com-

manding Officer of Clarksville, and it carried the gold seal of the Department of the Navy.

Along with the parchment was a citation which read, in part: "(Mr. Clark's) professional competence and cooperative attitude were directly contributable toward the successful accomplishment of his mission."

"Needless to say, I was pleased by the appointment," Dick notes, "and honored by the responsibility of command."

Service Awards

15 Years

 Angelo DiBella 2322 Sept. 1, 1948	 Paul C. House 3463 Sept. 1, 1948	 Mary J. Lucas 4211 Sept. 1, 1948	 W. G. Vander Laan 2541 Sept. 7, 1948
 Harold E. Crissey 4513 Sept. 7, 1948	 Robert L. King 4614 Sept. 8, 1948	 Edmund G. Baca 3242 Sept. 9, 1948	 William T. Perea 7163 Sept. 9, 1948
 William A. Gardner 7300 Sept. 10, 1948	 Ted B. Morse 7251 Sept. 10, 1948	 Sue M. Sabol 3452 Sept. 13, 1948	 David M. Smith, Jr. 4212 Sept. 13, 1948
 Stanley L. McCammon 4213 Sept. 13, 1948	 Gordon L. Miller 7244 Sept. 13, 1948	 Edward D. G. Clenney 7532 Sept. 14, 1948	 Paul S. Hamilton 4253 Sept. 15, 1948
 H. B. Goldenberg 7513 Sept. 15, 1948	 Kenneth F. Schooley 4253 Sept. 16, 1948	 Glenn M. Haughness 4631 Sept. 17, 1948	 Richard H. Marmon 4631 Aug. 23, 1948

ECP Provides Superior Way To Perform Duty of Charity

Rabbi Moses Ben Maimon (Maimonides) was born in Cordova in 1135 and died in 1204. He was a Jewish philosopher and master of rabbinic literature who lived in Fez and Cairo.

He became recognized as the greatest rabbinic authority of his time, was appointed body physician to Saladin, and married the sister of Ibn al Mali, a royal secretary.

His philosophical treatise, "The Guide for the Perplexed" strongly influenced his Arabian, Jewish, and Christian successors. It seeks to harmonize biblical and rabbinic teaching with philosophy—especially that of the Greek philosopher, Aristotle.



The following is a quotation from Maimonides:

There are eight degrees or steps in the duty of charity.

The first and lowest degree is to give, but with reluctance or regret. This is the gift of the hand, but not of the heart.

The second is to give cheerfully, but not proportionately, to the distress of the sufferer.

The third is to give cheerfully proportionately, but not until solicited.

The fourth is to give cheerfully, proportionately, and even unsolicited, but to put it in the poor man's hand, thereby exciting in him the painful emotion of shame.

The fifth is to give charity in such a way that the distressed may receive the bounty, and know their benefactor, without being known to him.

The sixth, which rises still higher, is to know the objects of our bounty, but remain unknown to them.

The seventh is still more meritorious, namely, to bestow charity in such a way that the benefactor may not know the relieved persons, nor they the name of their benefactors.

Lastly, the eighth, and the most meritorious of all, is to anticipate charity by preventing poverty.

Sandia Laboratory employees have an opportunity, through the ECP, to obtain both the seventh and eighth levels outlined by Maimonides. We know the agencies which use our gifts and the kinds of activities performed. We will not know the individual benefactors. Our gifts also go a long way toward the eighth level.

Agencies such as the New Mexico Council on Crime and Delinquency work in the area of preventing tragedy. Agencies such as the Muscular Dystrophy Association of America perform research programs aimed at prevention of pain and suffering. The ECP is a working plan; your support is continually needed.

Promotions

Kenneth R. Anderson (7324) to Laboratory Assistant
 William J. Stokes (7324) to Laboratory Assistant
 B. M. Vandenburg (7334) to Laboratory Assistant
 Roger W. Thorp (4123) to Staff Member, Administrative
 Herman J. Von Steeg (8223) to Staff Assistant, Technical
 Gary M. Loucks (8114) to Staff Assistant, Draftsman
 Roy A. Furrow (4574) to Janitor
 P. Trujillo (4518) to Helper, Trades
 Nyrak H. Marchant (4631) to Technician
 Arthur P. Hindmarsh (8222) to Boiler Plant Operator
 Danella Y. Davis (3126) to Stenographer Clerk
 Neal K. Howard (4543) to Staff Assistant, Administrative
 Lawrence Metoyer (4511) to Cleaner
 Louis C. Nogaes (4432) to Reproduction Equipment Operator
 Leopoldo A. Armijo (4514) to Utility Operator
 Manuel R. Chavez (4573) to Automotive Mechanic
 Helen D. Garcia (2641) to Record Clerk
 William E. Farrar, Jr. (3452) to Data Processing Clerk
 Daniel F. Trujillo (3452) to Data Processing Clerk
 Pauline Lamberson (4431) to Editorial Assistant
 F. E. Candelaria (3452) to Senior Clerk
 Dorothy D. Hummer (4335) to Travel Clerk
 James I. Morewood (2561) to Data Reduction Clerk
 Perfecto Garcia (4573) to Transportation Dispatcher
 Orlando Vigil (4333) to Accounting Clerk
 Mary T. Werner (8241) to Secretarial Stenographer
 David J. Barton (4413) to Draftsman
 R. Bonnie Smith (4310) to Secretary
 Bernice P. Vigil (6000) to Secretarial Assistant
 Betty L. Turman (4135) to Invoice Clerk
 Betty J. Healy (3126) to Secretarial Stenographer
 Lola V. Johnson (3126) to Secretarial Stenographer
 Faye J. Swinford (3126) to Secretarial Stenographer
 Norma J. Woelhart (3126) to Secretarial Stenographer
 Eunice W. Frank (3126) to Secretarial Typist
 Frances M. Roelle (3126) to Secretarial Typist
 A. Janet Shields (3126) to Secretarial Typist
 Lyndall L. Carter (4433) to Record Clerk
 Marsha G. Gazdig (4333) to Teletypewriter Operator

J. B. Baskett (4432) to Reproduction Service Clerk
 Dorothy W. Calloway (3453) to Data Processing Clerk
 Gerald M. Whitlock (2563) to Data Reduction Clerk
 Donald J. Aydelott (8232) to Pressman
 Alan L. Richards (8214) to Stockkeeper
 Judith A. Damoulos (8212) to Typist
 George W. West (8232) to Mail Clerk
 Sally L. Forrest (8212) to Service Clerk
 Kenneth L. Kluge (8232) to Mail Clerk
 John F. Bacher, Jr. (8213) to Computer Facility Operator
 Clyde C. Holland (7246) to Field Test Technician
 Supervisory Lateral Transfers
 C. E. Dahl from 2544-3 to 2543-3
 F. A. Baczek from 3420 to 4334
 R. E. Henderson from 1551-1 to 1522-1
 W. E. Schorr from 1522-1 to 1522-3

SERF Featured in September Issue of New Mexico Magazine

"Nuclear Age Research," an article describing the Sandia Engineering Reactor Facility, appears in the September issue of *New Mexico Magazine*. Written by James E. Mitchell of Public Relations Division 3431, the article tells of radiation effects studies performed using the reactor. Several full color photographs by Bill K. Laskar (3432) illustrate the article. Technical advice for the article was provided by J. W. Easley, Director of Radiation Physics 5300; C. A. Anderson, supervisor of SERF Operations Division 5331; and H. E. Harling, administrative assistant in 5300.

The Nuclear Test Ban Treaty

PREAMBLE

The governments of the United States of America, the United Kingdom of Great Britain and Northern Ireland, and the Union of Soviet Socialist Republics, hereinafter referred to as the "original parties,"

Proclaiming as their principal aim the speediest possible achievement of an agreement on general and complete disarmament under strict international control in accordance with the objectives of the United Nations, which would put an end to the armaments race and eliminate the incentive to the production and testing of all kinds of weapons, including nuclear weapons,

Seeking to achieve the discontinuance of all test explosions of nuclear weapons for all time, determined to continue negotiations to this end, and desiring to put an end to the contamination of man's environment by radioactive substances,

Have agreed as follows:

ARTICLE I

1. Each of the parties to this treaty undertakes to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion at any place under its jurisdiction or control:

A. In the atmosphere, beyond its limits, including outer space, or underwater, including territorial waters or high seas; or

B. In any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the state under whose jurisdiction or control such explosion is conducted. It is understood in this connection that the provisions of this subparagraph are without prejudice to the conclusion of a treaty resulting in the permanent banning of all nuclear test explosions, including all such explosions underground, the conclusion of which, as the parties have stated in the preamble to this treaty, they seek to achieve.

2. Each of the parties to this Treaty undertakes furthermore to refrain from causing, encouraging, or in any way participating in, the carrying out of any nuclear weapon test explosion, or any other nuclear explosion, anywhere which would take place in any of the environments described, or have the effect referred to in Paragraph 1 of this article.

ARTICLE II

1. Any party may propose amendments to this Treaty. The text of any proposed amendment shall be submitted to the depositary governments which shall circulate it to all parties to this Treaty. Thereafter, if requested to do so by one-third or more of the parties, the depositary governments shall convene a conference, to which they shall invite all the parties, to consider such amendment.

President Kennedy has asked Americans to inform themselves concerning the ratification of the treaty. So that Sandia Corporation employees will be better informed on the treaty under discussion we print here the complete text.

2. Any amendment to this Treaty must be approved by a majority of the votes of all the parties to this Treaty, including the votes of all of the original parties. The amendment shall enter into force for all parties upon the deposit of instruments of ratification by a majority of all the parties, including the instruments of ratification of all of the original parties.

ARTICLE III

1. This Treaty shall be open to all states for signature. Any state which does not sign this Treaty before its entry into force in accordance with Paragraph 3 of this article may accede to it at any time.

2. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the governments of the original Parties—the United States of America, the United Kingdom of Great Britain and Northern Ireland, and the Union of Soviet Socialist Republics — which are hereby designated the depositary governments.

3. This Treaty shall enter into force after its ratification by all the original Parties and the deposit of their instruments of ratification.

4. For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Treaty, it shall enter into force on the date of the deposit of their instruments of ratification or accession.

5. The depositary governments shall promptly inform all signatory and acceding states of the date of each signature, the date of deposit of each instrument of ratification of and accession to this Treaty, the date of its entry into force, and the date of receipt of any requests for conferences or other notices.

6. This Treaty shall be registered by the depositary governments pursuant to Article 102 of the Charter of the United Nations.

ARTICLE IV

This Treaty shall be of unlimited duration.

Each Party shall in exercising its national sovereignty have the right to withdraw from the treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty three months in advance.

ARTICLE V

This Treaty, of which the English and Russian texts are equally authentic, shall be deposited in the archives of the depositary governments. Duly certified copies of this Treaty shall be transmitted by the depositary governments to the governments of the signatory and acceding states.



PROFESSIONAL sanitarians from Colombia visited Sandia Laboratory's Environmental Health Department 3310 recently for indoctrination in industrial hygiene methods used here. Affiliated with the Peace Corps, they will return to their native country with American Peace

Corps volunteers who are being trained in Albuquerque, and will work with the Americans in the Peace Corps program in Colombia. J. L. Martinez (7241) at right, served as translator for the group. At right is W. H. Kingsley, who is supervisor of Division 3311.

Une Voiture Francaise Gaze Magnifiquement Utilisant La Puissance Electrique au Lieu de L'essence

Paul Stickler (2543) calls it his "Little Joule." On the outside, it looks like a very clean little '55 Renault 4CV. Under the rear deck, where the motor ought to be, is a stack of batteries, a maze of wire, and a surplus aircraft generator. It's an electrically-powered sedan. Since he completed the electric powerplant last May, Paul's transportation costs him .8 cents per mile.

"I started thinking about an electric car in November of last year," Paul says.

After a long search, Paul located the '55 Renault at a used car lot. The price tag was \$40. "My electric car had to be lightweight," Paul said, "and inexpensive."

Next step was to remove the conventional engine. In the meantime, Paul had ordered a 400 amp jet aircraft generator from a surplus dealer in Los Angeles. He had also located six industrial cart batteries. The control apparatus and circuits were built from surplus gear purchased at the Sandia salvage yard.

The car was purchased in February. Paul had it converted to electric power early in May. After three months and some 500 miles Paul has experienced no difficulty. Top speed of the car is 40 mph "depending on which way the wind is blowing."

The electric motor is equivalent to a 10 hp conventional engine, Paul says. The car, carrying the driver and one passenger, has a range of 17 miles. Then the batteries need recharging.

The charger came out of the



PAUL STICKLER (2543) displays the "Little Joule," electric powerplant he designed and built for his '55 Renault 4CV. The car achieves 40 mph, has a range of 17 miles, and can be recharged overnight at home.

Sandia salvage yard. Paul plugs it into a 110-volt outlet in his garage and lets the car recharge every night. New Mexico Public Service Company furnished a meter for

the charger and the power cost averages 40 cents a week or .8 cents per mile.

Total cost of the car, electrical assembly, and charger was \$225.

Invite Soccer Players To Join Sandia Team for Season's Competition

Offensive and defensive players are needed for the soccer team made up of Sandia Laboratory employees which participates in the Metropolitan Soccer Alliance. The University of New Mexico sponsors the Alliance, providing use of soccer fields on the UNM campus, uniforms, and equipment except for shoes.

Other teams in the Alliance represent Kirtland Air Force Base, Boys Academy, Europe, Afro-Asia, Latin America, and North America. League play commences in the fall and extends to late winter. Games are played on Saturday and Sunday afternoons.

No prior experience in the game is needed and age is no limitation. Persons interested in playing with the team or those who have been team members in the past may contact either John Souza (5243), AX 8-0777; or Jack Deveneau (4361), AX 9-4055.

Coronado Club Swimming Pool To Close Sept. 2

This evening, the Coronado Club will feature a Mexican Buffet, with Social Hour from 4:45 to 7:30 p.m. Prices for the buffet will be \$1.25 for adults and \$1 for children.

The last day for recreational swimming at the Club will be Labor Day, Sept. 2.

On Saturday, Sept. 7, the Sandia Club will hold its Fall Dinner Dance. Also, Teenagers' Dance Instruction will begin at 1 p.m. Beginning Tuesday, Sept. 10, the Club will begin a series of adult dance instruction lessons.

Entries Close Tomorrow For Albuquerque Open Horseshoe Tournament

Contestants have until noon tomorrow to qualify for the Albuquerque City Open Horseshoe Tournament, according to Parker Burns (2643), president of the sponsoring Albuquerque Horseshoe Club. The tourney will be played on the New Los Altos courts Aug. 31-Sept. 2.

Anyone desiring to enter the tournament can qualify by pitching 100 shoes at the Los Altos courts either tonight or tomorrow morning. Results of the qualifying will place the contestant in one of four competitive classes. Trophies and a fourth prize will be awarded winners in each division.

Further information is available from Parker, telephone AL 5-3737. Tournament entry fee is \$1.50.

Parents Group Will Hear Discussion of Home Buying, Selling

The Albuquerque Chapter of Parents Without Partners will meet Saturday, Sept. 7, at 8 p.m. at the East Central Branch of the Albuquerque National Bank.

Speaker will be Thomas H. Martin, Albuquerque real estate broker, who will discuss "Buying and Selling Homes from the Viewpoint of the Owner."

Parents Without Partners is a national organization devoted to the interests of single parents (widowed, divorced, or separated) and their children, according to Dorris Hankins (5412), publicity chairman.

Additional information about forthcoming social events of the organization, including a hayride and children's party, is available from Dorris, phone AL 6-0712.

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

- MOUTON JACKET, size 12, \$30. Bueffel, AX 8-1163.
- NORGE AUTOMATIC WASHER, 3 yrs. old, \$90; boy's 24" bicycle, \$10. Prekker, AX 9-6468.
- USED SILVERTONE TV and stand, \$50. Church, 256-3960.
- '56 PONTIAC 4-dr., R&H, \$425; boy's 26" bicycle, \$10; chrome high chair, \$12; 21" Admiral table model TV, Dohrmeyer deep fryer, \$10. Long, AX 9-1416.
- HOME on large lot w/9 fruit trees, 28' den w/fireplace, built-ins, flexible terms, Paradise Hills. Davis, 898-2227.
- BABY'S play pen, \$15. Hudson, 344-1154.
- '57 GE WASHER, Filter-Flo, new water pump, \$35. Oard, 247-9924 after 5 p.m.
- STUDENT FOLK GUITAR, \$15; 120 bass accordion; Thor Automatic Gladiron, \$15. Glass, 298-0842.
- ELECTRIC STOVE and refrigerator; car top carrier. Moore, 299-8377.
- COUCH; desk and chair; bedroom suite; dinette set; Noritake china; grill; portable sewing machine; luggage; miscellaneous furniture. Boyd, AX 5-4371.
- DINING ROOM SET, table and 6 chairs w/table pad, \$49. DeHaan, DI 4-4805 anytime after Sept. 2.
- '47 JEEP STATION WAGON w/OD, \$125. Sanders, AM 8-1500.
- BICYCLE, girl's 26", \$15. Seay, AX 9-5270.
- SEWING MACHINE, electric portable Kingston Deluxe, all attachments, still under guarantee, make offer. Cockrill, AM 8-5502.
- '58 TR3, \$700. Randle, Placitas.
- VENETIAN BLINDS, 1 ea. 6' wide, 5' high, \$5; 1 ea. 5' wide, 4' high, \$5; 21" TV console, \$35. Leonard, AL 5-4825 after 4 p.m.
- BONANZA F model, 200 hrs., SMOH Chrome Major licensed to July '64; 20 gal. Aux., LTRA-6, VC27A, ADF, FGP, \$12,950. Neibel, AX 9-0336.
- '57 STUDEBAKER 2-dr. Scotsman, 6-cyl., standard transmission, \$275. Bryant, AX 9-8315.
- CORRESPONDENCE COURSE, Electronics, Capital Radio Engineering Institute (CREI), complete, \$25. Petrone, 255-3633.
- HOTPOINT REFRIGERATOR, 14 cu. ft., \$45. Wladika, 255-9166.
- '54 CHEVROLET 4-dr. sedan Bel Air, standard trans., \$295; all metal luggage trailer, \$55. Robinson, 243-4794.

NEXT DEADLINE FOR SHOPPING CENTER ADS Friday Noon, Sept. 6

- BASSINET, \$5; bathinette, \$5; Craftsman lawn mower, \$10. Daniels, AM 8-1128.
- MASON & HAMLIN REED ORGAN, \$125; Mitchell-Garcia matched surf casting rod and reel, never used, wholesale. Patterson, AX 9-5152.
- PHILCO REFRIGERATOR, 9 cu. ft., \$45. Deller, 298-3260.
- TRUMPET, used Gretsch Pathfinder w/case, \$50. Schildlinecht, AX 9-5540.
- '47 JEEP, CJ2A full metal cab, hubs, tow bar. Crass, 299-1418.
- 1928 MODEL A FORD. Monroe, 9722 Salem NE, AX 9-3041.
- NORGE GAS RANGE, 30" oven, \$40; 2 step blond end tables and one step blond corner table, \$25. Stephenson, AX 8-5902.
- APPROX. 1/2-acre lot in Glenwood Hills, \$600 down and assume \$36.90 monthly. Hopper, DI 4-7985.
- BABY CRIB, \$18; baby stroller, \$4. Weber, AX 9-1389.
- FACTORY HARD TOP for four place Austin Healey, will paint your color, \$195. Schultz, 298-2731.
- LIONEL TRAINS, two sets, extras, \$50 or separately; Winchester pump .22, case and ammo, Hi-Power, \$35. Scott, AX 9-3412.
- NEW REVERE 8mm movie camera; Bell & Howell projector, both for \$175, originally \$250. White, DI 4-8685.
- '62 BONNEVILLE convertible, white, loaded, \$3000. Neitzel, DI 4-8685.
- OUTBOARD MOTOR, 7 1/2 hp Elgin, \$75 or will trade. Morrison, UL 5-9173.
- CAR SEAT; swing, \$3. Gragg, AX 8-0267.
- '55 PONTIAC HT Coupe, R&H, w/w, \$350; two 15" wheels for Chevrolet; 3 used 8.20x15 w/w, \$2 ea. Wilson, AX 8-0049.
- GLASS CANNING JARS w/lids, qts. 1/1 doz., Pts. 80c/doz. Hobbs, 268-6461.
- BEDROOM SET, 3 pieces w/mattress and boxspring. Holmes, AX 9-2640.
- '62 MERCURY METEOR 2-dr., all power. McHarney, AL 5-7883.
- ROBERSON, double garage, family room w/fireplace, carpets, drapes, a/c, below appraisal, assume GI or new FHA. Let-better, 299-4343.
- 3-BDR. HOME, built-in kitchen, large lot, no flood problem. Petersen, 2916 Dakota NE, AM 8-8618.
- ONE-HALF PRICE SALE household furniture; Filter-Flo washer, GE dryer, appliances, paint; gentle kid's horse, \$80; free kittens, dogs. Brathovde, Box 425 Frost Rd., San Antonio, BU 2-3259.
- 2 PLATFORM ROCKERS; 1 divan; 2 end tables; 1 bedroom suite w/chest of drawers, mattress; Coldspot refrigerator, 1 yr. old; desk. Marchant, AL 5-1152 after 5 p.m.
- UNDERWOOD portable typewriter w/case. Morrissey, CH 7-1130.
- USED 32" wood door w/glass, 36x36 steel casement window, 4 venetian blinds, 2 12"x40" louvered shutters. Holloway, 255-6938.
- '53 CHEVY V8, auto. trans., \$175; 35' four-ft. high white fence on roll, \$10. Stone, 268-2657.
- GENERAL ELECTRIC RANGE, \$50. Kelly, 255-9967.
- MACGREGOR high-cut football shoes, soft kangaroo leather, nylon cleats; Riddell low-cut field shoes; both size 10. Thiry, 8003 Constitution NE.
- FREE PUPPIES, small breed. Moon, 298-1701 after 5 p.m. and weekends.

- '61 FORD 4-dr. HT, many extras, 14,000 miles, \$1750; Zoysia grass plugs, 7 cents each. Cannon, AX 9-4592.
- '62 BONNEVILLE, loaded, will take trade as equity. Mantona, UL 5-9264.
- 3-BDR, 1 1/2 baths, paneled den w/fireplace, priced \$2300 less than my investment, \$500 down FHA, 11017 Phoenix NE. Ray, AX 8-0408.
- POODLE PUPPIES, black, male, standard, AKC reg. Hannah, 298-3931.
- TV, 19" portable 1960 model, needs minor repair, \$30. Smailer, 299-8413.
- POLAROID MODEL 850 camera w/Wink-Lite, flash and case, \$85. Deeter, AL 5-5789.
- ELECTRIC RANGE, 4 burners, 2 yrs. old. Wemple, 298-2048.
- HEATHKIT S.G. 8 R.F. signal generator, \$10. Brownson, AX 9-0449 after 5 p.m.
- BOAT, 16' fiber glass w/75 hp Johnson motor, custom foam rubber seats, speedometer. Windham, 256-9455.
- WALTON BELT vibrator. Burright, AX 9-7386.
- NADCO GOLF CART, \$5; green divan, \$12.50. Nelson, AL 5-2364.
- CHIHUAHUA PUPPIES, AKC reg., female, 1 black and white, 1 silver. Howe, 282-9927.
- CROSLY-KELVINATOR refrigerator, \$60. Moyer, AX 9-0759.
- '60 CORVAIR 700, 4-dr., standard trans., R&H, new tires \$950. Richards, 2929 Cardenas Dr. NE, AL 6-9740.
- '60 CHEV. 1/2-ton pickup, 8' fender side box; 16' aluminum boat, 78" beam, remote controls, top, trailer. Tackett, 298-4500.
- .257 ROBERTS w/scope; Windsor guitar and case; comb. radio-record player; 30.06 rifle; 30 gal. aquarium; misc. other items. Shaw, AX 9-5557.
- MOVIE CAMERA, Keystone model K-20, f1.8 fixed focus lens, never used, guarantee included. Hansen, AL 6-0641.
- TROMBONE, Pan American, \$50. Warden, AL 5-0557.
- '56 MERCURY 9 passenger station wagon, R&H, AT, \$450. Forsman, 299-5570.
- SILEX EDGER-trimmer, \$15; 20-watt amplifier, \$25 or best offer; Conn Clarinet, B-flat, \$55. Carlson, 299-0258.
- '63 PARILLA TRAIL AND ROAD CYCLE, 12 hp, 4-speed; new Ruger Blackhawk '44 Magnum pistol, \$80. Etherton, 298-5155.
- YOUTH BED, \$15; Vespa scooter, \$85 or trade. Coalson, BU 2-3208.
- DOUBLE ROLL-AWAY BED, coil springs, mattress, \$17.50, will deliver. Smith, 268-1778.
- GAS RANGE, Kenmore '59 model w/center griddle, timer, burner and oven light, and oven window. Berry, AX 8-6996.
- LARGE DINETTE w/6 chairs; youth bed w/mattress and matching chest; stroller; 6-year crib w/mattress. Loepke, AX 9-7338.
- POLAROID J-66 CAMERA w/complete kit, was \$116 retail, make offer. Sisler, AX 9-0963.

- ITALIAN PROVINCIAL DINING TABLE w/6 chairs; coffee table, 2 end tables. Gandy, 299-9445.
- 36" HOTPOINT RANGE, white porcelain finish, thermowell, 4 burners, timed oven and outlet, highest offer. Lewis, AX 9-2322.
- MOUNTAIN LOT, terms or will trade for late model pickup. Sanchez, CH 2-4556.
- '56 CHEVROLET 2-dr. HT, PB, Power Glide, V-8, \$400. Pohl, DI 4-8503.
- '58 INTERNATIONAL and '50 Chevrolet, both stationwagons, both w/numerous extras. Sims, AL 5-6967.
- '62 FORD GALAXIE, V-8, standard transmission w/OD, R&H, Trujillo, 299-4911.
- '53 STUDEBAKER 1/2-ton pickup, \$250. Petriani, 289-0433.
- ELECTRIC HAIRDRYER, \$5; Morse vacuum cleaner, new, \$25. Pinkerton, AL 5-2505.
- GUITAR, blonde Byrdland Gibson, \$500. Hampton, AL 5-8110 after 5 p.m.
- RIFLE, Sako 300 HSH Magnum w/Lyman peep-sight, recoil pad, 5 boxes ammunition, \$110; USAF-type flare gun, 10 flares, \$15. Mattox, 268-5554.
- '59 OLDS WAGON, Super 88, automatic transmission, PS, PB, trade considered. Brewster, 10208 Eden Ct. NE, 299-8731.
- BELL BOTTOM JACK, capacity 5 tons, \$2.50; wire fence stretcher, \$2; RFD mail box, \$2. Hill, CH 3-3493.
- '24' BOY'S BIKE, \$15. Baxter, 1610 Bayita Lane NW, DI 4-7601.
- MINIATURE FRENCH POODLE, white, registered, male. Patrick, 299-5878.
- TRANSFORMER, 220 volt to 50 volt secondary, 5 kilowatt rating, fine for welder, \$20. Adams, AM 8-5943.
- SCHWINN BOY'S BIKE, cost \$60, sell for \$25; Samoyeds 4-yr.-old female, 2-yr. male, all shots, obedience trained. Merrill, CH 2-4873.
- GONSET G-76 100 watt mobile or home transmitter receiver, cost new \$419, sell for \$245, power supplies extra. Anderson, AX 9-2595.
- BAR STOOLS, 30", wooden seats and backs, wrought iron legs, set of 5, \$20. Price, AX 9-6265.
- 2-BDR, SE Heights, a/c, sprinklers, carpets, drapes, near bus, schools, shopping, bases, \$11,500, 312 Wellesley. Monson, AM 8-5001.
- 1951 HOUSE TRAILER, Lighthouse Caravan, 8 x 30 ft, \$995. Hutchison, 632 Montoya NW.
- HIGH CHAIR, maple, plastic tray, \$6. Platt, 298-1180.
- 4-BDR HOME, corner lot, fireplace w/bookcase, family room, a/c; veneer stone siding 8"x24"x1 1/4" handyman material. Bell, AX 9-4064.
- '57 AUSTIN OF ENGLAND, Westminster model A-90, 6-cylinder. Regan, 7521 Cutler Ave. NE, AX 9-8877.
- 8" TILTING ARBOR SAW, ball bearings, 24"x24" table with or without motor and blade; GE double-oven range, about 5 yrs. old. Hurley, 256-0746.
- MUNTZ 21" TV, \$50; 20 acres near Torreon, \$150 per acre, heavily wooded, title insurance. Weir, AX 9-1160.
- STEVENS MODEL 15-B single shot boy's .22 rifle, fired less than 100 rounds. Chavez, 299-8194.
- THREE Marine Corps down sleeping bags; covered auto-top carrier for compact car; seat belt adapters for VW. Hoagland, 299-7097.

- BOX SPRINGS, mattress and Hollywood bed frame. Danclovic, AL 5-4927.
- 16" FORD WHEEL tire and tube, \$6. Asturias, 299-4173.
- IRONRITE IRONER, \$20; wardrobe suitcase, \$10. Garrard record player, \$15. Granum, 243-1491.
- AUTOMATIC WASHER, Kenmore, 1956 model, recently overhauled, \$22.95. Trybul, 298-3325.
- BABY FEEDING TABLE, \$15; car seat, \$4; car bed, \$5; accordion, 120 bass, \$80; evaporative car cooler, \$25; room-size cooler, \$15. Sisson, AX 9-4217.
- 1958 HOTPOINT automatic washer. Needs new clutch, \$25. Absher, 243-7508.

WANTED

- WILL CARE FOR one or two children in my home, 9005 Shoshone NE, near Samber Del Monte School. Starkovich, AX 9-5445.
- JEEP PICKUP CAMPER, canopy will trade living room furniture, 30-06 light plant (not operating), garage door, misc. for all or part payment. Aaron, 282-3124.
- RIDE to 880 parking lot, Mackland, between Amherst and Carlisle. Bascom, AL 6-7724.
- RIDE from Aloha Village Mobile Home Court—vicinity Yale and Gibson—to bldg. 880. Hunt, 243-0162.
- METRONOME in operating condition. Sundberg, AX 9-2177.
- RIDE from vicinity of Columbia SE or Southern SE to bldg. 892. Jackson, 242-7084.
- 4 CU. FT. CEMENT MIXER; 12 cu. ft. refrigerator; about 10" metal lathe; 1/4 hp drill press; early American couch. Coalson, BU 2-3208.
- WOMAN for child care and housework, live in, room, board, and salary, age 18 to 40. Meyer, 298-4825.
- WINCH FOR JEEP WAGON, power take off or electric. Adams, AM 8-5943.

FOR RENT

- MODERN FURNISHED Sandia mountain cottage, insulated, suitable for 1 or 2, 25 min. from base, water and heat paid, carport, \$45/mo. McMillin, BU 2-3226.

LOST AND FOUND

- LOST—White bone bracelet, brown bill-fold w/ID of Honorato Sanchez, wedding pictures, keys on chain, 36 slides in paper bag, 2 keys on ring, film badge, magnifying glass in case, bank from Credit Union left in bike basket 892, brown pipe, wallet insert w/ID Clarence J. Domme. Lost and Found ext. 29157.
- FOUND—Wrap-around sunglasses in black case, prescription sunglasses w/metal frame in brown Ridgecrest optical case, #741 key, 2 1/2" brown 2-blade pocket knife, safety glasses, small white pearl pocket knife, Wearwear sportsman watch w/black face grey band, golden aqua rhinestone drop earring, 6" slide rule in tan case, glasses with "Wimpy" on nose-piece, 2 1/2" pearl handle pocket knife, keys, gold plated Polaroid sunglasses. Lost and Found ext. 29157.

In Many, The Rains Brought Forth The Best



- Major Paul House, USMCR -

Sandian Appointed Commanding Officer Of Marine Corps Unit

Major Paul C. House has been appointed Commanding Officer of the Fifth Force Reconnaissance Unit, FMF Force Troops, U. S. Marine Corps Reserve, which is stationed in Albuquerque. Effective date of the change in command is Sept. 1. At Sandia, Major House is supervisor of Technical Illustration Section 3463-1.

Paul formerly served as mobilization officer of the New Mexico District, USMCR. He was on active duty during World War II, and interrupted his Sandia career for duty during the Korean conflict. He's been a member of the Marine Corps for 22 years.

The Fifth Force Reconnaissance Unit is one of four similar units in the United States. A parachute and amphibious reconnaissance group, the unit is comprised of military specialists in intelligence, communications, and guerrilla warfare.

When Albuquerque was hit by a flash flood recently, Sandia Corporation employees were not idle. Many of them participated in rescue work. Others were busy sandbagging their own homes. Still others spent an anxious several hours watching the black swirling waters lap around their doors.

After the runoff receded, the mess was something to behold. Sandia husbands, their wives and youngsters spent many an hour mopping, shoveling, and bailing.



SCENE OF FLOOD DESTRUCTION was visited recently by two members of the Bernalillo County Citizens' Unit, Ken Johnson (4232-3), right, and F. D. Snyder (4231-3). They provided emergency help during floods in Albuquerque together with many other Sandia volunteers.

Two Flood Watchers Held Night Long Vigil Over Ever-Deepening Waters

"Of all the things that happened that night, the sightseers were the most preposterous," Ken Johnson commented. He and Dean Snyder (both of Measurements and Standards Division 4232) are members of the Bernalillo County Citizens' Unit, and they saw action, along with many other volunteers, during the recent floods of Albuquerque.

They received an alert call about 7 p.m. on Aug. 10, and they reported to the Bernalillo County Sheriff's Department. From there they were dispatched, in their radio equipped cars, on a reconnaissance of the North Valley area.

"We wanted to see how the water situation was there, what requirements were for possible evacuation of families living in the area, and what roads would require blocking," Dean said. "Once we got out there, we stayed."

Both men started the long night's vigil in the area around Edith and Candelaria. Later, Ken spent two hours in the vicinity of Fourth Street and Menaul. They and others spent many hours giving aid to evacuees, to other rescuers, to spectators, and to other rescue units via two-way radio.

"The rain lasted for about an hour," Ken continued, "but it was only the beginning of our troubles. The water rose rapidly. Military vehicles were able to evacu-

ate some 300 families from the area, but the water in the streets was six feet deep in some places where the pavement had washed away."

"We were amazed by the people who came simply to watch," Dean said. "Some of them drove into the deepening water and stalled; then they required rescuing. Some were in pajamas; they kept coming long into the night—until about 3 a.m. Eventually, the streets were completely blocked by stalled automobiles."

By 5 a.m., things had quieted down, although there were still several patrols out to protect the sodden property from looters. Ken, Dean, and others made their way home.

On Sunday evening, Ken was called out again during a rainstorm—this time, to watch the arroyo and dam located near the junction of State Highway 422 and Menaul. "I spent two hours in the area," he said. "But that's another story."

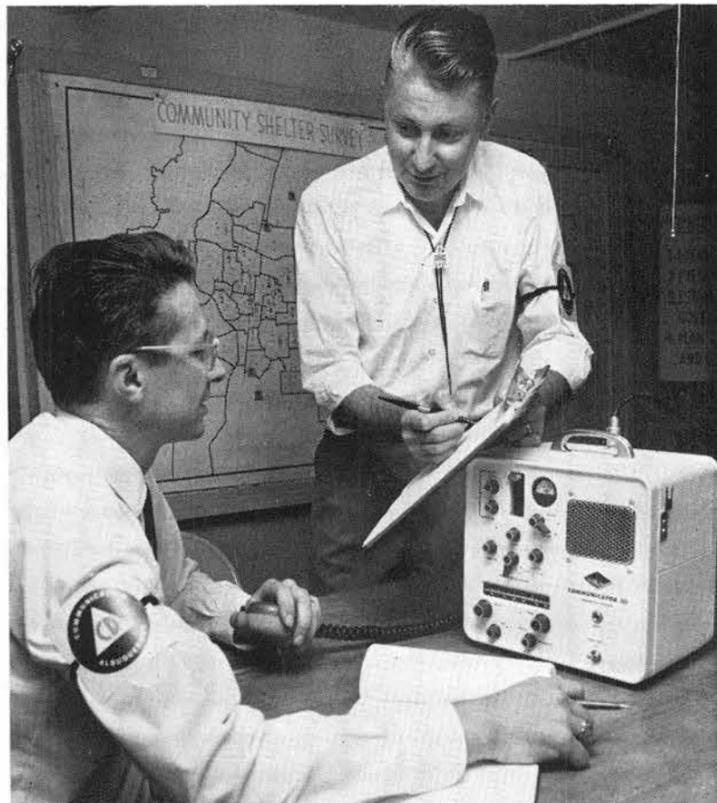
The Bernalillo County Citizens' Unit was only one of many volunteer units on duty during the flood. Closely allied with local Civil Defense activities, the 200-member unit provides help during CD emergencies, and aids the Bernalillo County Sheriff and the State Police. Sandians interested in joining the unit should contact Ken (AX 8-0735) or Dean (AX 9-7845).

Molten Metal Burns Three Employees In Bldg. 841 Foundry

On Aug. 26, as three employees were pouring molten aluminum in the Bldg. 841 foundry, there was a loud report, and the molten metal spewed from its receiving container. All three were burned; only one was injured seriously enough to lose time. He is recuperating with first and second degree burns. Probable cause of the accident: moisture in the container.

The two-and-one-half-inch, one-hour rain set some sort of a 30-year record. Help given the more unfortunate victims of the waters also set a new record.

Following are two reports of how Sandia employees worked the night of the rains. These reports do not give the complete story of the volunteers of that night, for they have proven to be a modest lot. The Lab News searched out this information and prints it as an example of man's help to man.



VOLUNTEER MEMBERS of Radio Amateur Communications Emergency Service (RACES) provided communications assistance during the night of the floods in Albuquerque Aug. 10. At right is Bob Dawirs (1531). Buford Eagen (1512) is at center. They're shown at local CD center.

Amateur Radio Operators Assist In Albuquerque Flood Rescue Work

Several weeks ago, an Albuquerque family sat down to dinner. Rain had been falling for an hour, but the family was warm and dry; they were planning an evening at home. The rain made them peaceful. It was quiet in the house.

Then, without warning, a rushing wall of water pushed open the front door and entered their lives. The children found themselves foundering nightmarishly in nearly five feet of water. The parents hurriedly made a pile of living-room furniture in the center of the room; the children found safe mooring on that. Then the father waded out to seek help.

The night of Aug. 10 brought such disaster to the lives of many including some Sandia employees. However, unselfish efforts of many volunteers, including the Radio Amateur Civil Emergency Service prevented the waters from causing a catastrophe.

RACES provided a quick response to the flood emergency. Some 20 volunteer amateurs, nine of them Sandia employees, took up a variety of communications jobs which helped to ease the problems of other flood workers.

At 6:55 p.m., Albuquerque's Director of Civil Defense, Clinton Roth, called the alert. By that time, it was apparent that the battle against the waters would be a long, hard one.

The RACES members took up strategic positions with their radio gear. Buford Eagan (1512), W5WBG, was dispatched to the evacuation center in the Civic Auditorium. Leon Day (7215), W5LQM, stationed himself at Red Cross headquarters, and Bob Dawirs (1531), W5UAF and RACES Alternate Radio Officer, manned the net control station at Civil Defense Headquarters.

John Courtney, W5ONK, a former Sandian, provided monitoring and relay services at his home station to serve the needs of the mobile radio operators in the field. J. H. Harrell (7312), W5FAG, and Ken Mills, ACF Industries, W5WZK, went to patrol the Embudo

Dam. Others were dispersed at critical locations throughout the city: C. P. Thomson, Jr. (4511), K5TCU; Thomas Martin (1322), K5SFU; Ed Wood, K5WME; Cedric Center (1424), W5FJE; Carl W. Franz (1321), W5ZHN and Chief of Communications for the Albuquerque-Bernalillo County Civil Defense Organization; and Lester B. Balint (1431), K5KUV. Eight other operators also participated. In addition to their communications activities, these men helped motorists stranded in the water.

"We worked from 7:15 p.m. Saturday to early Sunday morning," Carl Franz said, "and the whole operation went very smoothly."

In total, the group devoted 142 man-hours to the emergency, and put some 775 miles on their mobile rigs. "In addition to giving us the opportunity to provide help during the emergency," Carl added, "the flood enabled us to check out our organization and to increase our preparedness for future emergencies."

Two Sandians Read Papers at Philadelphia Psychology Convention

S. H. Peres and F. O. Carleton of Personnel Research and Testing Division 3133 presented papers at the annual convention of the American Psychological Association in Philadelphia, Pa., Aug. 28-Sept. 4.

Title of Mr. Peres' paper is "An Exploration of Engineers' and Scientists' Motives Related to Job Performance." Mr. Carleton presented "Student Stereotypes of Industrial Recruiters."

Square Dancers Sought

Square dancers and those interested in learning are invited to attend the dances held by the Circle Square Dance Club. Beginning Sept. 5, dances will be held each Thursday at 7 p.m. at the Sandia Base Officers Club.

For more information call P. R. Wilkes (7422-2), AX 9-1624.



- Shirley M. Harper, 7543 -

Take a Memo, Please

If you notice any extra precautions that should be taken to prevent injuries, pass them along before someone gets hurt.

Sandia's Safety Record

Sandia Laboratory HAS WORKED 105,000 MAN HOURS OR 3 DAYS WITHOUT A DISABLING INJURY

Livermore Laboratory HAS WORKED 648,000 MAN HOURS OR 124 DAYS WITHOUT A DISABLING INJURY