

# First Students End Apprentices Machinist Training

Sandia Corporation

## LAB NEWS

ALBUQUERQUE, N. MEX. • LIVERMORE, CALIF.

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MARCH 4, 1960



**JOURNEYMAN MACHINISTS**—The five men pictured above have completed Sandia's apprenticeship program for machinists and have been certified as

journeyman. L to R: Charles Ladig, John Malpas, Jake Gonzales, Jerry Cole and Kyle Williams. Graduation exercises were held in the shops Mar. 1.

Five machinist apprentices at Sandia Laboratory became journeymen at a ceremony held in the Development Shops March 1.

The men, Jerry Cole, Jake F. Gonzales, Charles V. Ladig, Jr., John T. Malpas and Kyle B. Williams, were presented certificates by S. P. Schwartz, vice president and general manager.

This is the first graduating class from the apprenticeship program for machinists which started March 3, 1958. The program, containing 8000 hours of training spread over 4 years, was entered by 25 men. Those graduating Tuesday entered the program with credit for on-the-job training they had received at Sandia prior to their enrollment in this program.

Graduation exercises in Bldg. 840 saw the entire Development Shops closed down so that employees from this area could attend the event. R. J. Hansen, di-

rector of development shops, opened the program and introduced other persons who have contributed to setting up apprenticeship training. This included members of the Joint Apprenticeship Committee, Larry E. Bowen (4254), Ralph W. Griffin (4253), Archie J. Fisher (4252), William F. Peay (4252), Alfred C. Taylor (5254) and Wilbur L. Miller (3132).

Others introduced were W. R. Parker (4254), supervisor of apprentices; and K. R. Dickerson (3132), administrator of apprentices.

Mr. Hansen also introduced additional Sandians who have been working with the program since its beginning: Frank Dausses (3132), William F. Leverenz, Jr. (4253), Mel A. McCutchan (3132), Walter Hall (4250), William Chandler (3221), Ernest Peterson (3220), and Lynn Castle (3132).

Next speaker was Harold Burrell, president of the Metal Trades Council. He was followed by Mr. Schwartz who spoke on the significance of this first class completing the program and then presented certificates to the new journeymen.

W. R. Parker presented identity cards to the graduates and Mr. Hansen closed the meeting by giving the men their machinists handbooks.

### Sandians Invited to Hear Dr. Teller Speak At Dinner Meeting

Monday evening, Mar. 14, Dr. Edward Teller, Director of Lawrence Radiation Laboratory, University of California, will be guest speaker at the Armed Forces Medical Symposium banquet at the Sandia Base Officers Club.

Dr. Teller is internationally known in the field of nuclear research.

Sandia Corporation employees are invited to attend this banquet. There will be a social hour from 7 to 8 p.m. and dinner will be served from 8 to 9. Cost is \$4 per person. Reservations, which are limited to 400, may be made by calling ext. 27155 prior to 4 p.m. Thursday, Mar. 10.

### Livermore Lab Earns Nat'l Safety Council Award of Merit

The National Safety Council's Award of Merit has been bestowed upon Sandia Corporation's Livermore Laboratory for operating 2,531,255 man-hours without a disabling injury.

Notification of the award was made in a letter from Howard Pyle, president of the National Safety Council, who said that the period included in the citation was from September through December 1959.

The Award of Merit is one of the highest awards an organization can receive in recognition of an outstanding safety record, according to the National Safety Council.

### Dr. Norris Bradbury Speaks at Sandia on Colloquium Program

Four sessions of Sandia Corporation Colloquium have been scheduled during the coming two weeks.

Paul Craig, Los Alamos Scientific Laboratory, will speak on "Mossbauer Nuclear Resonance Effect" Tuesday, Mar. 8 at 1:30 p.m. Tickets are not required.

On Wednesday, Mar. 9, Dr. Norris Bradbury, Director of Los Alamos Scientific Laboratory, will discuss "Development Programs at Los Alamos." The Research Colloquium will begin at 9:30 a.m.

"Experimental Research Programs at Los Alamos," will be presented on Tuesday, Mar. 15 at 1:30 p.m. by Dr. John Manley of Los Alamos. Tickets will be required for both talks.

Kirby L. Thornton, Aluminum Company of America, will speak on "Aluminum Alloys and Special Forming Processes" at a Development Seminar Friday, Mar. 18 at 9:30 a.m. Tickets will not be required for this meeting.

All meetings will be held in Bldg. 815. For further information, contact Craig C. Hudson (5111), ext. 32267.

### Are You a Candidate?

If you are entering the political arena by running for nomination in the primary please let the Lab News know. In Livermore notify the Information and Publications Division 8233.

As in the past, we will carry an article identifying candidates for public office. The publication of this material does not imply endorsement of any candidates, but this paper believes that public service is an important obligation.

Making yourself available for public office for which you are qualified is a public service of a high degree.

### Reads Technical Paper

H. G. Baerwald (5132) will present a technical paper during the national convention of the Institute of Radio Engineers in New York City, Mar. 21-24.

Title of the paper is "Eigen Coupling Factors and Principal Components, the Thermodynamic Invariants of Piezoelectricity."

### Final Great Decisions TV Programs Will Be Presented on Two Channels

The final four programs of the "Great Decisions—1960" television series will be telecast each Sunday during March, 3:30-4 p.m., over Channels 4 and 5.

On March 6, the discussion topic will be "Middle East . . . what hope for stability?" and will feature Zuhdi Faruki, UNM; Rabbi David Shor; Dale Bellamah, a local builder; and Dr. Henry Lampman, an Albuquerque psychologist.

"What goals for Africa's new leaders?" will be discussed on March 13 by Rev. E. F. Ostertag, St. Matthew's Episcopal Church; Dr. Stanley Caplan, Albuquerque Public Schools; and Father Paul Gopaul, a UNM doctoral candidate in political science.

The discussion on March 20 on the topic of "Cuba's revolution . . .

### Coronado Club Offers Varied Program For Members During Month of March

A buffet-dinner dance, two informal dances and a movie night are the Saturday night activities at the Coronado Club for the month of March.

The first informal dance, to the music of Bud Fischer's band, will be held tomorrow night from 9 p.m. to 1 a.m.

"The Face of Red China," "The Twisted Cross," and "The Sandia

Story" will be the fare on Movie Night at 8 p.m. on Saturday, March 12.

Club members and their guests will dance again on Saturday, is scheduled for 8:30 p.m. and the dancing will be from 9 p.m. to 1 a.m. Tickets for the evening must be picked up at the Club's office by March 23.

The buffet dinner-dance on the 26th will feature Jimmy Caldwell's orchestra. Dinner will be 6-8 p.m., a half-hour floor show March 19, to recorded music from 9 till 1.

### Sandians to Speak At Livermore Career Day Program Mar. 9

Three Sandians have been invited to address the students of Livermore High School during the annual Career Day program, Mar. 9.

Joe McManus (8114-5) will discuss careers in technical illustration, Roy Wilcox (8114-1) will speak on drafting and Mary Strickland (8212-5) will describe secretarial jobs.

reform or fiasco?" will feature D. J. Jenkins, Sandia Corporation, (3130); Dr. Leroy Miller, an Albuquerque physician; A. B. Chavez, Albuquerque Public Schools; and Ben Caine, a local businessman and ex-radio news commentator.

The final program in the series will be on "U.S. global strategy . . . what outlook in 1960?" and will have the following guests: A. Y. Pope, Sandia Corporation (5140); Kay Carson, Junior League; Tom Doyle, KOB-TV news staff; and Robert Robertson, UNM.

The television programs originate from the KNME-TV studios and are co-produced and moderated by R. C. Colgan (3431).



"INDIA'S MIDDLE WAY" was discussed last Sunday on "Great Decisions—1960" TV series being telecast over Channels 4 and 5. Appearing on the program were (l to r) William Huber, Director of

the UNM's University College; B. C. Hernandez, Albuquerque Attorney; R. B. Powell, vice president, Personnel; Fred Buckles, Santa Fe correspondent for the Albuquerque Journal; and Bob Colgan (3431).

Editorial Comment

### Engineers and Physicists . . .

W. J. Byatt (5111) calls attention of the editor of the **Sandia Corporation Lab News** to a statement in the Feb. 19 issue of the publication which confuses the accomplishments of men of science.

When referring to the accomplishments of the past 10 years the **Lab News** unfortunately attributed them to engineers exclusively. A sentence was used which should have read: "Here are a few scientific accomplishments of the 1950's." The sentence as it appeared referred to them as "engineering accomplishments."

Mr. Byatt points out that physicists and mathematicians were primarily responsible for development of the thermonuclear explosion. He also reminds us that 21-centimeter radiation from hydrogen is the work of radio astronomers. A physicist discovered the Van Allen radiation belt which now bears his name and two theoretical physicists predicted the overthrow of parity principle of basic physics.

The transistor is also the work of physicists and acrylic and polyester synthetic fibers are the work of chemists.

As Mr. Byatt points out, the work mentioned above could not have been accomplished without the help of engineers, but the original ideas came from mathematicians, physicists and chemists.

Our thanks to Mr. Byatt and other non-engineers for their comments on this matter. The **Lab News**, in its enthusiasm for the annual observance of Engineers' Week, unintentionally over-credited the engineers, but the physicists and the mathematicians join enthusiastically in saluting their engineering partners in science without whom progress in applied research would be difficult if not impossible.



**SUCCESSFUL JUNIOR MARKSMEN** are pictured after completing competition in the 1960 New Mexico Junior Gallery State Rifle Championship held recently at Holloman AFB. Standing are George Browning, Don Gilstorf, Jack Dain (Grand Aggregate State Champion), Mike Janes, and Bob Backstrom. Kneeling are Elizabeth Browning, John Blair, Pat Janes, Tom Treadwell, DeCamp Treadwell and Pat Dain. The youngsters are members of the Sandia Base Junior Rifle Club and children of Sandia employees.

### Junior Marksmen Earn Top Honors In State Competition

A number of Sandia youngsters competed successfully on individual or team levels in the 1960 New Mexico Junior Gallery State Rifle championship, held last month at Holloman AFB.

Sandia Base Junior Rifle Club took top honors winning seven of 10 major trophies. The Grand Aggregate of State Championship was won by Jack Dain, son of Frank C. Dain (4211). He scored 383 out of a possible 400 points.

Jack's sister, Patricia, placed second in Class C Aggregate (for children 11 and 12 years old) and was also second for High Girl Winner.

John Blair, son of William Blair (2723-1), won second in Class B Aggregate (13-14 years old).

Other children of Sandians who participated in the tournament were George W. Browning, Elizabeth H. Browning and Lamar DeCamp Treadwell.

Positions fired on the 50 foot indoor matches were prone, standing, sitting and kneeling. Rifles of .22 caliber were used.

### Congratulations

Mike Truitt (8121-2) and Marie Thibault were married Feb. 21 and are now residing at 2210 Fourth St., Livermore. Mike has been with Livermore Laboratory since July 1957.

Joe (Al) Chavez (2721-1) and Trinni Montoya were married Feb. 14 at the Harwood Methodist Church. When they return from their honeymoon the couple will be living at 709 Claudine NE.

### On Washington Symposium

R. T. Othmer (1282-1) participated recently in a panel discussion during the 28th Symposium on Shock, Vibration and Associated Environments in Washington, D. C.

Mr. Othmer discussed "The Collection, Analysis, and Presentation of Shock and Vibration Data."

### Wins Speech Contest

A speech on "People to People—Key to World Understanding" won first place for Kathie Clough, daughter of Elaine Clough (8212-3), in the annual Lion's Speech Contest.

### New Homes

Jerry Cole (4254-2) and his family recently moved into their new ranch style home in the Bosque Farm area. Jerry designed the home and then had a contractor build it.

Mr. and Mrs. Don Johnson (1621) have purchased a new home at 7009 Comanche NE. Getting settled in their new home at 8310 Connecticut NE are Mr. and Mrs. D. A. Watt (4233).

Other new home owners are the Richard L. Smiths (2531) at 10201 Lexington NE, and the Gordon Bennetts (8232-2) at 1178 El Dorado Court, Livermore.

Roque Feliciano (2721-3) and his wife Patty (2632-2) have moved into their new home at 729 Claudine NE.

### Second-Time Winner

For the second year Bob Nelson (4421) has won the "Speaker of the Year" contest held by Sandia Toastmaster's Club 765. Other contestants in the recent competition included runner-up Lew Hanchey (1247), Jack Wiesen (1592) and Bob Quinlan (1322).

## 'One-Tube Laboratory' Tells Story Of Home Workshop Test Equipment

Combining technical knowledge in electronics and instrumentation with non-fiction writing has proved to be an interesting and worthwhile pursuit for Howard Burgess (2752).

His latest article, "One-Tube Laboratory," earned the coveted lead-off story and cover spot in the January issue of **Popular Electronics**.

"One-Tube Laboratory" describes a piece of test equipment designed by Howard in his home workshop. Written in a do-it-yourself style, the article tells how to build the equipment which takes the place of half a dozen tubes for a person with a small shop.

Howard slants his writing toward the novice in electronics and test equipment instrumentation. "It's very important that we keep young fellows interested in this type of work," he says, "and this is one way of doing it."

Oscilloscopes were the subject of a 12-months series of articles which Howard did last year for **Popular Electronics**. Before that, he wrote another 12-months series on test equipment for **CQ**, a magazine for radio operators. This brings in another hobby of his; he has been a licensed ham radio operator for 26 years.

When Howard first started writing about 20 years ago, out of necessity he started taking his own pictures to illustrate his articles. Soon, he had his own darkroom and even designed an aerial camera. Of course, he then submitted an article about his photography work and aerial camera to **Popular Photography** and it was accepted.

Howard also used to illustrate his articles with his own cartoons, but does not do this anymore.

He receives many inquiry letters about his articles. "They come mostly from people who 'followed



**FEATURED ARTICLE** in the January issue of **Popular Electronics** was a story written by Howard Burgess (2752) entitled "One Tube Laboratory." Howard designed and built the piece of test equipment at his home.

my instructions exactly except for substituting a few tubes or changing a few leads.' Then they want to know why it didn't work," Howard says.

Other magazines which have published his articles include **Electronics** and **Radio News**.

Howard has been working at Sandia nine years in the Primary Frequency Standards Lab. Before coming here, he worked for United Airlines in Cheyenne in instrumentation, and previously was a technical supervisor for the Mutual Broadcasting System in Iowa.

He feels that there is a great demand for non-fiction articles. "If you have any interest at all in writing, you should try it," he says. "You'll find it satisfying and rewarding."



Phyllis Eskew (2563)

## Congratulations

### Born to:

Mr. and Mrs. Ernest E. Landavazo (4573-2), a son on Feb. 15.

Mr. and Mrs. Felipe L. Chavez, Jr. (1423-3) a son on Feb. 10.

Mr. and Mrs. Ronald D. Bentz (1424-3) a son, Leslie Michael, on Feb. 21.

Mr. and Mrs. C. C. Ward (1422-3) a daughter, Pamela Kay, on Feb. 5.

Mr. and Mrs. Lewis A. James (8114-4) a daughter, Rebecca Ann, on Feb. 20.

Mr. and Mrs. George Pinsonneault (8232-3) a son, Matthew Stephen, on Feb. 14.

Mr. and Mrs. John L. Daniel (8114-5) a son, Chris L., on Feb. 16.

Mr. and Mrs. Hilding Isaacson (8153) a son, Stephen Douglas, on Feb. 15.

Mr. and Mrs. Melquiades Sanchez (4623-3) a daughter, Carmella Ann, on Feb. 14.

Mr. and Mrs. Andrew C. Ellingson (2441-4) a son, Andrew, Jr., on Feb. 18.

Mr. and Mrs. W. B. Norwood (4121) a son, John Randolph, on Feb. 23.

## Weddings and Engagements

The engagement of Lois Knudson (8212-5) and Tom Harban (8225-3) was announced on Feb. 5. Lois has been with Livermore Laboratory since July 1959, and Tom started work in May 1959.



Lois Knudson

Ida F. Herbert (8223) was married Feb. 17 to Max Chambers. The couple is residing in Castro Valley, Calif.

## Sympathy

To Harry C. Olson (2531) for the death of his father in Aultrain, Mich., on Feb. 12.

To Ed Domme (4111), Vince Domme (4511-1), and Clarence Domme (4514-1) for the death of their mother in Topeka, Kans., on Feb. 16.

To Sidney P. Timmings (8222-2) for the death of his father in Oregon.

To Ervin W. Lehmann (4253-1) for the death of his mother in Madison, Wis., on Feb. 23.

To Albert E. McMurray (4251-1) for the death of his mother-in-law on Feb. 21.

To A. O. Butts (4514-1) for the death of his father in Burleson, Tex., on Feb. 18.

To W. H. Martin (4514) for the death of his father in Waynesboro, Tenn., on Jan. 26.

To Maxine Stephenson (2713-4) for the death of her father in Union City, Mich., on Feb. 20.

To Al Gruer (5260) for the death of his brother in Oakland, Calif., on Feb. 28.

### Efforts by Eugene Helz To Save 'Aussie' Soldiers

A heroic attempt to rescue four Australian saboteurs from an island held by the Japanese during World War II is described in a TV film based on the exploits of E. R. Helz (8161-3), former assistant engineering officer of the U.S.S. Redfin.

Gene was awarded the Navy Cross for his participation in the daring submarine rescue attempt. He and three crew members attempted to slip to shore in a rubber boat. A Japanese patrol intercepted the landing party and the group was forced to depart, after engaging the Japanese in hand-to-hand combat. A second submarine later evacuated the stranded Aussies.

The film version of the story was shown at a meeting of the Livermore 20-30 Club last week.

## Welcome Newcomers

Feb. 15-26

<b>Albuquerque</b>	
Margaret K. Atkin	5261
Carolyn A. Benzing	3126
James E. Clark	4622
Ada Jane Erbe	2126
Cyrus D. Hall	2713
*Robert J. Hark	8232-1
Sterling L. Humphrey	4413
Mary Jane Kelsey	3126
Carl J. Klecotcka	4152
Jerome J. Kostel	5523
E. Elizabeth Lundy	3126
William B. Nelson	4413
Maxine E. Patterson	3126
Rand R. Rozell	4413
M. Nadine Sheppard	3126
<b>California</b>	
Ruth E. Dunker, Livermore	8232-3
David A. Edwards, Irvington	8232-4
Karen L. Griffiths, Pleasanton	8212-3
Gabriel Gutierrez, Stockton	8232-4
Glady's J. Harms, Livermore	8211-3
Ernestine Middles, Livermore	8212-3
Stephen D. Phillips, Livermore	8225-1
*Richard Y. Shimada, Hayward	8114-3
Vernon C. Smith, Mountain View	4211
Karen K. Wilson	8212-3
<b>Iowa</b>	
David R. Kendall, Iowa City	2752
Robert J. Klingler, Iowa City	1615
<b>Kansas</b>	
Kenneth M. Timmerman, Lawrence	1613
<b>Michigan</b>	
David C. Schuetz, Detroit	2543
<b>Missouri</b>	
Glen H. Whiting, Rolla	1247
<b>Nevada</b>	
Clifford Jacobs, Yuton	5522
<b>Returned from Leave (Albuquerque)</b>	
Jocelyn L. Fuller	4413
Phoebe B. Keller	3466
Lynn F. Ritchie	5126
Glen L. Wisner	4413
* Denotes Rehired	

Sandia Corporation

# LAB NEWS

ALBUQUERQUE, N. MEX. • LIVERMORE, CALIF.

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# Sandia Lab's Scientific Exhibits Are On Road in Texas, New Mexico Communities

The Old West's traveling tent show has a modern-day counterpart here at Sandia. Today it isn't medicine being sold; it is understanding—understanding of the role of science in modern day life.

The years have wrought a few changes: brass bands and torch lights have been replaced by hi-fi background music and colored spot lights. Instead of bouncing chorines on a stage, they are bouncing wave guides on an oscilloscope. The exuberant barker is now a highly skilled technician giving accurate descriptions of scientific phenomena and technology together with their practical applications.

Fortunately, creaky show wagons traveling over rutted prairie

land have been replaced by steel trains, trucks, and automobiles speeding over rails and highways. One thing hasn't changed though—the audiences still are fascinated children and adults who mix smiles with their "ooh's" and "ah's".

The modern audiences are found at school science fairs. Today, for example, Sandia is participating in the Third Annual International Science Exposition in El Paso, and in the Science Fair at Aztec High School in northern New Mexico.

At the El Paso show thousands of Texas high school and college students, educators, and other interested persons are watching Sandia's APAR (Automatic Pro-

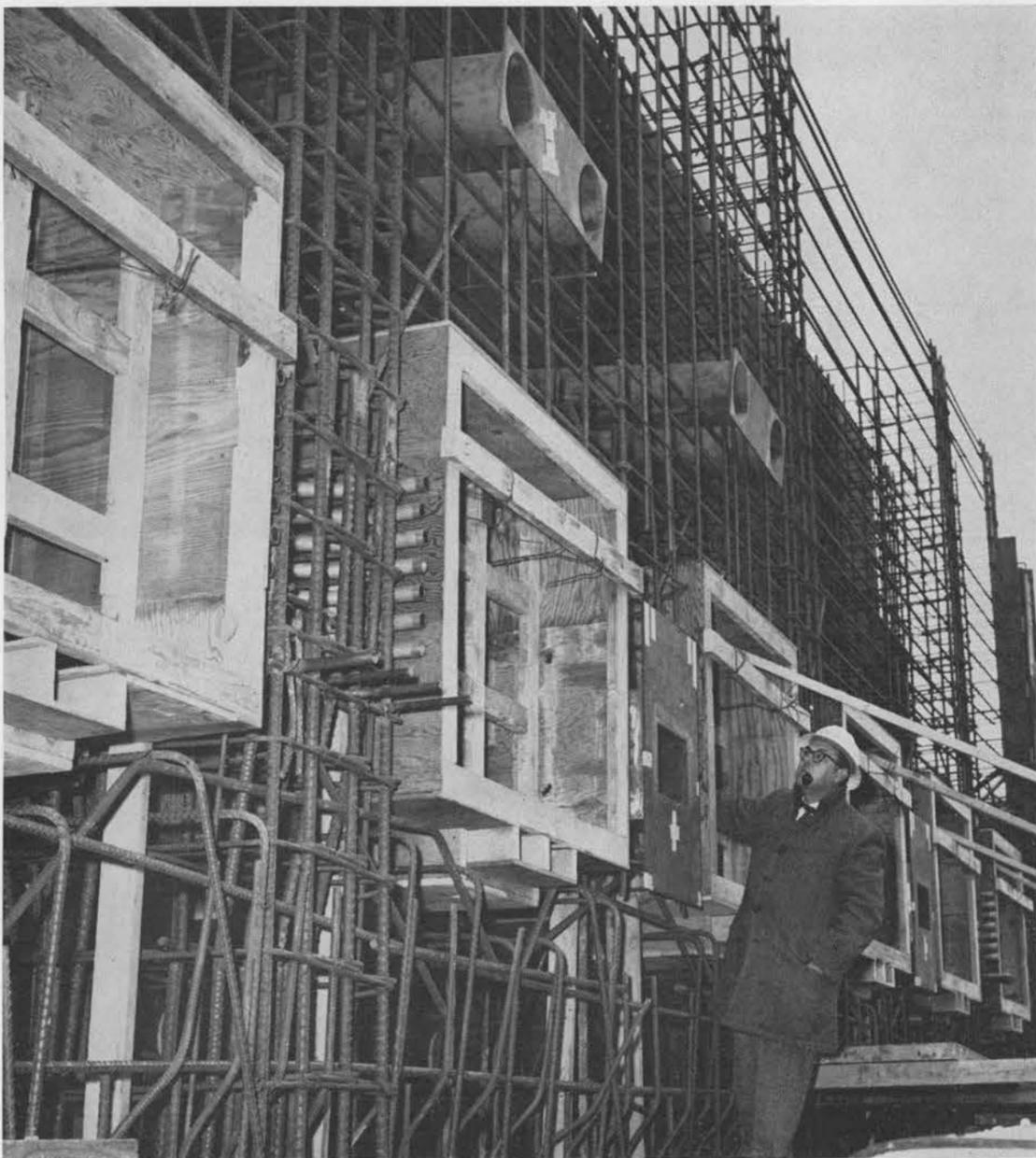
gramming and Recording Data System) in operation. "Barkers" R. E. Adams (1522) and T. E. Zudick (3431) are manning APAR and are selling another scientific advancement of Sandia; "selling" in terms of informing the public.

Physics and Photography are the subjects of the Sandia exhibit at Aztec today and tomorrow. This same exhibit will be used in the Science Fair at Farmington High School next week. B. E. Dieruf (5256) and a Public Relations Division representative will man both the Aztec and Farmington exhibits.

Sandia's participation in such science shows is carried out by Public Relations Division 3431 under the direction of J. C. L. Leslie, Supervisor of Community Relations Section.



REACTOR CONSTRUCTION looms in the background as John Colp (1626-1) observes the progress of construction. Cold winds and low temperatures of last week slowed the construction somewhat. Completion date of the facility is expected in late 1960.



MANIPULATOR WALL of the Sandia Engineering Reactor Facility now under construction in Area III is examined by John Colp, Nuclear Facilities and Equipment Section 1626-1. Wooden frames are the forms for the lead glass shielding that will

permit operators to see the "hot" area of the facility. Round forms at the top of the photo will be openings to house the manipulator "arms." Wall will be 42-inch-thick concrete poured around the complex steel framework shown in the photograph.

## AEC Seeks Bidders For Improvement of SSTB Water Supply

Plans and specifications were issued recently by the AEC for additions and modifications to water treatment facilities at Sandia's Salton Sea Test Base.

Water treatment facilities at the Salton Sea installation will be improved to provide 200 gal. per minute capacity in softening, clarification, filtration and purification of existing canal ground water. Chemical mixers and feeders will be added to the system as well as reaction tanks, filter tanks, purifying tanks and pumps.

The equipment will be installed in a new prefabricated metal building with additional electrical service.

Bids were opened Feb. 27 by Golden, Bryant and Jehle, Inc., of El Centro, Calif., architect-engineering firm employed by the AEC for the project.



DOUBLES CHAMPIONS of the Coronado Club Jewelette league are shown above with trophies won for their 1231 high score. Left is Kendra Longfellow (5331) with Doreen Westfall (4335), right. Kendra was also All-Events winner in the tournament with 967.

## Jane Chase Wins Bowling Singles At Coronado Club for Second Year

For the second consecutive year Jane Chase (5111) has won the singles championship of the Coronado Club Jewelette league tournament. Jane bowled a high of 627 in a three game series to take the honors.

Kendra Longfellow (5331) and Doreen Westfall (4335) teamed to take the doubles championship with a high score of 1231.

Scores calculated with handicap. Kendra also emerged as All-Events winner of the tournament with a total of 967 rolled in singles and doubles competition.

Other winners in the singles event listed from second through fifth place, are Diane Martin, Helen Pipher, June Williams and Marie Calvery.

Second through fifth place winners in doubles competition are Mary Erbert-Evelyn Massey, Mary Lou Arnot-Madeline Martin, Phoebe Adams-Arlene Held and Shirley McKeever-Barbara Vandenberg.

Mina Carnicom (1311), secretary-treasurer of the league, served as tournament director.

The Jewelette league is composed of Sandia and AEC women employees and wives of members.



JANE CHASE (5111) shown above is the singles champion of the Jewelette league for the second consecutive year. She bowled 627 in a three-game series to capture the crown.

## Calendar Scientific and Technical Meetings

Mar. 8

Instrument Society of America  
Dinner: 6 p.m. at the Lodge, Los Alamos  
Technical Meeting: 7:15 p.m. at Health Research Auditorium, Los Alamos  
Speaker: Dr. E. C. Anderson, Leader of Radiochemistry Section, Biomedical Research Group  
Topic: The Los Alamos Human Counter Tour: Low Level Counting Facilities  
Film: On Geneva Conference  
Bus is being chartered and reservations are required. For further information and reservations contact James H. McCutcheon (1322), ext. 37167.

Mar. 9

American Society of Mechanical Engineers  
Bid Opening Room, U. S. Army Corps of Engineers, 2108 Central SE  
7:30 p.m.  
Speaker: J. L. Redmond, Chief of Planning and Reports Branch, U. S. Army Corps of Engineers  
Topic: A technical presentation of "The Sandia Conservancy District"  
For more information contact Walt Dauphine (2533), ext. 28233.

Mar. 10

American Welding Society  
Place to be announced  
Dinner Meeting: 6:30 p.m.  
Technical Meeting: 8 p.m.

Speaker: Jack Graux, District Manager, Sciabey Bros., Inc.  
Topic: Design and Fabrication for Resistance Welding  
For further information contact V. G. Nelson (1621), ext. 32246.

Mar. 17

Society of Technical Writers and Editors  
Albuquerque National Bank, 4401 Central NE  
7:30 p.m.  
Speaker: Richard A. Powers, Manager of Operations, Lytle Corp.  
Topic: Publications Feedback Problems in Customer-Vendor Relations  
For further information contact G. J. Hurley (5323), ext. 46256.

Mar. 18

New Mexico Society of Professional Engineers  
UNM Geology Lecture Hall, Rm. 122  
8 p.m.  
Speaker: J. W. O'Meara, Public Information Officer, Office of Saline Water, Department of Interior, Washington, D. C.  
Topic: Conversion of Salt or Alkali Water into Potable Water with Particular Emphasis on the Proposed Roswell Plant  
General public urged to attend  
For further information contact W. F. Scott (1282), ext. 20147.

This information compiled by the New Mexico Council of Scientific and Technical Societies.



**STOCK TABLES** hold the interest of Carter House (8213-2), left, and Al Ford (8116) as they check fluctuations in the stock market. Both are members of "Investments Limited," an employee club.

#### Turns a Neat Profit

### Investment Club Based on Faith in Country's Free Enterprise Economy

Learning the business of capitalism is a profitable pastime for a group of Livermore Laboratory employees who have formed a noon-hour investment club, "Investments Limited."

The group owns shares in five companies and members meet once a month to discuss these and future investments. One stock, purchased by the club last August, has gained 50 per cent in value.

"We're not interested in 'get rich quick' schemes," said Carter House (8213-2), club president, "but we are concerned with the long range growth of our investments."

Dividends accumulated by the club's stocks "go back in the pot for additional investments," Carter explained. He added that the club can declare a dividend at any time, but members have preferred to let their profits work for them.

#### Faith in System

"Through the purchase of stocks we are also helping to demonstrate our faith in the free enterprise economy on which our government is founded," Carter pointed out.

"The idea for the group originated with Marlin Pound (8212-1), Carter House and Jack Hubner (8213-2). They obtained information from other groups throughout the country and from the National Association

of Investment Clubs, and established their own club, "Investments Limited," in June 1959.

Membership in the club is limited to 16 by the club charter. Each member pays a \$30 initiation fee and \$10 a month dues, all of which is applied to the purchase of stocks. Investments by the club now total about \$1600.

During club meetings possible investments are suggested by an investments committee, headed by Marlin Pound (8212-1). Members then attempt to learn all they can about the makeup of the suggested companies by studying reports in business publications and information furnished by the club's stockbroker, Merrill, Lynch, Pierce, Fenner and Smith.

#### Study Firms

"We look into their management structure, the products they manufacture, their net sales and earnings, and their yearly stock price range," Carter said. "From this information we plot a trend, indicating their ability to grow in earnings per share."

Selection of stocks is based on a vote by the club's membership.

Members of Investments Limited represent a cross section of the Laboratory. They come from supervision, development engineering, personnel, budgeting, accounting, security and business methods. The club is made up of the following officers and members:

Art Eiffert (8230), vice president; Walt Dzugan (8213-1), secretary; Jack Hubner (8213-2), treasurer.

Sid Wagner (8161-3), Al Ford (8116), Bob Hazel (8212-4), Ken by Marlin Pound (82131). Membership, Gordon Bjork, Arnold Schuknecht (all of 8213), Marlin Pound (8212-1), Don Gregson (8142), Dave Hurley, Lurl Ostrander and Irv Troyky (all of 8231-1).

Sandians who may wish to form their own investment groups may contact any member of the club for additional information.

### Mountain Club to Visit Ghost Towns

A particularly interesting trip is scheduled by the New Mexico Mountain Club for tomorrow (March 5). Members and guests will visit the ghost towns of Coyote and Hagan and will also hunt for jasper.

Ralph Holloway (1311) will lead this trip, which starts from Nob Hill at 8 a.m.

## Employees Raise Their Voices in Politics By Taking Duties of Party Precinct Chairmen

"The Great American Game of Politics" will bring millions of citizens into action this election year. Some will lead and serve the party of their choice as well as vote.

Political experts say that election outcomes are controlled in the

precincts at the grass-roots level. As a result more and more importance is being placed on political activity at this level.

About the most important person in the precinct political organization is the precinct chairman. Each political party has a chair-

man in the precinct and much of the fate of the party in that precinct rests with this chairman.

Here are two Sandia employees who are serving as precinct chairmen—they are from each of the two major political parties. These are Sandians who serve.

### Ballet Guild Elects Sandia Employees to Head Organization

Several Sandians have been named to the board of directors for the recently-chartered Ballet Guild of New Mexico. L. M. Jericinovic (2640) and Joseph Muench (1592) are directors and Dixie Baca (3126) is serving as secretary.

The non-profit guild has been formed with the idea of supporting a state ballet company and thereby provide a medium of expression for writers, musicians, designers, dancers, etc.

### ALO Employees Have Long Federal Service

Length of service awards were recently presented to five AEC-ALO employees who completed 20 years of Federal service during the calendar quarter ending Dec. 31. Eleven additional employees received pins for 10 years service.

Those with 20 years service include Edwin L. Brawley, James C. Hobart, Don Johnstone, Norvin Armstrong and Kathryn F. Miller.

Recognized for 10 years of Federal service were Charles A. Durham, Myrtle W. Morgan, Horace C. Wright, Eugene W. Griffith, Charles R. Adams, Jessie Mae Rowe, Ernest L. Boynton, Jr., Charles E. Ellis, Stephen N. Keister, James R. Hagler, and Francis J. Hillenbrand.

### UNM Engineering Students Visitors At Sandia Lab

A three and one-half hour visit at Sandia Laboratory by engineering students from the University of New Mexico Feb. 26 completed Sandia's participation in National Engineers' Week.

Seventy upper-classmen from the mechanical, electrical, civil and chemical engineering schools spent the afternoon getting acquainted with various engineering activities here.

After a showing of the "Sandia Story," M. G. Young (5523), D. J. Jenkins (3130), N. J. Pollard (1411) and W. A. Gardner (1610) met with the students in Sandia's Theater Bldg. 815 and discussed several aspects of engineering at Sandia.

The students then visited Area III with R. L. Ault, W. H. Cross, and M. McWhirter (all of 1615) as guides.



Homer Ator

### Republican Chairman Precinct No. 40

Homer Ator (2622) is just "getting his feet wet" as a Republican Precinct Chairman since he was appointed only four weeks ago. Previously he was a division chairman for about two years.

Homer feels his main job is to get the party organized within the precinct. "This can best be accomplished by having good division chairmen who can get blockworkers and committees set up," he says.

He also thinks that the precinct chairman can provide more unity in the party by acting as a middleman between the county chairman and the division chairman.

"There are approximately 5000 voters in my precinct," Homer says, "and only through the cooperation of all workers in the precinct can an efficient group be organized."

Homer, a section supervisor, has worked at Sandia Corporation nine and one half years.



Edward J. Peterson

### Democratic Chairman Precinct No. 45

Edward J. Peterson (4253-2) finds that in his work as a Democratic precinct chairman he meets many interesting people who have all kinds of opinions and thoughts.

"I think that people of today are generally more politically-minded because they are more aware of the effect the government can have on their lives," he says.

As a precinct chairman, Ed believes that one of his most important jobs is getting people to register; then they are encouraged to vote. When new families move into town they are contacted and asked to register.

Working with a precinct chairwoman and division chairmen and chairwomen, Ed coordinates programs of the Democratic party. During elections he helps set up polls and performs other election duties.

Ed, who has been a precinct chairman about one year, got interested in precinct work while serving as a division committee-man.

Ed has been at Sandia Corporation almost eight years.

## Sandia's Safety Record

**Sandia Laboratory  
Has Worked  
8,145,000 Man Hours  
Without a  
Disabling Injury**

**Livermore Laboratory  
Has Worked  
2,789,000 Man Hours  
Without a  
Disabling Injury**



UNM ENGINEERING STUDENTS toured Sandia Laboratory recently as part of the activities of National Engineers' Week. Entering Sandia's Theater Bldg. 815 to view "The Sandia Story" with the

students are W. A. Gardner (1610), first row, left, and M. G. Young (5523), right, who participated in the program. The students also visited environmental test facilities in Area III during the tour.

### Here's a Fall-Out Shelter for Sandia Do-It-Yourself Fans

Building plans for five basic fallout shelters are contained in a booklet entitled "The Family Fallout Shelter," which is available to Sandia employees. Those at Sandia Laboratory interested in obtaining this book should contact Roseanne Bascom, Services and Benefits Division 3122, ext. 26149.

At Livermore, the booklet may be picked up at Employee Services Division.

The plans range from a do-it-yourself basement concrete block shelter to a concrete underground room.

Questions concerning this booklet or any Civil Defense matters should be referred to John Timmons (3122), ext. 39246 by employees at Sandia Laboratory.

Civil defense questions from employees at Livermore Laboratory should be directed to Irv Troyky (8231).

Model Sportscar Wins First Prize In New Mexico for Sandian's Son



Bill Hope —state winner in auto design—

State winner, junior division, in a recent nation-wide automotive design contest is Bill Hope, 16-year-old son of Voris Hope (3126 State to 3463).

Bill's gleaming white model of a sports coupe brought him \$150 in prize winnings, a personal trophy and a trophy for his school, Highland High School where he is a junior.

The contest is sponsored annually by the Fisher Body Craftsman's Guild and General Motors Corporation. Entries have to meet special requirements in size and speed. Winning models are chosen on the basis of original design, practicability, and craftsmanship.

Bill is already hard at work on a new design to be submitted next year in the senior division contest. Finding time to work on the model is a problem for Bill. In addition to his many school activities, he also works afternoons and weekends in a bicycle shop.

Documentaries to Be Shown on Noontime Movie Schedule

Sandia Laboratory's noon hour movie schedule for the coming two weeks is:

Mar. 7-8-9

"The Unguarded Moment" with Esther Williams, George Nader (color).

Mar. 10

"War in China" (Prudential's Award Winning TV series) (B&W).

Mar. 11

"Age of the Jet" (Prudential's Award Winning TV series) (B&W).

Mar. 14-15-16

"The Blue Lagoon" with Jean Simmons, Donald Hudson (color).

Mar. 17-18

"This is Russia" (Documentary) (color).

All movies start at 12:10 p.m. in the Sandia Base Little Theater which is located south of the military cafeteria on Main St. Time of showings averages about 35 minutes.

Horsemen Get Chance To Show Skills in Rebel Riders Show

The South Valley Rebel Riders will hold their first open horse show of the year on Sunday, Mar. 13, at Miller's Arena, 2121 Tapia Blvd. SW.

There will be classes in horsemanship and reining as well as barrel and pole bending races. The event will be divided into three age groups.

Everyone is welcome either as a participant or as a spectator. There is no charge for admission to the grounds. Post entries will be accepted.

For further information contact Bob Blair (4411), CH 2-6582.

Association Needs Softball Officials

Employees interested in serving as umpires or scorekeepers for the Sandia Corporation Softball Association are asked to contact George Banos (3122), ext. 29157. Play will begin about May 1.



Dean S. Wise 4232 Mar. 12, 1950

Ten Years



Donald E. Rauch, Sr. 5532 Mar. 13, 1950



R. W. Hartenberger 4573 Mar. 13, 1950



John A. Blythe 4224 Mar. 14, 1950



James H. Hann 2632 Mar. 16, 1950

Five Years

Mar. 5-18

Robert W. Seavey 2421, John R. Johnson 5232, Paul D. Seward 2643, Orlando Garcia 4516, Robert H. Newman 3463, William W. Parker 1285, William P. Roper 5255, Barbara J. Tanner 3126, Leonard J. Flesner 2752.

R. R. Bailey Elected To Head Directors Of Softball Group

R. R. Bailey (5532) has been elected to head the Board of Directors of the Sandia Corporation Softball Association for 1960.

Serving on the board of directors for the National League will be Art McMullen (1423) and Bob Evans (4412). Jim Tichenor (6021) and Bob Guerrero (4132) will represent the American League.

Game schedules and organization of teams are now being worked out, according to George Banos (3122), Employee Services representative and permanent secretary of the association.

Twenty-two women have entered Sandia Corporation's first annual Ladies' Table Tennis tournament. Beginning Mar. 7, the singles tournament will start at 12:10 p.m. daily in the bay area in the NW corner of Bldg. 892.

The winner of each match will be decided by two out of three games except the championship match which will be a three out of five series in this single elimination tournament.

Three matches will be played daily, and there will be no postponements. If a person is not available for play on day scheduled, she will forfeit her game.

Singles champion and runner-up will be awarded trophies. For further information contact George Banos, Employee Services Representative, ext. 29157.

Livermore Ski Club Meets to See Films

Livermore's Sandia Ski Club will meet Mar. 16 at 7:30 p.m. at the Livermore recreation center. Two ski films in full color will be shown and a report will be given on the club's recent trip to Mt. Shasta.

The meeting is open to the public and membership is not limited to Sandia employees or their dependents.

University Golfer's Association, which has plans for an active golfing year, has issued a membership invitation to Sandia Corporation employees.

For the latter part of February, the following week-end events have been scheduled: Low Net, Feb. 20-21 and Heart Fund Tournament (Peoria System), Feb. 27-28.

Six tournaments have been planned from April through October. The UGA will also award a \$5 merchandise certificate for the low net score of the week. This contest runs from each Monday through each Sunday inclusive, and the only qualification is UGA membership, which costs \$5 per year.

Memberships may be obtained at the University Golf Course clubhouse desk. For further information contact Del Trester, CH 7-1711, ext. 3144, or AL 5-2179.

Sandia Employee Table Tennis Tourney Starts Next Monday

Tournament play for men's singles table tennis will begin Monday, Mar. 7, in the South Bay of Bldg. 892. Trophies will be awarded to the champion and runner-up.

Winners and runners-up of general organizations who will participate in the tournament are:

Org.	Champion	Runner
1200 Earl Morris	1300 Carroll McCampbell	Casey Kassans
1400 Otto Schreiber	1600 Bob Wolfe	Charles McLaughlin
2400 Tom Kelly	2500 Leo Reynolds	Dick Prairie
2600 Jack Chavez	2700 Gene Chavez	Herman Romero
3100 George Banos	3400 Walter Scott	Ben Gardner
4100 Frank Comiskey	4200 Flavio Gonzales	Ken Hewitt
4400 Bill Lutgen	4500 Warren Buck	Ken Smith
4600 Ben Garcia	5300 Joe Zinn	Wilfred Bergsten
5300 Joe Zinn	5500 Don Emrick	Bill Gardner
5500 Don Emrick	6000 B'ly Palmer	Warner Jones
		John Malins
		Art Everitt
		Sam DeHaan
		Bob Armstrong
		Ed McGarvie
		Jim Tichenor

Fry Cook Wanted

A fry cook, either male or female, is sought to work in the Tech Area Cafeteria, Bldg. 839, from 12 noon to 12:30. Any employee with a "Q" clearance is eligible for this part-time job. Contact the Coronado Club, ext. 37275.

Basketball Association Schedule

Mar. 8 thru Mar. 15  
(All games played at McKinley Junior High School Gym)  
Tuesday, Mar. 8  
7:00 p.m. 3400-II vs 4400  
8:15 p.m. 3400-I vs 1300, 1400, 1500  
Wednesday, Mar. 9  
7:00 p.m. 3400-I vs 1600, 5300, 5500  
8:15 p.m. 3400-II vs 5100, 5300, 5500  
Thursday, Mar. 10  
7:00 p.m. 5100, 5300, 5500 vs 4400  
8:15 p.m. 1600-I, 5200 vs 1200, AEC  
Tuesday, Mar. 15  
7:00 p.m. 1200, AEC vs 5100, 5300, 5500  
8:15 p.m. 3400-I vs 4400

Volleyball Association Schedule

Mar. 8 thru Mar. 16  
(All games played at Sandia Base Gym)  
Tuesday, Mar. 8  
5:30 4100, 4500 vs 5500  
6:15 1200-I vs 1200-II  
7:00 1600-I, 2700 vs 1300, 1400, 2400-I  
Wednesday, Mar. 9  
5:30 5100 vs 3100  
6:15 1200-II vs 5200  
7:00 1600-II vs 1300, 1400, 2400-II  
Tuesday, Mar. 15  
5:30 5500 vs 1200-II  
6:15 1600-I, 2700 vs 4100, 4500  
7:00 1200-I vs 1300, 1400, 2400-I  
Wednesday, Mar. 16  
5:30 3100 vs 5200  
6:15 1600-II vs 5100  
7:00 1200-II vs 1300, 1400, 2400-II

SHOPPING CENTER

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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

'53 PONTIAC, 2-dr., '60 license, 57,000 mi., standard transmission, \$350. Guist, AX 9-9060, 3417 Espejo NE.  
TROMBONE w/case, \$85; Maytag washer w/pump & tubs, \$45; Deluxe dryer, \$85; new breakfast table w/leaf, \$45. Brunacini, DI 4-6831.  
GE REFR.-FREEZER COMBINATION, \$225; table lamp, white shade, \$6; tool box, lift-out tray, \$4. Hobbs, CH 2-4745.  
GAS RANGE, Magic Chef, 4 burner, large oven & boiler. Neel, AX 9-9309, 3617 Espejo NE.  
FISHING BOAT, 14 ft.; trailer and 14 HP Evinrude motor, \$300; registered Labrador Retriever pups. Tuttle, AL 6-2740.  
3 BRM HOME, 2 baths, walled, large kitchen & utility room, garage, immediate occupancy, \$1750 total equity. Renegar, AX 9-2233, 325 Gen. Stilwell NE.  
2 JEEPS w/trailers, 1944 & 1948, new overhaul. Trujillo, 3408 6th NW after 5 p.m.  
VIOLIN, Nicolaus Amati reproduction made in Czechoslovakia, wood grain, etc., \$225; Starlite mattress, innerspring for double bed, \$115. Montoya, AX 4-6966.  
FORMICA DINETTE SET w/4 chairs, \$25; Hoover vacuum cleaner, \$10; baby stroller, \$5; lawn mower, \$5; bookcase, \$5. Williams, AX 9-0876.  
BOX SPRINGS for double bed, \$10. Vivian, AX 9-1785.  
SPRINGFIELD 1884 musket, \$15; Winchester model 12 shotgun, \$65; want German Luger. Smitha, AX 9-1096.  
'57 OUTBOARD MOTOR, 30 HP Elgin, good for water skiing, \$200. Meikle, AX 9-4640.  
3 BRM BRICK, 1 1/4 baths, HW floors, CH, AC, sprinklers, terraced yard w/patio, priced below FHA appraisal. Seay, AX 9-5270.

'58 ISETTA '58 engine, 45 mi. per gallon \$595; '58 custom Rambler sedan w/overdrive, \$1550. Creveling, CH 2-3790, 1415 Park SW.  
3 BRM HOME, 1 bath, drapes, carpeting, walled, landscaped, 3 1/4 % \$2450 down or clear late model car. Bontempi, AX 9-6838.  
'51 DODGE 4-dr. sedan, \$150. Heckler, AL 6-7192.  
GOLF CLUBS, Kroydon, Tommy Bolt set of 9 irons & 4 woods, never used, priced to sell. Ruff, ext. 48190.  
'51 FORD PICK-UP truck, 3/4 ton, 4-speed, 8 ft. box, winch. Tucker, BU 2-3204.  
JOHNSON SPEED-X semi-automatic pump, \$10. Kanode, AL 6-1858 after 5:30 p.m.  
RUG, brown tweed, 12 x 18, w/pad. Catt, ext. 24195 after 5:30 p.m.  
16 FT. METAL BOAT w/metal trailer, \$275 cash. Pfeffer, AL 6-3200, 533 Arizona SE.  
MODEL ENGINE, K&B .23, will demonstrate, \$8 or will trade for K&B .15 in equivalent condition. Taylor, AL 6-3774.  
3 BRM ROBERSON, 1 1/4 baths, walls, sprinklers, fireplace, 1376 sq. ft., \$900 down, \$16,000. Desjardine, AX 9-0077.  
3 BRM ROBERSON, family room, 2 baths, electric kitchen, double garage, AC, carpeted LR & hall, terms, \$20,900. Calvery, AX 9-5800, 11212 Prospect NE.  
CAR AIR CONDITIONER, A.R.A., w/Warner electric clutch & 4 cylinder Lehigh compressor, \$100; twin chrome "Strolee" stroller, deluxe model. Barber, ext. 46278.  
BLOW TORCH, heavy duty, \$6; 1/4 in. electric drill, \$14; soldering gun set, \$12. Pitti, AL 6-1629.  
'58 CADILLAC, 16,000 mi., all power, AC, jet black, \$3695; will consider trade. Thompson, AX 9-7806.  
'57 BUICK Century 4-dr. hardtop, w/w tires, PS & PB, '60 license tag, other extras, \$1700. Hawley, AL 5-0332 after 5:30 p.m.  
MOVIE CAMERA, 8 mm Revere, five speeds, 500W. Revere projector, Editor splicer, \$200 value, sell \$100. Shane, AL 5-5673 829 Georgia SE.  
GOSSIP BENCH, maple, \$17. Gochner, AL 6-6975.  
'59 FORD Galaxie Tudor Victoria, black, 300 HP engine, Cruise-o-matic, PB, many extras. Kown, ext. 45267, 3216 "A" St., Rm. 22, base men's dorm.  
STUDIO COUCH, \$25; single record player, radio & PA system, \$65. Zingg, AX 8-2729.  
SAVAGE MODEL 340 30-30 bolt action rifle, \$40; Marlin .22 bolt action repeater, \$20. Jones, AM 8-3055.  
'54 MARLETTE HOUSE TRAILER, 29 ft. Fletcher, ext. 35135.

NEXT DEADLINE

FOR SHOPPING CENTER ADS Friday Noon, March 11

'50 DESOTO, 4 new tubeless tires & new battery, O'Trimble, AX 9-0198, 1025 Maxine NE.  
UPRIGHT PIANO, Nichols Bros., \$100. Lucero, AL 6-6375.  
3 BRM, 1 1/4 baths, HW floors, sprinklers, near schools, \$1000 down; will rent \$125 on year's lease; immediate occupancy. Steele AM 8-8323.  
3 BRM. HOFFMAN BRICK, 8303 Los Arboles NE, 1 1/4 bath, attached garage, AC, carpet, sprinklers, drapes, furniture; accept house trailer in trade. Richmond, AX 9-3130.  
HEATHKIT WA-P2 preamplifier & W-3AM 20 Watt Hi-Fi Williamson circuit amplifier; \$80 as kit, will sell for \$50 completely wired. Newlin, AL 6-7115.  
'51 PLYMOUTH Suburban, heater, good second car, \$195. Neiman, AX 8-0223.  
CRIB-PLAYPEN COMBINATION, \$15. Hedberg, AX 9-6359.  
'56 GE WASHER filter-flo, \$65; 21 in. Hallcraft table model TV w/table, \$75; baby bed w/mattress, \$20; buggy, \$10. Wiesch, AL 6-7236.  
STAUFFER COUCH, Princess model, pink, \$100. Reidel, AX 9-5505, 8707 Woodland Ave. NE.  
BICYCLES, boy's 24 in. and girl's 26 in., \$10 & \$15 ea.; lawn mower, Craftsman rotary type 2 cycle, \$40. Gonzales, CH 2-4012.  
ELECTRIC HEATER, Monarch & Knapp, 24 x 24 x 6 in., \$35. Reinertsen, AL 5-1954.  
WEAVER ALUMINUM COOK SET, reasonable. Gabaldon, CH 7-2672 or CH 3-6980.  
BUNK BEDS, 40 in. wide, wood frames, link springs & mattresses, w/safety rail & ladder; makes into twin beds, \$20. Monson, AM 8-5001 after 5:30 p.m.  
TV, 21 in., & stand, needs picture tube, \$25; plastic covered occasional chair, \$5; Scotch cooler, \$3.50. Gammon, AM 8-1032.  
HEATHKIT HI-FI, 20-watt amplifier, 12 in. electrovoice speaker w/enclosure & turntable, \$50 or best offer. Stark, CH 3-3110 after 6 p.m.  
3 BRM HOME, 30 ft. living room w/fireplace, HW floors, separate guest house, \$1000 down, sell FHA appraisal. Crosby, AM 8-5189.

CAMPING TRAILER, 15 ft. Mercury deluxe '59 model, sleeps 5, has Butane stove & oven, ice box, sink & water tank. Skender, CH 7-4555.  
SET EDEL SPINNER hub caps, white background, \$15; set of '56-'57 Chevy fender skirts, \$5. Tichenor, DI 4-3187.  
CHILD'S TRICYCLE & fire engine. Worden, AL 6-9594.  
BABY CRIB w/mattress, \$15; bathinette, \$10; combination car seat-car bed, \$3; adjustable doorway gate, \$2. Gelder, AX 9-0134, 10201 Los Arboles NE.  
HOLLYWOOD BED COVERS, dark green w/matching pillows, two for \$12.50. Ingram, AX 9-6194, 9638 Morrow NE.  
'54 FORD V-8, club coupe, custom, R&H, \$545. Spann, DI 4-8793 after 5 p.m.  
'55 PLYMOUTH 4-dr. sedan Plaza (6), \$600. Vinovich, AX 9-1979 after 5 p.m.  
RUG, all wool, 6 x 9, beige, \$15. Baker, AX 9-9392.  
'56 FORD 4-dr., R&H, auto. tran., factory air, \$1050; '54 Ford, 4-dr., R&H, OD, \$550. Pardo, AX 9-2250, 2009 Vermont NE.  
35 REMINGTON automatic cost \$135, sell \$65; 270 Winchester, 243 Winchester, 12 ga. shotguns, sell or trade. Butler, AX 9-5626.  
3 BRM HOME, grade schools close, large kitchen, family room, CH, AC, landscaped, GI, sale or trade. Stixrud, DI 4-7873.  
INNERSPRING MATTRESS & box spring, full size, \$15; Dumont TV, 17 in., \$45. Glenn, AX 9-2743.  
VACUUM CLEANER, Bee-vac, w/attachments & sprayer, \$16; Kodak 35 mm camera & flash attachment, \$15. Haycraft, AX 9-3220.  
RIFLE, 30-06 custom Remington Enfield modified action, K-25 scope, fancy stock, \$95. Vaughn, AL 6-0341.  
SOFA, green plastic, two cushion, \$25; red frieze recliner chair, \$20. Mohart, AL 5-7805 after 5:30 p.m.  
TWIN BED, limed oak finish, complete w/spring & mattress, \$20. Platt, AX 9-0196.  
CHILD'S CAR SEAT, \$1.50; diaper pail & toilet seat, \$1 ea.; large bird cage & stand, \$4.50. Van Delinder, AL 5-9324, 3212 Cushman Dr., NE.  
'56 CUSHMAN SCOOTER, \$75. Costello, AX 9-0563, 1828 Blume NE.  
BLOND STEP TABLE, \$6; blonde lamp table, \$6; pair skis w/bindings, size 10 1/2 boots, \$10. Hart, AX 9-8832.  
3 BRM HOME, garage, walled, patio, landscaped, no qualifying, vacant, \$12,500. Dieruf, AX 9-6526, 9904 Arvilla NE.  
'55 CHEVROLET station wagon, new motor, transmission & brakes, 1 owner, \$950. Patterson, CH 3-9474, 606 Ridgcrest Dr.

LOTS, 140 x 200, North Valley. Padilla, DI 4-6552 after 6 p.m.  
CHIHUAHUA PUPPIES, registered, must sell immediately, reasonable offers considered. Cericola, DI 4-4243.  
YOUTH BISH, innerspring mattress, natural finished hardwood w/removable guard rails, \$40. Wade, AX 9-2050.

FOR RENT

3 BRM HOME, 1/2 block to grade school AC, walled yard, \$120 monthly, available March 15. Harper, AX 8-0146, 1101 Garcia NE.  
3 BRM HOME, 1 1/2 bath, walled yard, garage, carpet, AC, sprinklers, \$110 mo. PINE, AL 6-4216.  
ROOM for employed woman, close to base. Batchelor, AL 6-0504 after 5 p.m.

WANTED

BABY SITTING in your home and do light housekeeping during working hours. Hospital, CH 3-9328 after 6 p.m. weekdays.  
HOSPITAL BED. Otero, ext. 42256.  
BARBELL SET, any size. Cericola, AX 8-2426.  
HOME FOR CHIHUAHUA male terrier, alert watchdog, fine pet for adults, has shots, no charge. Pappas, AM 8-0781.  
HOME FOR FUZZY female puppy. Tatum, CH 2-9021.

LOST AND FOUND

LOST: Ladies Bulova watch; red billfold w/ID of Gail Wood; keys in plain brown case; black gloves; green & brown glass earring w/brass; gold loop earring; 2 keys in Glendale brown case; silver wedding band made in Mexico. Lost and Found, ext. 26149.  
FOUND: Aluminum key w/No. 967; gold leaf earring; ladies brown leather glove left at Medical 2-15. Lost & Found, ext. 26149.

FOR SALE AT LIVERMORE

'55 JAGUAR MK7 Salon, \$1500. Hollingsworth, HI 7-4327.  
DINETTE SET, maple, table & 4 chairs, \$50; early American floor lamp, make offer; maple hutch, \$35. Sullivan, VE 7-5485.  
WASHER, agitator electric, stainless steel tank, portator type, \$10; assembled Heathkit UA-Z hi-fi amplifier, 14 watt, \$20. Wheaton, HI 7-3689.  
OUTBOARD MOTOR, Johnson, 18-horse. Sparger, HI 7-5316.  
SKI BOOTS, ladies handmade, size 6 1/2, \$10. Loveless, HI 7-3678.  
BIRD CAGE, parakeet, \$3. Resemius, HI 7-3011.  
'59 FORD Galaxy, 2-dr. hardtop, PS, R&H, Cruise-O-Matic transmission, \$2550. Ayen, HI 2-954.

# Minute Assemblies Are Big Job Of Miniature Machine Section

There is an ever-growing urgency in Sandia Corporation's undertakings for miniaturization. It is of the utmost importance that components be smaller, more rugged, more reliable. The men in the Miniature Machine Section are helping reach the goal.

Miniaturization is a question of of relativity.

A miniature locomotive might be a foot long, but a microscope is required to observe the teeth of a miniature gear.

Minute parts and assemblies for research and development projects are the main concern of the Miniature Machine Section 4253-3 in the Development Shops. The group is also occasionally called upon to repair or duplicate parts for precision instruments and measuring devices.

Highly skilled machinists Ed Grymkoski, Rex Rozelle, Vic Schaeffer and Jim Taylor, headed by the supervisor, Carmon C. Paschal, use a variety of precision equipment worth over \$100,000.

Since watchmaking tools are often used, it would be natural to assume that the men of this organization had previously been watchmakers. "Not so," said Mr. Paschal, "our people are model and instrument makers who have a liking for minute work. The requirements for the job include a steady hand, a precise eye, dexterity, and above all patience."

### Patience Factor

The patience factor was emphasized recently when 6000 lines were scribed around the outer surface of a cylinder two inches in diameter, with the lines spaced .001 of an inch apart. It took one man five days to accomplish this after special equipment was set up.

Preparation and tooling for a job frequently require much more time than the actual machining or processing.

The drawings provided the machinists are frequently scaled 50 or even 100 to 1 and a comparator is used to compare these highly accurate drawings with the item itself.

Stainless steel, brass and aluminum are the principal metals used; however, the section also works in plastics, precious metals and rare metals.

To accomplish the wide variety of work, the section uses precision equipment including lathes, milling machines, drills and grinders. Some of the special equipment used includes an optical jig borer, a Najet drilling machine, pivot polishers and burnishing equipment. Also available is a centerless grinder, a surface grinder



MINIATURE ODOMETER, used to measure lapsed distances, is being assembled by Ed Grymkowski. Large scale drawings, designed by engineering groups, have been used in tooling tiny parts.



UNIVERSAL CYLINDER GRINDER has been operated by Rex Rozelle in forming this experimental mandrel for air bearing application studies. Supervisor C. C. Paschal checks dimensions.

and a highly accurate outside diameter grinder.

### Use Jeweler's Lathe

The lathes range in size from a 12 in. swing capable of cutting 184 threads per inch to a jeweler's lathe that uses drills two thousandths of an inch in diameter. A wide variety of chucks, face plates and attachments make this equipment extremely versatile.

Naturally, working to such minute tolerances requires the best in measuring equipment.

Men use such tools as a 20 power measuring microscope for measuring length, angles and radii and also electronic measuring devices that are accurate in millionths of an inch. For odd shaped configurations there are a variety of measuring tools of comparable accuracy.

Work of this kind requires the utmost in cleanliness and ultrasonic cleaning equipment is used to insure that dust or foreign matter will not affect the product.



THIS DRILLING machine, operated by James Taylor, can duplicate any pattern of holes from a master plate. Use of such mechanical aids are as close as these machinists come to a "production line."



COMPARATOR is utilized by Vic Schaeffer in checking size and outline of tiny escapement wheel for a timing device against large scale drawing. Drawings are frequently of a 50 to one ratio.



SANDIA CORPORATION EXECUTIVES visited Livermore Laboratory recently for technical briefings and a look at new facilities. Explaining the operation of new equipment to some of the visitors is L. E. Hollingsworth (left center), manager of the Test Department (8120). Looking on are R. W. Henderson, vice pres., Development; J. P. Molnar, pres., R. E. Poole, vice pres. at Livermore.

## Nuclear Test Question Debated on Television's 'Small World' Program

Several television programs of particular interest to Sandians have been presented recently on weekends. One of these is a two-part conversation between Dr. Edward S. Teller, head of the University of California's E. O. Lawrence Radiation Laboratory, and Bertrand Russell, noted English author and statesman. The second half of the series will be presented Sunday on Edward R. Murrow's CBS (Channel 13) program, "Small World," from 4 to 4:30 p.m. They are discussing the case for resumption of nuclear tests.

The Public Relations Division 3431 is planning to distribute

notices to employees in advance of weekend programs of general interest, provided information is received in sufficient time from the networks. Bulletin board notices may be used to announce such programs when there is not time enough to get a notice distributed to all employees.

### Joseph J. Schauer Died February 15



Mr. Schauer

Joseph J. Schauer, a Corporation employee for more than eight years, died Feb. 15. He was 63.

Mr. Schauer was a boiler fireman in Heating Plant Section 4514-2.

Following funeral services in Albuquerque, burial was at the National Cemetery, Santa Fe.

Survivors include his widow, a son, Joseph D. (who works in 2444), his mother and a sister, both of Gallup, N. Mex.

## Employees Help in Livermore Drive for Recreation Bonds

William A. Jenkins (8233-1) has been elected chairman of the Livermore Citizen's Committee for Recreation and Park Bonds, an organization formed to win support for additional recreation facilities in Livermore.

Serving on the executive committee is Lee Hollingsworth (8120). Publicity Chairman for the committee is R. A. Dickson (8233-1).

The recreation bond issue will be presented to the voters in Livermore on Mar. 8.

## NOTICE

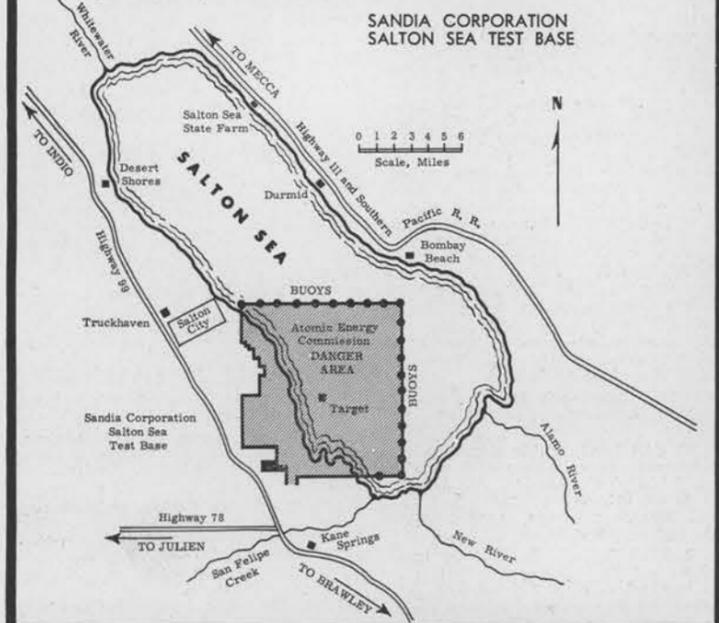
### BOATMEN, FISHERMEN, AND OTHERS IN THE SALTON SEA AREA

The cross-hatched area in the map below is United States Government property, known as the Salton Sea Test Base. The Base is operated and maintained by Sandia Corporation for the U. S. Atomic Energy Commission. It is used primarily as a bombing range for ballistic tests of missiles dropped from airplanes and hence is a

### DANGER AREA

Trespassing in this area is not permitted at any time, week-ends and holidays included. The area is about nine miles square; and its water boundaries are marked by buoys spaced about a mile apart, and its land boundaries by government signs.

The entrance to the Base is an access road from Highway 99 about thirteen miles south of Salton City. Admittance to the Base is granted only to authorized persons having official business there.



KEEP OUT SIGNS have been posted in areas surrounding Salton Sea warning sightseers, sportsmen and vacationers of the AEC's test range there which is operated by Sandia Corporation.