



STORING EXHIBITS for Sandia's "Sphere of Science" display as they are prepared for the New Mexico State Fair, Sept. 26-Oct. 4, are John Leslie (foreground), who is in charge of the exhibit, Marv Sektan, both 3431-2, and Lou Baldwin (right), on loan from 3423.

Evening School to Offer 3 Daytime Classes For Second Shift Employees

Sandia Corporation Evening School enrollments are being accepted by General Training and Education Division 3132. Catalogs listing full course offerings and descriptions will be in the booklet racks.

Any employee desiring to enroll in the Evening School is urged to complete an enrollment card printed on the back of the booklet and send it to Division 3132. Answers to questions and additional information may be obtained by calling ext. 47255.

The Evening School this year is providing three courses for second shift employees.

Industrial Electricity will be offered at 1:45 p.m. on Thursdays beginning Sept. 17. Instructor will be Herbert L. Floyd, Jr. (1452).

Blue Print Reading (Building Trades) will also meet at 1:45 p.m. on Thursdays beginning Sept. 17. Instructor will be J. P. Pupelis (4412).

Welding I will be offered on Saturdays at 8 a.m. beginning Sept. 19. Ira J. Honeycutt (4232) will be the instructor.

All Sandia Corporation Evening School courses are designed to augment the curricula of community educational facilities. They are aimed at providing special subjects to meet the needs of Sandia employees. Classes are taught by Sandia employees on Corporation premises.

The classes in most cases meet once a week for 16 weeks. Except for the purchase of textbooks, there is no cost to employees.

Information about registration for courses in the Albuquerque Vocational Evening School can be obtained by calling CH 7-9541, ext. 264.

Unions Buying Carnival Tickets For Children

Tickets to the Sandia Base Carnival have been donated by three unions, representing Sandia Corporation employees, so that underprivileged children may attend.

The Carnival will be held Sept. 4-7 and more than 400 youngsters from such agencies as St. Anthony Boys Home, Indian School and Martineztown Community Center, will be given books of coupons for rides and other entertainment.

In endorsing the Carnival the unions — Office Employees International Union, Local 251, International Guards Union of America, and the Metal Trades Council — also urged their own members to take their families to the Carnival.

Proceeds of the Labor Day weekend event will be used to help support such Sandia Base organizations as the Teenage Club, Little League Baseball, Girl and Cub Scouts and the Junior Gun Club.

'Sphere of Science'

'Dome' Travels to State Fair For '59 Show

Sandia's "Sphere of Science" geodesic dome is being dismantled this week and is well on the way toward another New Mexico State Fair. The geodesic dome will be erected again on the Fair Grounds and will feature new and improved displays.

A temporary theater will be added to the dome, capable of seating 70 persons. "The Sandia Story," 30-minute color movie telling of the work and mission of the Corporation, will be shown continuously during the week of the Fair—Sept. 26 to Oct. 4.

Some 14 separate exhibits are planned for inside the dome plus the use of Sandia's RMRH (Robot Mobile Remote Handler) operating in front of the dome. The RMRH, developed for use in Sandia's reactor facility, is a vehicle which is operated from a console inside the building. It has two manipulatable arms and television "eyes."

Some of the scientific items to be demonstrated inside will be transistors, pressure sensing devices, radiation effects, physics, chemistry, aerodynamics, environ-

mental testing, instrumentation, mathematics, photography, manufacturing control, nuclear batteries, and natural radiation.

Community Relations Section 3431-2 designed the exhibit and is coordinating preparation. John Leslie, supervisor of the section, is in charge. Many Corporation organizations are participating in the effort.

The Sandia exhibit was one of the State Fair's most popular attractions last year. During the week some 82,000 persons visited Sandia's dome.



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ALBUQUERQUE, NEW MEXICO

SEPTEMBER 4, 1959



THE INTRICACIES of the Van de Graaff accelerator (5150) during the Business-Education Day Tour of Sandia Corporation by new Albuquerque teachers.

New Teachers Tour Sandia Laboratory on 1959 Albuquerque Business Education Day

Sandia Corporation was one of the 27 Albuquerque firms that were hosts to 375 new teachers on Business-Education Day recently.

B-E Day, sponsored by the

Chamber of Commerce and the Albuquerque Public Schools, was to inform teachers of community resources and better acquaint them with the world of business.

The theme of the Day was "the free enterprise system and its part in the American way of life."

The 24 teachers who visited Sandia were greeted by J. P. Molnar. Following Mr. Molnar's welcoming address, M. L. Merritt (5130) gave an illustrated talk on the Alaskan harbor plans which are part of Project Plowshare (the peaceful use of nuclear explosions.)

The group then viewed "The Sandia Story," a 30-minute color film describing the work, mission and facilities of Sandia.

At noon the teachers had an informal lunch with members of the Sandia Small Staff at the Coronado Club.

The afternoon was spent in touring the Van de Graaff accelerator facility and Area III. H. J. Stein and I. Auerbach of the Physical Sciences Department (5150) demonstrated the Van de Graaff. The tour of Area III was conducted by W. H. Cross, supervisor of the Track and Explosives Section (1615-1). In Area III the teachers saw the 300 ft. drop tower, hydraulic centrifuge, shock cord accelerator, air gun and 3000 ft. rocket sled track.

General tour guides, F. H. Hannah (3364) and R. C. Colgan (3431), reported that the teachers volunteered dozens of favorable

comments about the tour and expressed their gratitude at being able to visit the Laboratory. Many of the teachers stated that they planned to make use of speakers from Sandia and would have their classes visit the geodesic dome, "Sphere of Science," exhibit hall, during the school year.

YMCA Committee Has Workshop on Health Education

A workshop on "The Amazing Thing Is You" will be presented by the Health Education Committee of the Heights Branch, YMCA, Sept. 12 for boys and girls of junior high school age and their parents.

Purpose and objects of the workshop are to achieve a better understanding of the human body, to know the physiological and physical changes children undergo during adolescence, and to promote a closer parent-child relationship.

The day-long program at Mitchell Hall, University of New Mexico, will include talks by Dr. James J. Calvert, clinical psychologist; Martin Fleck, UNM biology professor; Rev. Charles A. Fish of St. Mark's Episcopal Church, and Rev. Paul Morell of Christ Methodist Church.

Health Education Committee members include Sandians Kenneth A. Smith (3150), William G. Funk (3120) and Donald J. Jenkins (3130).

For further information call the YMCA at CH 3-5631.



UNDERPRIVILEGED CHILDREN will be able to attend the Sandia Base Carnival this week-end through tickets donated by three unions. Discussing

the plans are (l to r) John Sitts (4511); W. C. Kraft (2550), Corporation ticket sale chairman; John Wahlenmaier (4842), and Stanley Eastman (4212).

So You Want To Write Your Congressman . . .

No one knows, for sure, why so many American citizens fail to write their Congressmen on important issues. It is only on infrequent occasions that any significant number of voters stir themselves to write their thoughts to the men who represent them in Washington.

There are a couple of reasons which might slow down letter writing.

Some folks may hesitate to approach their representatives in Washington even through the mails, because they think of them as too important to be bothered. Congressmen are important, to be sure. But they are in Washington to reflect the will of the people. Congressmen know this and want to hear from you.

The other reason is that some folks may feel they cannot express themselves in a letter. They should not let this hold them back. Your personal views on one issue is appreciated. But don't send a form letter someone else has prepared.

What should you write about? Write about those issues that have importance directly to you. Inflation, labor, federal aid to education, taxes, foreign aid, balanced budget, highway program are among the subjects which will affect your future.

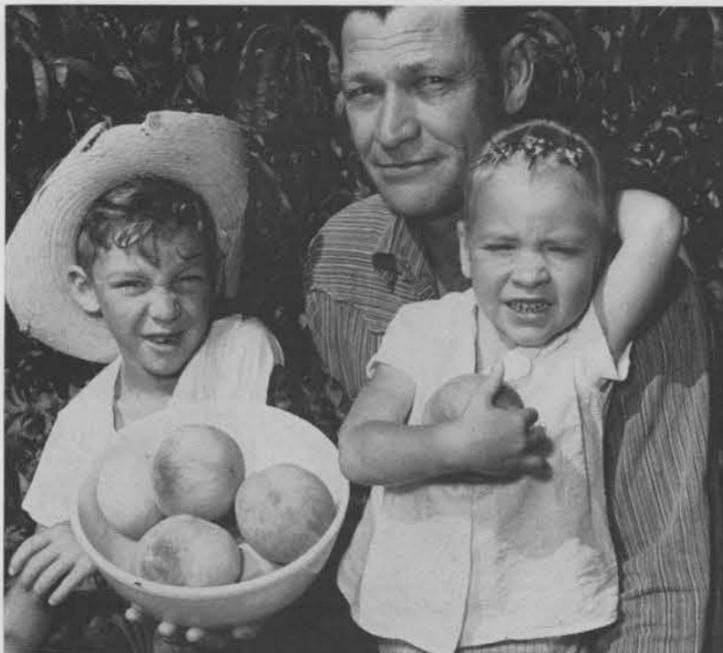
Do you have any opinions? Write to your Congressmen.

The Honorable Clinton P. Anderson
Senate Office Building
Washington, D. C.

The Honorable Dennis C. Chavez
Senate Office Building
Washington, D. C.

The Honorable Thomas G. Morris
House Office Building
Washington, D. C.

The Honorable Joseph M. Montoya
House Office Building
Washington, D. C.



DISPLAYING a bowl of large peaches grown on his three-year-old tree is E. A. Raney (3242) with his son, Dan, and daughter, Kathleen. Mr. Raney found the tree growing in a Sandia flower bed.

Secret of Prolific Peach Tree Lies In 'Old Bones and Scrap Iron'

From seedling to bearer of giant peaches in just three years is the story of a special peach tree nurtured by E. A. Raney (3242), a member of Sandia's security force.

In the spring of 1956 Mr. Raney noticed a small peach seedling growing in a flower bed near the entrance to the Bldg. 880 cafeteria. He thinks the plant was the result of a peach seed tossed into the flower bed.

He carefully removed the seed-

ling and took it home and planted it in his back yard at 5709 Alta Monte NE. He says the secret of the tree's amazing growth and giant fruit is the "old bones and scrap iron" he buried under the roots of the seedling.

This year, the tree's third season, the tree yielded almost a bushel of delicious peaches averaging between 8 and 10 inches in circumference. Several peaches were 13 inches in circumference.

Much-Traveled J. J. Miller Has Gone 24,000 Miles Since May 30

J. J. Miller (5251) may be justified in feeling desk-bound when he stays in one location for more than a short time. Since May 30 "J. J." has traveled more than 24,000 miles — almost equivalent to around the world.

At the end of May J. J. and his wife, Lorena, left Albuquerque for a five-week vacation in Denmark, Sweden and Norway. Upon his return he made a two-week business trip to Eniwetok Atoll. Travel was mostly by air in both instances.

The Millers returned from Scandinavia very enthusiastic about the scenery, friendliness of the people and the foreign food. "We walked so much we didn't even gain any weight from eating such rich food," J. J. said.

They participated in the "Meet the Danes" and similar exchange hospitality programs in all three

countries. Through this program American tourists are invited to private homes for dinner and conversation. In Bergen, Norway, they were asked to a party which resulted in two further invitations.

"Most everyone in Scandinavia speaks some English," J. J. explained, "and we already have had letters from several Europeans we met in this way."

Outstanding experiences were seeing a few of Denmark's 499 existing castles, a four day canal trip across Sweden, and a six day bus and fjord trip across Norway. J. J. has 1600 color slides of the trip so he and his wife can reminisce.

Pretty soon he can start planning for their next trip abroad—destination undecided. "That's part of the fun for me, reading up and deciding where we should go and what we should see," he said.

Fishing Expedition Off Golden Gate Yields Big Bass

Highlighting a recent deep sea fishing trip for Jim Brock (8224) was the landing of a 34 lb. sea bass 12 miles out from the Golden Gate. The big fish, not usually found in Northern California waters, required 45 minutes to land.

Assisting in the battle was Les Rowe (8220), who caught a salmon. Other Sandians on the trip were Bud Pearson (8222-2), Arnie Lamb (8234-1), Jess Burns (8123-1) and Smokey Maxwell (8225).

Tours Europe

Marguerite Mihoevich (8115) left San Francisco last week for Paris where she will join a tour of France, Italy, Germany and Switzerland. She will spend two weeks visiting her father's relatives in Yugoslavia before returning to the United States on Oct. 23.

Farewell Parties

Numerous farewell parties were held last week for J. Verlin Hunt (4211), who retired on Aug. 31, and his wife, Ruth (also 4211), who terminated on the same day. Ruth spent all but two months of her eight years with Sandia Corporation in Bldg. 840, first as a receptionist and later as an accountability clerk.

Verlin had been in 4200 all of his 12 years at Sandia and was in Bldg. 840 since it was built.

Ruth and Verlin are looking forward to camping trips now that they will have time to travel at their leisure.

New Homes

Mr. and Mrs. Harry C. Olson (2531) are proud new home owners at 6501 Rogers NE.

Moving into a new home at 10304 Marble Pl. this week were Orton Benson (4152) and his family.

Enjoying their new home at 10112 Matthews NE are James (5243) and Kathleen (2243) Cox.

Get Well Wishes

Wishes for speedy recoveries are extended to J. R. Smith (2713-4) and A. E. Redlinger (2713-3). Both are convalescing following surgery.

Also on the sick list is Gerhard Horn (4251-1), another who is convalescing from recent surgery.

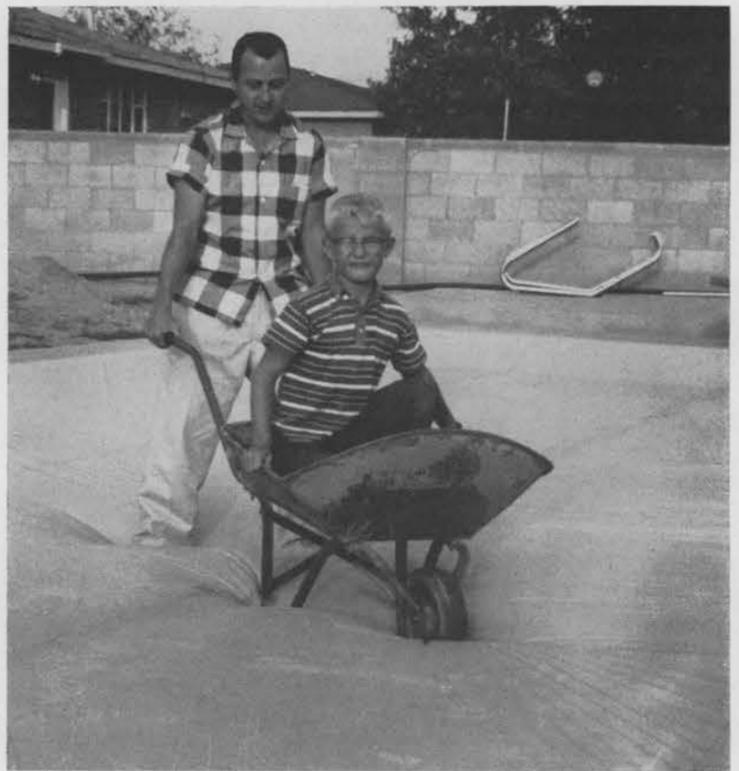
Recent surgery undergone by Casper Doty (4224-4) has prompted get well wishes from his many friends in 4200.



Shirley Gibbs (2562)

Take a Memo, Please

With either motorist or pedestrian it isn't the right-of-way that counts. It's the right way. Common courtesy combined with common sense can often prevent accidents.



TENSILE STRENGTH of swimming pool cover and lock system, developed by two Sandians, is tested by Leo White (1474) and his son. Cover locks can be installed on old as well as new pools.

Your Swimming Pool Is Safer Now Thanks to Leo Bartolucci's Idea

When Leo Bartolucci (2531) remarks that business conditions are "fluid" he's not kidding. Away from Sandia Leo is primarily interested in swimming pools.

For construction of pools Leo is in partnership with Leo White (1474) in Albuquerque Emerald Pools, Inc. When it comes to pool accessories he and John Rohrer (2532) have formed Bart Enterprises.

With the latter the big push right now is for the Bart Cover-Lock. These are aluminum anchor devices installed flush with the deck and designed to lock plastic covers over pools when they are not in use. The men have applied for a patent and have already sold 38 sets in Albuquerque and have orders on hand from California and Texas.

The trade magazine "Swimming Pool Age" made mention of the Bart Cover-Lock in its April new product section. As an outgrowth of the publicity Leo received in-

quiries from Belgium, Canada, Cuba, Mexico and Brazil.

Selling features of the locked cover are its ability to keep children and pets out of the pool when the owner is absent, to keep sand and leaves from blowing in and to prevent evaporation of water and chlorine.

When not busy with either of his jobs Leo takes time to function as president of the New Mexico Association of Swimming Pool Builders.

Congratulations

Born to:

Mr. and Mrs. Dick Jennings (4121) a daughter, Glenna Dee, on Aug. 18.

Mr. and Mrs. Dick Baff (5143-1) a daughter, Elizabeth Ann, on Aug. 20.

Mr. and Mrs. Eddy L. Jacobs (1414) a daughter, Carrie Lee, on Aug. 17.

Mr. and Mrs. Al Robnett (1411) a daughter, Allyson Spaight, on Aug. 24.

Mr. and Mrs. Richard L. Smith (2531) a daughter, Sheri Lynn, on July 30.

Mr. and Mrs. Hilton B. Souther (2531) a daughter, Laura Jean, on Aug. 24. Sheila was division secretary for 2722.

Mr. and Mrs. Fred Martinez (4152) a daughter, Sally Jane, on Aug. 26.

Mr. and Mrs. R. B. Yoder (4131) a son, Michael Joseph, on Aug. 16.

Sympathy

To Andrew Kuntz (4574) for the death of his father in St. Louis, Mo., Aug. 15.

To J. H. Kelly (3122) for the death of his mother in Louisville, Ky., Aug. 12.

To Gene Abbott (3121-2) for the death of his brother in Walnut Creek, Calif., recently.

To M. F. Stewart (3441-2) for the death of his father recently.



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Charles Roehrig (3452)

Charles Roehrig Heads Local Palsy Campaign

Heading the annual fund raising drive in Albuquerque for victims of cerebral palsy will be Charles Roehrig (3452). He is chairman of the cerebral palsy telethon which will be presented on KOAT-TV Sept. 12-13.

Goal of the telethon is to raise \$30,000 to finance treatment of cerebral palsy victims at the New Mexico Rehabilitation Center.

Employees who belong to the Sandia Corporation Employees Contribution Plan contributed \$2,940 to the Cerebral Palsy Association of New Mexico in 1958. So far this year employees have contributed \$2,850 to the Association.

This amount is the cerebral palsy share of the SCECP "Give Once and For All" fund which benefits 24 agencies of the United Fund plus an additional eight national health and welfare agencies.

Mr. Roehrig has been employed at Sandia for seven years, first as an auditor in Financial Department 6020 and for the past two years as a data coordinator in Electronic Data Processing Division 3452.

Better Know Laws Before You Hunt In New Mexico

Attention big game hunters! Services and Benefits Division 3122 has on hand a limited number of pamphlets giving the regulations for the 1959 season in New Mexico for hunting deer, turkey and bear.

These rules and accompanying map may be obtained free of charge in Bldg. 829.

Services and Benefits Division also has available notary public service for the convenience of Sandia employees.

Welcome Newcomers

Aug. 17-28

- Albuquerque**
- Matthew J. Ahern 3423
- Anita L. DiSanti 2221
- Roy W. Hunter 4152
- *Martha A. Leverenz 5512
- *Kenneth R. Ludwick 3464
- *Sandra Markham 4212
- *Jean C. May 5512
- Arthur W. Perkins, Jr. 1626
- *Mae Pickett 2562
- Elsie M. Radwanski 4431
- James R. Schaeffer 4333
- *Joseph H. Shelby 4253
- Russell F. Simpson 4253
- Glenda J. Spann 3126
- Dorothy G. Tierney 3126
- Derral W. Whitlock 4413
- California**
- Dorothy S. Davidson, Concord 8212-2
- Charles S. Hoyle, Albany 8116-1
- Robert P. May, San Diego 8124-1
- Terry A. Ramsey, Fair Oaks 8223-1
- Joan F. Acker, Livermore 8212-3
- Robert E. Baldwin, Livermore 8225-1
- Eva J. Kerns, Livermore 8212-3
- Donald G. Knudsen, Hayward 8225-1
- Richard A. Lassen, Livermore 8232-1
- Joyce Paul, Irvington 8212-3
- Olive A. Ritter, Livermore 8233-2
- Hanne B. Rose, Castro Valley 8212-3
- Morton D. Sorensen, San Diego 8121-3
- Marilyn P. Tooker, Livermore 8232-1
- Florida**
- *Jack W. Scheerer, Hialeah 4411
- Kansas**
- Verlan Keith Gabrielson, Manhattan 8141
- Maryland**
- Wendell D. Weart, Aberdeen 5112
- Massachusetts**
- John E. Beam, Cambridge 5150
- New Mexico**
- Bonnie Lujan, Santa Fe 3464
- Tennessee**
- *Martin Rechner, Johnson City 4411
- * Denotes rehired
- Returned from Leave**
- David W. Bushmire, Killeen, Tex. 2543
- Jose I. Garcia, Albuquerque 3241
- Edsel L. Gunn, Albuquerque 2251

Livermore Lab Employees Set \$10,000 Goal in Bay Crusade

A goal of \$10,000 for Livermore Laboratory employee's part in the 1959 United Bay Area Crusade has been set, according to Jim Brock (8224), campaign chairman.

The Sandia drive will kick off on Sept. 21 and continue through Sept. 25, with final results expected to be in by Sept. 28. The campaign will mark the second year in which employees have contributed to the United Bay Area Crusade. Previous campaigns were conducted independently in Livermore.

A total of 263 Bay Area agencies are participating in this year's drive, 89 in Alameda County. Total goal for the entire drive is \$11,000,000.

Last year Livermore Laboratory employees contributed \$5320 to the United Bay Area Crusade, plus a corporate gift of \$425. Employees on the roll at the time

numbered 450. Present personnel strength is more than 750.

As was the case last year, employees will be given the opportunity to contribute over a 12-month period through payroll deduction. Cards with employees' names pre-printed on them, will be distributed to each employee by department solicitors on Sept. 21. One solicitor will be appointed for each 10 employees in each department.

Working with Jim Brock on the committee will be R. S. Cook (8161-1), co-chairman; A. R. Eiffert (8230), executive solicitor; and department squad leaders D. M. Johnson (8110); C. M. Jones (8120), B. E. Barker (8140), J. C. Miller (8150), E. A. Aas (8160), R. E. Huston (8210), E. E. Alford (8220), and E. A. Paxton Jr. (8230).

Sandia Comptroller to Speak Before Albuquerque Accountants Association

Sandia Corporation Comptroller Robert G. Luckey will address the first fall meeting of the Albuquerque group of the National Association of Accountants.

His topic will be "Accountants—A Help or a Hindrance?"

The dinner meeting will be held Sept. 17 at 6 p.m. at the Silver Spur Restaurant, 5600 Central SE. All interested Sandians are invited to attend. Reservations may be made on or before Sept. 14 through Byron Garritson (4171), ext. 46158, or Robert E. Duke (4122), ext. 44253.

Mr. Luckey transferred to Sandia last March from New York City where he had been comptroller of Western Electric Company's Defense Projects Division since 1955.

A Western Electric employee for 31 years, he started as a payroll clerk at the Kearney, N. J., Works and subsequently spent many years in cost and accounting work.



Robert G. Luckey

Patent Granted to H. A. Mackay for Adhesive Composition

H. A. Mackay (1625-2) was granted a patent on Aug. 4 for an adhesive composition perfected prior to his employment with Sandia Corporation. The patent, No. 2,898,324, was awarded for "Industrial Adhesive Bonding Agent Comprising Liquid Melamine Modified Urea Formaldehyde Resin."

Rights to the patent were assigned to the Catalin Corporation, New Brunswick, N. H., where Mr. Mackay was senior chemist, adhesives laboratory, when the discovery was made.

He has been with Sandia in Reinforced Plastics and Elastomers Section for two years.

Distribute New Monitor's Log As Security Aid

"Security is an individual responsibility" and to further emphasize that fact Security Operations and Information Division has been distributing a Monitor's Log this week.

The log is a 16 month calendar with space beside each day for the organization's monitor to note the time the final check is made to determine if all classified material is in a safe place.

Each month of the calendar also features a quotation of importance. Persons quoted include Nikita Khrushchev, Mao-tse Tung, J. Edgar Hoover, Lewis L. Strauss, President Eisenhower, Nikolai Lenin and Joseph Stalin as well as others.



SPECIAL CALENDAR for organization security monitors is displayed by Rita Smith (3422). Monitors' Log is being distributed by Security Operations and Information Division during this week.



SOAKING IN THE SUN at the Coronado Club pool is pretty Marilyn Dunn (3126). She's making the most of the last few days of the swimming season that remain since the Club pool closes Sept. 7.

Comes in handy too

First Aid Know-How Easy to Get in Sandia Evening School

H. A. Singleton (1247) can vouch for the usefulness of first aid training. Referring to training being offered employees and their families through the Corporation's Evening School, he says, "It's the best course I ever took." He has good reason to believe so.

Last spring during dinner his young daughter was badly scalded by spilled gravy.

Remembering his class instruction, Mr. Singleton pulled off the gravy-soaked clothing, used a glass of milk to wash off the hot liquid and at the same time cool the skin, wrapped his daughter in a blanket, gave her an aspirin and rushed her to a hospital.

The family physician complimented Mr. Singleton on his quick thinking and proper treatment of this home accident.

Classes for the comprehensive first aid course, which combines the standard and advanced first aid courses, will meet every Wednesday from 7-9 p.m. for a 16-week period in room 2 of Bldg. 300 beginning Sept. 16. Additional classes on other nights will be organized if necessary.

Further information may be ob-

tained from Donna Bourlon at ext. 52151. There is no charge for the instruction.

Supervisory Appointments

THOMAS F. LANEY to supervisor of Special Problems Section 5241-3, Data Reduction Division.



Tom has been with Sandia Corporation nine years and has been in data reduction work since January 1951.

In connection with his job he has participated in Operations Redwing and Hardtack in the Pacific.

During World War II Tom served three years in the Navy as a radarman, part of the time in the Pacific theater of operations.

In 1949 he received a Bachelor's degree in business administration from the University of New Mexico.

ROGER A. BAROODY to supervisor of Environmental Test Division 8121, Livermore Laboratory.



Roger joined Sandia in Albuquerque in June 1951 as a project engineer in the Systems Development organization. He transferred to Livermore in November 1956 as supervisor of a project engineering section.

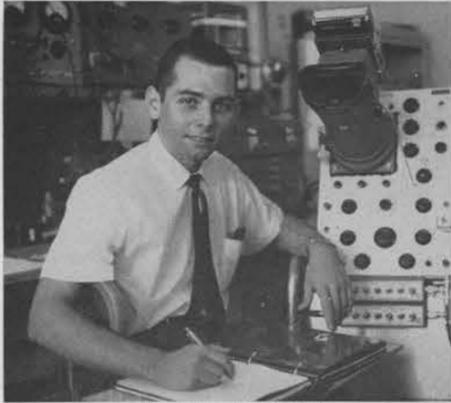
His previous employment included summer work as a mechanic for Comstock Canning Corporation and Geneva Forge Cutlery Company, both in Geneva, N. Y.

Roger has a BS in mechanical engineering from the University of Wyoming and did graduate work there in business administration. He obtained training as a machinist at Wentworth Institute in Boston and the Lewis Trade School in Geneva, N. Y.

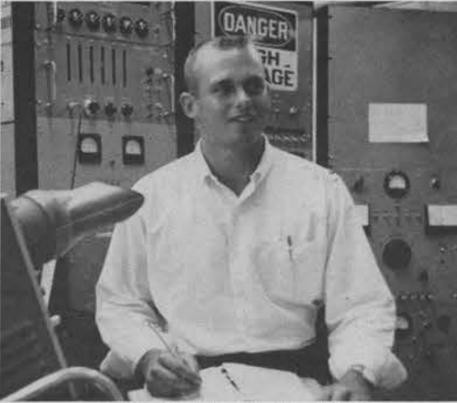
During World War II he served three years in the Navy aboard a destroyer.

Roger is a member of the American Society of Mechanical Engineers.

College Profs, Students Comment on Work Here



Ira Gilbert (1431)



Clyde Northrup, Jr. (5231)



George Forman (1217)



Catherine Thomas (5511)

When college classes resume this fall there will be 57 more students and 23 faculty members from schools across the nation with Sandia Laboratory work experience.

Since the Staff Summer Program was started five years ago approximately 228 students and 70 faculty members (both high school and college) have spent their vacation months with the Corporation working on specific assignments in their field of study.

The program includes 17 students who have returned for their

second year and three who have worked at Sandia under the program three summers.

This year's group, representing 52 different schools, was chosen from among 700 applicants.

Four students and two faculty members were interviewed to determine reaction to their employment.

* * * * *

Catherine Thomas, one of the two girls in the Staff Summer Program, has been working in the Statistics Section of Quality Assurance Procedures Division. She's a math major at Vanderbilt University and will be entering her senior year.

"This was my first job with industry," she said, "and I feel it's been a good experience." Although her chosen field is research, her Sandia work has been closely enough related to be worthwhile.

Why her interest in math? "I like the challenges offered in the field," she explained.

* * * * *

Albuquerque is home for Clyde Northrup, Jr., son of C. J. Northrup (5252). In recent months he has helped in the calibration of fluor materials in Nuclear Test Division 5231.

Clyde will be a senior at Oklahoma State University this fall where he is on the Dean's roll despite a scholastically tough double major in physics and math. Not all

his time is spent studying: Clyde will be president of his senior class and is one of the top 10 discus throwers in the nation.

At Sandia he's had good use for studies in physics and statistics. "I haven't had a class in concentrated electronics as yet but it should be a lot easier after the help the fellows at work have given me," Clyde remarked.

* * * * *

Jim Mann has already received his Bachelor's degree in applied mechanics from Virginia Polytechnic Institute and now is ready to enter Harvard University for graduate work in the same field.

Although fresh out of college, he is well acquainted with summer work in his chosen field. Jim has been a co-operative student engineer, which means that every other quarter he worked at Norfolk Naval Shipyard. Even though this work-school schedule continues year 'round, it still takes an extra year to obtain a degree.

At Sandia Jim has been in the Structural Analysis Division 1282. "A summer work program certainly helps the student to decide which courses in school will be the most useful," he explained.

* * * * *

Another Harvard-bound student is Ira Gilbert, who has worked the past two summers in the Electronics Components Department 1430. He recently re-

ceived a BS degree in physics at Brooklyn Polytechnic Institute.

Ira's job at Sandia has been in the development of the trippatron, a high voltage switch tube invented by Robert Creveling (1413). He terms his work here "enlightening."

A native of Brooklyn, Ira finds the Southwest quite a contrast to his heavily-populated home area. Although he's not firmly convinced he'd like to live in New Mexico, he does admit that the weather is fine here.

* * * * *

One of the visiting professors is George Forman, who has taught machine design and mechanical vibration at the University of Kansas for the past four years. Other summers he has worked in the aircraft industry, in steel fabrication and as a private consultant.

At Sandia George was in Project Division 1217. He feels that a summer work program gives the college professor of science or engineering an opportunity to directly observe the operation of research and development organizations and that way be better prepared to help educate tomorrow's engineers and scientists.

"It's a two-way program," George said. "The visiting professor can often contribute substan-



Frank McCulloch, Jr. (1625)

tially to industry by virtue of a fresh and unbiased point of view."

* * * * *

This is the second year that Frank McCulloch, Jr., has participated in the Staff Summer Program. During the rest of the year he teaches general and advanced biology at Highland high school and works part-time at Sandia.

His job here (1625-2) involves a long-range research problem in mycology, more specifically a study of mold deterioration with regard to testing for standards of materials.

"I feel it helps with my teaching to be involved in active scientific work," Frank said.



Jim Mann (1282)



THE 5500 TEAM shown above defeated 1400 in two tight games to walk off with the championship of the Sandia double elimination tournament played last week. In front are bat boys Dickie Otero and Danny Boggs. From left in the second

row are Dick Coleman, Bill Boggs, Ken Flynn, Jim Kelly, and Bob Bailey, manager. Standing are Dick Brian, Mel Otero, Ron Bump, Roy Hanson and Cliff Kinabrew. Members not shown: Dennis Salazar, Dick Andres, Roy Lamber, Dick Clark, John Robinson.



HE'S SAFE! 5500 catcher Ron Bump is a split second late as Vic Sirwinski scores a run for 1400 during one of last week's games.

5500 Softball Team Wins Sandia Tournament Defeating 1400 Team

Team 5500 defeated 1400 twice in a double elimination tournament to emerge champions of the Sandia Corporation Employees Softball Association. The 1400 team had entered the tournament undefeated while 5500 fell early in the tournament to 4400 by a score of 7-5.

Out of the loser's bracket of the tournament, 5500 faced 1400 and coolly downed the favorites 7-6 in the first game and 8-3 in the second. Roy Hansen of 5500 was

pitcher for the champions on both nights.

In the first game 5500 took an early lead. The score was 6-0 in the third inning. Team 1400 rallied starting in the sixth inning to bring in five runs and scored one more in the 7th. Two men were left on base.

In the second game both teams scored three runs early. Then 5500 broke away in the fifth inning and scored three runs on a series of hits and put the game on ice.

Softball Players Party Finale to Strenuous Season

The Sandia Corporation Softball Association will hold a season's end party at the Coronado Club at 8 p. m. tonight, according to Bill Weinbecker (4253), chairman of the refreshments committee.

All Sandia softball participants are cordially invited to attend, Bill says.

Trophies, on order now, will be awarded to champions.



KEN FLYNN of the 5500 team hits a long one during the two-game final tilt between 5500 and 1400 for Sandia Softball championship.

Six Life Saving Steps of Rescue Breathing

(Reprinted with permission from the CIL CONTACT, publication of Canadian Industrial Limited, S. G. Bone, Editor.)

Everyone in the family should know about "mouth-to-mouth" or "rescue breathing" artificial respiration.

The method is based on the fact that everyone has an ideal built-in pulmator in their own breathing system—ideal because it has the same characteristics as the breathing system of the suffocated person.

The simple six steps of this technique are illustrated on this

page. Below Dr. C. L. Halsam, chief medical officer of the Canadian Industries Limited, has answered some questions which may arise concerning this technique.

What is the advantage of the mouth-to-mouth rescue breathing method over the arm-lift one?

It is simple and any obstruction of the air passage is recognized at once.

Can the method be used on babies? Is there any difference in

the technique for babies and for adults?

It is perfectly adaptable to a victim of any age. With infants, the jaw is pushed forward by pressing at the jawbone. This is because the thumb in the mouth can block it. Air is breathed into the infant by covering the nose and mouth with your mouth and breathing in.

This doesn't sound like a new method—isn't it actually old?

It goes as far back as the Bible and a "rescue breathing" incident is recorded in 2nd Kings, Chapter 4, verse 34

What do you do if the victim's jaws are so rigid you can't breathe into the mouth?

Cover the mouth completely with your fingers and then breathe into the nostrils.

What about germs if I'm to put my mouth on a stranger's?

Don't worry about germs when a life is at stake. If one is available a hole can be torn in a handkerchief and this placed over the mouth of the patient.

If I'm breathing my air into someone's lungs, isn't it bad air filled with CO₂?

If you inhale deeply before breathing into the patient, he will get enough oxygen from you, in fact more than he needs.

Does this mean I inhale more deeply?

Yes. You are breathing for two so you should inhale about twice as deeply.

How can I tell if his tongue is blocking the throat?

The chest will not rise when you breathe in.

What do I do if this is so?

Try to clear the tongue from the throat, re-adjust the head angle and resume the method.

With a drowning victim, when should I start using the technique?

Don't wait until the patient is ashore. If at all possible, begin mouth-to-mouth breathing immediately. The earlier artificial respiration is started, the better the chance of success.

Are there any special factors with a drowning victim to consider?

Your first breath into him may cause water to come out. Clear his throat and resume breathing. If there is water in his stomach, push gently on the stomach and let the water flow out of his mouth.

How do you know the victim needs rescue breathing?

Your administration of rescue breathing can't hurt him if he is breathing all right but it can save his life if he isn't. You can recognize the patient's shortage of oxygen because of the blue coloration of the lips, tongue and fingernails.



WITH LOWER jaw in normal position, tongue may block the windpipe and prevent air from entering lungs. Two ways to prevent this are shown below.



ONE METHOD of overcoming this is to insert left thumb in mouth, grasp lower jaw and pull forward and upward. Air can now flow freely through air passage.



SECOND METHOD is to push jaw forward by pressing at the jawbone. This method is of special use with infants since the thumb in the mouth can block it.



ONE: Place victim on the back, loosen collar and belt. Stretch head back and raise lower jaw.



TWO: Insert left thumb in the mouth and grasp lower jaw and lift it forcibly upwards and forwards.



THREE: Hold the lower jaw up and with the right hand close the victim's nose.



FOUR: Take a deep breath, place your mouth firmly over the victim's mouth and breathe out.



FIVE: While breathing into victim, watch chest rise to make sure his air passage is clear.



SIX: Remove your mouth from the victim's to allow his breath to be exhaled. Count three and repeat.

How many breaths will be needed to revive a patient?

It may take only 10 or 15 or you may have to continue the method for hours.

Why are the nostrils pinched?

This prevents air leakage out through the nostrils

How can I tell the method is working?

The skin color will gradually turn to a glowing pink.

What other accidents can produce asphyxiation?

Carbon monoxide poisoning from a car's exhaust, electric shock, a foreign body lodged in the throat, an overdose of certain medicines or a chest injury.

What is the first step with a victim of carbon monoxide poisoning?

Get the patient into fresh air and then send someone for help if this is possible. Immediately begin rescue breathing.

What is the first step in saving a victim of electric shock?

Make sure he is not still touching a source of live current. Then begin rescue breathing as quickly as possible.

Isn't there a chance of blowing air into the stomach with this method?

Yes. All you have to do is push gently on the stomach to remove the air.

How long should a breath be? How often should I breathe into the patient?

A breath should last only until the chest rises. Remove your mouth and count to three or four and then resume breathing in. If you find you are becoming light-headed or dizzy, just slow down your rate a bit.

Can a youngster use this method?

Yes. A youngster may save the life of an adult by rescue breathing.

Should this technique be taught to my family?

Yes, for you may not be present and your child's knowledge may save a playmate's life.



SECRETARIAL SEMINAR is discussed by (l to r) R. J. Hansen (4200), panelist; Joanne Boyd (5250), program committee; Julia Sensel (AEC-ALOO), Albuquerque chapter president, and Beverly Allen (AEC-ALOO), master of ceremonies. Seminar will be Sept. 19.

Sandians to Appear on Program of Second Annual Secretarial Seminar

A Secretarial Seminar, sponsored for the second year by the Albuquerque chapter of the National Secretaries Association, will be held Sept. 19 at the Alvarado Ho-

tel. Theme of this year's day-long program is "Communications — Person to Person."

Included in the session will be talks on "Expressing Yourself to Others" and "Office Etiquette Do's and Don't's." Alice Bump (5211) will be one of the participants in the morning panel on "Getting to Know You." R. J. Hansen, Director of Development Shops (4200), will participate in the afternoon panel on "Ask the Experts," which includes discussions on business etiquette, techniques and procedures, business responsibilities and applied psychology.

Beverly Allen (AEC-ALOO) will be master of ceremonies of the afternoon session.

Last year the seminar attracted about 200 secretaries from Albuquerque and Santa Fe. "This year we expect an even larger group since invitations have been extended to secretaries in other cities in New Mexico," according to Julia Sensel (AEC-ALOO), president of the Albuquerque chapter.

Additional details or registration blanks may be obtained from Joanne Boyd (4250), ext. 35138.



WILLIAM H. SLATON has been appointed Deputy Assistant General Manager of the U. S. Atomic Energy Commission. Mr. Slaton has been Assistant Manager for Administration and Construction in the Commission's Albuquerque Operations.



Silas A. Upson —Director of the Division of Weapons Research and Classification Office of Advanced Planning, ALOO—



Edward C. Stewart —Scientific Program Advisor in the Office of Advanced Planning ALOO—



David W. Persons —Director, Division of Reactor Operations, Office of Advanced Planning, ALOO—

Announce Reorganization, Appointments For ALOO Office of Advanced Planning

Changes in organization and personnel in the Office of Advance Planning of the Atomic Energy Commission's Albuquerque Operations Office have been announced by Paul Ager, ALOO Assistant Manager for Advance Planning.

The new Division of Weapons Research and Classification in the Office is directed by Silas A. Upson, who has been with the Commission in Albuquerque since 1951. Previously he was Quality Assurance Co-ordinator in the

Office of Inspection and Storage Operations of ALOO.

The new Division of Reactor Operations has as its Director David W. Persons, who has been Coordinator of Research Support in the Office of Advance Planning. Mr. Persons has been with the Commission at Los Alamos, Denver and Albuquerque since 1949.

Establishment of the two Divisions in the Office of Advance Planning reflects an increased

emphasis within Albuquerque Operations on planning and research in peacetime applications of atomic energy, Mr. Ager said.

Edward C. Stewart, Jr., who has been Research Plans Specialist, will be Scientific Program Advisor in the revised organization, reporting directly to Mr. Ager. Mr. Stewart has been with the Commission at Oak Ridge, Tenn., and in Albuquerque since 1951, and has been associated with the atomic energy program since 1947.



Shopping List

	1940	1959
1 lb. round steak		1.08
1 lb. bacon	.36	1.08
1 loaf bread	.30	.69
2 quarts milk	.08	.20
1/2 lb. butter	.24	.50
1 1/2 oz. can of salmon	.20	.38
1 lb. cheese	.15	.61
1 lb. dried prunes	.23	.58
1 pt. salad dressing	.11	.40
1 lb. dried beans	.22	.38
3 lbs. pork chops	.06	.18
6 lb. leg of lamb	.78	\$5.00
3 lbs. apples	1.56	
5 lbs. potatoes	.12	
1 can peaches	.09	
1 can tomatoes	.17	
5 lbs. sugar	.07	
	.26	
	\$5.00	



FOOD PRICES have risen from two to three hundred per cent, on the average, since 1940. Prices quoted above are national averages based on reports of the U. S. Bureau of Labor Statistics.

Your Hard Earned Food Dollars Get Less 'Mileage' These Days

Remember when five bucks would fill a market basket to overflowing? Not any more! We're paying more and more for less and less these days as the value of our dollars goes down and down.

Inflation is caused by a lot of things. But two main causes are: **Wage increases in excess of increases in the nation's productive efficiency; and—** **Deficit government spending, especially in times of prosperity.**

When wages go up faster than the nation's productive efficiency over an extended period, prices are bound to go up, too. For the labor costs of industry in general account for about two-thirds of the price tag on goods and services.

With every boost in wages that is not offset by an increase in productive efficiency, prices are pushed upward and the value of the dollar does down another notch. It's a vicious circle.

And when the government's expenditures exceed its income from taxes, that increases prices, too. For a major portion of the difference, or deficit, frequently has to be made up by borrowing from the nation's banks.

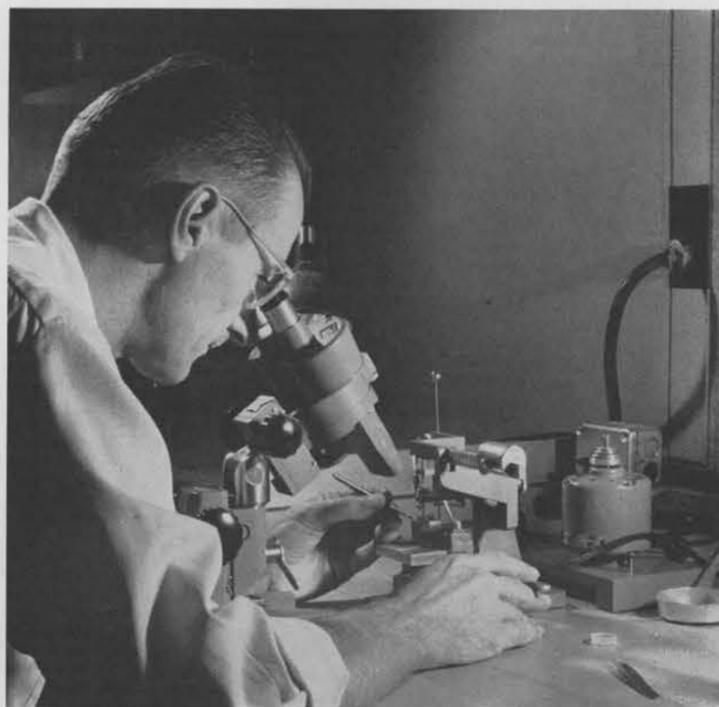
This has the effect of adding new dollars to those already in circulation as the government pays its bills. When that happens, the nation's supply of money tends to get ahead of its supply of goods; and with too many dollars chasing too few goods, prices quite naturally rise.

Inflation CAN be stopped. But everybody has to pitch in and help. For example, to halt the wage-price spiral, both labor and management must help to

achieve a proper balance between wage increases and increases in the nation's productive efficiency.

And we should do everything we can to bring about economy in government. You can help by dropping a line to your Congressmen and Senators and reminding them that deficit government spending is a serious threat to our economic security. Remember that taxpayers' dollars are Sandia's only source of funds. Do your part to see that all of us get the most for our tax dollars.

Remember too that inflation helps no one, and if allowed to run unchecked it will be disastrous for everyone.



MICROSCOPE IS NEEDED for Mike Zownir (4252-3) to drill extremely tiny hole in piece of wire, required for testing a switch.

Minute Wire Pierced Lengthwise In Delicate Drilling Operation

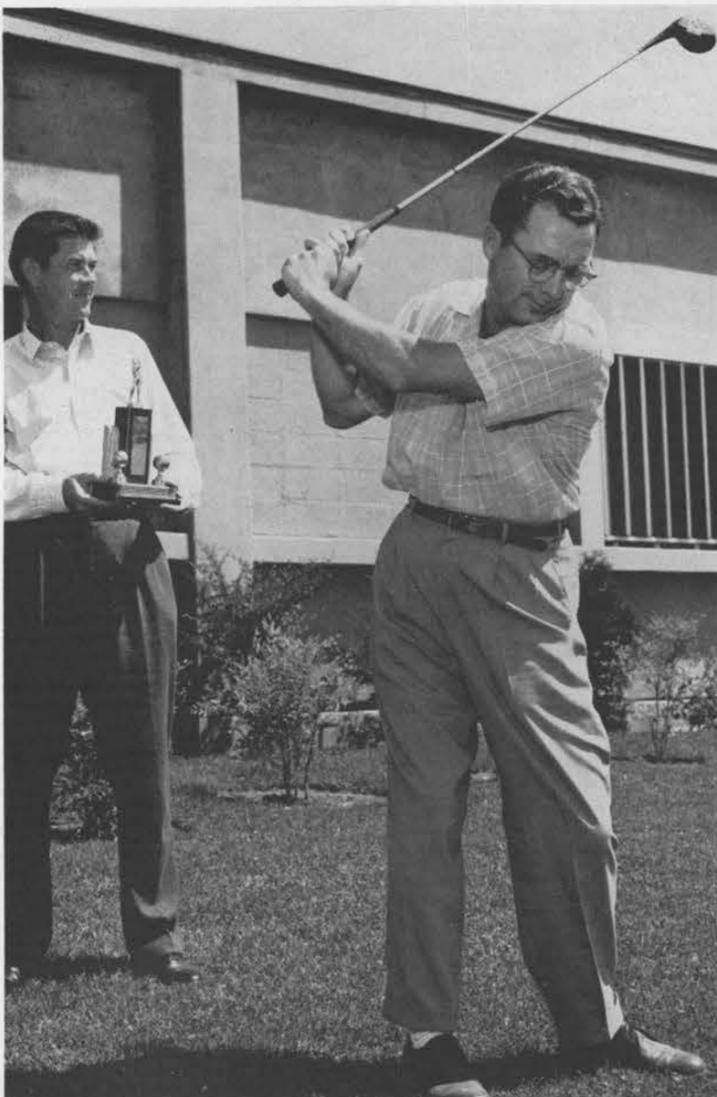
A single human hair placed alongside the wire to be pierced with a hole looked like a super highway running next to a foot-path.

Actually the wire was .008 of an inch in diameter. Branch Shop Section 4252-3 was required to drill a hole in the wire .002 of an inch in diameter. Another piece of wire .001 of an inch in diameter would eventually be put through the hole to become one of two testers required to check the continuity of a piston's action in an inertial switch. The switch is a project of the Escapement Timers and Integrators Division 1474.

To drill such a minute hole a 20 power microscope is necessary; the drill is also set at a ratio of 20:1 so that the perspective seems normal. The drill operates at 2,000 rpm and is cooled with oil. There is no chuck on this particular drill and the arbor and drill are one piece. A sapphire vise helps control concentricity. Depth of this hole will be seven times the diameter.

Congratulations

Congratulations go to Wilfred Sanchez (4221-4) on the event of his recent marriage to the former Toni Vigil.



VINCE PETERSON (8221-1) demonstrates golfing stance which helped him obtain low net score of 58 in the Radiation Recreation Association. Holding his winning trophy is Cliff Erickson (8114-1), who was runner-up at Livermore with a low net score of 64.

Theater Available So Noon Movies Reopen With 'Glenn Miller Story'

Noon hour movies will again be part of the Sandia recreation program Monday, Sept. 14.

Temporarily discontinued when theater space at Sandia Laboratory became unavailable, the program will start anew utilizing the 330-seat Sandia Base Little Theater. The building is located immediately south of the military cafeteria on the southeast corner of Main and "F" streets.

"The Glenn Miller Story" is the first movie scheduled. It features James Stewart and June Allyson. The film will be shown in three sections beginning Monday and continuing through Tuesday and Wednesday. Showings will start promptly at 12:10 and end at 12:50.

On Thursday, Sept. 17, the first part of "The Land Unknown" will be shown and will be completed the following day. The movie stars Jock Mahoney and Shawn Smith.

As in the past, the noon movie program will strive for variety in films scheduled. Color movies will make up a large portion of the programs. Drama, westerns, comedies, mysteries, musicals and documentary-type movies are planned.

Movie schedules will be posted on bulletin boards and printed in the Sandia Lab News.

Clyde Hughes Heads Flag Football Ass'n

Clyde Hughes (4412) was elected to head the Sandia Corporation Employees Flag Football Association at an organizational meeting last week. Serving as vice president will be Jack Dyer (3121) and George Banos (3122), will serve as secretary.

Eight teams organized within superintendencies will participate in the league. Play is expected to start Sept. 8.

Service Awards

TEN
YEAR
PINS



R. J. Dill
2720
Sept. 6, 1949



Sarah M. Copeland
5321
Sept. 7, 1949



Jesse C. Rehberg
5223
Sept. 7, 1949



Antonio C. Salazar
4575
Sept. 7, 1949



Eugene A. Aas
8162
Sept. 12, 1949



E. R. Parsons
5545
Sept. 13, 1949



Joseph E. Sylvestre
4252
Sept. 13, 1949

Five Year Pins

Sept. 4-18

Orville E. Adamson 4582, T. J. Setz 1626, Hugh A. Sumlin 4253, Kathryn H. Luckett 2221, Leonard C. Beavis 1413, George J. Janser 1313, William B. Benedict 5132.
Robert I. Butler 1615, William M. Phillips 2713, Charles S. Stack 4212, Elys A. Warren 1592, L. T. McKenzie 3242, Albert F. Miller 4251, Roy J. Martin 1322, Robert E. Berry 1245, O'Donna S. Gunn 4212, Rafael T. Garcia 4212 and Carl R. Carlson 1261.

Sanado Club Members Will Hold Annual Barbecue-Dance Sept. 12

Sanado Club will hold its second annual barbecue-dance Saturday, Sept. 12, at the Coronado Club. The evening's entertainment will include a social hour, followed by Western-style chicken dinner and finally dancing from 9 p. m. to midnight.

A pantomime will be presented

by Paul House, Jim Walston, Jack Suttman, Edison Sprigg and Richard Strome (all from the Technical Art Division). General chairman of the decoration committee is Mrs. J. E. Fesler.

James W. McRae, former Sandia Corporation president, and Mrs. McRae will be special guests at the affair.



TOASTMASTER OF THE YEAR Robert E. Quinlan (1473) is presented pen stand by Roger Johnson (left) (4252), Albuquerque area governor for Toastmasters. Bob received the honor for his general contributions to Sandia chapter 765 during the past three years.

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

GYM DANDY WHIRLWIND (2-place merry-go-round), \$9; electric motor— $\frac{1}{2}$ HP, \$10; centrifugal pump— $\frac{1}{2}$ " input, $\frac{1}{4}$ " outlet, needs repair. Hungate, AX 9-6834.
BUTANE STOVE w/oven; ice box; fire chains, 6.50x16, \$5. Stuart, AX 9-9190, 10200 Los Arboles NE.
3 BRM Hoffman, brick, 1 $\frac{3}{4}$ baths, HW floors, screened patio, sprinklers, AC. FHA loan commitment \$16,000; down payment \$1,900. McNeely, AX 9-4232, 2511 Gen. Arnold NE.
'57 PONTIAC hardtop, R&H, Hyd. drive, new w/w, low mileage, \$1700. Smith, AL 5-6478.
'51 HUDSON, 4-dr., 6 cyl. overdrive, R&H, \$175. Norwood, AL 5-4639 after 6 p.m.
FREEZER, 13.3 cu. ft. chest type Kelvinator. MacGibbon, AM 8-8923 days, CH 2-5675 after 5 p.m.
UTILITY TRAILER, 6' x 8' bed, \$35. Radigan, AX 9-8345.
'47 CHEVROLET, 2-dr., recent overhaul & lube, new tires, new seat covers, \$185. Drury, DI 4-4973 after 5:30 p.m.
PET BANTAM CHICKENS, various sizes, mixed colors, \$1-\$1.50. Gary, AL 6-7325.
'58 VOLKSWAGEN deluxe, Leatherette upholstery, oil temp. & gas gauges, w/w tires, stabilizer bar, \$1,650. McCoy, AL 5-7800 after 5 p.m.
WASHER, Kenmore automatic, 2-cycle, lint filter, water level & water temperature control, 1 yr. old, \$180. Stock, AL 5-3938.
2 WESTERN SHIRTS, suede leather, calf-skin inserts, large & small size for man and woman, nearly new, \$20 ea. Ives, AX 9-7003.
26" ENGLISH BICYCLE, ladies bronze Schwinn, cost \$70, sell \$35. Snodgrass, AL 6-4072.
'52 ENGLISH AUSTIN, A40, \$350. Walters, AM 8-4165.

5-DRAWER CHEST, blond; record cabinet; bed headboard & frame; plastic skirt dressing table & bench; overstuffed chair. Littrell, AL 5-4620, 2820 California NE.
'50 JEEP, steel cab, new motor, \$795; man's Rolex automatic watch, \$95. Winblad, DI 4-3109.
'58 MGA, \$1900. Cole, AM 8-3020, 645 San Pablo SE.
WESTINGHOUSE LAUNDROMAT, \$70. Thompson, AL 5-5282, 817 Amherst NE.
'54 WILLYS JEEP, 4/WD, oversized heater, canvas top, 5 new tires, tow bar, trailer hitch, \$995. Kilmartin, AX 9-0836, 1504 Conchas NE.
'51 NASH, 2-dr. sedan, R&H, overdrive, 3 nylon tires, seats make into bed, \$175. Cummings, AM 8-1139 after 5 p.m., 417 Chama SE, Apt. 1.
FENCE, picket, white, 3'x50', \$10. Jaramillo, AX 9-3441.
'53 CHEVROLET Belair, lt. blue, new seat covers, new battery, recent valve job on motor. Kelly, CH 7-9835 after 5 p.m.
PING PONG TABLE, regulation size, 2-piece, \$20 or best offer. Everett, AX 9-6057.
2 BRM HOME, LR and BR carpeting, pitched roof, walled backyard, lawn with shade trees, \$10,700. FHA commitment. Garcia, AL 5-6929, 628 Madera SE.
GENERAL COVERAGE RCVR, 200 KC to 30 MC; HRO5 front end, separate IF amp., \$70. Maase, AX 9-3647.
JET WATER PUMP, $\frac{1}{2}$ HP motor, little used, \$75. Ellicott, CH 3-1287, 2455 Del Sur Dr. SW.
RECORD CHANGER, Garrard RC 88, Sonotone diamond stereo stylus, walnut base, used one month, \$70; 9x12 grey rug. Karcher, AM 8-4279.
'55 BUICK hardtop, new tires and brakes, white sport model, \$300 down, \$800 at \$52.75 per mo. Wright, DI 4-8151 or AM 8-4128, after 5 p.m.
'54 INDIAN MOTORCYCLE, first \$100 takes. Rappleyea, AL 6-6603 after 5 p.m.
CHIHUAHUA PUPPIES, purebred, no papers, \$25-\$30; wood lathe, 24", \$12; mink scarf, \$75. Eversgard, AL 6-6345.
ELECTRIC RANGE, 40" Hotpoint, push-button control, automatic timer, deep-well, etc., \$150. Huner, AX 9-4557.
'54 UNIVERSAL IRONER used 5 mos., orig. cost, \$200; make offer. Salazar, AL 5-1301 after 5 p.m.
KITCHEN TABLE and chairs, chrome hair-pin legs, Formica top, red, 4 chairs plastic covered, \$25. Roberts, AL 5-9527.
TRAILER, 15' Terry w/Butane refrigerator & stove. Chapman, AX 9-3946.
COLLAPSIBLE STROLLER, \$10; playpen, \$8. Johnson, AL 5-5427.
2 BRM HOME furnished, bath, LR & DR carpeted, AC, garbage disposal, dishwasher, auto. washer, dryer, sprinklers, patio. Schroeder, AX 9-1636.

NEXT

DEADLINE

FOR SHOPPING CENTER ADS
Friday Noon, Sept. 11

TYPEWRITER Royal portable, \$40; 16" GE table TV, \$45; 2 bamboo shades, \$2.50 ea.; "Riviera" fringe TV antenna, \$25. Mills, AX 9-2130.
DACHSHUND PUPPIES, 6 wks. old, registered. Gardner, DI 4-2547.
RIFLE, Remington 740 autoloader, 30-06, sling, recoil pad, \$90. Adams, AL 6-3316 after 5 p.m.
ENLARGER, 3 $\frac{1}{4}$ -4 $\frac{1}{4}$ " Kodak, includes 3.5 75mm lens, \$20; 10 gal. aquarium, \$8. Newman, CH 3-1496.
'51 FORD, automatic trans., new seat covers, etc. Erni, AL 5-8350 after 4:30 p.m.
FREEZER, 15' United upright, orig. cost \$400; sell for \$200 cash. Hume, AM 8-1503.
WEDDING DRESS, size 10, imported chantilly lace & tulle, scalloped sabrina neckline, fingertip sleeves, chapel sweep skirt. Hendred, CH 3-2647.
'56 HARLEY-DAVIDSON, Mod-165, \$160 or best offer. Beach, AL 6-6165.
2-WHEEL TRAILER, \$35. Hancock, ext. 41268 or 51294.
REVOLVER, Harrington-Richardson model 922, 4" BBL, 9-shot w/multiple extraction, with holster, \$18. Donaldson, ext. 25165.
'29 MODEL "A" coupe, juice brakes, \$250; Leica camera w/case, 2 stereo attach., filters, \$125. Campbell, AX 9-4830.
3 BRM HOME, 4 $\frac{1}{2}$ % GI loan, 1 $\frac{3}{4}$ baths, HW floors, pitched roof, double garage, fireplace, sprinklers, many extras. Heising, AX 9-7139.
3 BRM HOME, 1 $\frac{3}{4}$ baths, w/w carpeting, walled yard, landscaped, sprinklers, many extras, no qualifying. Layton, 2041 Jensen Drive NE.
CUSTOM DRAPE for Sandia Base efficiency apt. for separating BR from LR, 1 $\frac{1}{2}$ yrs. old, \$40, paid \$75. Westmark, ext. 48244.
MEMBERSHIP in Crossroads Flying Club, \$400; Cessna 172, Piper 150 Tri-Pacer Omni, licensed pilots only, minimum 75 hrs. solo. Woodall, ext. 35279.
75 WATT XMTR., Phone; 1 Hallicrafters SX96; 1 Beam & Tower; 1 rotator & control Heath VFO modulator; extras. Cooke, ext. 31254.

'59 FORD, 4-dr., 6 pass. country sedan station wagon, Cruisomatic, R&H, large V-8 engine, lt. green, \$2650. Atkinson, AX 9-3250.
'58 HOUSE TRAILER, 3 Brm. kitchen, LR, bath, close to Base. Lopez, CH 3-1744, 1-3 p.m. or 8-11 p.m.
PORTABLE AIR CONDITIONER, Westinghouse, \$25. Briehn, AX 9-3317 after 4:30 p.m.
BOODLE BUGGY, \$15. Dauphinee, AL 5-6367.
HIGH CHAIR, Cosco chrome, \$8; 2 rain-bird heads, \$5; carpet sweeper, \$3. Olson, AL 5-8360.
CLARINET, Normandy, with case, \$65; Schwinn "World Traveler" English bike, \$35. Brown, AL 5-0566.
CROSLLEY REFRIGERATOR; mangle ironer; wringer washer. Jacobs, DI 4-2534.
21" TV, RCA, blond cabinet, good tubes, \$95. Vanstorm, ext. 41138.
ACCORDIAN, 120 bass Wurliitzer. Sektnan, AL 6-4411, ext. 23178 after 4:30 p.m.
FUR CAPE, finger length, \$75; originally \$350. Arning, AL 6-9229.
DALMATIAN PUPPIES, 6 wks. old, AKC registered. Garrison, DI 4-2023 after 5:30 p.m.
'51 MOTORCYCLE, Triumph, 650 C.C., \$325; sewing machine, Kenmore desk model, make offer; grey winter coat, imported fabric, size 18, \$15. Pegue, AL 5-2084.
DINING TABLE, solid oak, 43x32 in. plus extra leaf, \$17; 75 watt modulator, \$30; Knight VFO, \$24.50. Drake, AX 9-0743.
'57 PLYMOUTH Belvedere, 2-dr., hardtop, R&H, Torqueflite trans., \$1650; (\$100 below NADA Book value). Maynez, ext. 2-2174, 503 Ash SE.
TV, Motorola w/stand, 17", repairable. Martinez, AX 9-1918.
TRAILER, American 34 ft., 2 brm., carpet, indirect lighting, new heating stove & refrigeration air conditioner, jacks & shed included. Loepke, AL 5-4465.
BENDIX AUTOMATIC WASHER, \$30. Miller, AX 9-9474.
PORTA-CRIB (less mattress), and baby-buggy, \$20. Hedberg, AX 9-6359.
BOOKS, 28 historical & educational "Landmark" bks., \$15 or best offer. Bliss, AM 8-2089.
2 BRM HOME, tile bath, hardwood floors, aluminum awnings, garage, walled yard, trees, sprinklers, \$13,000. Lee, CH 2-5505, 1613 Wilmoore Dr. SE.
DINING ROOM SUITE mahogany, w/china cabinet, \$45; chaise lounge w/cedar storage below, \$7. Butler, AX 9-5626.
'59 MG-A w/accessories, wirewheels, \$2450; will consider trade. Sanchez, CH 2-6241.
STUDIO COUCH, dark green, \$20. Morris, AX 9-3804.
GAS RANGE, "Wellbuilt," 36 in., \$30. Murray, DI 4-5289.

PORTABLE TYPEWRITER, Remington. Newman, AL 5-6354.
HARLEY DAVIDSON 165, just overhauled, saddle bags & buddy seat, \$250. Gonzales, CH 2-4012.
SELMER FLUTE, \$90; girl's bicycle, 24", \$7.50; deep freezer, chest, 19 cu. ft., needs motor-compressor unit, \$135. Nissen, AL 5-5657 after 5 p.m.
'58 MOTORCYCLE, Triumph Tiger Cub, 10 hp., \$425. Johnson, AL 5-5427.
WANTED
UPRIGHT TYPEWRITER, will trade Royal Companion portable of equal value. Jolly, CH 3-9737.
OLD FASHIONED CLOTHES and costumes. Hickey, AX 9-5771.
WATER WELL PUMP w/tank. Chavez, AL 5-5461.
HOMES for half-Siamese kittens, 6 wks. old. Houghton, DI 4-2278, 222 Montana Rd. NW.
AF OFFICERS winter uniform, 42 blouse, 36" waist; ping pong table. Houghton, AX 9-3386.
CHILD CARE in my home. Blagg, AX 9-8624, 405 Conchas Ct. NE, Buena Ventura Estates.
HOMES for Calico Kate's housebroken kittens. Johnson, AL 5-8851.
OLD FORD or Mercury body; call evenings. Villella, AX 9-7915.
CHILD CARE in my home; preferably a boy 4 or 5 yrs. Morris, AL 6-0152, 920 Kentucky SE.
'55 OLDSMOBILE SERVICE MANUAL or '55 MOTOR book. Barbier, AX 9-1305.
BELT SANDER. Streeter, ext. 48235.
RIDE to or in direction of Dayton, Ohio, weekend of Sept. 19. Will share driving and expenses. Winklejohn, ext. 47142.
LIVERMORE FOR SALE
CONVERTIBLE BED DIVAN, \$35; vanity w/large round mirror, walnut finish, \$15. Pearl Johnston, HI 7-1269 after 5 p.m.
FOR RENT
3 BRM HOME, garage, landscaped, stove furnished; no short termers, please; \$115/mo. Dieruf, ext. 48164, 9917 Ley-enderer NE.
LOST AND FOUND
LOST: Money lost 7:20 a.m. 8-26-59, Bldg. 802, vicinity of lunchroom; black bone penknife w/2 blades; keys w/round white plastic container; royal blue cardigan sweater; clear plastic cosmetic bag w/cosmetics; 3-blade case pocket knife w/brown bone handle. Lost and Found, ext. 26149.
FOUND: Money found 8-17-59; keys in brown tooled leather zipper case; one key on SC Family Day chain; gold shield shape cuff link w/ Trojan head. Lost and Found, ext. 26149.

Democracy Depends On Quality of Individuals' Lives

Frederick R. Kappel, President of American Telephone and Telegraph Company, recently spoke to the graduating class of Knox College. Mr. Kappel discussed the world into which the graduates would soon plunge and told of the complications of modern life and the places in that life the graduates would and should be taking.

Following are excerpts from his talk.

For all the conventional talk about airplanes and communications making the world smaller, there is another part of our awareness that tells us this isn't so at all. On the contrary, it is getting bigger all the time.

The Middle East for instance is considerably bigger and more baffling to most of us than it was a few years ago. The whole continent of Africa is far, far bigger than when you first came here as freshmen. Not literally of course. But ever so much bigger in its impact on you and me. So is Russia. So is India. So is China.

The whole world is bigger because there is more in it that concerns us.

I could give other examples but these are enough. The broad point I have in mind is that adding all this bigness up, the sum total may seem to you rather forbidding. It may lead you to ask: Can the individual—~~one~~ small person, as you humbly think of yourself—count for anything in all this vastness? Can he make his life really matter?

I say to you earnestly: Of course he can—if he will. Or to be a little more direct: Of course you can—if you will. The bigger the world, or more precisely, the bigger your apprehension of it, the more room it gives you to grow in.

This is not a thought that will appeal to you particularly if you prefer close limits. However I take it you did not come to college to find out how to fence yourself in.

My next comment is so obvious, I almost hesitate to make it. We live in a time of crucial decision—one almost feels impelled to say, of ultimate decision.

What kind of a world is this to be? That is the question, and no generation of human beings ever faced a bigger one. All we need to do is make a little list: The strength and determination of communist states. The ferment of peoples in territories and new nations striving for a better life. The speed of scientific discovery and technological change. The existence of a power for destruction so great that it challenges description.

Will democracy and free society maintain itself and grow under these conditions? Remember this: no more than anything else can freedom stand still; it will either grow, or wither. And even in less critical times, making democracy work has been a difficult and delicate matter. For freedom encourages differences of all kinds: differences of ideas, of tastes, of ambitions, of personal goals.

We don't want to be shaped or formed according to some standard model. We want to disagree and argue with each other. We insist that what is good for Tom is not thereby also good for Harry. We stand on our rights and stick up for our opinions. We want the air of freedom and we don't want it air-conditioned by somebody else.

However, freedom can also bring bad results. We can become absorbed in seeking personal advantage. We can focus on our rights to the exclusion of most other things. We can listen to what we like to hear, and shut our ears to the rest. We can come to think that because we are free, we shall not be held to account.

Worst of all (and this sums up the bad news in six words) we can take freedom for granted.

So I think it comes down to this—that this difficult and delicate business of making democracy work depends on the quality of in-



Frederick R. Kappel
—President of American Telephone and Telegraph Company—

dividual lives, and on how they nourish each other.

It depends on people developing themselves with the idea of contributing something, and not just taking something. It depends on their eagerness to exercise their personal talents, and their personal tastes, in ways that enrich the common life. It depends on their interest in helping to bring out the best in other people.

It depends on vigorous and thoughtful participation in political life. It depends on capacity for self-discipline—by which I do not at all mean a merely stern or puritanical discipline, but the kind of discipline that people with worthwhile goals happily impose on themselves.

Aside from these broad comments, there are three fairly specific things I had in mind suggesting to you.

One has to do with quality of workmanship. And if you don't mind, I'll use an example drawn from the communications business to help illustrate the point.

A few weeks ago one of my associates was telling me about the results of a missile test shot over the South Atlantic. This was the first time the nose cone of a long-range missile had been recovered. Since the system for guiding the missile had been designed at our Bell Telephone Laboratories, you can see that we were particularly interested.

Measuring the position and speed of the missile in flight, the guidance system was able to calculate with pin point accuracy just where the nose cone would fall in the sea, 5,000 miles away.

Let me give you two or three figures to indicate what this means. When the rocket engine cuts off, the speed of the missile out in space is around 24,000 feet per second. But a variation of one foot per second at the cut-off point will cause a difference of about a mile in where the nose cone lands. So you see how remarkably accurate the guidance system must be.

The second suggestion I was thinking of is somewhat related to what I have just been saying. Good jobs can not be accomplished by rule or by rote.

In the last couple of years or so I have heard quite a bit about somebody called The Organization Man. I am not exactly sure who he is, but I think he exists, and I think one of his characteristics is that he is more concerned with avoiding pitfalls than with blazing trails.

The fault for this may well be his, but it may also be the organization's for encouraging him in his error.

If this is so, it means that to

avoid making little mistakes, the organization man and the organization collaborate to make a big one.

I am afraid the reputation of the organization man has promoted the idea that in big companies a few people do the thinking and a lot of other people behave accordingly. I wouldn't say to you that this is never so. I do say there is no good reason under heaven why it should be so, and that where it is, it will not be so for long, for under these conditions the organization is not fitting itself to survive.

The fact is, the business of a big organization calls for thousands of individual decisions and these must be made by thousands of people. Moreover these individual decisions are not petty. They are very influential. And it is only by reason of these decisions that the organization moves and acts. It cannot move as a solid mass. That is simply impossible. A business is not a glacier.

I said I was making a suggestion. The suggestion is that if you are thinking of entering an organization, you do so with the intention of not becoming an organization man—or an organization woman.

Do I mean by this that you should not be concerned to share the organization's purposes? I certainly do not. I mean rather that it is far better to operate on the basis that you will help make the organization's purposes, than on the basis that you will merely follow them.

If you do the one, I think you will find plenty of room for the exercise of freedom. If you do the other, in a few years you will probably be grumbling about being in a rat race, and you will complain that "the system," whatever that may be, is getting you down.

But I need to add a couple of other thoughts here. To help make an organization's purpose calls for much more effort on your part to develop your capacities and your competence. You can't afford to go off half-cocked, and the organization can't afford to have you.

So the freedom to be a maker, like all other freedoms, depends on your fitness for it, and this fitness does not come of itself. It has to be created.

My last suggestion has to do with politics. I hope some of you will go into politics and I hope all of you will take politics seriously. The Greeks may not have a word for you and me, but the politicians do have one. We are their constituents. And as they face up to decisions, they all the time have to be thinking about what we are thinking.

Certainly they have both the opportunity and responsibility for leadership. Nor should we make the mistake of underestimating their capacity for independent thinking. Nevertheless, legislators in a democratic country face a very, very difficult problem. They cannot dissociate themselves from the views of their constituents and hope to remain in office.

But what are our views? And how thoughtful are they? If they are narrow and provincial, and do not take into account the serious problems that confront the whole country, then our lawmakers have no help in making crucial decisions that affect the welfare of all.

In plain language, if we think small, how can we expect them to act big?

Furthermore, if we think well and broadly, but still are silent,

what are we contributing then? Nothing at all, it seems to me.

So I urge you not only to think as big as you can, but to know and communicate with your elected representatives. To ponder the questions they are wrestling with. To express your views to them—not hastily or carelessly, but on the basis of care and conviction. To be as active as you can be in party affairs and in political campaigns.

A large order, you will say. I agree it is. Looking for a somewhat broader maxim than the one I just mentioned, the other day I came across this sentence by Tom Paine:

"Those who expect to reap the blessings of freedom," he said, "must, like men, undergo the fatigue of supporting it."



TOUR OF THE TECH AREA at Livermore Laboratory was made last week by William H. Doherty (left), manager of government sales for the Western Electric Company, accompanied by R. E. Poole (right), Vice President at Livermore. Joining them (in line behind Mr. Poole) were L. E. Davies (8150), L. E. Hollingsworth (8120), C. R. Barncord (8160), R. L. Brin (8110), C. Winter (8141).

WE Government Sales Head Visits at Livermore Lab

William H. Doherty, manager of government sales for the Western Electric Company, toured technical facilities as part of a briefing with officials at Livermore Laboratory last week.

Mr. Doherty joined Bell Telephone Laboratories in 1929 in re-

search and development, assuming his present position in 1958. He received the I.R.E. Morris Lieberman prize in 1937 for his invention of a high efficiency high power radio frequency amplifier circuit, a patent for which was assigned to BTL.

A graduate of Harvard University with BS and MS degrees, Mr. Doherty received his ScD degree from Catholic University.

W. T. Ryan Heads Division of Livermore Bay Area Crusade

Serving on the volunteer staff of the Livermore United Bay Area Crusade is William T. Ryan (8211), who has been appointed chairman of the Commerce and Industry Division in the city of Livermore.

As division chairman Bill will be responsible for all commerce and industry participation in UBAC in the Livermore area.

In addition to his other duties Bill will also serve as an "account executive" for the Livermore-Pleasanton area, making calls on major industries in the area employing more than 50 people.

The Livermore-Pleasanton drive will get underway in late September.

Fall Classes in Ballroom Dancing To Start at Club

Ballroom dancing classes will again be offered to Coronado Club members starting Sept. 14.

Gail (3463) and Jennifer Ward will teach the beginners' class in the waltz, fox trot and swing starting at 7 p.m.

The more advanced class, which includes the rhumba, samba, tango, and cha-cha, will be taught at 8:30 p.m. by Charles (5512) and Holly (4131) Balistrere.

Cost of the 10 week course of one and a half hour lessons is \$6. Registration will be held prior to the first class.



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