Navy Certificate of Merit Is Awarded Sandia Corporation



POLARIS MISSILE, similar to this one, will form an impressive backdrop for ceremonies at Livermore Laboratory today when the Certificate of Merit, one of the Navy's highest awards, is presented to Sandia Corporation for its work on the Polaris warhead.

The Navy Certificate of Merit, one of the Navy's highest awards, will be presented to Sandia Corporation today in ceremonies to be held at Livermore Laboratory. The award will be made in recognition of Sandia Corporation's work on the warhead for the Polaris missile.

A similar ceremony honoring the Lawrence Radiation Laboratory will also be held today.

Presenting the award to President S. P. Schwartz will be Rear Admiral Joseph D. Black, USN, Deputy Commander, Field Command, Defense Atomic Support Agency, Sandia Base. R. E. Poole, Vice President, Livermore Laboratory, will act as host for the ceremony.

Employees to Attend

Livermore Laboratory's 950 employees will be excused from work at 11:15 a.m. to attend the presentation, which will be held in front of the Laboratory's Administration building.

Adding color to the proceedings will be a full-scale mock-up of the Polaris missile, which will form an impressive backdrop behind the speakers' rostrum. The missile model was shipped to the Laboratory for the presentation by the Lockheed Missiles and Space Division, Sunnyvale, Calif., managing agency for the Polaris program.

Meritorious Services

Former Secretary of the Navy on Programs, and B. S. I W. B. Franke, in a letter to Mr. President, Development.

Schwartz, said, "It is my great pleasure to inform you that Sandia Corporation has been awarded the Navy Certificate of Merit for its meritorious services to the Department of the Navy which contributed to the success of the Polaris program.

"This is one of the highest honors which the Navy can grant and on this occasion I wish to express personally the Navy's deep appreciation of the unselfish interest and patriotic service which you and your company have so generously extended to the Naval establishment."

Officials Invited

Among those who have been invited to attend the ceremony are Dr. Edward Teller, Associate Director of the Lawrence Radiation Laboratory; Dr. Harold Brown, Director, Lawrence Radiation Laboratory at Livermore; and Dr. John S. Foster, Jr., Associate Director for Nuclear Devices and Weapons, LRL, Livermore. Others invited include dignitaries from the Lockheed Missiles and Space Division, the 12th Naval District, San Francisco; the San Francisco Area Office, AEC; DASA Field Command, Livermore Branch, and the Bureau of Naval Weapons, Washington, D.C.

Officials from Sandia Laboratory who have been invited in addition to Mr. Schwartz are R. W. Henderson, Vice President, Weapon Programs, and B. S. Biggs, Vice President, Development.

Following is the text of the U. S. Navy award being given Sandia Corporation today:

* * *

DEPARTMENT OF THE NAVY
The Secretary of the Navy
takes great pleasure in presenting this
Certificate of Merit
to

Sandia Corporation for services set forth in the following Citation

For outstanding service to the Department of the Navy in designing, developing and engineering the non-nuclear portion of the POLARIS missile warhead. Assigned the task of developing a warhead of minimum inert weight and maximum payload within the total allowable re-entry envelope for the POLARIS missile, Sandia Corporation skillfully coordinated design and development efforts to produce a highly sophisticated weapon. This was done ahead of the most optimistic time estimate and made possible the successful launching of the first ballistic missile from a submerged submarine on 20 July 1960, in recognition of and appreciation for the outstanding contribution, this certificate is approved this first day of December 1960.

W. B. Franke Secretary of the Navy

Sandia Corporation LAB EWS A

ALBUQUERQUE, N. MEX.

LIVERMORE, CALIF.

VOL. 13, NO. 5

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MARCH 3, 1961

H. C. Biggs Appointed To New Chairmanship Of AOA Organization

H. C. Biggs, manager of Physical and Electrical Standards Department 2410, has been named chairman of the Standards and Metrology Division of the American Ordnance Association.

Henry Marsh, vice president for the Technical Division, AOA, announced the two-year appointment at the 16th annual meeting of the Standards and Metrology Division held at the Coronado Club recently.

New secretary of the Division will be J. C. Moody, supervisor of Length and Mass Standards Section 2411-1.

Mr. Biggs formerly was chairman of the General Physical Standards Section of the Division. The other two Sections are Electrical and Electronic Standards, and Dimensional Standards.



EASY DOES IT—Units of Sandia's new 7090 computer were moved gently into the Bldg. 880 Data Processing Center last week. The new 7090 will eventually replace Sandia's 705 computer. Move-in took an entire day. Installation was set for completion this week.

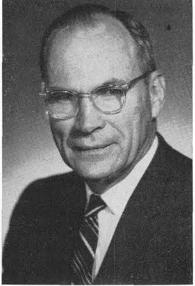
Sandia Announces Election of New Vice President, Director

At a meeting of the Sandia Corporation Board of Directors on Monday, Feb. 27, in New York City, E. H. Draper was elected a vice president of the Corporation. He will succeed B. S. Biggs as Vice President, Development, effective April 1, 1961.

Mr. Biggs will transfer to Liver-

more, Calif., to take charge of Sandia Corporation's Livermore Laboratory. R. E. Poole, presently Vice President, Livermore Laboratory, will retire June 1 at his own request.

Mr. Biggs and Mr. Draper will report to R. W. Henderson, Vice President, Weapon Programs. Succeeding Mr. Draper as Director of Systems Development will be H. E. Lenander, presently Director of Electromechanical Component Development. L. D. Smith, Manager of Electrochemical Development Department, has been promoted to succeed Mr. Lenander, effective April 1.



B. S. Biggs Vice President, Livermore Laboratory

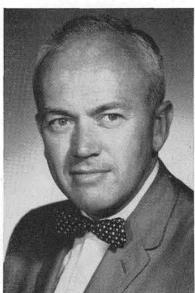
B. S. Biggs was elected Vice President, Development, last September and will become Vice President, Livermore Laboratory, on June 1 at the time of R. E. Poole's retirement.

He had been Director of Materials and Standards Development since January 1958.

At the time of his transfer to Sandia three years ago, Mr. Biggs was Assistant Chemical Director-Development, Bell Telephone Laboratories. During his 25 years with the Bell System, he has been extensively involved in materials research and engineering, and has published a number of scientific papers in this field.

He has an AB degree from Southwest Texas State Teachers College, and AM and PhD degrees in chemistry from the University of Texas.

Mr. Biggs is a member of the American Chemical Society and the Society of Chemical Industry, and is chairman of the Scientific Advisory Committee of the Center for Prevention of Deterioration (National Research Council).



E. H. Draper Vice President, Development

E. H. Draper was elected Vice President, Development, effective April 1, after serving three and a half years as Director of Systems Development.

At Sandia since September 1948, Mr. Draper was appointed division supervisor in 1949 and became a department manager a year later.

He graduated from the University of Colorado in 1940 with a degree in mechanical engineering and took graduate work at Stevens Institute of Technology for three years while employed as Assistant Project Engineer at Wright Aeronautical Corporation, Wood-Ridge, N.J., from 1940-47.

He also worked a year for AVCO Manufacturing Corporation, Lycoming Division, in Strafford, Conn., as Engineering Manager.

Mr. Draper is Vice President, Region VIII, of the American Society of Mechanical Engineers.



L. D. Smith Director, Electromechanical Component Development

L. D. Smith, manager of Electrochemical Development Department, has been promoted to Director of Electromechanical Component Development, effective April 1.

In October 1947 Mr. Smith joined the Sandia Branch of the Los Alamos Scientific Laboratory and was assigned to Project Sandstone. The following year he participated in atomic tests at Eniwetok. In 1951 he became supervisor of an engineering division and in March 1956 was promoted to manager of the Electrical Systems Engineering Department. Mr. Smith transferred to his present organization in July 1959.

During World War II, while serving with the Air Force, Mr. Smith participated in designing and testing fuzing systems for atomic weapons. This type of work he continued at Sandia.

He received his BS degree in electrical engineering from the University of Wisconsin.

8,000,000

5,000,000

2,600,000

1,750,000

800,000 500,000

500,000

215,000

"Why Johnny Can't Vote"

Figures have been compiled showing that 19,365,000 citizens of voting age were unable to vote the last election.* Here's why:

Mobile adults unable to meet state, county, or precinct residence requirements Adults kept from polls by illness at homes, hospitals, nursing homes for the aged, etc..... Adults traveling for business, health, vacation and other reasons unable to attain absentee Adult negroes in 11 southern states kept from

polls by literacy tests, poll taxes, various social

Adult illiterates in 25 literacy test states...... Citizens of voting age in District of Columbia... U. S. citizens living abroad Adult prison population

Total number of citizens unable to vote....... 19,365,000 You can select your own statistic with which to be indignant. The largest number, 8,000,000 voters disenfranchised because they have not lived in a state, county or precinct long enough, is a good point to ponder. This "mobile" population is for a great part people who are well educated, responsible citizens with initiative and character needed to pull up stakes and seek advancement in a new community. They are harshly

discriminated against by our election laws. There is no reason, the American Heritage Foundation points out, to take the vote away from these millions for no better reason than their having moved. A New York Herald Tribune editorial points out "State Legislatures can correct this before 1964, if they will. The danger is that, elections past, the disenfranchised will be forgotten until it's too late

The U. S. Constitution makes each state responsible for

establishing voting requirements.

New Mexico Legislature is again considering this state's lack of an absentee ballot. Previous constitutional amendments in this state which would have provided the ballot had rocky going. Each time they have been presented to the voters they have gone down in defeat. New Mexico is one of five states which do not provide absentee ballots. The others are Alabama, Louisiana, Mississippi and South Carolina.

*Sources: U. S. Census Bureau and American Heritage Foundation

Bonie Lopez Plays 'Rufe' of That Famous Town Founded by Al Capp

When the Light Opera Work-

shop's production of the Broadway

musical, "Li'l Abner" opens at the

Civic Auditorium March 11 Boni-

facio Lopez (4213) will be seen

and heard in five or six of the

"Bonie" plays the role of "Rufe."

one of the prominent citizens of Al

Capp's imaginary town of Dog-

This will be Bonie's first appear-

ance on the stage. As he explains

it, "A girl saw me singing in a

church choir and thought I'd be

As it happens Bonie's brother,

The local presentation opened Feb. 25 in Gallup with a second

preview showing in Belen slated

Bonie is an electrical inspector

Sheldon H. Dike, of Dikewood

Corp., will receive the Institute of

Radio Engineers' Fellow Award at

a meeting of the Albuquerque-Los

Alamos Section of the IRE on

Four Hills Country Club, starting

at 6:30 with a social hour. Dinner

of the New Mexico Territory" fol-

lowing presentation of the Fellow

The meeting will be held at the

Dr. Dike will speak on "History

For reservations or further in-

formation contact K. D. Hardin

Sympathy

To Alsid LaMoria (4623) for the

To R. A. Keen (2543) for the

To Mary Lee Peckumn (3122-1)

death of his son, Ricky, on Feb. 17.

for the death of her father in

Muskogee, Okla., on Feb. 25.

death of his twin sons: Donald on

Feb. 21 and Daniel on Feb. 23.

IRE Fellow Award

March 14 Meeting

Tuesday, March 14.

will be served at 7:30.

(1431-1), ext. 32143.

who is an actor, appeared in the original Broadway production of

better as a comedian.

the same musical.

for March 4.

chorus scenes.



"Bonie" Lopez (4213) _Rufe of Dogpatch_

Congratulations

Born to:

and Mrs. D. R. Adolphson To Be Presented at (1121) a daughter, Cynthia Ann, on Feb. 8.

Mr. and Mrs. H. A. Mackay (1112) a daughter, Jeanne Mc-Lean, on Feb. 8.

Mr. and Mrs. A. H. Stark (1124) a son, Edward William, on Feb. 13.

Mr. and Mrs. M. B. Moore (4543) a son, Eric Kenneth, on Feb. 9. Mr. and Mrs. Clifford L. Shaw

(4251-1) a daughter, Kimberly Ann, on Feb. 18. Mr. and Mrs. Eugene Cummings

(4231-1) a son, Bruce Nolan, on Feb 19.

Mr. and Mrs. E. P. Quigley (2564) a son, Daniel C., on Feb. 7. Mr. and Mrs. Don Leisey (8114-2) a son, Philip Jay, on Jan. 31.

Mr. and Mrs. Dale Roske (8142-2) a son, Joseph, on Feb. 12.

Mr. and Mrs. E. A. Hunter, a daughter, Dawn Ione, on Feb. 15. Sondra is on leave from Section 8212-3.

Mr. and Mrs. Gordon E. Boettcher (1431) a son, Mark Edward, on Feb. 19.

Mr. and Mrs. Wilfred Sanchez (4221-4) a daughter, Yvonne, on

MARCH 3, 1961 J. F. Sladky Candidate for School Board

Joseph F. Sladky, supervisor of Section 8144-1, Project Engineer-



Mr. Sladky

ing Division, has filed as an incumbent candidate for election to the Livermore Elementary School Board. Four positions are open on the Board.

"Joe" served an unexpired term on the School Board when he was appointed to fill a vacancy last year. He also served one year on the Livermore Citizens Study Group for the high school.

Since he joined Livermore Laboratory in 1956, Joe has worked as an engineer in the Materials Division, Test Design, and is now in project group work. Before joining Sandia, Joe worked five years for the Boyd Engineering Company in Albuquerque.

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

Joe received his BS degree in mechanical engineering from the University of Minnesota. He is married and has two children.

Family Event

When Bess Streater (3000) and her sister, Delores Ann (7184), traveled to Wewoka, Okla., last month the trip was even more eventful than they expected.

The occasion was to help their parents, Mr. and Mrs. A. F. Streater, observe their golden wedding anniversary. On hand were 11 children, 18 of 22 grandchildren, and four of six greatgrandchildren.

The Albuquerque Streaters spent an unexpected extra day in Oklahoma-they were snowbound.



Rosario Marquez (2644-1)

Take a Memo, Please GOOD HOUSEKEEPING goes a long way towards removing accident hazards. A clean, orderly job location is usually a safe place to work. When you removed a hazard you go a long way in preventing an accident.



EASTER SEAL POSTER will be a familiar sight during March as the New Mexico Society for Crippled Children and Adults conducts its annual campaign. Harold V. Catt (6021) is president of local group which seeks \$80,300 through Easter Seal campaign and doorto-door solicitation Mar. 19. Sandians gave \$5400 to 1960-61 drive.

Sandians Help Boy Scout Troop Earn **Coveted 50th Anniversary Award**

Boy Scout Troop 166 became the only troop in the Sandia District last week to receive President Eisenhower's 50th anniversary award. Fred Schneider (4352), neighborhood scout commissioner. presented the banner to the troop. Twenty-six scouts also received individual ribbons.

During the same Court of Honor Personal Fitness Merit Badges were awarded 29 scouts by D. D. Dollahon (4112), chairman of the advancement committee. President Eisenhower's Personal Fitness Program for 1960 was discussed by Armond Seidler of the Citizens Committee on Personal Fitness.

Among advancement awards, 11 were for star scouts.

At the Court of Honor merit badges were awarded 15 scouts by Verne Christy (3211), counselor.

During the past year the troop has averaged at least one week-end camp out a month, despite snow or desert-like temperatures. Last weekend 67 scouts and 13 parents made a trip to Carlsbad Caverns. Scoutmaster is Dick Brian (2622).

Scholarship Awarded

The Westinghouse Achievement Scholarship has been awarded David Miller, who worked at Sandia for a year and a half in Department 7410 and who is the son of G. H. Miller

The scholarship, worth \$500, presented him "on the basis of high achievement in his academic work and demonstrated qualities of leadership." David attended California Institute of Technology his first two years and now is attending the University of New Mexico where his major is physics.



STAR SCOUT awards were presented 11 by Advancement Chairman D. D. Dollahan (4112) at Troop 166 Court of Honor.

Returned from Service

Raymond Pena has returned to Sandia after two years in mili-



tary service.

Hired in June 1956, Ray worked in the Drafting organization before being called into the Army. After basic training in Fort Chaffee, Ark., he was stationed at Fort Sill. Okla. He was reinstated at Sandia as a draftsman in Design Definition Section A IV, 4411-4, last month.

Sandia Corporation

ALBUQUERQUE, N. MEX.

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Telephone Sandia Base ALpine 6-4411 Ext. 25253, 26135



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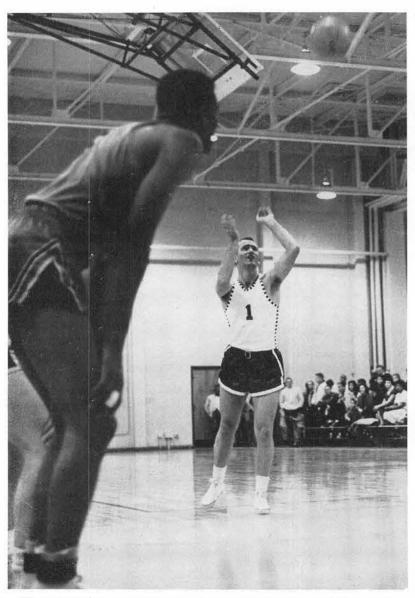






LIKE FATHER, LIKE SONS. Lawrence Bowen and his two sons, Kent and Larry, are all in the same trade. Lawrence, center, has been a machinist for

21 years; Larry, right, graduated from Sandia's Apprenticeship Program in February, and Kent began his apprenticeship in August. All are in 4254.



Star tournament recently. Sandia Lab took third place after defeating Manzano Base but losing two to the Sandia Base team.

Welcome Newcomers

Albuuerque	
Lillian M. Bourgeois	7536
June G. Boyd	3126
Thomas P. Conlon	2561
Milton D. Dow	3464
Robert F. Gardner	3466
*Carol A. Hogan	
Marjorie E. Rabel	3126
Robert H. Roth	
Sonja C. Sager	
*Naomi J. Skaggs	3126
Arizona	
Robert E. Gaeddert, Tempe	3425
California	
Alan D. Swain III, Woodland Hills	1443
Colorado	
Thomas O. Corey, Denver	4411
District of Columbia	
Hugo F. Bezdek, Washington	5151
Illinois	0,0,
William C. Peila, Chicago	2521
John T. Schamaun, Champaign	
Lawrence C. Bennett, Chicago	
그는 그렇게 되었다면 중 하는 이렇게 나면서 아르는 말이면 나면서 그런 나이에 하는 그리는 그리는 사람이 적어났다.	/312
Indiana	
Frederick R. Gustke, Crown Point	7312
James W. Ninmer, Valparaiso	2452
Robert P. O'Shea, South Bend	1121
lowa	
Charles E. Cockelreas, Iowa City	3/23
	0423
Kansas	0440
Bill R. Emrick, Manhattan	
Ronald E. Day, Kansas City	7524
Dean E. Gladow, Alma	7224
Missouri	
Loren W. Schieber, Kansas City	5113
Jacob A. Krommenhock, Kansas City	2411

Nebraska		
Paul D. Schaudt, Lincoln	7232	
Paul D. Schaudt, Lincoln	7253	
New Jersey		
Paul R. Miller, Union	3465	
Pennsylvania	0400	
Robert P. Gall, Pittsburgh	2/21	
Returned from Leave	3431	
	4411	
Raymond Pena Sarah F. Thomsen, Livermore, Calif.	0222 1	
New Hires at Livermore Jan. 28-Feb.	0232-1	
Duth D. Deschatt Descille Calif	0010 5	
Ruth P. Brockett, Danville, Calif.	8212-5	
Jack A. Casey, Jr.,		
Klamath Falls, Ore. Richard I. Cline, Seattle, Wash.	8122-3	
Richard I. Cline, Seattle, Wash.	8124	
Gaillord M. Cormany, San Jose, Calif.	2227775	
San Jose, Calit	8114-1	
Leonard F. Dighton,	000.00	
Pullman, Wash	8144-1	
Leonard F. Dighton, Pullman, Wash. Charles R. Evens, Granada Hills, Calif.		
Granada Hills, Calif	8232-5	
Louis J. Hamilton, Berkeley, Calif.	8114-2	
Paul G. Heppner, Reseda, Calif.	8116-3	
Tadao Hisaoko, Union City, Calif.	8114-3	
Robert A. Holmstrom.	(6.0. TA1669)	
Berkeley Calif.	8114-3	
Robert A. Holmstrom, Berkeley, Calif. *Gale L. Hudson, Oakland, Calif.	8114-1	
Seymour W. Mayer, Jr.,		
Reseda, Calif.	8121-2	
Patrick I O'Shaa Livermore	8232-4	
Carol A Portolese Tracy Calif	01411	
*William I Databased	9101-1	
Patrick J. O'Shea, Livermore Carol A. Portolese, Tracy, Calif. *William I. Pritchard, Stockton, Calif.	01141	
Deserted U. Courses	8114-1	
Donald H. Swanson, Klamath Falls, Ore.	01000	
Klamath Falls, Ore.	8122-2	
Dennis F. Varley,		
Klamath Falls, Ore.	8121-2	
Dennis F. Varley, Klamath Falls, Ore. Alec R. Willis, Berkeley, Calif * Denotes rehired	8114-3	



FRED WETZEL scores two points for the Sandia Lab All-Stars during a game Sandia Base in the recent tourney. Phil Loper in middle.

Larry Bowen Is Proud of His Sons; They're Machinists at Sandia Too

Lawrence J. Bowen (4254-1) believes he's the only machinist in New Mexico who has two sons in the trade.

"I know that out of 3000 members in the State Council of Machinists I'm the only one," he said.

His sons, Larry E. and Kent J., both are assigned to Project Shops Division 4254, and both are enrolled in Sandia's Apprenticeship Program.

Larry E., who started working at Sandia in September 1956, graduated from the Apprenticeship Program at the end of February and became a journeyman. When the Program was started in March 1958, Larry was given credit for one year's on-the-job

Appoint Two Sandians To City Gov't Boards

Two Sandia men, D. J. Jenkins and James G. Marsh, have been named to serve on city boards.

Mr. Jenkins, manager of Personnel Research, Training and Education Department 3130, was appointed to complete the term of C. H. DeSelm (8200) on the City Personnel Board. This group is the final authority for all city personnel actions. He will serve until June 1962.

Mr. Marsh, supervisor of Classification Division 3422, was appointed by the City Commission to the seven-man City Parks and Recreation Board. His term is four years. This board has the power to recommend policies to the Parks and Recreation Department for the improvement of city recreation facilities. Jack Hueter (2563) is already a member of the board.

Lab All-Stars Take Third Spot in Recent Basketball Tourney

Sandia Laboratory Basketball All-Stars emerged third in the recent tournament between Sandia Laboratory, Sandia Base, Kirtland Air Force Base and Manzano Base.

Sandia Base, winners of the tournament, handed the Lab All-Stars both defeats in the double elimination tourney. Scores were 92-50 and 71-47. The Lab Cagers won over Manzano Base 62-59.

Lou Kracko (2752) and Clyde Hughes (4412) were coaches of the training.

The Program takes four years to complete, and covers 8000 hours of on-the-job training. Most of the trainee's time is spent in the machine shops, with some instruction given in sheet metal, welding and heat treat shops.

Kent joined the program last August.

Larry J., who has been a journeyman for 21 years, has an enthusiastic interest in the Sandia Apprenticeship Program. He has served on the Joint Apprenticeship Council since it was established in

"The committee's main job is to review monthly reports and grades of the apprentices to make sure that everyone is progressing as expected," he said. "And, on occasion, we advise and help the trainees with their problems."

The elder Bowen is president of Local 1689, International Association of Machinists, a position which he has held for three years. He has been at Sandia almost sev-

Team of Sandians Compete in District **Basketball Tourney**

A team of predominately Sandia employees, playing under the colors of Bel-Air Drug, advanced to the quarter finals of the recent District 3 AAU basketball tournament before being eliminated.

Larry Bowen (4254) was manager of the team while players included Tom Tormey (4254), Larry Tichenor (4225), Frank Comiskey (6021), John Brane (4413), Jim Tichenor (6021) and Art McCarthy (7223).

The team finished the season with 12 wins and five losses.

44-45-46-6000 Teams Basketball Champs

Sandia Laboratory Basketball Association champion for the 1960-61 season is the 4400, 4500, 4600 and 6000 team.

Members of the team are Gil Baca, Jim Sanchez, Jim Tichenor, Phil Loeper, John Brane, Dave McGillivray, Julian Lovato, Jim Hudson, Jim Freese, Lou Sanders and Tom Sheldon.

All of the men will receive in-

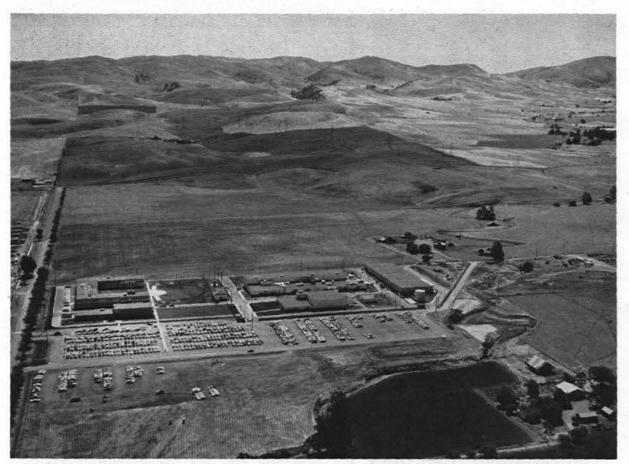
dividual trophies.



SANDIA LAB ALL-STAR basketball team took time out from tournament play last week for this team portrait. In first row, from left, are Frank Comiskey (4153), Jim Sanchez (4573), Leo Chavez (4221), John Smatana (1111), Ron Flury (7145)

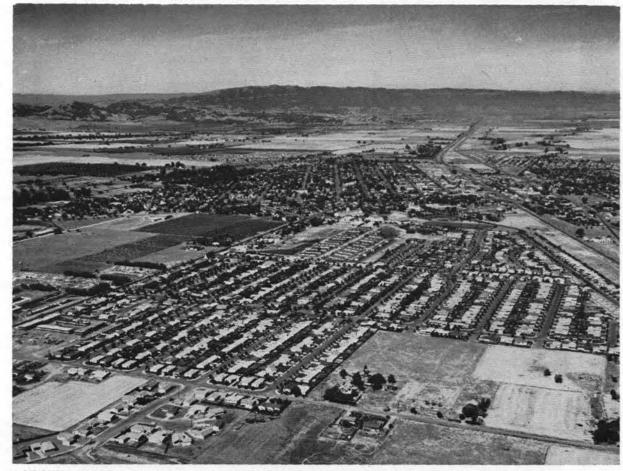
and John Brane (4411). In the second row are Bob Hedges (2716), Lou Sanders (5150), Julio Lovato (4411), Al Brazda (7243), Fred Wetzel (7532), Phil Loeper (4412) and coach Len Krako (2752). Not shown is team member Jim Hudson (5150)...

Students Tour Livermore Lab



more Laboratory built on land on which cattle

MODERN PLANT of Sandia Corporation's Liver- nent buildings include more than 207,000 sq. ft. of floor space and are located on a 75 acre site. grazed and crops grew five years ago. The perma- Now plant and equipment are valued at \$11,000,000.



GROWTH OF LIVERMORE is evident in this photo showing new housing developments in the north-

eastern end of the city. Livermore's population has increased from 10,000 to 16,000 in the past five years.



EARLY HEADQUARTERS of Livermore Laboratory in quarters like this until October 1957 when the diation Laboratory. The laboratory staff worked The number of Sandians at Livermore now is 950.

was this barracks building at the Lawrence Ra- first of the permanent facilities was completed.

Livermore Lab Marks 5 Years of Progress March 8 On March 8. Livermore Laboration Laboratory to permanent facilities across the street.

Full Partner in Weapons Program . . .

tory will observe its fifth anniversary as a partner on the Atomic Energy Commission's nuclear weapons team.

In its short span of years the Laboratory has grown from a humble beginning in a wooden barracks building on the grounds of the University of California's Radiation Laboratory to a modern, permanent installation of its own, valued at more than \$11,000,000. From an "advance guard" of 13 employees sent from Albuquerque, the Laboratory's personnel has increased to 950, making it one of the major employers in the Livermore area. Of these employees more than 85 per cent make their home in the Livermore area and they spend a good part of the Laboratory's \$7,000,000 annual payroll

in the local community. Livermore Laboratory's official history began on March 8, 1956. when the Atomic Energy Commission designated Sandia Corporation as the prime contractor to handle expanded ordnance engineering functions in partnership with the University of California's ing and overflowed into Bldg, 142. in those days, I had difficulty in Radiation Laboratory (now the University of California Ernest O. Lawrence Radiation Laboratory).

One Organization

When it was originally established, the Livermore installation consisted of only one organization. Engineering Department 1250, headed by W. J. Howard, Mr. Howard became Director of Systems Development in November 1956, and in 1957 R. E. Poole was named Vice President, Livermore Laboratory.

Although the number and types of weapons developed at Livermore over the years remain classified, one program has been made public-the warhead for the Navy's Polaris missile, which was developed in partnership with the Lawrence Radiation Laboratory.

High Praise

Rear Admiral William F. Rayburn, in speaking of the Polaris recently, praised the work of Livermore Laboratory and LRL employees for their work on the warhead. "My compliments to the Lawrence Radiation Laboratory and Sandia Corporation's Livermore Laboratory on the very smooth and efficient work toward the development of the Polaris warhead," he said. "I particularly want all those working on the project to know my deep appreciation of this splendid cooperation with the Navy.'

As weapons work expanded at Livermore, construction began on a complete new plant. The first of the six present buildings was com-

ployees began their move from temporary quarters at the Radia-"Much of my time then was

Growing Pains

Along with Livermore Laboratory, the city of Livermore experienced growing pains. From a town of less than 10,000 people in 1956, the city swelled to 16,000 and is still growing. Home building became the city's busiest activity, and vineyards and grazing land gave way to the tract developers. With new homes came new businesses and the Livermore valley's economy swung upward.

One of the best qualified Sandians to talk about "the early days" of the Laboratory is Jim McMinn, supervisor of Product Control Division 8234, who is one of the 10 remaining employees of the original 13. "When I came out here in Sep-

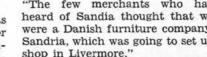
tember 1955," Jim said, "our entire office consisted of one room in Bldg. 151 at the Radiation Lab. As we grew larger we moved into Bldg. 144 where we were assigned Transfer Arrangements

spent in making arrangements for Sandians transferring from Albuquerque. We had one rented station wagon available to us and we used it at least once a day to drive to the San Francisco airport and meet new arrivals. I made the trip so often I think I could drive the freeways blindfolded," Jim re-

"One new arrival really threw me," Jim said. When Gayle Cain (8122-3) and his family drove in from Albuquerque, Jim went over to help them get settled in the guest house Sandia was then rent-

"There they were on the doorstep, luggage piled all around them: Gayle, his wife and two children, and the family pet-a great big live chicken."

Another of Jim's duties in the early days was to administer the "agent's account," a fund established to buy many of the items quarters in part of the two floors needed in setting up the Livermore of the building. It wasn't long be- facility. "Because not many peofore we filled up the entire build- ple in town had heard of Sandia We also maintained a model shop cashing checks even though I was agent for the company," Jim said.



Community Recognition

come recognized in the communiin civic affairs, serving on the Valley Memorial Hospital board of



"The few merchants who had directors, Livermore Recreation heard of Sandia thought that we District, Chamber of Commerce. were a Danish furniture company. Livermore Elementary School Dis-Sandria, which was going to set up trict, and many others. Employees have contributed generously to local fund drives, giving more than Since those days Sandia has be- \$64,800 to the Valley Memorial Hospital campaign and \$26,850 to ty. Sandians have become active United Fund drives over the years. It's an impressive record for a

five-year-old.



AMONG THE LATEST to be hired at Livermore Laboratory are Jack Casey, electronics technician assigned to 8122-3, left, and Leonard Dighton, electrical engineer in 8144-1. Both hired in on the same day. They were the 947th and 948th on the roll.



FIRST EMPLOYEE to be hired at Livermore and still on the rolls is Marguerite Mihoevich, who will observe her fifth year with Sandia Corporation in April. Marguerite is currently secretary to J. L. Rowe, manager of Plant Services Dept.

Great Decisions Groups to Discuss UN-Africa Problem

"UN in Explosive Africa" is this weekend's "Great Decisions-1961" TV discussion topic. Guests will be Arch Napier, writer; Richard Milner, architect; Max Linn (3420) and Mrs. Glen Ream, American Association of University Women.

Next weekend the topic will be "The Americas in Jeopardy." Guests will be Aris B. Chavez, Rio Grande high school principal; Mrs. Iris Legg, AAUW; Father Richard Butler, Aquinas Newman Center, and Louis Lagrave, stockbrok-

The programs are telecast on Fridays at 8 p.m. over KNME-TV (Ch. 5); Saturday at 11:30 a.m. over KGGM-TV (Ch. 13), and Sundays at noon over KOB-TV (Ch. 4).

The series is moderated by R. C. Colgan (3431-1)



A. B. Metzger Named Safety Consultant For Bell Laboratories

shown to an outside group.

facilities used at Sandia to simu-

late and exceed conditions which

weapons would experience in field

The two-hour tour, which fol-

lowed Mr. Howard's talk, included

demonstrations of the Laboratory's

rotary accelerator, 15,000 pound

electrodynamic shaker, climatic

chambers, the data center, and da-

A. B. Metzger, manager of Safety Engineering Department 3210, has received a temporary assignment as safety engineering consultant for the Bell Telephone Laboratories.

Mr. Metzger will report to BTL headquarters at Murray Hill, N.J., on March 10. He will be visiting other BTL locations in a consulting capacity during coming weeks. The assignment is for an indefinite period of time.

C. E. Land Will Present Tech Paper at IRE Convention in N. Y.

A technical paper entitled "A Ferrite Piezomagnetic Stress Transducer" will be presented by Cecil E. Land (7233-1) at the Institute of Radio Engineers International Convention March 23 in New York City.

The paper will subsequently be published in the 1961 IRE Inter- fashion show-punch party is Mrs. national Convention Record.

During Edison Day Activities Extreme environmental condi- ta recording facilities. Also dem tions which might be encountered onstrated and explained were reby nuclear weapons systems were sistance wire and crystal accelero-

demonstrated Feb. 25 at Livermore meters. The physical principles in-Laboratory to a group of high volved in the operation of each of school science students. The tour these facilities were explained to was part of the first Edison Day the students by technical tour program to be held at the Labora- guides from Test Operations Divitory and marked the first time sion 8121 and Test Services Divimany of the facilities had been sion 8123.

Helping to relate the program to The program opened with the classroom work were Clyde Walkshowing of the movie, "The San- er, Dick Jacobson, Dave Hillyer. dia Story," and followed with a Tom Meagher, Gerald Hickey and welcoming address by W. J. How- Bill Maxwell (all of 8121), and ard, Director of Systems Develop- Don Skinrood, Jess Burns, Jim ment 8100. Mr. Howard outlined Shindelar, Kit Harrington and the challenge and opportunity Janet Lovell (all of 8123). Escorts awaiting science students in engi- for the student group were Bill neering and scientific professions. Jenkins and Dick Dickson (both He also briefed the group on the 8233-1).

New Hours for Credit Union

New hours for operation of the Sandia Laboratory Federal Credit Union were announced this week by the Board of Directors. Effective Monday, March 6, loan applications will be taken only in the mornings from 8 a.m. to 1 p.m.

The cashier, however, will be on duty from 8 a.m. to 5 p.m. for making deposits or withdrawals.

For emergencies, loans may be made in the afternoon by arranging an appointment. The Credit Union extension is 38155, the building number is T-609.

Sanado Club Plans 'Fairyland' Fashion Show at Club Mar. 7

"Fashions in Fairyland" is the theme for the Sanado Club's annual style show to be held Tuesday, March 7, at 2 p.m. at the Coronado Club.

Mrs. William Kraft is chairman for the decorations, which will depict characters in various fairytales. Mrs. G. C. Hollowwa and Mrs. James Karo will be in charge of the models, who will step out of a golden coach a la Cinderella General chairman for the

LIVERMORE TECHNICAL CALENDAR

for Jim when he was assigned to Livermore Base in 1955. pleted in October 1957, and em-ORIGINAL TRANSFEREES to Livermore Labora- In front (1 to r) are Benjamin F. Fisher, Jr., Robert

tory are shown in this early picture. Of the 13 L. Siglock, Vernon M. Field, Wayne A. Grimshaw, shown, 10 remain. Pictured against the wall (I to r) Orval W. Wallen, Marry "Aggie" Van Brocklin and are C. E. Barncord, Charles A. Gump, Clifford O. Nora Belle Byrd. No longer with the corporation Erickson, S. Gayle Cain, Charles Winter, Frank J. are Charles Gump, Frank Thomas and Nora Byrd. Thomas, James McMinn and William B. Marsh. Annual Livermore payroll now totals \$7,000,000.

REMINISCING about the early days at Livermore Laboratory are

(1 to r) Aggie Van Brocklin (8241-1), Jim McMinn (8234) and

Tillie Wheeler (8224-1). Aggie and Tillie were the first to work

Mar. 7 American Institute of Electrical Engineers
General Applications Division
Crown Zellerbach Building
1 Bush St., Room 4
San Francisco
Meeting: 7:30 p.m.
Speaker: D. N. Aboudara,
Transportation Sales Specialist portation Sales Specialist General Electric Co. tion of the Motorize Institute of Radio Engineers

Professional Groups
Antennas & Propagation
Physics Lecture Hall
Room 101
Stanford University
Meeting: 8 p.m.
Dinner: 6:30 p.m., The Red Shack,
4085 El Camino Way, Palo Alto
Speaker: Dr. Charles Cook, Manager,
Molecular Physics Section, Stanford Unive
Topic: "Collision Cross Sections
and Collision Frequency"
Reservations: Odette Moore, Reservations: Odette Moore, DAvenport 6-6200, Ext. 2414

Mar. 8

American Society of Mechanical Engineers

Sacramento Subsection Chuck Wagon Marcone and Fulton Ave. Sacramento Fellowship: 6 p.m. Dinner: 7 p.m. (\$3) Dinner: 7 p.m. (\$3)
Meeting: 8 p.m.
Speaker: Harvey O. Banks, Vice President,
eeds, Hill and Jewett—Consulting Engineers,
San Francisco.
Formerly Director Water Resources
Department, State of California.
Topic: "The Battle Over Water Still Rages"
Reservations: Reservations: Ralph L. Sabiers, Jr., IVanhoe 7-9289 Colin F. Robertson, IVanhoe 3-1909

Mar. 9 California Society of Professional Engineers Diablo Chapter P. G. & E. Auditorium 1535 Bonanza St. Walnut Creek, California Meeting: 8 p.m.
Speaker: Walter Maurer, District Manager,
Electric Cranes & Hoists, Harnischfegar Corp.
Topic: "Overhead Handling in Today's
Industrial Facility"

Mar. 9
American Society of Mechanical Engineers
Santa Clara Valley Subscription
Old Plantation Inn American Society for Metals Golden Gate Chapter Pland's Broadway & MarArthur Blvd. Old Plantation Inn
Corner El Camino Real and San Antonio Road
Los Altos
Assembly: 6:30 p.m.
Dinner: 7 p.m.
Meeting: 8 p.m.
Speaker: Dr. Robert Mozley,
Associate Professor, Stanford University,
High Energy Physics Laboratory
Topic: "Project 'M'—Stanford Two Mile
Linear Accelerator"
Reservations: Doug Hines, Cypress 7-3000, Ext. 256

Mar. 9
Society of Non-Destructive Testing, Inc.
Golden Gate Section
Whitcomb Hotel San Francisco
Fellowship: 6:30 p.m.
Dinner: 7 p.m.
Meeting: 8:30 p.m.
Speakers Panel: Anthony Schwarber, Lawrence Radiation Laboratory; Al Gobus, Phillips Electronic-Radiography; Frank George, United Airlines, Nagnetic Particles and Penetrants, Larry Haller, Magnaflux Corp., Eddy Currents. Topic: "Question and Answer Presentation-All Types of Non-Destructive Testing" OVerland 1-4540 or SEabright 1-0264

> Mar. 9
> Society of Plastic Engineers, Inc.
> Golden Gate Section
> International Inn
> 326 S. Airport
> Belmont (So. San Francisco)
> Happy Hour: 6 p.m.
> Dinner: 7 p.m.
> Meeting: 8 p.m.
> Speaker: R. L. Gardner, Rome & Haas
> Topic: "Implex, Its Uses and Markets" "Implex, Its Uses and Markets Mar. 13
> American Society for Quality Control
> Northern California Section
> Moore's Prime Rib Kart
> 210 El Camino Real
> Palmont

Belmont Social Hour: 6 p.m.

Meeting: 8 p.m. Speaker: Captain Lubelsky

Topic: "Quality Assurance in Complex System

Mar. 9

Broadway & MarArthur Bivo.
Oakland
Fellowship: 6 p.m.
Dinner: 6:30 p.m.
Meeting: 8 p.m.
Speaker: Dr. Carl Samans,
Director of Materials Division,
Research and Development Dept.,
The American Oil Co., Whiting, India
pic: "Metals Headaches in Making Gaso Mar. 14 nia Society of Professional Engineer Golden Gate Chapter
Montclair Restaurant Banquet Room
550 Green St.
San Francisco
Social Hour: 6 p.m.
Dinner: 7 p.m. (\$3)
Meeting: 8 p.m.
Speaker: To Be Announced
Topic: "Economics at Home and Abroad"
Reservations: Carl Kirker, EXbrook 7-6625 Golden Gate Chapter * * * Mar. 14 American Institute of Industrial Engineers
Peninsula Chapter
The Red Shack
40085 El Camino Way
Palo Alto
Social Hour: 6:30 p.m.
Dinner: 7 p.m.
Meeting: 8 p.m.
Speaker: David G. Parks
Topic: "Communications and the Topic: "Communications and the Industrial Engineer" Mar. 14
American Institute of Electrical Engineers

Engineers' Club of San Francisco
206 Sansome St.
San Francisco
Social Hour: 5:30 p.m. Social Hour: 5:30 p.m.
Dinner: 6:30 p.m. (\$3.75)
Meeting: 8 p.m.
Speaker: John F. Bonner,
Vice President in Charge of Engineering,
Pacific Gas and Electric Co.
Topic: "Mucho Megawatts"
Reservations: Vic Kaste, DOuglas 2-3740 Mar. 14 Institute of Radio Engineers Professional Groups

Radio Frequency Interference
The Gold Platter
1000 El Camino Real
San Carlos
Happy Hour: 6 p.m.
Dinner: 7 p.m.
Meeting: 8 p.m.
Speakers: Fred Rowe,
Northern California Electrical Bureau;
Richard Lake, Pacific Gas & Electric Co.
Topic: "Interference in Power Systems"
ervations: Peter Spencer, DAvenport 1-2

Mar. 15 American Institute of Electrical Engineers Santa Clara Valley Subsection The Old Plantation Restauran San Antonio Rd. at El Camino Real
Los Altos
Social Hour: 6 p.m.
Dinner: 7 p.m. (\$2.50)
Meeting: 8 p.m.
Speaker: Charles Wood,
Director of Research and Development,
Solid State Products Dept.,
Kearfoll Division of General Precision, Inc.
Topic: "The Hall — Effect and
Magnetoresistive Devices"
Reservations:
Palo Alto—Delores Tryforos, DAvenport 6-7000
Sunnyvale—Odell Blair, REgent 6-3411
Ext. 641
San Jose—Wally Wedekind, Cherry 3-3600 San Antonio Rd. at El Camino Real

Mar. 16

American Society of Lubrication Engineers Northern California Section Spenger's Fish Grotto Foot of University Ave. Berkeley Berkeley
Social Hour: 6 p.m.
Dinner: 7 p.m.
Meeting: 8 p.m.
Speaker: Dr. Francis J. Clauss,
Lockheed Missile and Space Division, Palo Alto
Topic: "Lubrication of Space Vehicles"

Mar. 16 American Society of Mechanical Engineers San Francisco Section
Applied Mechanics Division Engineering Building Room 209 University of California Berkeley Berkeley
Meeting: 8 p.m.
Speaker: Aubrey B. Miller,
Varna Corp., Consulting Engineers
Topic: "Vibration Problems in Propulsio
Systems and Nuclear Power Apparatus"

Wind Measurements 55 Miles High Are Planned by Sandia

A study to measure wind direction and velocity by launching a small balloon with a Deacon Arrow rocket to an altitude of more, than 55 miles is being conducted at the Naval Missile Facility, Point Arguello, Calif., by Sandia Corporation.

Project engineer is Charles T. Force (7131-2) with H. W. Pumphrey (7133) as mechanical designer and Lyle K. Porter (7231), field test engineer.

The first launch is slated for some time after March 16, depending upon weather conditions. Two later launchings are scheduled at a rate of one per month.

The 17 ft. Deacon Arrow solid propellant two-stage rocket is essentially the same as that used for high altitude studies utilizing aluminum chaff.

The balloon, 39 inches in diameter, which will be contained in the nose cone, will be separated from the second stage of the rocket at an altitude of more than 300,000 ft. The balloon is made of Mylar, an extremely tough plastic material, the same as is being used for the Echo satellite balloon.

For Sandia's purpose the balloon will be given an internal pressure equal to ambient pressure at 120,000 ft. One characteristic of the material is that it stays the same size rather than expanding or contracting under changing pressures.

Inside the balloon is a reflector (aluminized coating on Mylar) that can be detected by radar. At Point Arguello FPS-16 radar will determine wind direction and velocity by tracking the balloon.



MYLAR BALLOON with aluminized reflector inside which can be detected by radar is held by Charles T. Force (7131-2) at Tonopah Test Range. Balloon is of type to be used at Point Arguello, Calif., for measuring high altitude wind direction and velocity.

Winners Announced for Coronado Club's Annual Bowling Tournament

All-events winner in the Coronado Club's 9th annual handicap bowling tournament was Dick Siebenforcher (4152), whose pin total was 1903. Coming in second was Ray LeTourneau (7182) with 1894.

In the singles tournament, D. R. Kvarnstrom (7184) was first with a 660 series, and Don Carnicom (1432) rolled 658 for second

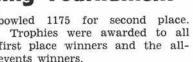
Doubles winners were Frank Abbott and Frank Ewing (both AEC) who bowled a 1272 series. In second place were Leroy Keck (4411) and Ken Pilkington (4411) with

Team winners were the Sandboggers whose pins totaled 3000. In second place were the Hopis with 2969.

Women's all-events winner was Kendra Longfellow (3126) who had a 560 scratch series and 474 in doubles. Kendra also won the singles trophy for her 635 handicap series. Second place was taken by Alma Van de Velde (3452) with a 615 series.

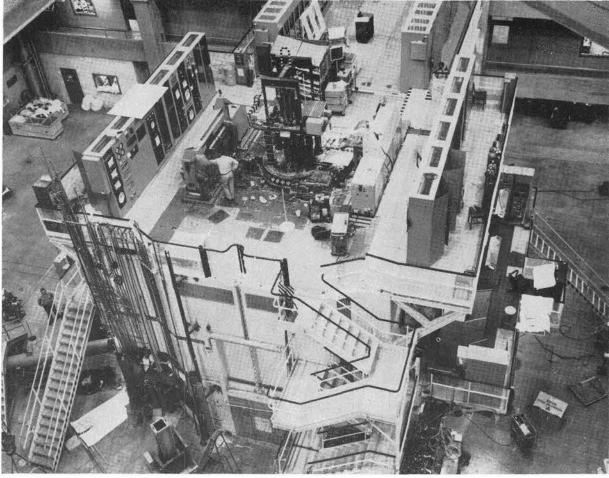
Doubles winners were Marian Willigan and Cleo Goris (both AEC) who had an 1186 series. Marie Calvery (wife of Herman Calvery, 2722) and Alice Woodley (wife of Joe Woodley, 2715)

bowled 1175 for second place. first place winners and the allevents winners.





DON TODD (5431), left, watches a TV monitor receiving transmissions from an underwater camera undergoing test in the reactor core area. The reactor is shut down while fuel is being changed. High level gamma radiation in the core area prevents use of ordinary equipment. Special camera was developed for SERF use.



MATERIALS TESTING REACTOR (MTR) at the National Reactor Testing Station near Idaho Falls, Idaho, has been used since February 1957 for a Sandia Corporation radiation effects study. The

heterogeneous, light water-cooled and moderated reactor, some three stories tall, uses highly enriched uranium as fuel, operates at a power level of 40 megawatts and provides fluxes up to 2x1014.

Sandia Conducting Radiation Effects Study at Idaho Falls

Since February 1957, Sandia Corporation has been conducting a radiation effects study using the facilities of the National Reactor Testing Station located near Idaho Falls, Idaho.

In almost four years of testing of materials and components some 225 experiments have been conducted on about 2000 samples.

"In the beginning of the program," James A. Sisler says, "we were interested in radiation effects on specific components. The program since has developed into broader areas including research."

Jim is project engineer for the program for Radiation Effects Studies and Testing Division 5432. Most of Sandia's design and development organizations have been involved in the program with specific requests for radiation effects data.

As a prelude to the work planned for SERF (Sandia Engineering Reactor Facility) now under construction in Area III, radiation effects on basic materials have been studied not only to find more radiation-resistant materials, but understand basic damage mechanisms.

Effects on Semiconductors

Research aimed at understanding radiation effects on semiconductor devices has been performed with the results leading to more radiation tolerance. Another area of interest has been the development of better dosimeters for measuring radiation environments.

In the experiments vacuum tubes, adhesives, diodes, transistors, organic dielectric materials, semiconductors, optical glass, adhesives, plastics and potting materials have been subjected to radiation.

Most of the radiation exposures were made using the Idaho Falls MTR (Materials Testing Reactor). a large three-story facility which uses highly enriched uranium as fuel. The reactor operates at a power level of 40 megawatts and provides neutron fluxes up to 2 x 10¹⁴. It is a heterogeneous, light water-cooled and moderated type

Numerous holes through the reactor shielding extending into the core area provide for insertions of the materials to be irradiated. Sandia has designed and built several accessory items including a special plug facility, shielding casks, instrumentation and tools for use with the MTR.

Both static and dynamic tests have been performed. Components were fitted into one of the special plugs, inserted into the reactor and performance sequences monitored while the unit was undergoing bombardment.

Develop TV Cameras

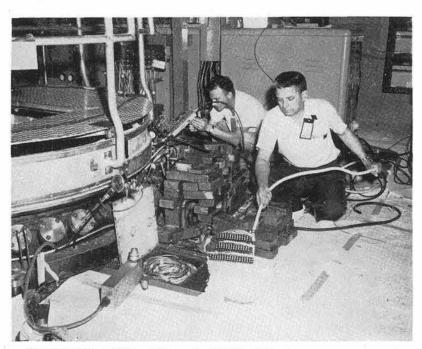
"Our work has led to the development of devices that will operate in a radiation environment," Jim says. "For instance, a television camera for use in the hot areas of SERF was developed."

After a sample receives radiation exposure, it is usually 'cooled" in lead casks at the reactor site and then shipped to Sandia for analysis. Sandia personnel are present during the radiation periods to operate instrumentation and supervise the operation. Phillips Petroleum Company, contractor to the AEC, operates the MTR.

"From these studies," Jim says, "Sandia has gained working experience with reactors, explored some of the areas of interest and has gained an insight for planning other programs for SERF and the pulsed reactor.

Both SERF and SPRF (Sandia Pulsed Reactor Facility) are under construction in Area III and are expected to go into operation in

Other 5430 personnel who have participated in the radiation effects program are Pat Proulx, Robert Healy, Ted Stetz and Don



JIM SISLER (5432), right, and a Phillips Petroleum employee work on circuit wiring for a dynamic radiation effects test of electrical devices in the Idaho Falls Materials Test Reactor. The devices, not shown, will be lowered in a special container into the reactor high neutron flux area for irradiation. Instrumentation will record performance while the devices are undergoing the bombardment.



sity of Wichita Foundation for Industrial Research. His other experience includes 15 months with Boeing Aircraft in Wichita where he worked on modification of the

1943-46 and was recalled during the Korean conflict for duty at Aberdeen Proving Ground.

degrees in mechanical engineering from Kansas State University where he was a member of Pi Tau Sigma, mechanical engineering honorary, and Sigma Tau, engineering honorary. He is a registered engineer in Kansas and a member of the American Society of Mechanical Engineers.

W. J. Whitfield (2564) presented a technical paper on "Aerosol Dust Count Results" at an American Society for Testing Materials F1-X-A subcommittee meeting in Washington, D. C., recently.

JOSEPH T. BLACK, JR., to supervisor of Section 7182-3, Structural Analysis Division.



Joe has been working in the Systems Development organization since he came to Sandia nearly four years ago.

Immediately prior he was chief of the

plans review and modification section of the Corps of Engineers Albuquerque district office. He was employed there five years.

Joe received his BS degree in civil engineering from the University of New Mexico in 1949 and his MS from the same school in

He is a member of Phi Kappa Phi, scholastic honorary, is a registered engineer in New Mexico, and is on the board of directors for the New Mexico Society of Professional Engineers.

During World War II he served from 1941-45 in the Navy.

Report from Cliff Bell

Clifford Bell (4573) sends his greetings and best wishes to his friends at Sandia Corporation. Clifford has been absent from work due to illness for some months and reports that consideration shown by Sandia Corporation, the Metal Trades Council and all his friends has meant much to him and his family.

Tech Papers Sought For N. Mex. Academy of Science Meeting Apr. 8

Technical papers are being sought for presentation during the New Mexico Academy of Science semi-annual meeting Saturday, April 8, at the New Mexico Institute of Mining and Technology campus in Socorro.

the New Mexico State Science

sented by Sandia employees.

sible interest, and should require point out that authors should bear in mind that while the audience will have a scientific background and interest, it may not be trained in fields of specialization.

submitting an application with title and abstract of not more than 250 words to Dr. E. C. Coolidge, Department of Chemistry, NMIM&T, Socorro.

dia contact Irving Auerbach (5150), ext. 32366.

Shriners Visit Sandia 'Sphere of Science'

Members of the Shrine Chanters Association of North America toured Sandia Laboratory facilities last Saturday.

E. C. Riggin (2323) is national president of the Shrine Chanters. Public Relations Division 3431

coordinated arrangements for the

MARCH 3, 1961

Howard B. Austin 7222



LAB NEWS

Sandia Service Awards

15 Years

C. Hilton DeSelm 8200 Mar. 4, 1946



PAGE SEVEN

Allen E. Hall 4221 Mar. 4, 1946



Ben H. Bright 2620



Fred H. Schneider 4332



Phillip R. Owens 4111 Mar. 15, 1946

10 Years

Mar. 4-17

Mar. 4-17
James D. Anderson 4512, Luther Z. Beatty 3242, Gino Carli 2452, Harold F. Gustafson 2532, Thomas O. Harrell 2644, R. R. Middlesworth 7125, Walter T. Parker 4621, John Paul Pupelis 4412, David A. Watt 4233, Samuel Allen 2713, Claude Baca 4511, Matt Joe Bustos 4624.

4112, F. E. Mitchell, Sr. 4131, Epifanio Padilla 4512, Manuel Rico 4211, Richard A. Miller 2722, Elias Benavidez 4513. Jerome H. Gibson 3154, Everett R. Gourley 3242, Richard D. Jones 5153, Joe R. Mahboub 3242, Gilberto Sandova 4252, Byron Lee Stew-art 2644, F. Archibeque 4512, Tomas A. Baca 4575, Willard D. Clark 2644, Donald L. Har-rison 3461.

Melvin N. Pliner 7122, D. C. Davis 4514, Ralph W. Gustin 4424, Ben Jojola, Jr. 2641, Gene Harold Romero 3242, Phillip H. Bircher 7512, Theodore B. Harris 4621, Thomas L. Mead 3242, Ruth 1. Schooley 2600, L. W. Gus-tafson 4335.

SHOPPING CENTER

CLASSIFIED

ADVERTISING

to week of publication unless

RULES

One ad per issue per person Must be submitted in writing

Use home telephone numbers

For Sandia Corporation and

No commercial ads, please

7. Include name and organization.

FOR SALE

3 BDR. Roberson home, carpeted, land-scaped, walled yard, 13/4 baths. Minor, AX 9-2267.

tone, powerglide, power steering, R&H, tinted glass, \$700. Bennett, AX 9-7400.

TWO COUCHES, plastic, removable back cushions, \$55 for both. Natoli, AM 8-5033 after 5:30.

COUNTRY HOME, 3 bdr. modern home on one acre, also outbuildings. Located 20 miles from Albuquerque on Highway 47 (So. Broadway). \$13,500, make offer on down payment. Skelley, TO 5-9302.

'60 VOLKSWAGEN, standard equipment plus fuel gauge, leatherette upholstery, Wolfburg radio. Below market at \$1525. Mortley, AL 5-1420.

'54 LAMBRETTA motor scooter. Ruff, AM 8-9969.

TRANSMITTER, Harvey Wells TBS-50, complete with V.F.O. and power supply. \$75 or make an offer. Bauer, AL 5-7774.

ANTIQUE ROCKING chair, maple, arms, contour seat, \$60; chord guitar, cost \$130 new, \$50; folding poker table, \$10.

TRAILER, 21', sleeps 5, gas-electric com-plete kitchen, bath, 10-ply nylon tires, hydraulic brakes, extras. Long, AL 6-0262 after 5 p.m.

'58 FORD 4-dr. Ranchwagon, 6-cyl., standard shift, overdrive, heater, padded dash and visors, \$1250. Mathias, AL 5-0156.

SILVERTONE radio-phonograph combina-tion, table model, \$25 or best offer. Crawford, AL 6-2303.

R-1 LOT, $50' \times 135'$, located close to Nob Hill, \$3,250 total. Terms. Stripling, AX

BABY BED, apt. size, with mattress, \$15; car bed, \$5; stroller, \$3; bottle sterilizer, \$1. Arning, AL 6-9229.

COLLIE PUPPIES, AKC registered tri-color and sable. Meek, CH 2-1185.

MAPLE BENCH top; kneehole desk; glass top Winthrop desk; floor polisher; Sim-mons daybed. Weidman, CH 2-5006.

'58 FORD Fairlane 500, power brakes, power steering, R&H, 4-dr., large motor, \$1200. Pritchard, AM 8-6430.

IRONRITE ironer, \$30; floor lamp, suitable for den or rumpus room, \$4. Dodd, AX 9-6330.

MAYTAG WASHER, conventional; Frigidaire ironer; chest w/5 drawers; vanity dresser; playpen. Make offer. Gunderson, AX 9-9184.

'48 CHEVROLET, 2-dr., R&H, runs well, \$100. Nelson, AX 9-1959.

.22 H&R 9-shot revolver, holster and cart-ridge belt; hunting knife and sheath; 10x50 monocular and case. Make offer. Pace, AX 8-1112.

Galbreath, DI 4-4306.

Hill, \$3 9-3336.

'56 CHEVROLET V-8 Bel Aire, 4-dr.,

AEC employees only

changed by holiday.

1. Limit: 20 words

Deadline: Friday noon prior

SHOPPING CENTER

NEXT DEADLINE

FOR SHOPPING CENTER ADS Friday Noon, March 10

'53 STUDEBAKER coupe, \$275 or best offer. Fairbanks, 304-A Texas SE, ext. 24160.

REAR BUMPER, corrugated steel plate, fits many '48 through '54 trucks. Pierce, AL 5-7923.

RECEIVER SET, SX 28 Hallicrafter, with with headphones. Guitar with case, \$15. Libby, AX 9-0344. 3 BDR. HOME, 2 full baths, wall, sprink-lers, near schools, low down payment, FHA, \$15,500. Roeder, 1830 California NE, AL 6-6445.

'60 EL CAMINO, light blue, R&H, stand-ard transmission, reasonable, will con-sider trade. Reese, AL 5-4288 after 5:30 p.m.

REFRIGERATOR, gas Servel, \$85. Gilbert, 5-9006.

CHILDREN'S four ladder climber, \$12; Kodak Retina I, 35mm camera, \$15. Rayner, AM 8-1705.

MOTORCYCLE, 1957 Triumph Cub, 250cc; 1956 Harley 125cc. Small one needs some work. Eno, DI 4-1583. OLD NAVAJO concha belt with butter-flies and leather backing. Williams, AX 8-2671.

ENCYCLOPEDIA, 19 vol., late edition, \$90 or reasonable offer. McReynolds, 509 Florida SE, AL 5-2615.

FLOOR FURNACE, 35,000 BTU, complete with thermostat, \$25. Berry, DI 4-6047 AUTOMATIC DISHWASHER, Westinghouse, under counter type, \$50. Gay, AX 9-5625.

HEATHKIT Hi-Fi equipment, ready to play
AM and FM tuners, monophonic preamplifier and 25 watt amplifier. \$95. 10109 Maya Court NE, AX

9 METROPOLITAN; 35mm Bolsey camera; 2 formals; records; travel iron. Trumble, AM 8-7477.

16" ADMIRAL TV; size 7½ lady's Chicago shoe skates; baby's play and feeding table. Brooks, AX 9-1884.

HOUSE TRAILER, 1956 Trotwood, 36 ft., one bedroom, modern, \$1500. Will fi-nance or trade for equity in house, boat rig or lots. Earnheart, AX 9-7126.

DINING TABLE, cherry wood, six chairs, upholstered seats, extra leaf to seat eight, provincial, \$75. Shepherd, AL 6-2059.

DINETTE SET, chrome, pearl gray table 30"x52" including 10" extension, four red chairs, \$25. Clark, 9913 Leyendecker NE, AX 9-4819.

SLIDE PROJECTOR, used, Kodak, \$25. Peterson, AM 8-5883. '58 FIAT 600, a real gas miser, \$600. Genuine "Quick-Kamp" camping trailer, \$200. Everett, AX 9-6057.

ROLLAWAY BED, large Simmons, \$25, also pillows, sheets and covers at nominal prices. Chandler, telephone 298-1956.

'58 EDSEL, Ranger series H.T., power brakes, power steering, low mileage. Nor-ton, BU 2-3165.

SEARS 4x7 orbital sander, near new, extra paper, \$17.50; two 16" wheels for Dodge or International pickup, \$3 each or trade. Pliner, AL 6-1907.

OUTSIDE DOOR, 2'8"x6'8", half glass; double bed; book case headboard, mat-tress. Calvery, AM 5-0351.

VACUUM CLEANER, upright, \$7; power lawn mower, \$95; Kodok camera 2C w/case, portrait lens, \$15. Quinlan, ext. 53137.

SHOPPING CENTER

'40 CHEVROLET, 2-dr. business coupe, heater, good tires, '61 plate, \$75. Peuri-foy, 1709 Vermont NE, AX 9-1606.

3 BDR., 13/4 baths, double garage, car-peted, drapes, brick fireplace, AC, dis-posal, landscaped, near schools, park FHA appraisal \$18,500, \$500 down. Brunacini, DI 4-6831.

7 OLDSMOBILE 88, 4-dr. Holiday, 3-2 bbl. Jetaway trans., R&H, PB, PS, 47,000 miles, one owner. Edwards, 10235 Propps NE.

MATCHED SET, two step tables, one coffee table, blond wood, \$15. Matlack, AL 6-7371.

GAS RANGE, Chambers, retained heat model, broiler, deep well w/pressure cooker action. Hickey, AX 9-5771.

OWNER GONE, must sell or rent quickly, three bedrooms, $1V_2$ baths, attractive neighborhood, \$10,500 or \$85 rent. Robnett, AX 9-9192.

'57 VOLKSWAGEN sedan, blue, all ex-tras, \$1075; 1958 Pontiac tudor sedan, standard shift, immaculate; 1951 All-state motorscooter, new motor & tires, \$95. Johnson, AX 9-8980.

POLAROID LAND camera with case and flash; Masco tape recorder, \$50 each. Stephenson, AX 9-3914.

TWO KARLSON speaker enclosures w/ British made speakers installed, 35 to 18,000 cps, \$55. Browning, AX 9-6384. LINED DRAPES, green and white striped, one fits 45" traverse rod, other fits 60" traverse rod, 56" long, \$12. Bode, AM 8-2157.

ACME VISIBLE files, like new, holds 4" x 6" cards. Barker, AX 9-2365.

TILTING arbor saw with ½ hp motor and stand, also rip fence and miter gauge, \$50. Taylor, AX 8-0426.

gauge, \$50. Taylor, AX 0-0420.

'48 DESOTO, good mechanically, repainted, one owner, '61 tag, make offer. Mc-Millan, 1518 Katie NE, AX 9-0305.

3 CHESTS of drawers; ½ size bed; combination radio, phonograph and wire recorder. Gragg, AX 9-0311.

DELIA Slipperland new cost \$58, selected

DRUM, Slingerland, new cost \$58, selected calf skin with cover and strap, \$35. Wittwer, AM 8-2625.

TREE, mountain cottonwood clump type, 12 ft. tall, \$5 or best offer, you dig; boy's English bicycle, \$20 or best offer. Summers, AX 9-4674.

COFFEE TABLE, French provincial, \$15. Hook, AM 8-0291.

CUSTOM BUILT 3 bedroom, 13/4 baths, large utility room, kitchen built-ins, large utility room, kitchen built-ins, hardwood floor, fireplace, large back-yard, available in June, \$17,200. Peter-son, AX 9-5922.

MAC GREGOR MT woods, 1, 3 & 4, D-3, R-shaft, \$30. Leonard, AX 9-4684.

3 BDR. HOME, 13/4 baths, 2-car garage, w/w carpeting, near elementary, jun-ior high, high school and shopping cen-ter. Halsey, AX 9-5775.

WANTED

RIDE from 2842 Manzano to Bldg. 802. Roth, ext. 26108. IRRIGATION PUMP, 2 or 3 inch. McRey-nolds, 509 Florida SE, AL 5-2615.

BABY CARE in my home, \$15 a week Bortniak, AL 6-3177.

RIDE starting March 6 from vicinity of 2903 Manzano NE to Bldg. 880 parking lot. James, AL 6-7891.

CHILD OR BABY for young mother to care for while parents work. Home next to Sandia Base, 7908 Kathryn SE. Ridlon, AL 6-2590.

RIDE starting March 6 from vicinity of 2717 Quincy NE to Bldg. 880 parking lot. Morterud, AL 5-9263. CHILD CARE in my home near Sandia Base,

qualified, experienced, one block off Eubank. Adent, AX 9-1905 or DI 4-1240. GERMAN LUGER and old hunting knives. Pay cash or trade Winchester 1892 carbine or rifle, 44/40 calibers. Smitha, AX 9-1096.

while you work, reasonable. 415 Charleston NE, AL 6-7371.

A15 Charleston NE, AL 0-/3/1.

DOG HOUSE, used, for large dog. Hopeck, AX 8-2760 after noon.

CAMPING TRAILER or pick-up with camper body. Will pay cash. Ward, ext. 42188.

PORT-A-CRIB, used. Anderson, AL 6-4728.

FOR RENT

3 bedrooms, 13/4 baths, stove, refrigerator, garage, water paid. Miller, telephone 265-0029 evenings and week-

BDR. furnished apartment, carport, completely redecorated, Vassar NE, \$90-\$95. McCoy, AL 5-7800 evenings.

HOUSE TRAILER in canyon, 10 minutes from Sandia Base, \$10 a month. Chavez, AL 5-5461.

ROOM and bath in private home, Snow Inez area. Dougherty, AX 8-0060 even-

ROOM furnished apartment, 6710 Acoma SE, gas and water paid, \$75 month. Burnett, DI 4-3563.

LOST AND FOUND

FOUND: brown frame safety glasses; gold faucet cuff link; keys in brown leather snap case; Packard key; tan sport cap; 15 year Sandia Corp. tie clip; black fur lined gloves; Alpine lighter. Lost and Found, ext. 26149.

AT LIVERMORE

DYAL standard typewriter. Kelly, HI 7-6369.

FRIGIDAIRE electric stove, automatic timer, clock, separate bröiler, storage drawer; Whirlpool automatic washer. Beavers, HI 7-4324.

BDR house, 2 baths, double garage, heavy shake roof, insulated, built-in stove and oven, fireplace, other extras, \$20,000. Peterson, HI 7-2542.

WANTED AT LIVERMORE

Division.

John has been assigned to Systems Development organization during his five and a half years at Sandia.

Before coming here he worked for three years for the Univer-

B-29 and B-50. John served in the Army from

He received both his BS and MS

Tech Paper Presented

SHOPPING CENTER

HEATHKIT DX-40 ARC5 receiver, homemade BFO, and Mosley vertical antenna, model V-4-6. Entire rig, \$60. Luna, AX 9-5751.

JEEP PICK-UP, 1948, 4-wheel drive, 6-ply mud & snow tires, R&H, \$350. Schuetz, CH 2-3510. TRANSMITTER, Barker & Williamson 5100B, \$300; antenna rotor with cables and indicator (ideal for beam), \$50. Bortniak, AL 6-3177.

RECEIVER, HQ170C, matching speaker, cost \$380, will sell for \$265. Andy, AX 9-2595.

METAL LOCATOR and detector, in carry-ing case, \$25. Houts, AL 6-7218.

'57 PLYMOUTH Sport Fury hardtop, Torqueflite, power steering, brakes, windows, antenna, dual speaker radio. Caudle, AX 9-4579.

BUNK BEDS, maple, complete, \$32.50; man's bicycle, lightweight, fully equipped, new, \$35; movie camera, DeJur 8mm in original box, \$25. Morgan, AL 6-9637.

CORNER CABINETS, pair, maple; pair hitching post table lamps; 30-06 Spring-field, Mannlicher stock; 30-06 Enfield, sporter; HDM hi-standard pistol. Elder, 913 Georgia SE, AL 6-1848.

BAMBOO PLANTS, free, you dig. Gillespie, 4212 Sunningdale NE, AL 5-6421 after 6 pm.

20" BICYCLE, boy's, \$15; American Flyer remote controlled train, 4' x 8' board, accessories, \$20. Syroid, AX 9-8256. DACHSHUND PUPPIES, AKC registered, red, available March 15. Neel, 3617 Espeja NE, AX 9-9309.

HEATHKIT V.T.V.M., \$25; large office desk, recently refinished, \$35. Singleton, AX 9-1613.

3 OLDSMOBILE 98 hardtop, R&H, PS, PB, new seat covers. Morrison, AM 8-1826 after 5 p.m. BABY BUGGY, \$15; stroller, \$2; youth bed, \$5. Ingram, 9638 Morrow Rd. NE, AX 9-6194.

'59 VOLKSWAGEN, 9000 miles on white sidewall fires, completely undersealed, plus extras. Nichols, AX 9-7364.

RIFLE, 30-06 Enfield, \$65 or best offer. Feldman, DI 4-6114. '56 OLDSMOBILE 4-dr., R&H, blue and white. Benton, 435 Lafayette Pl. NE, AL 5-4466.

FURNITURE, five pieces: 2 lamps, 2 end tables, and coffee table, all light oak finish. Rebarchik, CH 3-4718.

COMPLETE STEREO tape system: Viking deck, preamps; Scott 299 amplifier, AR-2 speakers, assorted tapes. Sell or trade, terms. Ross, ext. 20132. SW Valley, h/w floors, strage from screened back porch. Priced at FHA appraisal of \$13,600.

BOY'S BICYCLE 20", new tires, new thorn-proof tubes, \$15. Vandi, 1843 Cagua Pl. NE, AL 5-0685.

'50 DODGE 4-dr. sedan, R&H, good tires new battery, good transportation, \$115 Scheiber, 6713 Dodd NE, AX 9-4743.

CHAPMAN 3 bdr., 13/4 baths, 2-car garage, h/w floors, 3-way fireplace, electric range, built-in oven, landscaped, walled, FHA. Wicke, 1108 Parsifal NE, AX 9.8354

14" TV, Zenith portable, 1958 model, recently overhauled, complete with maintenance manual, spare tubes, etc. \$60. Petrone, AL 5-3633 after 5:30. 41/2% GI, corner lot, 3 bedrooms, 2 baths, carpeted, custom drapes, many extras. Healy, 4717 Palo Duro NE, DI 4-8378.

2 CHEVROLET, good transportation, reasonable. Shoemaker, TR 3-0109 or DI 4-8969. 7" ADMIRAL TV set, aluminized picture tube, \$45. Gutscher, AX 9-9398.

The meeting will coincide with

Last year 22 papers were pre-

The papers should be of a scientific nature, of the broadest posfrom 10 to 15 minutes for presentation. Sponsors of the meeting

The deadline is March 11 for

For further information at San-

Frank H. Fox 4511, Fred K. Harrison 2713, Dorcas L. Richie 4234, Harold B. Thomas 2724, Reuben Villanueva 2722, F. H. Viquesney, Jr. 3426, Kenneth L. Cahill 7214, James H. Hockett

SHOPPING CENTER

RIDE from Morris and Menaul to Bldg. 802. Chapman, ext. 32250. CHILD CARE in my home near Sandia Base, Dallas NE, qualified, experienced. Monson, AM 8-6048.

BABY TO care for in my home, near base.

ROOM in quiet home, new furniture, private entrance and bath, employed man, near base. Moore, AX 9-3348.

NEW APT., four room furnished, \$58, water and garbage paid. Glory, CH 7-3145.

UNFURNISHED HOME near University with

BDR. house, stove and refrigerator furnished, water and garbage paid, \$65. 608 49th St. NW, country atmosphere, minutes from downtown. Maes, CH 7-1922.

LOST: safety glasses; 10 year Sandia Corp. tie chain; tan leather clip type glass-case; black knit gloves w/leather palms: 1958 Highland High ring with SS. Lost and Found, ext. 26149.

FOR SALE

HI 7-4324.

OAK end tables, coffee table, \$10 each; baby car bed, \$4; car seat, \$2; high chair, \$10; Dining table, 6 chairs, \$25. Tidwell, HI 7-6071.

FREEZER, chest type, 15 cu. ft., \$100; Kenmore automatic washer, heavy duty motor, \$100; gas range, \$40; refrigerator, \$35. Henderson, HI 7-4417.

BDR house, 2 baths, built-in electric kitchen, garbage disposal, double ga-rage, covered concrete patio, trees. Wells, HI 7-3446 after 5 p.m.

BDR house, 1 bath, double garage, covered patio, tool shed, fenced, land-scaped, other features, asking \$14,000. Myers, HI 7-3973.

ROCKING HORSE, spring type, 21" height. Kirk, HI 7-4564.

Mar. 4, 1946

Bob Leighninger Gives Family Security with Insurance Plan

"When you're young, you don't worry much about these things. Insurance seems like a fine idea but you're in no hurry. There will be plenty of time to get serious later. In the meantime you'd rather think about the weekend camping trip coming up or taking a boat out on the lake."

R. A. "Bob" Leighninger (1424) was being serious now. He was talking about his insurance program. As he calls it, the program is "his family security." Bob will be 31 in a few months. He has two small children and a new

Bob Leighninger

-program for family security-

Electric Shock Injury Tumbles Safety Record

Sandia Laboratory's safety record tumbled last week from 62 days or 2,115,000 man hours to zero when an accident involving electric shock occurred. An employee was making an adjustment on some electrical power apparatus when he accidentally touched against a live circuit.

The employee received medical treatment immediately. He was off work for almost a week.

Since the accident, Sandia Lab's safety record has climbed to 10 days or 350,000 man hours without a disabling injury.

"Responsibility became a big word in our life during the time we were expecting our first child," Bob says. "It was at this time that we took our first serious look at insurance."

Happily he discovered that as a Sandia employee he already had some group life insurance. This plus a small paid-up policy which his father had presented to him and his "GI" insurance which he kept when he left the Navy gave his family a small edge of security.

"Taking the long view, how-ever," Bob says, "This didn't seem enough to do the job. In case I went out of the picture, my wife would have small children to care for and would eventually face the necessity of having to go to work.

"Used to be the bulk of my insurance had no 'cash value' for borrowing and there was no permanent life insurance which, in a sense, is a savings program too."

During the next several years, Bob purchased two permanent life insurance policies, Sandia's supplementary insurance and another term insurance policy. Currently this gives his family \$68,000 worth of protection. Some of this represents permanent savings. His insurance is "programmed" to provide funds for his two sons' education, payment of the mortgage on his new home and provide, with social security benefits, an adequate monthly income.

"I'm not the morbid type," he says, "and I don't dwell on the dark side of things. But I do face the fact that I won't be around forever. In the meantime I try to provide for this eventuality. The insurance counselors in Bldg. 829 were very helpful in my planning."

Base of Bob's insurance is his Sandia group life insurance and supplemental life insurance. Sandia provides group life insurance up to a full year's salary for all employees. It is based on length of service and total annual salary. This coverage is free to employees.

The supplemental life insurance makes possible the purchase of life insurance at very low cost. The program provides life insurance equal to one year's basic pay, rounded to the next higher \$1000, double benefits in case of death by accidental means on or off the job, and dismemberment benefits. The Corporation pays the premium on the first \$1000 coverage and contributes to the purchase of the balance.

"This kind of insurance," Bob says, "gives you a good hard core of protection that you can't get anywhere else. The premium on the supplemental life insurance is less than 40 cents per month per \$1000 coverage."

Currently almost 96 per cent of Sandia employees are enrolled in the supplemental insurance program. In 1960 Sandia Corporation paid a total premium cost of \$219,000 to provide \$102,000,000 free group life and supplemental life insurance coverage for Sandia employees.

"My insurance premiums run about \$30 per month," Bob says, which is a pretty good chunk out of the budget, but for what I'm buying it seems reasonable. Besides, it's a long term savings program.'

MISSING MAN in this photo is Bob Leighninger (1424) whose insurance program would provide family security even if he were "out of the picture."

Bob uses insurance as family security and as a long term savings plan. Hard core of the insurance program is Sandia's group and supplemental insurance.

Club Buffet March 18 Features Fashion; Calendar Announced

Fashions will be featured at the monthly buffet dinner dance at the Coronado Club on March 18. Models will show the latest spring styles during a fashion show which starts at 8:15 p.m.

The buffet will last from 6 to 8 p.m., and dancing will be from 9 to 1 to the music of Lee Sprague's orchestra.

Tickets, which must be picked up at the club office by March 15, cost \$2.60 for members, \$3.60

for guests. The Arrada Trio will be playing for the Saturday Night dance on March 4. Tickets are \$1 for mem-

bers, \$1.50 for guests.

The following Saturday, March 11, a Teenage Record Hop will be held. Jim Simon, local disc jockey, will emcee the dance which is from 8 to 11. Parents can pick up tickets, which cost 25 cents, at the club office or at the door the night of the dance.

Tonight the Hazard Trio will be playing live music from 5:30 to 8:30, and next week Tommy Kelly's combo will play. Social hour is from 5:15 to 6:45, and the \$1.75 buffet is served from 6 to

AOA Meets At Officers Club Tuesday, Mar. 7

Albuquerque members of the American Ordnance Association will meet at the Sandia Base Officers Club on Tuesday, March 7, at 7:30 p.m.

Candidates for the upcoming election will be introduced at this stag party for members only. For reservations contact Col. J. G. Bain, president, Albuquerque Post, AL 5-4486.

ASM Members to Meet This Thursday

Albuquerque Chapter of the American Society for Metals will meet Thursday, March 16, at Hoyt's Dinner Bell at 6:30 p.m. The technical meeting will start at 8.

Guest speaker will be Harrison I. Dixon, president, Metallurgical Products Co., Brookline, Mass. His topic is "High Temperature Alloy Castings."

Industrial-Community Seminar Set March 10 by ASQC-AIIE Chapters

Several Sandians are active in the planning for an Industrial-Community seminar scheduled Friday, March 10. With the theme, "Breakthrough to Higher Levels of Performance," the seminar is a joint project of the Albuquerque Chapters of the American Society for Quality Control and American Institute of Industrial Engineers.

J. W. McDowell (2563) is general chairman for the seminar while L. E. Snodgrass is program chairman. D. M. Garst (2563) is handling publicity and B. B. Asher (4542) is in charge of finance.

Purpose of the seminar is to present a practical approach to the application of quality control, industrial engineering and management principles to representatives of New Mexico's growing industrial community.

Seminar speakers include J. M. Juran, New York City, management consultant, who has published five books and more than 100 papers on management subjects; W. G. Ireson, head of the Industrial Engineering DepartAlto, Calif.; and Gene E. Hinkle, Albuquerque Realtor, whose luncheon address is entitled "Fostering the Industrial Growth of Albuquerque."

Cost of the seminar is \$20. Advance registration should be sent to C. M. Flick, 5500 Granite Ave. N.E. Registration will also be open from 8 to 8:30 a.m. at the Western Skies Hotel the morning of

Patent Granted Navy For Work Done by C. F. Bild in 1951

Charles F. Bild, Director of Materials and Process Development 1100, was informed this week that an arming locking device he invented in 1951 has been patented. The patent is assigned to the United States of America as represented by the Secretary of the Navy.

Mr. Bild was supervisor of a fuze design group at the Naval Ordnance Laboratory in White Oak, Md., at the time the device was invented. He joined Sandia Corpora-



SANDIA OFFICIALS MEET-Former President of Sandia Corporation, Julius P. Molnar (left), met recently in Albuquerque with S. P. Schwartz, who succeeded Mr. Molnar as Corporation President. Mr. Molnar is now executive Vice President of Bell Telephone Laboratories and a Sandia Corporation Board of Directors member.

Sandia's Safety Record

Sandia Laboratory HAS WORKED 350,000 MAN HOURS OR 10 DAYS WITHOUT A DISABLING INJURY

Livermore Laboratory HAS WORKED 4,511,450 MAN HOURS **OR 1839 DAYS** WITHOUT A DISABLING INJURY