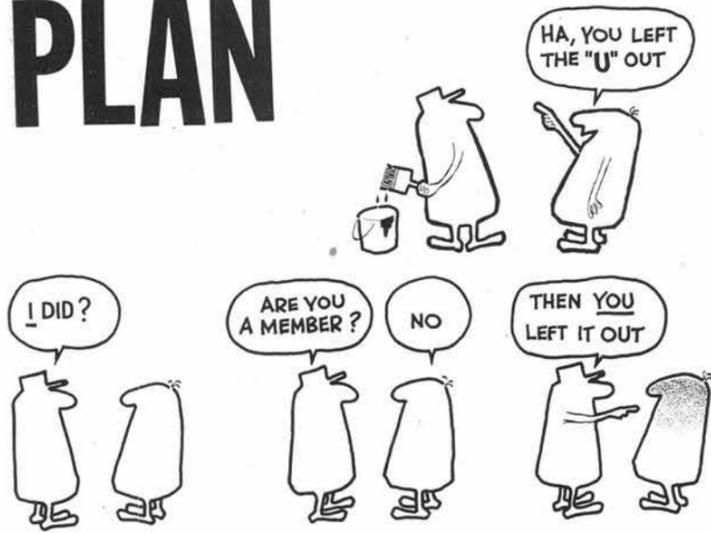


EMPLOYEES' CONTRIBUTION PLAN



ECP Drive Starts Monday; One Hour's Pay Per Month Is Sandia Lab Goal

Preparations for the 1961 Employees' Contribution fund drive are going smoothly according to W. R. Rosenberg (4360), chairman of the 1961 ECP committee. The drive begins Monday, Oct. 2, and will continue through Wednesday, Oct. 4.

A special training program for ECP captains has been in operation for the past several days, and the captains, in turn, are indoctrinating their department solicitors with background information on ECP and the participating agencies. This year's training program was prepared specifically for the ECP by Sandia's Supervisory Development Section 3131-1. Training representative F. H. Hannah (3131-1) supervised preparation of the program.

The goal for the 1961 drive is one hour's pay per month for each Sandia employee. Employees who already belong to the ECP

will be sent, through their division secretaries, a pledge renewal card upon which they may note an increase of deduction if they wish. After the drive all plan members will receive an ECP window sticker. Employees who do not belong to the plan will be contacted personally by a drive solicitor.

Funds raised through the drive will be distributed to 34 different health and service agencies in the Albuquerque area. The Employees' Contribution Plan provides assistance for nine nationally-affiliated health agencies and 25 member agencies of the Albuquerque United Community Fund. These agencies and their functions were discussed in previous issues of the Lab News.

Allocation of funds to agencies is based on a system of percentages of the total ECP fund and takes into consideration each

agency's fund-raising record in the community. Each member agency is required to submit an annual audited financial report to the ECP committee for review. The report becomes the basis for percentage allocations.

The enrollment drive for ECP is held at Sandia Laboratory every fall. This year, Plan members will not be personally solicited during the drive but will be given the opportunity to review their deductions to keep pace with income and with the increased need of the member agencies.

The Employees' Contribution Plan was established at Sandia Laboratory in 1957 in order to fulfill the need for a federated giving plan which would unify and simplify Sandia employee donations to several fund drives. At the present time, the ECP is the only solicitation of funds authorized within Sandia Laboratory.

Sandia Corporation LAB NEWS

ALBUQUERQUE, N. MEX. • LIVERMORE, CALIF.

VOL. 13, NO. 20

Published every other Friday for the employees of Sandia Corporation, contractor to the Atomic Energy Commission

SEPTEMBER 29, 1961

Reactor Controls Ready for Installation In SERF, Have Had Two Years of Checks

When the control console and panel boards are installed in the Area V building housing the Sandia Engineering Reactor Facility (SERF), the instruments will already have been thoroughly tested under simulated operating conditions.

During the past two years members of Reactor Facilities and Operations Division 5431 have been putting together the reactor control instrumentation in Bldg. 839. Outside, on the south side of the same building, is a mock-up of the reactor core. (The reactor is a tank-type uranium-fueled heterogeneous model, patterned after several reactors having long operating histories and satisfactory nuclear safety records.)

Power set panels may be operated manually or automatically. The indicators are of two types: one type gives warning of malfunction which requires attention

but does not shut down the reactor. This is called an annunciator. The other type results in the automatic shutdown of the reactor and is called a scram indicator. The electronics system was designed by J. G. Lareau (5431-2).

Functional Check

The instrument set-up has made possible a functional check of the total control system and studies of water flow in the tank core without the use of fissionable materials and attendant generation of neutrons. The flow studies have been performed by J. A. Moeller (5431-2). Present studies use an analog computer to simulate the reactor characteristics for the purpose of perfecting the servo-control regulation of the reactor.

The instrumentation is a combination of parts available commercially and those designed by field test organizations and fabricated by the Development Shops

here at Sandia Laboratory.

Under the initial contract for construction of the reactor, Sandia Corporation was allotted money from the AEC budget to provide the reactor core and associated controls, as well as the reactor pressure vessel and cooling equipment.

SERF will provide an intense source of neutrons and gamma rays for use in the Corporation's research and development programs, such as radiation effects and studies of crystal structure.

Original cost of the 30-ft. high mock-up was about \$10,000. It included the actual core plate bottom, moderator boxes, control blades, support structure, magnets, and drive motors—the whole control package. In normal operation 3500 gallons of water per minute will pour through the core for cooling purposes in order to remove the five megawatts of internal energy generated in the eight cu. ft. of the core. The mock-up simulates only one quadrant of the core; however, the same linear flow rate may be achieved with 875 gallons per minute as compared with 3500 gallons

(Continued on Page Three)



CONTROL CONSOLE for new reactor is operated here by Norman Lucas (5431). The instrumentation is a combination of commercial and Sandia-designed parts. Missing panel in center of photograph is at reactor site to check out the cooling system.



CAPTAINS for the 1961 ECP Fund Drive have been chosen and will be busily at work with ECP solicitors in their respective areas on Oct. 2-4. The front row includes (l to r): J. L. Hickey (4516); A. E. Hall (4221); R. S. Lemm (4230); D. B. Kennedy (4413); L. R. Neibel (4330); and W. A. Otero (4624). Second row: L. L. Pierce (4224), Metal Trades representative; P. H. Dailey (2643); Janice Sharp (4423), OEIU representative; R. D. Flaxbart (4570);

G. E. Hansche (7220); E. K. Baker (3341); R. E. George (4513); and D. R. Weldon (3222). Third row: J. R. Sublett (2560); W. O. McCord (1430); A. Y. Pope (7130); A. F. Cone (7510); G. W. McClure (5152); O. L. Wright (4610); C. C. Fornero (3153); and H. E. Viney (7210). Not pictured: E. R. Frye (1112); W. C. Kraft (2450); M. K. Linn (3420); M. E. Grothe (4150); R. E. Heppelwhite (4210); and R. H. Schultz (7320). Drive will start Monday.

United Community Fund Goal Upped For Disaster Help

Hurricane Carla, which recently devastated Texas, represents a major reason for increased needs of the member agencies of the ECP. Over \$6 million was spent by the American Red Cross to aid victims of the disaster. The money came from a national disaster fund that also supplied close to \$60,000 for Albuquerque flood relief.

To restore the disaster fund, Albuquerque and other Southwestern cities are increasing their UCF campaign quota for 1961. Albuquerque is adding \$15,000 to its previously announced UCF goal, making a new total of \$700,480. The decision to raise the UCF goal was made to avoid a separate drive by the Red Cross at a later date.

Editorial Comment . . .

A Good and a Shameful Record

The combined fire loss of Sandia and Livermore Laboratories last year amounted to \$105. This is a pretty good record. Nationally, Americans suffered 11,600 deaths and more than \$1,500,000,000 in property loss to fire. This is a shameful record.

According to fire prevention personnel at both laboratories, most fires are preventable. The Corporation's record shows what can be done with an alert, responsible program. Take the time and make the effort to perform a thorough fire prevention inspection of your home.

In proclaiming Oct. 9-13 as Fire Prevention Week in America, the President said:

"I call upon all citizens to understand and personally support the fire prevention and control efforts of their respective community fire departments. I also direct the appropriate Federal agencies to assist in this effort to reduce the shameful waste caused by preventable fires."

'Wrapped Up'

Modern life is too complex — too involved. We hear this complaint a lot. It's true we depend upon complicated gadgets. Our thinking apparatus must tackle problems unknown or undreamed of by our ancestors.

No point in isolating ourselves from other people and activities, though. We are involved, totally, in this life. To be involved means, literally, to be "wrapped up" in something. Technology has shrunk the world to little more than a large neighborhood. Today, more and more, people are "wrapped up" in each other's activities.

People, we know, will always need help from some source. Trouble, illness, disaster remain always with us. Vital sources of help today are the voluntary health and welfare agencies that are supported through the Employees' Contribution Plan.

This is the voluntary way, and ours is a voluntary society. The once-a-year campaign idea was born in America. Industry made possible the payroll deduction method of giving. It's the old, good neighbor spirit — modern version.

So, get involved. Give generously to ECP. Increase that deduction. You'll be helping people who are your neighbors. You'll feel good about being involved.

And the Minister Said, 'You're Not Legally Married'; Hiway Ceremony Follows Church

The setting at Central Methodist Church was just perfect for the marriage of Fran Adams (4333) and Nick Bourgeois (1414) on Sept. 14. After the ceremony, the customary signing and witnessing took place.

Just as Fran and Nick were leaving the church, the minister who had married them, Rev. Leonard E. Gillingham, called them back into his office to check the marriage license.

"You're not legally married," he said, "because you got your license in Santa Fe county and were married in Bernalillo county." A quick call to the County Clerk's office was in vain—no answer.

Next step was to find a map to see where the closest Santa Fe county line was. It was about three miles east of N. Highway 10 on Rt. 66.

So the entire wedding party got into cars, drove out through Tijeras Canyon, and stopped at a wide spot on the road close to the county line.

Mr. and Mrs. Bourgeois duly repeated their vows, and then the minister signed the marriage license, noting "married at Central Methodist Church and the county line on Highway 66."

Congratulations

- Born to:**
 Mr. and Mrs. Jim Guthrie (1413) a son, Matt William, on Sept. 4.
 Mr. and Mrs. Richard Rael (2644) a son, Richard Gerard, on Aug. 20.
 Mr. and Mrs. Clarence Davidson (2632), a daughter, Mary Beth, on Sept. 5.
 Mr. and Mrs. L. R. Plumley (4413-2) a son, Richard Lawrence, on Sept. 14.
 Mr. and Mrs. Frank Nieto (8233-3) a son, Mark Anthony, on July 26.
 Mr. and Mrs. H. B. Souther (2542) a son, Lance Hilton, on Aug. 25.
 Mr. and Mrs. R. P. Kelly (2641) a son, Brian Thomas, on Aug. 24.
 Mr. and Mrs. Allan Van Fleet a daughter, Cynthia Lynn, on Sept. 12. Jean is on leave of absence from 7241.
 Mr. and Mrs. Lewis Sisneros (4152) a son, Michael Gordon, on Sept. 18.



DOWN THE AISLE and down the road walked Fran (4333) and Nick Bourgeois (1414) after a mixup in their marriage license made two ceremonies necessary — one in church, one on highway.

Weddings

Pat McCanna (3126) has set Oct. 21 as the date for her marriage to George Beller (4123). The wedding will be performed in Lockport, Ill.

Pat has been with the Corporation a year and a half and George has worked here for three years.

Sympathy

- To Dorothy Fletcher (4153-1) for the death of her husband on Aug. 22.
 To E. Genese Shieler (7241-4) for the death of her father on Sept. 10.
 To Carl H. Beckham (8165-1) for the death of his father-in-law in Livermore, Sept. 3.
 To Carlston Luker (3446-1) for the death of her sister in London, Ky.

Family Reunion

Aug. 14 was a happy day for Henry W. Carrejo (4621-2) and his wife when all 13 of their children returned home for a family reunion. One of his daughters, Dolores (Sister Mary Pacheli), is a teacher at a parochial school in New Jersey. Other children came from Los Angeles and Arizona. And they plan to meet again in five years.

Edith Irwin Has Reunion with Son She Had Not Seen in 21 Years

The thrill of seeing her son for the first time in 21 years was experienced by Edith Irwin (4624) last month.

Edith has been married to Floyd L. Irwin (4231) for nearly 25 years and they have a son, 23, and a



Edith Irwin and Son

daughter, 16 years old. This story, however, concerns a son born from a previous marriage whom Edith hadn't seen since he was six years old.

Through circumstances last May, Edith discovered her son was in the Navy and learned his adopted name. She obtained his address from the Navy Department.

The son, Thomas E. Stanley, received his mother's letter at Holy Loch, Scotland, where his ship, the nuclear submarine USS Robert E. Lee, surfaced after being submerged 70 days—a new record. When he returned to home port a

meeting was arranged at International Airport in New York. Although there had been no exchange of photographs and 21 years had lapsed since the mother and son had seen each other, they walked straight to each other at the busy terminal!

"We drove to Groton, Conn., and for nine wonderful days my son hardly let me out of his sight," Edith recalls. Tom lives in Groton with his wife and three children—Edith's only grandchildren.

Tom's greatest wish now is to be transferred to Albuquerque where he can get to know his new sister and brother. "I'd love that, too!" Edith said.



TOASTMASTERS CLUB 765 honored Lee Deeter's 11 years of service to the organization at a special meeting last week. J. P. Mitchell (3121), left, presented Mr. Deeter (2440), right, with a plaque.

Sandia Toastmasters Club 765 Holds 'Lee Deeter Night'

Sandia Toastmasters Club 765 honored Lee Deeter (2440) Thursday, Sept. 21, with a special "Lee Deeter Night."

Mr. Deeter was presented with a plaque honoring his 12 years of service to Club 765 and to Toastmasters Clubs in the New Mexico area. He is one of the first members of the Sandia Club which was founded in 1949.

Many former "Toastmasters" in this area joined with current club members in recalling that Mr. Deeter is past president of Sandia Toastmasters Club 765, past governor of Toastmasters District 23, an active member of Club 765, and active in many community and technical organizations.

Club 765 is looking for new members who are interested in improving their speaking ability. Contact Hal Goddard (1443), AX 9-8370, for details.

'Atomic Kids' Set Records

The "Atomic Kids," a swimming team composed of Children of Sandia and Lawrence Radiation Laboratory employees at Livermore, recently established several national AAU swimming records.

Alyce Loveless (8114-3), who serves as team treasurer, has two children on the team. Other Sandians with "Atomic Kids" are Miriam Hall (8241-3) and Gordon Van Gundia (8156-1).



Frances Shelton (3126)

Take a Memo, Please

Show good safety sense by being alert to your surroundings as well as to the job at hand.

Tourists Crowding Israel, Europe Irv Auerbach Finds on Trip

A tremendous boom in tourism was one of the things Irving Auerbach (5151) noticed during a recent trip to Israel.

"The book and movie 'Exodus' have helped popularize Israel to the extent that you can't get space in the better hotels without reservations considerably in advance," he said.

During his two weeks in Israel, Irv visited places of archaeological and religious interest, farming communities, and the principal cities. City life is similar to that in European cities. Apartment houses are more common than individual homes and many of the new structures are cantilever construction with gardens and patios at ground level.

Cities are becoming industrialized with air conditioning equip-

ment, refrigerators, and sports cars among items being manufactured. Israel has tremendous potash, phosphate deposits, and copper mines, some originally worked in the days of King Solomon. Israel has a water demineralizing plant similar to the one in Roswell, N. M.

"The farm system is quite different from ours," Irv said. The farms are mainly cooperative or collective-type with only a few owned by individuals. Although oranges are a major crop, local shops sell only the culls. The best fruit are exported.

Irv also visited Rome, Florence, Venice, Lucerne, Paris and Amsterdam. "I joined the crowd. There were so many tourists in the European cities that there were waiting lines in front of museums," Irv explained.

Chuck Cockelreas Handles Large Share Of ECP Preparations

The success of an operation as extensive as the Employees' Contribution Plan drive depends upon an enormous amount of preparation.



Sandia employees do background work for the ECP drive along with the other tasks they regularly perform. Much of the preparation naturally involves writing and paperwork.

This year a good share of the writing workload was handled by C. E. Cockelreas of Technical Information Division 3423. Chuck was loaned to Community Relations Section 3431-2 for the duration of the ECP drive preparation. A large share of his work entailed writing, and he devoted much of the past five weeks to writing material for the ECP captains' training program.

"Chuck" came to Sandia last February from the University of Iowa where he received degrees in journalism and fine arts. In addition to his work as a technical writer, he is interested in writing fiction.

Sandia Corporation
LAB NEWS
 ALBUQUERQUE, N. MEX. • LIVERMORE, CALIF.

SANDIA LABORATORY
 Employee Publications Division 3432, Bldg. 610
 Sandia Corporation, Albuquerque, N. Mex.

LIVERMORE LABORATORY
 Publications and Public Relations Section 8233-1, Bldg. 912
 Sandia Corporation, Livermore, Calif.

Permission to reprint material contained herein for other than governmental use, may be obtained from the Editor, Lab News, Sandia Corporation

Deadline: Friday noon of the week prior to publication

Telephone Sandia Base: Alpine 6-4411 Ext. 54241

Telephone Livermore: Hilltop 7-5100 Ext. 2395

Member Association Nuclear Editors, Border Council of Industrial Editors and affiliated with International Council of Industrial Editors.

Building Project Set For Tonopah Range AEC Announces

The bid of \$459,200 by Tiberti Construction Co. of Las Vegas, Nev., was the apparent low figure for range development work at Tonopah (Nev.) Test Range. Bids were opened by the AEC on Aug. 24.

The project will include construction of a 4000-sq. ft. concrete and masonry administration building, a frame addition to the existing control building, eight small pre-fabricated metal instrumentation station buildings, water storage reservoir and fire protection lines, about 97,000 square yards of unsurfaced air field landing strip area, and utility facilities.

Work is to be completed within 180 days after the contractor receives notice to proceed. Plant Engineering Department project engineer is M. B. Moore (4543-3).

Square Dance Set For Coronado Club Tomorrow Night

A square dance with professional callers will be held at the Coronado Club tomorrow night from 7:30 to 11. Tickets are priced at \$1 per couple for members, \$1.50 for guests.

Next Saturday night, Oct. 7, Tommy Kelly's band will play for dancing from 9 to 1. Cost is \$1 for members, \$1.50 for guests.

Max Apodaca's combo will provide live music at the club tonight from 5 to 8 p.m. Social hour is from 4:45 to 6:15 p.m., and the \$1.75 buffet is served from 6 to 7:30.

Fire Prevention Week at Sandia To Stress 'Stop Fires—Save Lives'

"Stop Fires—Save Lives" is the national theme of Fire Prevention Week, Oct. 9-13. At Sandia Laboratory Inspection Section 4542-1 will be proclaiming this message and others during coming days.

Fire drills, inspections of all buildings, displays, and fire extinguisher demonstrations are planned. Climax of Fire Prevention activities will be a demonstration in Tech Area I of an ancient hand-pumper used by fire fighters of the 17th century. This will be contrasted against modern methods used by the Sandia Base Fire Department, which will conduct the demonstration.

Sandia Laboratory's fire loss during the past year totaled only \$35. An electric motor overheated last May in Bldg. 803 and accounted for \$30 of the loss. The other fire occurred in a truck when cigarette ashes caused a small blaze in the car seat.

"This is a good record," Ted Rosenthal of Inspection Section, said, "and reflects the awareness of Sandia employees to the dangers of fire. However, you can never rest on a good record. Fire is the greatest destroyer of property in the nation and it is a constant danger. You can never relax about fire."

Plant Engineering fire inspectors will step up regular inspections of all buildings during Fire Prevention Week. Ted urges all employees to take a good look around their work areas and report any hazardous situation.

He also stresses the importance of employees checking their homes

for fire hazards. "Clean up garages and storage areas," he urges.

"National statistics are appalling," Ted said. "Fire strikes every 37 seconds, 3000 times each day. Fire claims a life every 47 minutes, 31 times each day. Fire losses average over \$4,000,000 a day, more than \$1,500,000,000 last year. Fire prevention is serious business."

General purpose fire extinguishers will be made available to employees at a special discount price by a local supplier. The orders may be placed during Fire Prevention Week on special order blanks which will be distributed in an Employee Bulletin next week.

Bob Verdier Member Of Fallout Shelter Group at Livermore

Bob Verdier (8144-1) has been named to the executive staff of the Livermore Citizens Committee for Public Fallout Shelters.

The committee recently presented the Livermore City Council with a petition, bearing the names of almost two-thirds of Livermore's registered voters, urging city construction of public fallout shelters. The program calls for fallout protection for every Livermore resident. If approved, shelters would be constructed on public land, with each shelter accommodating from 100 to 400 people for periods up to two weeks.

Other Sandians working with the committee are Clarence (8165-1) and Alyce Loveless (8114-3), Glen Brandvold (8144-1), Rudy Johnson (8161-2), Everett Moore (8114-3), Carl De Caesar (8234-3), Val Peterson (8234-3), and Joan Peterson (8114).

Continued from Page 1 . . .

Reactor Controls

per minute and indicates what can be expected during actual operating conditions.

The mock-up has also made possible development work on manipulators, which are used to insert fuel and materials into the core under the 25 ft. of water used for shielding.

When the time comes, the control system and the mock-up (except for the wooden tower and steel tank, which will be scrapped) can be taken apart, moved, and put together again like an erector set.

Through prior assembly and checkout, about six months in time will be saved during actual installation in Area V.



FIRE PREVENTION WEEK at Sandia Corporation is heralded by Barbara Dolstra (8144) as she displays some of the fire fighting equipment used by fire teams. Sandia and Livermore Laboratories observance of the week, Oct. 9-13, will include a Fire-O-Rama demonstration, posters, and displays at Livermore, plus fire drills, inspections and displays at Sandia Laboratory.

Livermore Laboratory to Mark Fire Prevention Week With 'Fire-O-Rama'

Fire Prevention Week at Livermore Laboratory, Oct. 9-13, will be highlighted by a Fire-O-Rama demonstration and a sale of home fire extinguishers and flammable liquid safety cans to employees.

The Fire-O-Rama will be held from 1 to 1:30 p.m. Wednesday, Oct. 11, under the supervision of Verne McNabney, fire marshal in Health and Safety Section 8241-3.

Sandia fire teams will extinguish wood, paper, and trash fires, oil and gas fires, and electrical and chemical fires, demonstrating the effectiveness of various types of extinguishers. Additional equipment will be provided by the Lawrence Radiation Laboratory fire department for the demonstrators.

The home-use fire extinguishers and safety cans will be provided by the Lawrence Radiation Laboratory fire department for the demonstrators.

The home-use fire extinguishers and safety cans will be offered at cost to employees under a program arranged by the Health and Safety Section.

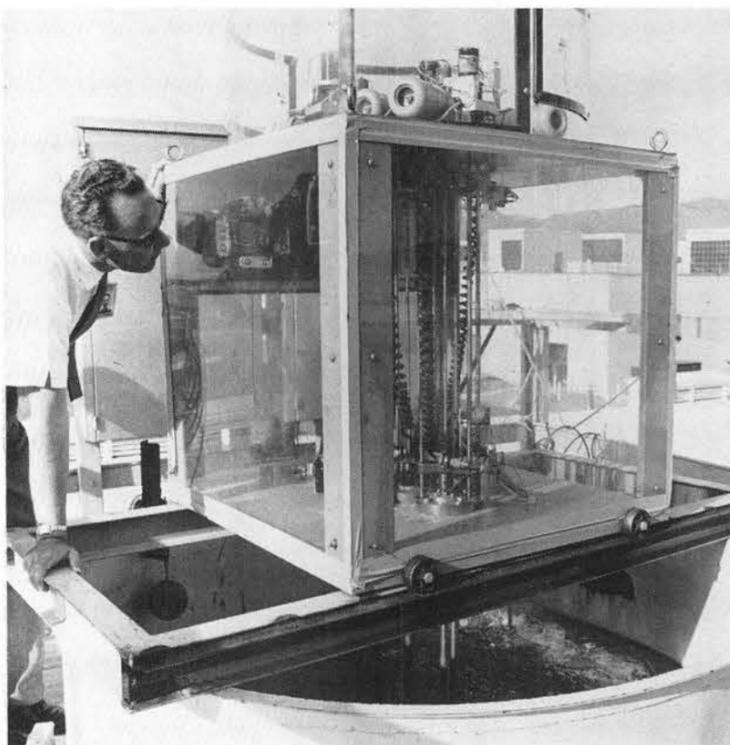
"These extinguishers and safety cans are approved for use in

the home, boat, or car," said Verne. "We're glad that this service can be made available to employees since fire constitutes one of the greatest hazards we live with daily. During the past 10 years there has been an average of 11,600 deaths a year by fire. Children five years old or younger account for a large percentage of that total."

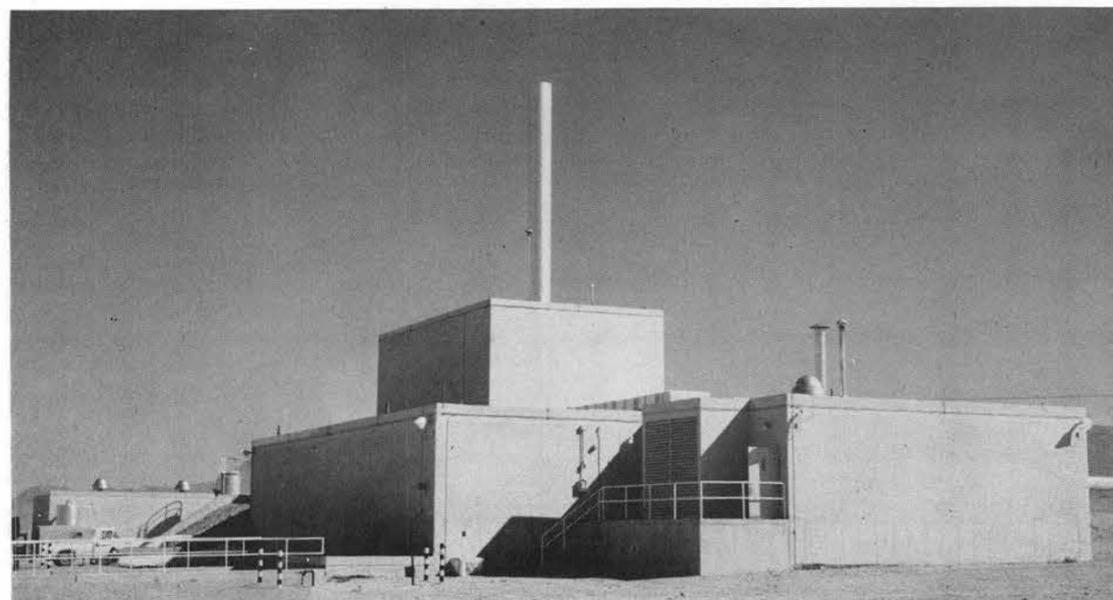
Posters, displays in Laboratory buildings, and safety pamphlets will also be featured during the week. The displays will include fire-fighting equipment, flammable liquid safety containers, and a working model of the Laboratory's fire alarm system.

Livermore Laboratory has a total of eight fire teams, one or more for every building. Each member is instructed in the use of different types of extinguishers and the type of fire for which they are intended.

"Although we had a pretty good fire record at the Laboratory last year, we're always striving for a better one, and for continued alertness on the part of everyone," Verne said. "We only had a loss of \$70 by fire for all of last year."



THIS CONTROL MECHANISM, being examined by F. A. Hasenkamp, is at the top of the 30 ft. high mock-up of the reactor core, and will eventually be moved to Area V. Core is water-cooled.



FIRST PHASE CONSTRUCTION OF SERF, the Sandia Engineering Reactor Facility to be operated by Sandia Laboratory, has been completed. Operating equipment to be installed will be under a construction contract yet to be let. Dependent upon final approvals by the Atomic Energy Commission, the reactor will probably be put into use in the spring of 1962. The SERF facility is in Area V.

construction contract yet to be let. Dependent upon final approvals by the Atomic Energy Commission, the reactor will probably be put into use in the spring of 1962. The SERF facility is in Area V.



FIRE TEAM members at Livermore Laboratory, Al Gregory (8213-1), center, and Clarence Johnson (8223-1), extinguish gasoline fire with CO₂ extinguishers at this practice session conducted by fire marshal Verne McNabney (8241-3), left. There is a total of eight fire teams taking part in protecting the Lab.



DAVE SAMPLE (4611-2) inserts an IBM card containing ordering information into the Data Transmission Terminal in the Bldg. 802 self service stockroom. He daily orders supplies from General Stores in Bldg. 887 without talking to any other person. All 12,000 non-sensitive items in General Stores have been punched for IBM.



IN BLDG. 887, Mary James (4613-1), by pressing a button, can make duplicates of order cards Dave Sample has just sent in. Data on the IBM prepunched cards are transmitted over regular telephone lines from stockrooms at Sandia Laboratory to Bldg. 887.

Data Transmission System Speeding Deliveries to Self Service Stockrooms

Machines that talk to each other have eliminated much of the paperwork required in Self Service Stores Section 4611-1. This results in one-day delivery service, fewer errors, and more efficient order handling.

An IBM 1001 Data Transmission System uses regular telephone lines to send information on IBM cards from one location to another. Each of the five Self Service Stockrooms at Sandia Laboratory has a sending station with a direct telephone line to the central receiving station located in Bldg. 887. It is the first data transmission system of this kind to be installed in the Rocky Mountain States area.

All 12,000 non-sensitive items stocked by General Stores Division 4613 have been punched on IBM cards. Information on the stubs includes description of item, its bin location in General Stores, standard pack, denomination code, and location of the Self Service Stockroom. All that is missing is the quantity needed.

Every morning Dave Sample, who works in Bldg. 802 stockroom, sits down at his desk which has a Data-Phone on it and takes the phone off the hook. This automatically rings the Data-Phone in Bldg. 887. Mary James, who is the operator in Stock Control Section 4613-1, lifts a button on the phone cradle which flashes a "go-ahead" light on Dave's control board.

He feeds a card into the data transmission terminal, and then

punches the quantity he needs on the card. (The keyboard operates on a six-digit system. If Dave wanted a quantity of 10 he would press the 0 button four times and then punch 10.)

When he finishes transmitting each card he hits the register key which releases the card punched at the central receiving station in Bldg. 887 and drops another one into its place. The register button also indicates by a high-pitched sound if the card was punched correctly.

"In 19 minutes I ordered 68 separate items," Dave says, "and this included taking care of phone and customer traffic, too."

This same process is repeated at each of the other four stockrooms during the day—performed without talking to any other person unless an error occurs.

"The advantages of this system are numerous," says Fred Vishaway, supervisor of 4611-1. "For instance, in the stockroom in Bldg. 802 approximately 350 Material Requisitions were written each month, all requiring a supervisor's signature. Multiply this by five stockrooms and it amounts to a lot of paperwork."

As soon as Mary James receives and duplicates all the cards from one stockroom, she takes the order back to General Stores to be filled. With delivery on a one-day schedule the stockrooms can keep smaller quantities on hand and stock more items.

The duplicate IBM packing card is attached to each item ordered which assures correct identification and decreases shelving time.

Records for FY 1961 show that 393,452 line items were issued by the Self Service Stockrooms. This doesn't take into account the quantities of the items which would increase the figure to approximately one million. Line items ordered for restock totaled 58,425.

Papers by Sandians Published in NBS Technical Journal

C. W. Harrison, Jr., D. H. Denton, Jr., (both 1424-1), and Prof. R. W. P. King (Sandia consultant from Harvard University) are co-authors of a paper appearing in the July-August issue of *Journal of Research of the National Bureau of Standards—D. Radio Propagation*.

Title of the paper is "The Electrically Short Antenna as a Probe for Measuring Free Electron Densities and Collision Frequencies in an Ionized Region."

Included in the same issue is another article by Mr. Harrison entitled "Antenna Coupling Error in Direction Finders." He is also the author of "Radio Frequency Shielding of Cables" appearing in the August issue of the *Journal of the American Society of Naval Engineers*.

Las Vegas Show At Coronado Club Social Hour Oct. 6

"Las Vegas Night" will be featured at the Coronado Club's social hour Friday, Oct. 6, from 4:45 to 6:15 p.m. Top entertainment including a comedian from the Sahara Hotel in Las Vegas will perform, according to Hap Holliday, Coronado Club manager.

Purpose of the Las Vegas Night is to promote a weekend trip to Las Vegas for Coronado Club members. This would include roundtrip first class air travel, rooms at the Sahara, two dinners and two brunches, one evening show, and a private cocktail party with Edie Gorme and Nelson Eddy as hosts. The entire trip will cost \$88.50 per person.

The plane will leave at 6:45 p.m. on Friday evening, Oct. 27, and return on Sunday.

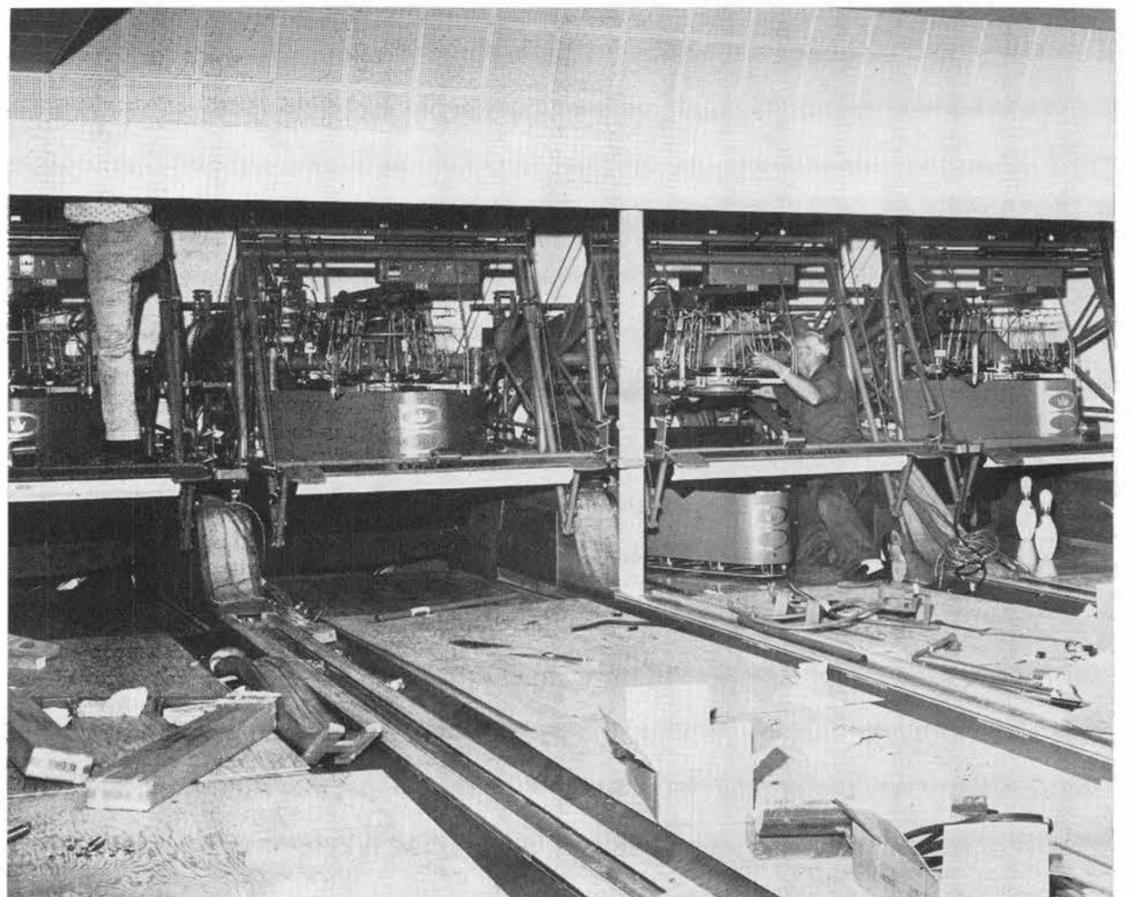
New Pinsetters Bring More Bowling Hours To Coronado Club

Automatic pinsetters have been installed in the Coronado Club bowling alleys which means that more hours of open bowling will be offered to members.

With this new equipment club members and guests can bowl during the noon hour, from 12:30 p.m. until closing time on Saturdays, and from 4:30 to 6:30 p.m. Monday through Friday. Open bowling costs 35 cents a line.

Besides regular league bowling during the week, a ladies afternoon league, high school afternoon league, and kiddies league on Saturday morning are being formed.

At present there is an opening for a Wednesday night league consisting of four five-man teams. This can be an all-men, all-women, or a mixed league. If interested, contact club manager Hap Holliday, ext. 37275.



OUT OF THIS CHAOS automatic pinsetters have emerged in the Coronado Club bowling alleys. Open bowling at 35 cents a line is now offered to club members and their guests during the noon hour, from 4:30 to 6:30 p.m. Monday through Friday, and on Saturday afternoon and evening.

Employee Contribution Plan Solicitors

- 1100, 1300**
Captain: E. R. Frye
J. M. Curlee, R. U. Acton, R. D. Bland, R. G. Vigil, James Doerner, D. F. Wilkes, J. D. Cyrus.
- 2300, 2500**
Captain: J. R. Sublett
L. H. Schultz, R. R. Bassett, J. M. Hueter, H. L. Calvery, W. G. Grisham, L. L. Phillips, J. R. Smith, J. A. Woodley.
- 2400**
Captain: W. C. Kraft
W. J. Meyer, A. V. McFarland, H. E. Long, E. J. Newfield, H. I. McLaren, S. A. Merriam, Lucille Long, T. O. Harrell.
- 2600**
Captain: P. H. Dailey
A. E. Farmer, J. R. Kannolt, J. D. Coleman, W. H. Allen, E. M. Showalter, G. R. Vaughan, G. R. Elliott, C. A. Denney.
- 3100**
Captain: C. C. Fornero
R. T. Hall, C. L. Hines, Jane Baker, Lucille Larrabee, F. Duggin, C. R. Burbank, J. R. Sheppard, J. L. Miller, J. E. Duffy, E. W. Swanson, W. L. Hammond.
- 3200**
Captain: D. R. Weldon
Jean Naughton, Harriet Evans, Evalyn Gillespie, Joanne Bauer, Billie Beckman, R. C. Ezell, C. F. Hurley.

- 3300, 3400**
Captain: E. K. Baker
Jean Miller, J. E. Moore, V. C. Honeyfield, A. A. Amato, J. C. Ivey (Swing Shift), B. O. Ellis (Night Shift), L. G. Baumann, F. H. Treon, W. W. Troy, J. F. Rabold, J. F. Berger.
- 3400**
Captain: M. K. Linn
T. L. Beckley, K. O. Waibel, D. K. McCoy, Virginia Haley, M. E. Holroyd, Lucretia Blum, H. L. Tallman, R. T. Tuffnell, C. R. Andes, R. L. Coughenour.
- 4100**
Captain: M. E. Grothe
Irene Brian, Janet Johnson, W. Van Deusen, W. Deeley, R. K. Vokes, T. R. Gourd, J. P. Logan, J. E. Westbrook, O. Ganzerla, E. C. Reilly.
- 4200**
Captain: R. E. Hepplewhite
H. J. Montoya, T. J. Dawkins, J. R. Russell, B. L. Sanders, Mary Kelly, D. W. Orth, N. J. Kasnic, R. K. Williams, J. E. Sul.
- 4200**
Captain: R. S. Lemm
J. Bedeaux, S. L. Owens, C. F. Jenkins, F. D. Chavez, R. J. Crawford, K. E. Johnson, Helen P. Agats, Dolores N. Smith, R. L. Dalby.
- 4200**
Captain: A. E. Hall
C. L. Shaw, K. F. Schooley, L. W. Carl,

- E. Grossman, W. B. Minser, E. G. Mares, L. D. Shoemaker, J. E. Hager, V. W. John.
- 4300, 6000**
Captain: L. R. Neibel
Joe Danlovic, N. R. Rose, Jean Heidenreich, J. M. Etherton, R. A. Quelle, Dorothy Mohart.
- 4400**
Captain: D. B. Kennedy
W. A. Stephenson, T. R. Bates, E. L. Westfahl, R. L. O'Nan, H. M. Poteet, P. P. Stirbis, R. E. Glass, C. P. Stanton, J. A. Ferguson, P. D. Scates, G. T. Merren.
- 4500**
Captain: J. L. Hickey
W. G. Mabery, J. H. Walker, J. R. Crye, Jr. (Night Shift), R. L. Whitlow, G. C. Baca, G. H. Dixon, T. W. Eglinton, C. A. Mieras, J. R. Chavez, F. G. Gabaldon.
- 4500**
Captain: R. D. Flaxbart
J. Silva, F. J. Mora, E. Jaramillo, J. C. Chavez, H. O. Armijo, F. T. Crocker, F. H. Fox, C. Valencia, C. H. Green.
- 4500**
Captain: R. E. George
C. V. Rathbun, R. G. Lucero, P. Ortiz, W. C. Baldwin, C. H. Weidman, D. T. Easton, J. C. Farmer, E. J. Hartenberger, R. E. Lovato, W. H. Thompson.

- 4600**
Captain: O. L. Wright
A. T. Marrs, J. R. Johnson, R. V. Peet, R. Lanes, R. Savage, B. Van Domelen, L. J. Keck, G. Norris, D. E. Power, Mary E. Hall.
- 4600**
Captain: W. A. Otero
B. L. Cafferty, C. F. Jacobs, D. F. Baca, R. L. Harrison, J. W. Windsor, E. G. McGarvie.
- 5100, 5400**
Captain: G. W. McClure
A. D. Kantz, K. D. Gramzow, T. E. Latta, D. H. Anderson, B. W. Lindsay.
- 7100**
Captain: A. Y. Pope
E. H. Copeland, R. W. Mottern, N. L. Vinson, D. L. Krenz, D. K. Buchanan, D. C. Bickel, A. R. Elwell, D. R. Kuehl, R. H. Rector, J. J. Bradshaw, L. P. Navoda.
- 7300**
Captain: R. H. Schultz
W. R. Barton, R. T. McVesty, C. G. Sproul, I. T. Holt, H. E. Widdows, B. L. Barth, H. Lucero, R. W. Olson, M. G. Baker, C. C. Tolbert, S. McAlees.
- 7500**
Captain: A. F. Cone
Eileen W. Young, O'Donna S. Scalf, Shirley M. Meloche, Laurel M. Sissom, G. T. Gatlin, K. T. Fosmo, R. L. King.

'The Links' Win Summer Bowling

The Sandia Mixed Handicap Summer Bowling League ended the season with first place team honors going to "The Links." Members are Jan Lovell (8123-2), Jim Lovell (8122-3), Fred Dalrymple (8124-2), Paul Domingues (8213-2) and his wife Betty.

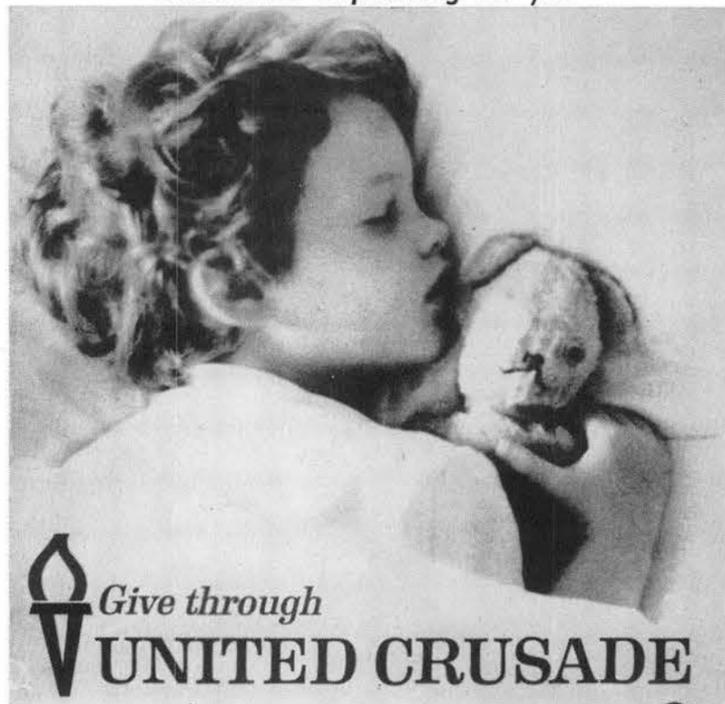
The league high scratch game trophies went to Max Schell (8141-4), for a score of 256, and Sally Forrest (8224-1) for 248. High scratch series trophies were won by Jim Lovell for a score of 616, and Sally Forrest for 498.

Newly elected officers for the 1961-62 season for the Sandia Mixed Handicap League are Harry Farmer (8144-1), president; Bill Guntrum (8125-2), vice president; and Marilyn Larson (8232-4), secretary-treasurer.

United Crusade Campaign Set For Oct. 2 Livermore Laboratory Goal Is \$12,000

"Someone's Depending on You . . ." With this theme, the United Bay Area Crusade will kick off its 1961 fund-raising campaign at Livermore Laboratory Monday, Oct. 2. Goal for the four-day drive,

Someone's depending on you



which ends Oct. 5, is \$12,000, it was announced by R. E. "Smokey" Maxwell (8225), campaign chairman. Money donated will go toward the support of 263 worthwhile agencies serving young and old in the five counties making up the Bay Area.

Included in the drive are 87 agencies serving Alameda County, seven of which have offices in the Livermore-Pleasanton area.

"Livermore Laboratory employees have been exceedingly generous in past crusades and I'm sure this year will prove to be no exception," Smokey said. "Last year Sandians at Livermore set a new record of \$9,711, or an average gift of \$14.26 for each contributor. With more than 100 employees added to the rolls since then, we ought to go over the top."

Local agencies benefitting from Crusade funds include the Twin Valley Association for Retarded Children, the Council of Social Planning — Livermore Area, the Pleasanton Township Welfare Council, the Pleasanton Boys' Club, the Family Service Agency, the Girl Scouts—Del Valle Area Council, Boy Scouts — Oakland Area Council, and the Salvation Army Service Extension Department.

"No Livermore or Pleasanton city goals have been established this year," according to Smokey. "Instead, all money collected will go toward achieving the various division goals in the South County. Added up, this will mean a goal of \$332,571 for the South County; a small part of the \$11,000,000 sought for the entire Bay Area Crusade."

Sandia contributions will help achieve the \$254,924 goal set for Commerce and Industry in Southern Alameda County. Other South County division goals include Business, \$13,740; Advance Gifts, \$3,892; Public Employees, \$7,225; Education, \$34,047; and Residential, \$18,743.

Year 'Round Payroll Deductions Approved For UBAC Contributions

Payroll deductions will again be available to all Livermore Laboratory employees making contributions to the United Crusade, it was announced by Cathy Banks (8213-2), treasurer of the 1961 campaign at Livermore Laboratory.

You will be contacted individually, beginning Oct. 2, by solicitors appointed in your department. At that time you will receive a pledge card, authorizing deductions for year 'round support of all the agencies in the United Bay Area Crusade. If you wish to contribute, you may authorize deductions in multiples of one dollar (if you are monthly paid) or in multiples of 25 cents if you are weekly paid.

When you decide what you wish to contribute, you will receive from your solicitor a receipt and a window sticker identifying you as a contributor to the United Crusade.

Squad leaders and solicitors for your department are as follows:

Squad Leaders

C. P. Rindone (8110), R. W. Weaver (8110), G. R. Marguth, Jr. (8120), R. C. Dougherty (8140-9112), C. M. Potthoff (8150), A. E. Thomas (8160), J. E. Bonetti (8210), J. H. Cordial (8220), A. C. Lamb (8230), H. V. McNabney (8240), and F. R. Moon, Executive Solicitor.

Solicitors

8110: Joey Beatty (8114-1); Chet Hamlin (8114-2); Paula Neighbors (8114-3); Maurice Taylor (8114-4); Cliff Erickson (8114-5); A. T. Nathan (8115-1); Joe Darginis (8115-2); A. R. Willis (8116-1); Sid Wagner (8116-2).

8120: K. Marx (8121-1); T. Meagher (8121-2); E. Williams

(8122-2); B. Green (8122-3); J. Carson (8123-1); B. Crocker (8123-2); E. Dopking (8123-3); R. Myers (8124-1); C. Linerud (8124-2); W. Schaffer (8125-1); H. Norris (8125-2); I. French (8126-1); R. Morrison (8126-2); J. Neuberger (8126-3).

8140: Glen Funk (8141-4); Dale Cook (8142-1); Don Bohrer (8144-1).

8150: Bob Hargreaves (8151-1); Norm Jacobson (8151-2); Don Loyd (8155-1); Jim Wright (8155-2); Jim Hyde (8156-1); Dick Craner (8156-2).

8160: Don Masson (8161-1); Melba Fitzgerald (8161-2); Bert Folks (8161-3); Chet Tarne (8163-1); Dick Neppe (8164-1); Bob Schaefer (8165-1).

8210: Joan Tucker (8121); Beverly Elrod (8126); Ann Decker (8141); Chandler Smith (8211-2); Phil Leiserson (8212-1); Betty Vineyard (8212-1); Phyllis Earhman (8212-1); Dorothy Wiemkin (8212-3); Jim Gallagher (8213-1); R. R. Russell (8213-3); Marguerite Mihoevich (8220); Claire Grubbs (8232); Ruth Burns (8232-1); Jean Thomas (8241-3).

8220: Earl Johnson (8221-1); Conrad Rogers (8222-2); C. Crawley (8222-1); Ferd Thome (8223-1); Vern Ivins (8223-1); Charles Walker (8223-3); Jim Rego (8223-3); Jim Henderson (8224-2); Joe Portolese (8224-2); Pat Tarp (8225-1); Joe Fox (8225-2).

8230: Pat Beavers (8232-2); Lance Pearson (8232-3); Betty Barnhouse (8232-4); Bob Harks (8233-1); Liz Bodie (8233-2); Karl Tucker (8234-1); Ben Raiche (8234-2); Joe Genoni (8234-3).

8240: Howard Henry (8241-1); John Rogers (8241-3).

Someone's Depending on You . . .

Livermore UBAC Chief Urges Campaign Support

"Someone is depending on you." Those few words need little or no explanation. They are words that comprise the slogan for the United Bay Area Crusade for 1961. Each day of the year an hour does not pass that someone, who has been caught in the throes of unfortunate circumstances, seeks aid from one of the 263 agencies supported by the United Crusade. You are their benefactor. Perhaps they do not know you, or you may never see them, but they depend on you for their rehabilitation, aid, or comfort.

If each of us would contribute the price of one package of chewing gum a day for one year, Sandia's contribution (based on approximately 900 employees) would amount to \$16,200.00 — \$4,200.00 over our goal set for 1961. A small price to pay for the greatness that is achieved in the end.

That same \$16,200.00 would pay for not just one of the following but all of these examples:

Training activities and supervision of 48 Boy Scout Patrols for one year.

Six visits by a nurse to each of 48 homes of seriously ill persons.

A month's care for 48 children in a day nursery.

A week's care by the Red Cross for 48 families if hit by a disaster.

A series of treatment interviews for 48 individuals at a psychiatric clinic.

Your donations are not demanded. Give what you feel like giving, and let your reward be the smiles and happiness of those who share in your contributions.

Our goal is \$12,000. "Someone is depending on you," but many are depending on us.

Roy E. Maxwell

R. E. MAXWELL, Chairman
Livermore Laboratory
United Bay Area Crusade

Bedridden Livermore Mother Aided By Homemaker Service, UBAC Unit

What happens to a family of six, including four children, ages 3 to 10, when the mother is confined to bed unable to serve meals, wash dishes, do the laundry, and other normally routine chores? This was the question which weighed deeply on Mrs. Robert Doane's mind as she lay helpless in bed, recuperating from an attack of infectious hepatitis.

Mrs. Doane, who lives at 1333 Lambaren Avenue, Livermore, had just returned from the hospital, and doctor bills, drugs, and hospital charges had taken away much of the money she and her husband had saved. They could not afford to hire a housekeeper, her husband couldn't leave his job, and no relatives lived near enough to come in and help.

That's when the Alameda County Homemaker Service, a United Crusade supported agency, stepped in. A substitute homemaker, a woman trained to take over a mother's duties for an indefinite period at a modest salary, was assigned to the Doane household at the request of the Livermore Council of Social Planning, another United Crusade agency.

The substitute homemaker

made daily trips from Oakland for four weeks, doing all the shopping, cooking, cleaning, and laundering, while Mrs. Doane regained her health. Transportation costs for the homemaker, \$3.50 a day, and her salary of \$1.50 an hour, were paid in full by the Alameda County Homemaker Service.

The Homemaker Service, instituted this year, is one of the many United Crusade supported agencies serving the Livermore-Pleasanton area. Mrs. Doane's case is real. It is not a fictitious account. She has willingly allowed her name to be used in the hope that others will learn of direct benefits offered through the United Crusade.

What happened to Mrs. Doane could happen to anyone. The rising costs of hospital care and medication have caused many middle-income families to be in financial straits, unable to afford assistance in times of need. In such cases the Homemaker Service will conduct an income study to see if partial payments for the service can be made by the family. If not, homemaker service is provided free of charge, supported by United Crusade funds.

Some Reasons for A United Crusade

- It eliminates the annoyance from many drives.
- It conserves volunteer manpower.
- It provides the most economical and efficient method of raising funds.
- It budgets funds on a sound, businesslike basis on evidence of need, assuring proper stewardship of the public's gifts.
- It spreads the base of giving, raising more money for health and welfare work.
- It raises standards of agencies' services and prevents duplication.
- It stimulates interest and knowledge of welfare needs among a larger number of people.
- It unites people of all races, creeds, and walks of life in a common, unselfish effort, motivated by the "universality of human needs."



GIVE YOUR FAIR SHARE, urges Christie Hills (8224), as she displays theme poster for the United Crusade. The Livermore Laboratory campaign kicks off Oct. 2, ends Oct. 5. Goal is \$12,000.

Looks Like Bad Year for Flu; Get Your Vaccinations Now

An upswing in the influenza cycle is likely in this country during the fall and winter, according to Dr. Luther L. Terry, Surgeon General of the Public Health Service.

He has recommended immediate

Welcome Newcomers

Sept. 11-22

Albuquerque		
W. Jean Anthony	4542	
Paul L. Baker	3441	
Ponciano Barela	4574	
Edgar E. Boeck	7536	
Benjamin Burnest	4574	
Lyndall L. Carter	3446	
Shirley J. Chasteen	3441	
Keith M. Creveling	3441	
Leo A. Doyal	3441	
Naomi M. Funk	3126	
Helen D. Garcia	3126	
*L. Virginia Glass	3126	
Reynold Gonzales	4574	
Molery T. Jones	4574	
Ruth E. Lighthill	2561	
Moises Lovato	4574	
*Floyd H. Mathews	7323	
*Fred Q. Miller	2413	
Judith E. Nelson	3126	
Dorothy I. Scott	3126	
*Gustavus J. Simmons	9111	
*Alice K. Winchell	3126	
Alabama		
John M. O'Brien III, Auburn	2544	
John T. Cutchen, Auburn	1314	
Arizona		
Robert C. Resta, Scottsdale	4332	
Arkansas		
James O. Wear, Fayetteville	5153	
California		
Walso S. Hunter II, Hollywood	3465	
Verner E. Gibbs, Anaheim	2322	
Colorado		
Glenn H. Miller, Littleton	5114	
John G. Pousma, Denver	7323	
Connecticut		
Francis R. Statzula, Groton	5434	
Michigan		
Aldred L. Stevens, East Lansing	7311	
New Mexico		
Faye M. Lee, Los Alamos	5152	
New York		
Donald W. Smith, Lockport	1124	
Ohio		
L. Nelson Umble, Bowling Green	3121	
Texas		
*Diane B. Holdridge, Dallas	5426	
James D. Kerr, Lubbock	7311	
Robert W. Harris, Houston	5113	
Virginia		
Julius Q. Lilly, Blacksburg	7323	
Kay L. Crosbie, Charlottesville	5431	
Andrew M. Jackson, Blacksburg	7321	
* Denotes Rehired		
Returned from Leave		
Rosalie A. Gallegos	3444	
Leon W. Maschoff	7234	
Cleo L. Westmark	3446	
Angelina Wilson	3126	
Sue C. Clements	4212	
Wilma L. Parsons	3126	

vaccinations for people with heart disease, pulmonary disease, diabetes or other chronic illnesses; people who are 65 or over, and pregnant women.

Type B flu occurs in four to six year cycles and Asian flu in two to three year cycles. Asian flu has been dormant since March 1960, and it has been more than six years since the U.S. has had much Type B flu.

All employees who are in the above categories or who have members of their family who are, should see their family doctor immediately for immunization shots. The need for such urgency is that once flu strikes a community, it is too late to protect these high risk groups. Vaccination now, ahead of the flu season, is the only safeguard.

Sandians Will Teach First Aid Courses At Veterans Hospital

Several Sandians will be instructors for a Standard First Aid 10-hour course to be taught to the staff at the Veterans Administration Hospital.

Two classes will be held five nights a week for five weeks. The same subject material will be taught in all ten classes each week, according to A. J. Petersen (7254), who is supervising the instruction.

Sandia teachers are George Chapman (2642), James Kenagy (4224), Fred Schneider (4361), Elliot Harris (3467), Gerald Van Gundy (2634), Grant Johnson (4153), Floyd Elder (4516), Edward Quigley (2564), Marshall Tippy (3211), and Thaddeus Stetz (5432).

Substitute instructors are Marion Young (7523) and James T. Brown (7511).



TRIUMPHANT SMILES brighten the faces of the winners in the 1961 Livermore Lab slow pitch softball tournament. The team won 14 games and lost three. From left they are Ralph Morrison (8126-2), John Neuberger (8126-3), Dick Petersen (8126-2), Tom Meagher (8121-2), Gil Margruth

(8123-1), Cornell Linerud (8124-2), team captain Doyle Baker (8125-2), Lyle Hake (8124-2), Sid Bowie (8122-2), Ken Marx (8121-1), Lee Hollingsworth (8120), Ed Daus (8121-1), and Bill Reske (8125-1). Not pictured were Don Werner (8124-2), Bob Cozzo (8121-2), and Jim Kersey (8123-1).

Robert G. Silva Dies Sept. 16

Funeral services were held last week for Robert G. Silva who died on Sept. 16 after an extended illness. Burial was in Mt. Calvary Cemetery.

Mr. Silva, who worked in Publications and Print Distribution Division 3446, had been at Sandia 11 years.

He is survived by his widow, seven children, and his mother.

R. H. Rector Will Read Paper at Shock Meeting

"Some Shock Spectra Comparisons Between The ATMX 600 Series Railroad Cars and A Switching Shock Test Facility" is the title of a technical paper written by R. H. Rector (7325-2).

He will read the paper at the 30th Symposium on Shock, Vibration and Associated Environments to be held in Detroit, Mich., Oct. 10-12.

Promotions

Howard C. Phillips (4253) to Machinist
 Ronald Redmond (8123) to Data Reduction Clerk
 Norman C. Colclough (4412) to Draftsman
 Jerry W. Cummings (4412) to Draftsman
 Dale H. Hill (4412) to Draftsman
 G. R. Mullin (4412) to Draftsman
 Frank C. Rivera, Jr., (2643) to Staff Assistant
 Adam Trujillo, Jr., (2643) to Staff Assistant
 Ray W. Gillette (8114) to Staff Assistant
 Richard W. Finn (8114) to Staff Assistant
 Orlando Sanchez (4573) to Truck Driver
 Floyd L. Irwin (4231) to Technician
 Myra K. Henry (3126) to Typist Clerk
 Geraldine D. Price (3126) to Secretarial Steno
 Janie A. Bryan (3126) to Secretarial Steno
 Antonio G. Torres (3446) to Document Clerk
 Benny C. Baca (7512) to Senior Clerk
 Betty B. Sherrad (4135) to Accounting Clerk
 Sally M. Donovan (7132) to Data Reduction Clerk
 Harold R. Baldwin (8225) to Stockkeeper
 William A. Clarke (8225) to Utility Operator
 Marie J. Brenton (8212) to Employment Clerk
 Gilbert G. Oliver (8232) to Mail Clerk
 Delmar V. Gronseth (4514) to Welder
 Lucy R. Metzger (4135) to Invoice Clerk
 L. M. Batterson (4131) to Disbursements Audit Clerk
 Wayne T. Welkenback (4234) to Order Analyst
 Estill R. Wood (4233) to Staff Assistant
 James L. Nickelson (8223) to Toolkeeper
 Shirley A. Mosley (8225) to Record Clerk
 Linda L. Burrow (8232) to Typist
 Eleanor R. Dadian (8213) to Teller

Supervisory Lateral Transfers

A. V. Engel, Jr., from 7115 to 9111
 J. L. Dossey from 7161-1 to 9111-1
 A. A. Lieber from 7161 to 9112
 H. R. Vaughn from 7131 to 9113
 H. H. Patterson from 7110 to 7160
 H. A. Backer from 8125-2 to 8155-2
 W. R. Guntrum from 8165-1 to 8125-2
 L. B. Hobbs from 1411-3 to 1414-1
 W. L. Hyde from 7241-2 to 7234-1
 R. Lynes from 3451 to 3442
 F. E. Bell from 3131-1 to 3131-2
 E. H. Wilson from 3131-2 to 3131-1

AEC Calls for Bids For Bldg. 861 Project

The AEC will call for bids about Oct. 9 for modifications and additions to facilities in Bldg. 861. Bids are scheduled to be opened Oct. 26.

Work will consist of site grading, installation of storm sewer and service drives, and modifications and additions to the existing facilities as required for the installation of laboratory equipment. Disconnecting, moving, and reconnecting old and new office and laboratory equipment from present locations to Bldg. 861 also are included in the project. Work is to be completed within 100 days after the contractor receives notice to proceed.

Plant Engineering Department project engineer is V. E. Kerr (4543-3).

Sandia Summer Hire Is Top Scholar at Princeton

David L. Beckedorff, Sandia summer hire in Division 5426, has been named top undergraduate student at Princeton University.

Dave recently received the Albert G. Milbank Memorial Prize of \$500, which is awarded the university junior who achieves the highest grade in all previous college work. He will be a senior in the department of mathematics.

Home Made Miniature Cannons Have Mighty Boom - Good History Lesson

Fourth of July is a big day at the Bob Patterson's. In observance of their daughter's birthday, family cannons are fired. Their mighty bang belies their size.

Bob (who works in 4234-1) became interested in making model pieces of artillery as an outgrowth of a desire to increase his skill in using a lathe.

The field pieces are all made on the same scale: three-fourths inch equals one foot.

Bob's first model was of the naval 20-lb. mortar used during the American Revolution. His second was the Parrott cannon used to some extent during the American Civil War. This was an extremely superior weapon and contained several new and important features, including a heat-shrunk sleeve on the breech which enabled higher velocity powder to be used, resulting in greater accuracy and distance.

"When the Confederates discovered the accuracy of this gun, they ran!" Bob said.

Recoil was still a problem with this cannon, and Bob finds even his model bucks back a half inch

upon being fired.

Currently Bob is making a model of the 1705 mortar used by Philip V of Spain. A future project will be the 12-lb. Napoleon howitzer used by both sides in the American Civil War.

It takes five or six hours to turn the barrel from a rectangular piece of brass, but the work doesn't end there. There are fittings, levers, chains, and bolts to be made and placed in the correct position. The gun carriage alone is carved from four kinds of wood: mahogany for the wheel rim, birch spokes, walnut hub, and maple for the essential water bucket. Cannoneers had to swab out the barrel with water after use of black powder.

Bob uses black powder in his guns with a little paper wadding tamped in. "If I tamp the paper real tight, the guns will crack like a rifle. If I tamp it gently, the noise is more effective — more of a 'swoosh boom'," he added.

"I've learned a lot about history in connection with making the guns," Bob said, "and I also like having a hobby that develops skill."



ON THE LINE, ready to fire, are models of the Parrott cannon (left) and naval 20-lb. mortar used during the American Revolution. Barrel of the largest cannon is eight inches long.



MODEL MAKER Bob Patterson (4234-1) adjusts size. Both guns can be fired and have authentic details such as wood trim, chains and levers.



LITTLE LEAGUE TEAM manager Tony Lopez (4212), seated, signals one of his boys to hold up at third base, while Gary Wolcott (1424); manager of the other team, checks defensive action.

Explorer Scouts Will Tour Sandia Laboratory

Seventy-five Manzano District Explorer Scouts will tour Sandia Laboratory's Area III facilities Saturday, Sept. 30.

Tour guides will be R. W. DeVore (3150), G. M. Johnson (4153-2), A. J. Clark, Jr. (7125), and D. K. Buchanan (7321-5).

Following a welcome by G. A. Fowler (7000), the Scouts will see a film on Area III test activities, visit the Sphere of Science, and then tour Area III.

Last week 10 physics students and three faculty members from the College of St. Joseph toured the Physical Standards Laboratory in Bldg. 860.

All Sandia Laboratory tours are arranged by Community Relations Section 3431-2. Stella Rappleyea is tours coordinator.

Kansas State Alumni Meet Tuesday, Oct. 3

Kansas State University alumni and former students will see color slides of campus buildings and activities at the annual dinner meeting of the Albuquerque Alumni group at La Hacienda, Tuesday, Oct. 3.

The University's alumni executive secretary will be on hand to tell of recent school developments.

All KSU alumni, former students, and friends are invited to attend. Additional information and reservations may be obtained from Loyt Lathrop (7213), AL 5-1901, or Walt Adams (7125), AL 6-7265. Reservations must be confirmed before Oct. 2.

Service Awards

10 Years

Sept. 30-Oct. 13

Corá S. Rathbun 7241, Robert E. Whitford 1111, C. W. Young, Jr. 7211, Lucile S. Marcum 3423, Arthur J. Clark, Jr. 7125, Don L. Rost 3211, K. S. Spoon 4300, Ray C. Smelich 3466, Roy D. Nix 4624, Oscar H. Berlier 4514, Johnnie B. Duran 1121, Lee G. Adam 2644, William D. Ingram 5133, M. J. Contreras 4573, Laddie R. Sladek 3241, Robert E. Pritchett 7254, Edward W. Swanson 6021, Eldon W. Uchurch 7322, Gladys A. Stumpf 2341, William B. Trehran 4512, Paul L. Stewart 8151, Elwyn R. Clark 7513, Earl A. Sherwood 4411, James W. Courtin 2634, George J. Pasko 2641, W. W. Olheiser 4516, Martha B. Andrews 4135, Joe G. Chavira 4212, E. M. Chavez, Jr. 4614, Gertrude B. Mora 3126, Albert M. Mares 4362, Mary L. Goolsby 3462.



WINNERS IN THE first annual New Mexico State Horse shoe tournament were (1 to r) P. D. Riley, Albuquerque, Lew Eversgerd (4614), Parker Burns (2643), Sam DeHaan (4611) Ross Sinkey (2452), Charles Rettinger (4254), and Frank Gabaldon (4573).

Sandia Gun Club to Give Inside Scoop On Hunting Seasons

Persons interested in getting the inside scoop on the coming hunting season prospects are invited to the Sandia Gun Club meeting Oct. 4. A member of the New Mexico Department of Game and Fish will discuss the hunting seasons and answer questions.

The meeting will be held at 7:30 p.m. at the Albuquerque Federal Savings and Loan Building, Wyoming and Menaul NE. For further information contact William Stephenson (1411), ext. 41162.

Mort Sorenson Wins Tennis Trophy

Mort Sorenson (8123-3) won the second place trophy in the first annual Livermore Area Recreation District Tennis Tournament held recently in Livermore. Twenty-four players competed in the all-male "round robin" event including P. T. Schoeneman (8123-1), Ernie Alford (8223-3), Alan Skinroad (8155-1), Don Skinroad (8123), Ed Daugs (8121-1), and Cal Brewster (8125-1).

Sandians Take State Horse Shoe Tourney

Sandia Laboratory employees took all but one trophy in the first annual New Mexico State Horse shoe Pitching tournament held during the Valencia County Fair at Belen.

P. D. Riley of Albuquerque won the championship in Class "A," with Lew Eversgerd (4614) taking second place, and Parker Burns (2643), third. First place in the "B" class went to Sam DeHaan (4611), Al Gruer (7530) was second, and Ross Sinkey (2452), third.

Charles Rettinger (4254) was first in the "C" class, Frank Gabaldon (4573) came in second, and Art Castillo (4151) won third place.

She Missed the Plane, Whew!

Earle Paxton (8233-2) was disappointed when his wife couldn't get reservations recently on an early plane home from Chicago. His disappointment turned to relief when he learned that the flight she missed crashed soon after, leaving no survivors.

Sandians Who Serve

Little League Baseball Managers Spend Hours Working With Kids

With the World Series starting on Oct. 4, the baseball season is almost over. Young Babe Ruths and Joe DiMaggios are putting away their baseball equipment for another year.

But the 350 boys who played in the Mile High Little League in Princess Jeanne Park are probably still reliving the high spots and horrible moments of their games. And their managers are, too, including Sandians Tony Lopez (4212) and Gary Wolcott (1424-3).

Tony sponsored a team of 21 boys called the "Little Dukes," while Gary managed 19 "Unbeatables." The men estimate they spent an average of 10 hours a week working with their teams which played one game a week.

Little Leaguers, eight to 12 years old, play in a minor league,

and if they're good enough they step up to the majors at the age of 10. In Princess Jeanne Park there are eight major and 10 minor league teams. Gary and Tony managed minor league teams.

They both feel that the boys learn good sportsmanship and teamwork in the Little Leagues. "When they make a mistake, they know it," Gary said, "and sometimes tears trickle down their cheeks when they make a bad play."

"We try to build up their confidence and always give them a pat on the back when they play well," he continued.

At the end of the season Gary gave a party for all his Little Leaguers and their parents. He also took the boys to see the Albuquerque Dukes play on "Little League Night."

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

RATTAN BAR, 3 upholstered stools, \$50. Payne, AX 9-6569.
GIRL'S BICYCLES, two, 20" and 24", \$20 and \$30. Neubauer, AL 6-7068.
VESPA SCOOTER, 5 hp, buddy seat, luggage carrier, three new tires, roll bars, spare gas, oil tanks, windshield, completely overhauled, \$150; executive oak typewriter desk, \$20. Cundiff, AL 6-4649.
2 LR LAMPS, \$8; Universal coffeeomatic, \$12; 20" window fan, \$12; GE fan, \$4; white taffeta bedspread w/pillow shams, \$8; 2 pr. white curtains, \$5. Kambouris, AX 8-2148.
REFRIGERATOR, 1958 Norge, 9.7 cu. ft., 550. SMITH, AX 9-8676.
BLOND DINING room set, large table with pad, buffet and six chairs, \$100 or best offer. Allaire, AX 9-0888.
SILHOUETTE lifetime membership, make an offer. Fisher, AX 8-2546.
CAMPING TRAILER, 1957 Deville, accommodates five, \$700 or best offer. See at 900 Cardenas SE. Allen, 268-1027.
SPINET PIANO and bench, mahogany, \$250. Hill, CH 3-3493.
5 BDR, 1, 3/4, 1/2 baths, Mossman, AC, drapes, large garage, sprinklers, established yard, block wall, 3620 Georgia St. NE. Whittaker, AX 9-9172.
MOTOR SCOOTER, \$35; Silhouette couch with timer, \$175. Sell or trade for travel trailer or guns. Welker, AX 9-1179.
VIOLIN, 3/4 size, case, balanced bow, excellent tone, \$75. Copeland, AL 5-4688.
BOY'S BICYCLE, English racer, \$30. Breslin, AX 9-6625.
3 BDR split level luxury home, double garage. Save agent's fee by dealing direct. Sallie, AM 8-2051.
'58 OLDSMOBILE Super 88, PS, PB, factory air cond., \$1595. Comiskey, AM 8-5120 after 5 p.m.
ACCORDIAN, 120 bass, best offer. Mancuso, AX 9-4279.
TRAILER, 1960 Sparlane, 50'x10', two bedroom. Sell or rent. Rathbun, CH 3-4892.
RIFLE, 30-06 cal. w/heavy duty sling and box of ammo, \$65 or best offer. Feldman, DI 4-6114.

ROBERSON, 3 bdr., 1 1/4 baths, Venetian blinds, drapes, AC, walled yard, \$15,300, no money down GI, near shopping and schools. Alexander, 9619 Arvada NE, AX 9-7967.
CORNET, Elkhart, w/stand and case, \$75; Pekingese, two year old female, \$15. Chavez, AL 5-1945.
'51 CUSHMAN motor scooter, \$75. Cacy, AX 9-6660.
FORDOMATIC transmission and other parts for 1953 Ford six. Clark, TR 7-0829.
ROTARY IRONER, GE, used less than one year, \$50. Larsen, AL 5-6407.
TIRE CHAINS, McKay multi-grip, 7:10-15 or 8:00-14, never used, \$9. Bryant, AX 9-8315.
'59 TRIUMPH Scrambler T20S, lights, speedometer, muffler; work bench, 2'x6', \$15; Bach trumpet and mutes. Hayes, 298-4682.
PORTABLE TYPEWRITER, Smith Corona, \$35; wood cartop carrier, \$3; baby crib, mattress, \$3.50. Sektman, AX 8-0373.
UNIVERSAL IRONER, \$35; RCA 16" TV, full console, \$35. Keever, 1501 Gloriaeta NE, AX 9-1334.
'55 DODGE station wagon, 2,000 miles on new motor, \$620; 1957 Renault Dauphine, best offer over \$400. Bode, AM 8-2157.
5 ACRES in Manzano Mountains, tall pine trees, running stream, \$1200 down, \$25 per month. Luehring, DI 4-2676.
SPEAKERS, Jensen DX-120, 12", new, \$22 each; record changer, automatic, Collaro "Conquest," M7D Shure cartridge, base and 45 rpm spindle, new, \$42. Brownina, AX 9-6384.
POOL TABLE, folding, 82"x43" family size, all accessories, \$30; 26" boy's knee-action Schwinn bicycle, \$25; David Bradley go-cart, \$30. Martin, 255-8030 evenings.
'59 TR3, removable hard top, low mileage, low price. Aldrich, AL 5-6637.
GUINEA PIGS, \$1 each; vacuum cleaner, \$7. Jones, AL 5-7924.
'47 STUDEBAKER Commander, \$75. Fitch, AL 5-5335.
'58 EDEL R&H, air cond., overdrive, 2-dr. Randle, AL 6-1747.
'22 RUGER "Bearcat" with belt and holster, \$30; various transmitter and receiver parts, \$15. Sharp, AX 8-2702.
TWIN CHAIR beds, custom made, foam cushioned, newly upholstered, turquoise, \$40 for pair. Rainhart, AX 9-2887.
STELLA GUITAR, can be used with or without amplifier; also saxophone. Lopez, 1605 Hendola Dr. NE, 299-4370 after 5 p.m.
3 BDR. Sproul Apache, 1 1/4 bath, built-in range, oven, patio, sprinklers, AC, walled, \$15,200 total, \$1700 down to existing GI loan. Kvarnstrom, DI 4-9301.
HIDE-A-BED, Simmons, turquoise color, \$100. Cashion, CH 2-3345.
GIRL'S BICYCLE, 26", \$12.50. Martin, AL 6-6785.
'60 LAMBRETTA motor scooter, 150 li, deluxe, spare, windshield, buddy seat, \$300. Bradshaw, AL 6-2084.
MOVIE CAMERA, Keystone 8mm, f1.9, \$25; girl's white shoe roller skates, size 8, little used, \$10. Warner, 298-3126.

NEXT DEADLINE

FOR SHOPPING CENTER ADS
Friday Noon, Oct. 6

BOY'S BIKE, 22"; 5 and 10 gal. aquarium tanks; electronic organ, 2 manual. Elder, AX 8-0043.
AUTOMATIC WASHER, Kenmore, \$20. Cook, AX 9-7509.
BEAR BOW, Quiver Grizzley model, 62", 50 lb., recurve included. Haines, 299-4117.
SLIDING INSIDE door, two-panel, w/hardware, 6'7"x30", \$6; steel casement window, 4'4"x2', w/hardware. Bascom, AX 9-1662.
LADIES GOLF CLUBS, Spalding matched, 3 woods, 7 irons, bag, cart, and 12 balls, \$125. Erne, AX 9-0565.
GOSSIP BENCH, \$6; folding wall table, formica top, \$20; dinette set, drop-leaf table, formica top, 4 chairs, \$25. Booth, 298-2107.
21" TV, RCA, mahogany cabinet w/doors, \$150. Hayes, AX 9-5491.
3 BRM INEZ brick home, 1 1/4 baths, carpeted, drapes, sprinklers, close to schools, \$750 above appraisal. Smith, 7702 Cutler NE.
CAMPER for old style pickup (Chev.), masonite construction, caulked and sealed throughout, windows. Hackard, AX 8-1368 after 5.
12" TV, \$25; medicinal lamp, 30 watt, \$7.50. Nelson, AL 6-4002.
SOLID OAK DESK, standard office size, 6 drawers, \$25 delivered. Shew, AL 5-0263.
TIRES AND TUBES: Tires, used, 4 ply, 2 6:00x16 and 1 6:15x16, \$3 each; tubes, 3 6:00x16 and 1 7:10x15, \$1 each. Bassett, AX 9-5685.
SPINET PIANO, blond, full keyboard, \$250; limed oak bookcase, coffee table, TV lamp, antenna. Porter, AX 9-1583.
GARAGE DOOR, metal, includes all necessary hardware; Kelvinator electric range, best offer. Humphreys, DI 4-0538.
OLDS TRUMPET, '57, Lambretta scooter, 16mm Keystone camera, '57 Harley Davidson 165 motor scooter, Universal ironer. Salazar, AL 5-1301, 420 Grandland SE.
DEER RIFLE, model 300, Savage w/ sheepskin carrying case and some ammunition, \$75. Batsel, AX 9-4091.
DINETTE SET, 5-piece, pink and black, \$40; contractor's size wheelbarrow, \$20. Miller, 265-0029.
IRONER, console Ironrite, \$75. Wilcox Gay tape recorder, \$40. Carter, DI 4-6563.
MODEL 70 Winchester caliber .270 w/ recoil pad, \$80. Bennett, AX 9-7400.
BOY'S BICYCLE, 26" medium weight w/ Bendix coaster brake and 3-speed hub, \$12. Adams, AL 6-7265.
LIVING ROOM SET, 5-piece, lamps, pictures, drapes, 21" GE TV console, radio-record player-recorder combination, patio furniture, women's clothing. Keck, CH 2-0127.

BUFFET, blond oak, heavy duty, magnetic doors. Padilla, AX 9-0460.
TWO NEW mountain homes at Cedar Crest, each w/two scenic acres, save \$\$\$, you finish inside, \$6000 and \$7000. Aaron, BU 2-3124.
21" RCA TV, thinline blond 1961 table model, purchased Sept. 20, 1961, paid \$266.77 w/tax, asking \$199, will trade. Chandler, AX 8-1976.
BAY MARE, gentle, sound and good looking, she is 6 years old and about 14 1/2 hands high. Causey, AX 9-0089.
SURREY "with fringe on top," factory motorized, owned by little ole girl who never drove over 5 MPH. Abbott, AX 9-8860.
'51 STUDEBAKER Commander V-8, 4-door sedan, \$75 cash or best offer. Summer, AX 9-1912 after 5.
FRIGIDAIRE REFRIGERATOR-freezer comb., 12 cu. ft., \$100. Conklin, AM 8-7819 after 5.
POOL TABLE, 4x8, \$8; 12 gauge shotgun w/shells, \$20; \$33 12 in. coaxial speaker and cabinet for \$15. DeZeeuw, DI 4-7392.
WIDE ANGLE BINOCULARS, 7x35, \$20; Walther .22 target pistol w/muzzle brake and barrel weights, \$60. Vivian, AX 9-1785.
'53 CHEVROLET Bel-Air Sport coupe w/ '54 running gear, \$375; '55 Chev. motor, V-8, \$100; '54 Chev. front end, \$50; '53 Chev. 6 motor, \$40. Shoemaker, TR 7-2053.
TWO DOUBLE and two twin beds, box springs and mattresses included. Thompson, AX 9-0092.
WORK BENCH, 54" long x 33" wide x 31" high, shelf w/backboard, 2x12" top, 4x4" legs, \$10; girl's size 6X coat and slacks, purple velvet, \$10. O'Brien, AX 9-4106.
DACHSHUND, Pedigreed male, red, 7 mos. old, has all shots, \$65. Durgin, 298-3581.
3 BRM HOME, 1 1/4 baths, fireplace, hardwood floors, AC, sprinklers, garage, workshop, patio, large lot, Mark Twain School, \$15,700, \$850 down. Smith, AM 8-3578.
3 BRM HOME, corner Stanford & Constitution facing golf course, landscaped, AC, large living room, two-car garage, water softener, \$16,800. Robnett, AX 9-9192.
GAS REFRIGERATOR, Servel, \$18; set for natural gas but can be adapted for butane or kerosene. Galbreath, 3730 Manchester NW, DI 4-4306.
'50 MERCURY CLUB COUPE; baby stroller and high chair. Wilson, 298-0049.
CLOTHES DRYER, Westinghouse, \$50. Mitcham, AX 9-8425.
'55 PLYMOUTH 4-dr., automatic transmission; Remington .22 model 513T with Redfield sight; girls size 4 ice skates. Bortniak, 256-3177.
POWER MOWER, Sears Craftsman deluxe model, 18", 2 1/4 hp., 6 mos. old. Norge washer, deluxe, lint filter agitator, normal cycles, 19 mos. old, \$100. Campbell, 299-8071.

WANTED

TO JOIN carpool from vicinity of 2700 Pennsylvania NE to Bldg. 836. Campbell, AX 8-4446.

RIDE from San Mateo and Douglas MacArthur to Gates 7 or 8. Shortt, DI 4-9868.
HOME FOR PUPPY, free, 4-month-old male, housebroken, playful, good with children. Ault, BU 2-3280.
'54 or '55 1/2 ton pickup in good condition, prefer Chevy or Ford, cash for reasonable price. Lopez, AX 9-0941 after 5 p.m.
CARPET, approx. 14'x14', beige preferred. Chandler, AX 8-1976.
CAR POOL members from vicinity of 6600 block of N. Fourth, openings for 3 people. Burt, DI 4-8045.
RIDE from vicinity of 7th and Coal. Sandoval, 243-2411.
RIDE from vicinity of Silver & Pine SE to Bldg. 802, Archuleta, CH 7-2527.
BUTANE TANK, 122 to 500 gal. Clark, TR 7-0829.
RIDE from vicinity of Cardenas & Comanche or San Pedro and Comanche to Bldg. 892. Cowham, 298-4249.
RIDERS from vicinity of Wyoming and Candelaria to Bldg. 802 or 892. Harper, AX 8-0146 after 5:30.
UNICYCLE, suitable for 12-year-old Tom-boy. Scrivner, AM 8-4717.
FILING CABINET, 3 or 4 drawer, letter size. Hill, CH 3-3493.
RELIABLE TEENAGER for babysitting evenings or weekends. Day, AX 9-0825.
BOY'S BICYCLE, 20", good condition; also tire pump. Fraunglass, 345-0119.
PIANO TEACHER to teach beginning child in our home or in immediate vicinity, Mossman area. Bear, AX 8-2744.
GIRL'S BICYCLE, 26". Ortiz, TR 7-3425.
TRADE clear city lot for lot outside city or clear Housetrailer, or? Chavez, AL 5-4461.

FOR RENT

2 BRM HOUSE, 5308 Summer NE, \$80. Vigil, AM 8-7083 after 6.
3 BRM, 2 bath home, w/hardwood floors, fireplace, large kitchen, utility room, walled yards, patio front and back, garage, 721 Cardenas NE. Goodwin, AL 6-7145.
LARGE HOME, 3 brm, den, 1 1/4 baths, built-in range, fence, water paid, Snow Vista, 1707 Jenaro Ct. SW. Fink, 247-2806.

FOR SALE AT LIVERMORE

MINOLTA SR-1 single lens reflex 35mm camera, leather case, F2 Rokkor lens, \$99.95. Scholer, ext. 2249.
GYL SET, "Happy Times," includes 7 ft. slide, 2 swings, teeter-totter, \$10. Brousseau, HI 7-4711.
NORGE DRYER, electric, includes cord, \$65; electric range, needs one small heating element, make offer. Henderson, HI 7-4417.
'54 PLYMOUTH, red and white Belvedere hardtop, power steering, R&H, needs seat covers, \$295. Mascarenas, HI 7-5188.
'46 GMC pickup truck, 3/4 ton, 4-speed, new battery, extra set of plugs, \$225. Glaze, HI 7-4167.
3 BDR JENSEN home, 1 1/4 baths, 2-car garage, fireplace, drapes, patio, landscaping, assume GI loan, \$19,300. Hunt, HI 7-0191.



ALL THE KING'S HORSES couldn't prevent these two Sandia chessmen from achieving top honors in the Livermore Laboratory Chess Tournament. Pictured on top of their trophies are Tom Doyen, Jr. (left), a summer hire in 8223-3, who won first place, and Walt Maupin (8126-1), second place winner. More than 30 chess enthusiasts took part in the tournament which began in July.

Livermore Employees Promoting UN Week

Five Sandians at Livermore Lab are serving on the newly formed Citizens Committee for the United Nations, designed to acquaint the local public with the UN—its aims, purposes, and accomplishments. Special programs will be arranged by the group during UN Week in October. Serving on the committee are Dick Dickson (8233-1), Pearl Johnson (8213-3), Ray Brousseau (8122-2), Jim Wimbrough and Dick Watkins (both 8161-3).

Sandia Papers Will Be Given at Vacuum Technology Meeting

Two Sandians have written technical papers which will be read at the Second International Congress on Vacuum Technology, sponsored by the American Vacuum Society, in Washington, D. C., Oct. 16-19.

J. G. King (2564-2) is the author of "Production Leak Testing of Large Pressure Vessels," and M. K. Laufer (2411-2) has written "Standard Leaks and Their Calibration by Constant Pressure-Change in Volume Techniques."

Livermore Valley Memorial Hospital Will Open Oct. 2

When Livermore's Valley Memorial Hospital opens its doors for the first time Oct. 2, Sandians at Livermore Laboratory will see the completion of a dream three years in the making.

In those years Sandians contributed more than \$75,000 in two successive drives to raise funds for the construction of the \$1,700,000 hospital. Included in this figure was a corporate gift of \$13,000.

Instrumental in the drive for the non-profit community hospital was Lee Hollingsworth (8120), who is vice president of the hospital's board of directors. Clyde Walker (8126) served as chairman

'Gamma-Ray' Paper To Be Presented at Electrical Meeting

A. W. Snyder and S. A. Harrison (both 5433) have prepared a technical paper which will be presented at the Conference on Electrical Insulation to be held at Pocono Manor, Pa., Oct. 23-25.

The paper is entitled "Gamma-Ray Photoconductivity in Polyethylene, Polystyrene, and Epoxy Formulation." Sponsors of the Conference are the National Academy of Science and the National Research Council.

Sandians Write Tech Papers for California Ceramic Conference

R. H. Dungan and A. H. Stark (both 1124-2) and H. M. Barnett (1314) are authors of a technical paper entitled "Crystallographic and Electrical Parameters in the Ferroelectric-Antiferroelectric Region of the PBZRO₃-PBTIO₃-PBNB₂O₆ System."

The paper will be presented in San Francisco on Oct. 26 at the fall meeting of the Electronics Division and annual Pacific Coast Regional Meeting of the American Ceramic Society.

of the Laboratory's supplemental fund drive.

The 46-bed hospital includes delivery and emergency rooms donated by Sandia employees.

Other facilities include a completely equipped surgery wing, X-ray facilities, nursery wing, recovery rooms, and the latest in hospital equipment.

A staff of 18 doctors will serve the new hospital, including specialists in surgery, obstetrics-gynecology, pediatrics, anesthesiology, radiology, and pathology.

A flexible floor plan will permit expansion of the hospital in five directions as the need for hospital services increases.

Cloudburst Dumps Torrent of Rain on Salton Sea; Test Base Under Water

A cloudburst dropped an estimated 1 3/4 in. of water in the desert area west of Salton Sea Test Base (Calif.) on Aug. 29 causing a flooding of the administration building, fire station, and warehouse No. 4.

The torrent used the Base approach road as its channel and the waters built up to three or four ft. within an hour on low parts of the Base.

Three security guards, who were on duty at the time, were able to get the two fire trucks out of the fire station before the water in that building reached desk high level. Crated electronic equipment in the warehouse was damaged. Water level inside the administration building reached four in. and nearly three in. of silt remained on the floors after the waters receded. Electricity was out.

Seven portable pumps operated continuously from the ramp of the 15-ft. dike from Tuesday noon to Friday evening pumping an estimated 10 million gallons of water from the newly-formed lake. It was Thursday afternoon before temporary electrical repairs permitted a minimum of power.

The water pipes from the treatment plant and the pumping station were exposed in many places but there was no apparent breakage. A standby generator at the water treatment plant kept constant pressure in the system.

Roads were washed out or undermined, then covered with eight to 12 in. of silt. Near the gatehouse, the east side of the paved roadway was eroded to a depth of seven ft. San Felipe Wash was impassable for several days.

Contracts were immediately let with outside firms for general cleanup of the area and repair of electrical and fire detection systems. In addition there will be later replacement of doors, floor tiles, motors, and preventive measures.

Since the California Base's deactivation last July, only 17 Sandia employees have remained there to perform security and maintenance service. They are supervised by D. P. Fifield, division head, and M. J. Lesicka, section supervisor.

Joseph J. Roof Retiring Sept. 30

Joseph J. Roof, who works in Stocks and Material Control Division 4212, will retire from Sandia Corporation Sept. 30. He has been at Sandia since December 1950.

First, he plans a good rest and a trip to the West Coast. When he and his wife return, Mr. Roof will take care of his home, his flowers, and fruit trees. "Maybe then, I'll look for a little work to do," he says.

Mr. and Mrs. Roof live at 10407 Fourth NW.



ROW BOAT replaced fire trucks at the Salton Sea fire station during recent flood. M. J. Lesicka, 4576-1 section supervisor, is manning the oars and checking preliminary damage.



SANDIA FIRE TRUCKS as well as vehicles from the Imperial Valley Conservancy District were parked atop the dike at Salton Sea Test Base to pump water from inundated area. Administration building, fire station, and warehouse No. 4 were damaged.

Bendix Kansas City Plant Flooded; Sandians Evacuated With Others

A number of Sandia Corporation employees were among the visitors evacuated from the Bendix Plant in Kansas City, Mo., Wednesday, Sept. 13, when flood waters became dangerous.

The rainfall, caused by the fading tropical storm Carla, began Sept. 11 and continued through the 12th. During the three days the area around the Bendix plant received nearly seven in. of precipitation.

R. P. Kelly (2641), who was there with Wilson Brown (7118), W. C. Colborne (4152), and C. M. Abernathy (2644), said they had just started to meet with Bendix officials in a conference room when the room was taken over by members of the emergency staff. At 10 a.m. the public address system announced that the plant would be evacuated parking lot by parking lot. This group, and other Sandians including F. P. Norcott (2533), M. E. Bailey (2543), T. F. Jones (8141), and C. F. Kyger (2544), left within the next hour.

In five short hours (on Sept. 13) the nearby Blue River rose 12 ft. to an all-time high of 44.5 ft.—nearly 23 ft. above flood stage. Adding to this runoff was the flow from Indian Creek, 300 ft. south of the Bendix plant.

While some employees were wading up to their waists to reach their cars, others were moving files, chairs and equipment in basement areas out of the water's reach. Over 100 pieces of expensive IBM equipment in the electronic data processing room were moved to upper floors in less than an hour. All electricity was shut off as a safety precaution.

By noon the entire plant and all outlying buildings were surrounded by flood waters. One parking lot was under six ft. of water. Basement offices were soaked with 11 in. of water and silt.

More than five million gallons of water were pumped out of main plant corridors and tunnels, then the clean-up job began. The plant was reopened Monday, Sept. 18.

Sandia's Safety Record

Sandia Laboratory HAS WORKED 910,000 MAN HOURS OR 26 DAYS WITHOUT A DISABLING INJURY

Livermore Laboratory HAS WORKED 302,000 MAN HOURS OR 53 DAYS WITHOUT A DISABLING INJURY



UNIVERSITY NIGHT recently at the Coronado Club gave prospective Sandia Lab students an opportunity to counsel with University and College of St. Joseph officials. In engineering group above are (l to r) Dr. Richard Clough (UNM), Reuben Weinmaster (1112), Harold Linker (7115), Glenn Loeppke (7117), and Robert Balthaser (7521). University Night was arranged by Division 3131.



SANDIA REGISTRATION DESK at the University of New Mexico last week serviced several hundred employees who were enrolling for courses under the Educational Aids Program or Technical Development Program. Among the Sandians who enrolled were (left side, from front) Charles W. Sargent (3421), Leonard J. Flesner (2412), Edward L. Lane (1422), Ervin F. Armbrust (3211) and John Koehler (7145). At right, same order, are Ruth Bishoff (UNM), Art Hill (3131), Dorothy Mohart (3131).