

Mr. McRae

Ex-President James W. McRae Dies Suddenly

James W. McRae, vice president, American Telephone and Telegraph Company, and former president of Sandia Corporation, died suddenly in New York City Feb. 2. He was enroute to a conference of Operating Vice Presidents where he was to give the opening address, when he was stricken. He was 49.

Mr. McRae served as president of the Corporation from Sept. 1, 1953 until Oct. 1, 1958.

Joining the staff of Bell Telephone Laboratories in 1937, he worked in various research fields until 1942 when he was commissioned a major in the Signal Corps. During World War II he served as chief of the engineering staff of the Signal Corps Engineering Laboratories in New Jersey. He rose to the rank of colonel and received the Legion of Merit for his work in developing radar counter measure devices. He was serving as vice president in charge of systems development at BTL when he was elected president of Sandia in

Mr. and Mrs. McRae had a wide circle of friends in the Albuquerque community and the news of Mr. McRae's death came as a severe shock to all who knew him and admired him for his warm and friendly manner as well as his executive and scientific abilities. The McRaes have four children, two daughters attending Stanford University and two sons at home in New Jersey.

Funeral services were held today, Feb. 5 at the Presbyterian Church in Madison, New Jersey.

Science Students to Tour Lab Edison Day

The fourth annual Edison Day tour of Sandia Laboratory for about 100 outstanding science and math students will be held Feb.

The tour is conducted at the request of the Atomic Energy Commission.

The students will be represented by all Albuquerque's secondary schools plus Belen High School.

The group will assemble in Sandia's auditorium for welcome and orientation at 12:30 p.m. Following a half hour talk on "Project Plowshare" by L. J. Vort-

man (5112), the students will see the "Sandia Story" film.

Students will then be divided into groups and according to their area of interest will visit Sandia's IBM 705 facility in Bldg. 880, chemistry facilities in Bldg. 830, biology area in Bldg. 830 and

the Van de Graaff accelerator for a discussion of molecular physics.

At 3 p.m. the four buses of students will travel to Area III to visit Sandia's sled track, drop tower, centrifuge and air gun environmental test facilities.

Sandia Corporation LABIEWS A

ALBUQUERQUE, N. MEX.

LIVERMORE , CALIF.

VOL. 12, NO. 3

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

FEBRUARY 5, 1960



CONSTRUCTION PROGRESS at the Sandia Engineering Reactor site in Area III is viewed by R. M. Jefferson (1626), foreground, from the top

of the recently completed three-story reactor cooling tower. Photograph shows thick steel and concrete going up. Operation is expected in 1961.

'Education' Topic For Next Lab New Editorial Contest

A bright new topic, offering a multitude of pros and cons, has been decided for the February Lab News employee-written editorial contest.

"Education—What Kind Do We Want?" is the subject. Scientists will have an opportunity to extoll the merits of specialization in the European school system. Academic scholars will have a chance to bemoan the lack of instruction in classic languages and literature. The supporters of liberal education can explain the advantages of basketweaving.

For this contest, deadline for entries will be March 1. They should be mailed or taken to the Lab News office in Bldg. 829. Please include your name, organization and office telephone extension at top of first page. Limit is 500 words.

All employees of Sandia Corporation below the level of department manager are eligible to enter the contest except those in the Public Relations Division. Prize for the best employee-written editorial is a \$25 U.S. Savings Bond.

The winning editorial for the January contest on the subject "Let's Face Communism Sensibly" will appear in the Feb. 19 issue of the Lab News.

J. P. Molnar and G. A. Fowler Are Fellows of IRE

J. P. Molnar, president, Sandia Corporation, and G. A. Fowler, vice president, research, received certificates as Fellows of the Institute of Radio Engineers at a banquet in their honor, Feb. 1.

Presentation of the awards was made by C. W. Carnahan, Seventh Regional Director of the IRE. The Albuquerque-Los Alamos Section of the IRE was host for the banquet which was held at the Sandia Base Officers Club.

Following the smorgasbordstyle dinner, Mr. Molnar spoke to approximately 230 IRE members and their guests.

Mr. Molnar and Mr. Fowler received the awards for outstanding contributions to radio engineering or allied fields.

Ceramics - One of Oldest Arts - Has Now Become New Science

Ceramics, one of the oldest arts known to man, has in post-war years become one of the newest sciences.

Bodies of metallic particles fashioned under high pressure and fired in high temperature kilns have become essential in the field of electronics. For transducers, piezo-electric ceramics have the important property of high efficiency in converting electrical energy to mechanical energy or the reverse process. When used in condensers, the ceramic parts are used as insulators between metal plates to increase the efficiency in storing high voltages.

To back up Sandia Research and Development organizations in the fields of piezo- and ferroelectric ceramics, a new Ceramics Laboratory has been set up in the northeast corner of Bldg. 840 to develop various processes and techniques to fabricate ceramic hodies

"We receive formulas and processes from the engineers," said William S. Sharp, supervisor of Ceramics Section 4224-1, "then it's up to us to mix the ingredients and carry out the basic steps." Little Change

Primitive man made his crude containers from pounded clay pressed into shape and baked in an open fire for hardness. The fundamental process remains the

For use in the electronics field the basic ingredient is metal rather than clay. Oxides, titanites and stannates of metals in various combinations are the foundation.

In the ceramics lab the ingredients are fed into a container from four hoppers which weigh the ingredients at the same time. This "batching system" was originally conceived by E. K. Gardner (formerly 4213, now 2541) and was developed by a commercial firm.

After the materials are taken from the batching system they are placed in a ball mill jar where they are thoroughly ground and milled into a homogeneous mixture in liquid form called a "slip."

The slip is run through ferrofilters to remove any magnetic particles and is processed in a spray dryer where it is again reduced to a powder.

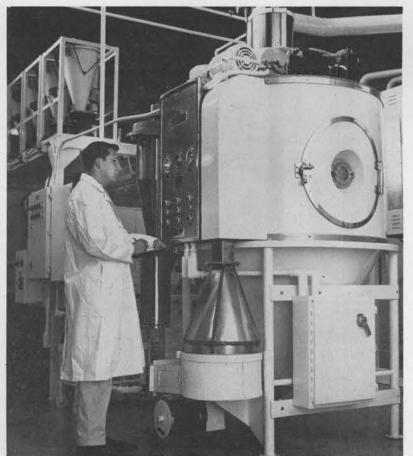
The finely milled ingredients are then pressed into molds of the prescribed shapes under high pressure, and the pellets are ready for firing.

Extreme Temperatures

Two of the vertical furnaces in this Sandia facility are capable of attaining 2750 degrees Fahrenheit; the third kiln has a maximum of 3250 degrees. There is also a low-temperature curing oven operating at up to 1500 degrees and a 500-degree drying oven

"This is a slow process," Mr. Sharp explained. "The kilns normally heat up at 150 degrees an hour. With a typical 79-hour baking cycle, two days would be

(Continued on Page Three)



SPIN DRYER, operated here by technician Melvyn S. Montano (4224-1), reduces to powder form liquid "slip" of milled metals.

Editorial Comment . . .

. . A Useless Character"

This question "Why Participate in Public Affairs?" has been heard a great deal in the past year or so. Persons who a short time back thought of "politics" or "public affairs" as beneath them are now enthusiastically in the middle of the activity.

This proposal that the average man enter public affairs is not new. In 431 B.C. Thucydides of Athens said, "We regard a man who takes no interest in public affairs, not as harmless, but as a useless character."

There are a number of possibilities for each person to enter into public affairs and stay out of this "useless character"

The current Great Decisions Program not only gives one the opportunity to understand foreign affairs better, but also gives the privilege of having his opinions heard where it does the most good - in the U. S. Department of State.

It is easy for anyone to enter politics at the precinct level. There your voice will be heard. And the precinct level is perhaps the most important (and maybe the most neglected) area of politics.

Civic affairs is another field where you can serve to the betterment of your community. Sound thinking and leadership are needed in many community activities.

Your church also needs your services. It is not enough to merely attend church and put your share in the collection plate. Churches cannot run on money alone — they need people.

There are hundreds of ways that you can serve your community, your country and your fellowman. Take your choice and serve well.

All of us should serve as generously as the need calls for. Edmund Burke told why we need to participate when he "All that is necessary for the forces of evil to win the world is for enough good men to do nothing."

Sympathy

To Roland L. O'Trimble (1224) and his son, William L. (4135), for the death of Roland's father in Kansas Dec. 30.

To Johnnie Chavez (4573-3) for the death of his brother-in-law in Albuquerque Jan. 14.

To W. H. Martin (4514) for the death of his father in Waynesboro, Tenn., Jan. 25.

To Sadie Sedillo (4518) for the death of her step-father in Tajique, N. Mex., Jan. 26.

To Charles E. Lewis (5534-1) for the death of his father in Texas Jan. 23.

To Joyce Moore (8212-3) for the death of her father in Castro Valley, Calif., Jan. 23.

To Robert E. Zumwalt (8115-2) for the death of his brother in Fresno, Calif., Jan. 24.

To Eloise Perry (8223-2) for the death of her father in Albuquerque Jan. 15.

To D. E. Dewhirst (8223-4) for the death of his father in Fresno

Jan. 13. To Elbridge H. Baber (4251-2) for the death of his sister in In-

diana Jan. 23. To Raymond L. Negus (4251-2) for the death of his sister in Iowa

Jan. 24. To Thurman Foreman (4574) for the death of his mother in Wichita, Kan., Jan. 29.

To George Curry (5231) for the death of his father in Albuquerque, Jan. 30.



LARGE BOBCAT trophy is displayed by Carl Nissen (5257) after recent Tonopah, Nev. trip.

Bobcat Killer

Proof of the ruggedness of the country around Tonopah, Nev., is held by Carl J. Nissen (5257).

While on a recent assignment, Carl and Walter Drake (both 5257) were driving from the ballistic range to town when they spotted a bobcat alongside the road. They chased it for about 200 yards when Carl jumped out and killed the animal with a stick.

The wildcat was estimated to weigh 65 lbs.

Weddings and Engagements



Sandia's Tonopah Ballistic Range recently. Heavy equipment was needed to clear the snow from roads

machine shop, office building, tracking telescope dome (in background) and a radar installation.

Military Returnees

After two years of Army duty Merlin D. Hansen has returned to his job at Sandia as an electrical



M. D. Hansen

engineer in Systems Planning Di-

Merlin was stationed for short periods of time at Fort Monmouth, N. J., and White Sands Missile Range, but most of his tour of duty was with the Army Signal Corps in Hawaii.



Russell Boor T. H. Martin

Two more Sandia employees returned to their jobs last month after military service.

Russell Boor (1626) had been in the Army for two years. After brief training at Aberdeen Proving Ground, Md., he spent the remainder of his tour of duty at White Sands Proving Ground, N. Mex. Russ first came to the Corporation in June 1956.

Thomas H. Martin (1322) returned after two and a half years in the Air Force. He was stationed mainly at Eglin AFB, Fla., and Holloman AFB, N. Mex. Tom was hired by Sandia Corporation in September 1956.

Earns License As Commercial Pilot

William Johnson (5242) has joined the ranks of Sandians with commercial pilot licenses.

Bill, a programmer on the IBM 704 for the past four months, has long been interested in flying as a hobby. His commercial license required about six months of work, including 200 hours of flying time, a lengthy written exam, and maneuvers using instruments only.

While stationed with the Navy on Sandia Base, Bill helped organize the Sandia Flying Club in April 1958. The club now has 133 members and owns eight planes, which are hangared at a field one mile southeast of Manzano Base. In addition, Bill is part owner of a Mooney Mark Twain.

Club Changes

Two changes have been made recently in the membership of the Coronado Club Board of Directors. F. L. Cason (4123) has been named Director of Membership, replacing A. C. Taylor (4254), and R. C. Colgan (3431) has been appointed Director of Publicity, succeeding D. R. Bontempi (formerly of 4412).



Sally A. Gallardo (5262)

Take a Memo, Please

Like tools and other safety equipment, safety glasses are at their best when kept clean and in proper repair. When lenses become badly scratched or pitted, they should be replaced.



WEATHER WISE Allan P. Gruer, manager of Test Range Department 5260, recently was called upon to lend a hand in snow removal in front of the Sandia office in Tonopah, Nev.

Congratulations

Born to:

Mr. and Mrs. A. C. Bustamante (5141) a daughter, Victoria Anne, on Jan. 21.

Mr. and Mrs. John Ethridge (3242) a son, Franklin Wayne, on Jan. 25.

Mr. and Mrs. William J. Villanueva (4224-2) a daughter, Louise, on Jan. 16.

Mr. and Mrs. M. A. Alexander (8232-2) a daughter, Dorothy, on

Mr. and Mrs. P. A. Carothers (8232-2) a son, Michael J., on Jan. 21.

Mr. and Mrs. A. W. Fite (1423) a daughter, Nancy Jean, on Jan.

Mr. and Mrs. Antonio Garcia (4252-5) a daughter on Jan. 23.

Mr. and Mrs. Jimmie R. Burnside (4252-1) a son, James W., on

Mr. and Mrs. Keith R. Baltz (5213) a son, Dale Roland, on Jan. 30.

Welcome Back

Fellow employees of Donald Bohrer (8152) welcomed him back to work following his recuperation from injuries received in a recent auto accident. A speedy recovery is extended to his wife who is still hospitalized from injuries received in the same accident.

Gerry Strandin (8121-2), also injured in the same accident, returned to work Jan. 20.

Co-workers of Chris Widger (8212-3), welcomed her back from her recent hospitalization.

Lila has been with the Cor-



Mr. and Mrs. Ronald Easly

Julia Radcliff (8212-3) was married recently to Ronald Easly of Oakland. The couple is at home at 1505 Jackson St., Oakland, following a short honeymoon in Sacramento.

Julia has been with Sandia since September 1959.

The engagement of Lila Wake- of Mission San Jose, Calif., on field (1261) and Lt. Wilbert Jan. 15. The ceremony took place (Bill) Craig of AFSWC was an- at St. Joseph Church in Mission nounced recently. The couple plans to be married Feb. 20.

poration four and a half years.



Miss Wakefield Miss Gardner

An early spring wedding is planned by Sharon Gardner (3113) and Lawrence L. Meyer, an electrical engineer in Waynesboro, Va. The ceremony will be held at Redeemer Lutheran Church in Albuquerque.

Sharon has worked for the Corporation two years.

Wedding bells rang for Joyce L. Paul (8213-2) and Harold Kleve ton the couple returned to Newark, where they will reside at 37359 Oak St. Joyce has been employed at Sandia since last August.

Following a honeymoon in Fel-

San Jose.

Feb. 19 has been set for the wedding of Elizabeth C. Durand and W. V. McGuire with the cer-



Miss Durand

emony held in a friend's home.

"Beth" (4221 and 4224 secretary) has been at Sandia nearly seven years and "Bill" (supervisor of Section 4412-5) has worked for the Corporation since June 1952.



The Lab News is an official publication of the Sandia Corporation, Albuquerque, N. M.
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Telephone Sandia Base Alpine 6-4411 Ext. 25253, 26135



Deadline Friday noon of week prior to publication



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

Letters Ask for Information on 'Rockets and Things Like That'

Nuclear reactors, rocket warheads and missiles are receiving a large share of attention in the nation's science classes, judging from the numerous letters received at Sandia Corporation from students seeking information and photographs.

The surge of interest in science ranges from the 12-yearold in Dallas who wanted "pictures and information on aircraft and missile industry" to the New York City science student who asked for "data on nuclear power-energy, heat-exchange fluids, gaseous diffusion procedures and thermal test reactors."

More letters and cards come from the East than from all other states put together and information requests from boys outnumber those from girls 15 to 1. All such letters are answered by Public Relations Division 3431 and available unclassified information is given, along with suggested sources of additional information.

Big Orders

Typical of letters received was that from an Oregon boy who wrote for information on "missiles you manufacture warheads for" and a diagram and explanation of workings of atomic and nuclear warheads. Or a New Jersey student's request for information and photographs on "wind tunnels, rockets, missiles, jets, planes, engines, etc. - any other items I have not mention-

Occasionally a letter from a student in a foreign country finds its way to Sandia. One from Rio de Janeiro, Brazil, requested "possible fotographs of your airplanes." Another from Kassel, Germany, was more detailed in its requirements. The writer wanted "information concerning your Lulu, anti-submarine missile" and also asked to be informed about "further Sandia Corporation products in these

Lulu Request

The "Lulu" also figured in a request from Albany, New York. The Washington Avenue Missile Club wanted information and pictures for use in their school's science fair exhibit.

The addresses alone are enough to make one wonder. Envelopes requesting information have been received which were addressed 'Sandia Atomic Power Laboratory (Operated by the Sandia Corporation), Sandia Base - Near Albuguerque. New Mexico." "Scandia Corporation," "Western Electric Manufacturing Company, Sandia Laboratory, Albuquerque' and "Sandra Corporation, Sardia Base, New Mexico."

Although the majority of the letters seek information and photos of rockets and missiles, there are requests for pictures of the moon, advancements in the development of weapons for war, and information about Sandia's Van de Graaff generator (from a San Diego boy building a small model of one).

Apparently the parents of many small fry are hard-pressed to answer technical questions. Pity the mother of a fifth grader in Scarsdale, New York, who was "writing a long report on rockets and things like that." He asked for "pictures and pamphlets on rocket engines, rocket fuels, what metals rockets are made of, how tall are the average rockets, are rockets made on an assembly line, or is each rocket made in different parts?" Experimental rockets in the garage must have replaced garter snakes in the dresser drawer in that budding scientist's play world.

Continued from Page 1

Ceramics Laboratory

needed to slowly cool the pellets. Too rapid heating or cooling causes ruptures or cracks." The kilns are operated automatically and may be set for any combination of time and temperature.

After firing, the pellets are ground to exact size.

Many ceramic products used in electronics require electrically conductive coating for solderability and adherence. An electrostatic coating of silver or other metals is applied to achieve this. "At present we are painting the silver on but eventually we hope to try spraying, silk screening and vacuum metalizing," Mr. Sharp said.

The pellet may also be polarized by heating it above the Curie point and applying 30-40 volts for each mill of thickness. After gradually cooling the item it can then be tested electrically.

The Ceramics Laboratory is one of a number of specialty groups available for use by Sandia engineers in the development of experimental designs.



GLORIA PUTNAM (4344) helps call attention to Valentine's Day,

Feb. 14, and the national heart fund drive that is conducted during the month. Bernalillo County Heart Association will conduct its

door-to-door campaign on Feb. 28. Sandians, through their membership in the Employees Contribution Plan, will contribute more

than \$6000 to the heart fund this year. That is quite a Valentine!

Three mobile electronics-type laboratories will be delivered to Livermore Laboratory next month for use by Test Department 8120.

Two of the laboratories will be housed in 40 ft. trailers. The third will be set up in a 14 ft. trailer. The trailers will include such features as air conditioning. electrical wiring and instrumentation racks.

The three mobile laboratories will cost a total of about \$100,-000. Each trailer will be equipped with instrumentation valued at about \$90,000.

The trailers, basically for use at locations lacking adequate permanent facilities, will also be used as auxiliary recording stations at Livermore Laboratory.

A local construction company has completed construction of a utility pad on which to park the trailers when they are in use at Livermore. The pad will make it possible to connect each trailer to water and electric lines. There will also be telephone installations at each trailer.

Total cost of the pad construction and utilities is estimated at \$3,000. The facility was designed by Plant Engineering Design Section 8221-2 with utility connections installed by the Maintenance Division 8222.

Great Decisions TV Programs Scheduled Feb. 7

The first in the eight week series of Great Decisions television programs will be simulcast Sunday, Feb. 7, at 3:30-4 p.m. over KNME-TV, Channel 5, and KOB-TV, Channel 4.

Topic of the first opinion-discussion program will be "Communist Timetable for 1960-What Odds?" This is the same topic that will be discussed by Great Decisions groups throughout Albuquerque and the nation during the remainder of the week.

Appearing on the program will e Father Daniel Rice, pastor of St. Charles Church; Dr. John Torrens, an Albuquerque psychiatrist; Dr. Claude Hempen, director of KNME-TV; and Dr. Francis M. Kercheville, professor of modern languages at UNM.

Moderator and co-producer of the program series is R. C. Colgan

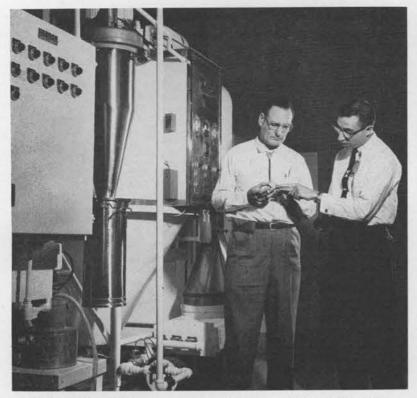
Mountain Club to Delve Into History Of Early Indians

A number of pre-Colombian pueblos representing Pueblo Indian civilization at the peak of its development will be visited by New Mexico Mountain Club members and guests Feb. 6-7.

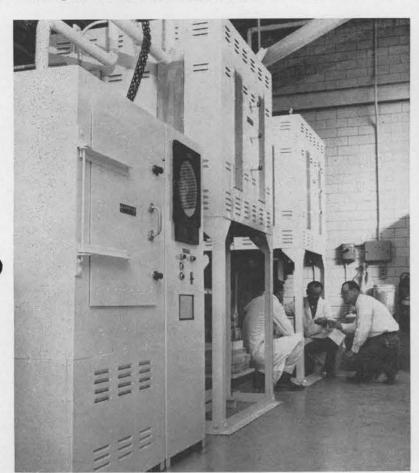
The week-end trip will be to Chaco Canyon, about 50 miles northeast of Gallup.

On the following Sunday an exploratory trip will be made among the strange sandstone formations in the Rio Puerco val-

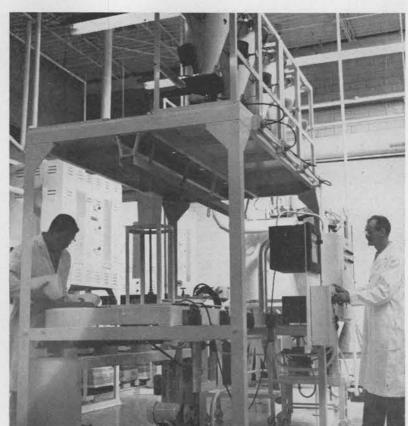
Both trips start from Nob Hill



RESULT OF SPECIFIC process used to form this ceramic body is checked by W. S. Sharp, supervisor of Ceramics Section 4224-1, and engineer David J. Kessel (1621), who works closely with the lab.



HIGH TEMPERATURE kilns, capable of reaching 3250 degrees F., can be automatically set for different combinations of time and heat. Members of Ceramic Lab check cooled pellets for cracks.



"BATCHING SYSTEM" permits ingredients to be weighed and flow into container without handling by Melvyn S. Mantano (left) or Leland L. Pierce. After mixing ingredients are finely ground.

ROCK SCRAMBLE on outcropping west of Los Lunas is fun for

experienced climber Reed Cundiff, son of Charles (5332) and

Catherine Cundiff (3113). Skill and practice are necessary.

Volunteer Mountain Rescue

Group Has Sandians Serving

Open for Membership

"The most important thing to

That advice comes from C. M.

"Bill" Williams (5126), a member

of the Board of Directors for the

newly-organized Albuquerque

Beisinger (5126), Don Lundergan

(1261), Marion Wickham (1313),

Tom Oakes (5231), Hank Tendall

(1215), Phil Mead (3423) and Dor-

Experienced climbers in Albu-

querque in past years have re-

ceived calls periodically from

Sheriff's offices or the State Po-

lice about searches or rescue op-

"In 1955," Bill recalled, "we

were called out when a TWA plane

crashed in the Sandias. We've

rescued archery hunters lost in

the mountains, college students

stranded on cliffs, and we were

even asked to give assistance when

Other Sandians who are members of the group include Zelma

Mountain Rescue Council.

ris Hankins (5112).

erations.

remember about mountain safety

is never travel in the mountains

alone!"

Supervisory Appointments

FRIEND L. SKINNER to supervisor of Section 8142-2. Prelimi-



Analysis nary Division, Livermore Labora-Friend first

joined Sandia Laboratory 1952 to go into business for himself in Albuquerque. He

returned to the Corporation in 1954 and was assigned to a Systems Development organization. He transferred to Livermore Laboratory in March 1958, as an electrical engineer assigned to a project group.

He is a graduate of Massachusetts Institute of Technology where he received his Bachelor's degree in electrical engineering in

visor of newly-created Tabulating



been in business

ed work at Sandia he spent eight years as principal tab supervisor at the Lawrence Radiation Laboratory.

Before his employment at Sandia, Friend worked for Holmes and Narver, an AEC contractor, and participated in the nuclear test series at Eniwetok in 1951.

1950. He is a member of the IRE.

GORDON V. BJORK to super-

methods work since he joined Livermore Laboratory in November 1957. Before he start-

He attended the University of Minnesota extension in St. Paul. From 1943 to 1946 he served in the U. S. Navy in Washington, D. C. as an IBM specialist.



UPPER BELAY IS USED by C. M. "Bill" Williams (5126) in working his way around a steep pitch in the Sandia Mountains.

two planes collided in the Grand Canyon. Last February the climbers incorporated so that they could function better as a group. Presently there are 25 members, including seven MD's. The council provides equipment, such as ropes and litters, and regular meetings alternate with practice sessions in the foothills. The council is set-up similar to

other mountain rescue units throughout the country. Members receive no remuneration for their expenses, work or danger-"and that includes hospital expenses if anyone is injured," Bill added, Any money received by the council will go towards more and better equip-

The council is open for membership, but to be classified as a "rescue member" a person must be an experienced rock climber. have taken standard and advanced first aid courses and, according to Bill, "be in shape to travel crosscountry in any weather."

"We also need associate members," he added. "They don't

scramble around the mountains, but directing spectators away from an accident or just keeping the men on the rescue supplied with hot coffee can be important."

And what other advice is there for mountain safety? Bill listed: never climb up something you can't climb down; don't move after dark unless you know what you're doing and carry a flashlight and matches.

"It's strange, but every person we've rescued only planned to stay out until noon," he said.

H. C. Biggs Presents **Technical Paper at** Redstone Arsenal

H. C. Biggs, manager of Physical and Electrical Standards Department 1650, recently presented a technical paper at the annual meeting of the Standards and Meteorology Division, Ameri-Ordnance Association, at Redstone Arsenal in Huntsville, Ala.

"Environmental Requirements for General Physical Standards" was the title of the paper.

S. GAYLE CAIN to supervisor of newly-created Instrument Ap-



plication Section 8122-3, Livermore Laboratory.

Gayle started work at Sandia Laboratory December 1952. in a project group and transferred to

Livermore Laboratory in October 1955, as one of the first 10 Sandians assigned to Livermore. He has been in Flight Test Division 8122 for the past year.

Before joining Sandia, Gayle worked for the Louis Allis Company in Milwaukee as a designer of rotating electrical equipment. He received his Bachelor's degree in electrical engineering from Oklahoma State University in 1949 and his Master's degree the following year. He is a member of Eta Kappa Nu, electrical engineering honorary society.

During World War II, Gayle served two and a half years with the 8th Air Force in England.

BERTON E. BARKER to supervisor of newly-created Section



8141-3, Preliminary Analysis Division, Livermore Laboratory.

Bert started work at Sandia Laboratory in October 1957, in the Statistics Division of the

Reliability Department. In June 1958 he transferred to the Preliminary Design Organization at Livermore Laboratory.

He was previously employed in quality evaluation work at the San Francisco Chemical Procurement District in Oakland.

Bert attended the University of California in Berkeley where he received his Bachelor's degree in methematics in 1950 and his Master's in applied statistics in 1957.

He is a member of the American Society for Quality Control and the American Statistical Association. His military service includes one and a half years service with the Signal Corps following World

M. TAYLOR ABEGG to supervisor of Advanced Development



Explosives Section 1312-2, Electrochemical Development Department.

Taylor was hired at Livermore Laboratory on Dec. 1 and was temporarily as-

signed to Division 8141 while awaiting transfer to Sandia Laboratory.

Previously he was with the University of California's Lawrence Radiation Laboratory in Liverfor four and a half and was responsible for their ferro-electric transducer program.

At the University of Utah, Taylor received his doctorate in explosives and a Bachelor's degree in fuel technology. Taylor did part of his undergraduate work at Cornell University and Brigham Young University.

He served three and a half years in the Army, part of the time in South America with the U. S. Military Mission to Costa

Taylor is a member of Sigma Pi Sigma, physics honorary, and Sigma Xi, research honorary.

Talks in Iowa Importance of fundamentals in

learning to write for business and industry was discussed this week by Jim Fife (3423-1) at the State University of Iowa. Jim addressed two groups of engineering and commerce students.

LOUISE D. PATTERSON to supervisor of Technical Information

Section 3423-5. "Pat" to Sandia five years ago from M a ssachusetts Institute of Technology's Lincoln Laboratory where she had been doing technical

stracting for two years

Prior to that she taught physics for four years at Wheaton College in Massachusetts and for a year at Limestone College in South Carolina.

When Sandia's former West Lab was a private school for girls Pat was the head mistress for nine years.

During World War II she was a student-assistant in Stanford University's Physics Department.

She has a doctorate in the history of science from Radcliffe College, an MS degree in physical science from Stanford University, an AM degree in history of science from Columbia and a BS degree in chemistry from the University of Pittsburgh.

E. D. HOLBROOK to supervisor of newly-created Data Reduc-

tion Section Liver-8123-3. Laboramore tory.

Edstarted work at Sandia Laboratory in November 1955, in the Mathematical Services Group 5242.

He transferred to Test Department 8120 at Livermore Laboratory in October 1957.

Prior to his employment at Sania, Ed spent three years as a mathematician with the Atomic Test Group at Kirtland Air Force Base in Albuquerque.

He received his Bachelor's degree in mathematics from York College, York, Neb., in 1941, and obtained his Master's from the University of South Dakota in 1952. During World War II, Ed spent four and a half years in the Army, serving overseas in the Philippine campaign.

CLIFFORD M. POTTHOFF to supervisor of newly-created Sec-



tion 8142 - 2, Project Engineering Division, Livermore Laboratory.

Cliff started

work at Livermore Labora tory in June 1957, following his graduation

from South Dakota State College where he received his Bachelor's degree in electrical engineering.

From 1951 to 1952 Cliff served in the U.S. Air Force, stationed in Tennessee.

He is a member of Sigma Tau. honorary engineering frataernity, Phi Kappa Phi, honorary scholastic society, and Eta Kappa Nu, electrical engineering honorary.

ROBERT P. MATTHEWS to supervisor of Multiplexing Systems Section



5223-1, Telemetering Systems Division. Bob has been

in Field Testing at Sandia for 14 years both in telemetering development and as

a project engineer.

During World War II he served three and a half years in the Army, the last year and a half at Los Alamos.

Bob attended the University of Tennessee and New York University and received his Bachelor's degree in electrical engineering from the University of New Mexico.

He is a member of the Institute of Radio Engineers.



1000 DAYS without a security infraction by AEC-SAO's Security Branch is represented by this certificate being presented secretary Florence G. Heineman by Area Office Manager Charles C. Campbell.

Sandia Steam Plant Sets New Capacity, Economy Record

During recent cold weather the Sandia-operated AEC steam plant for Sandia Base was called upon to produce a record amount of steam.

The peak weight of water converted to steam per hour ran in excess of 180,000 pounds, more than 50 per cent greater than the rated capacity of the boilers. The record was set simultaneously with a new record for efficient use of fuel oil.

In order to conserve available natural gas for use in the Base housing areas, the steam plant switches to fuel oil when advised of an imminent shortage. After receiving a gas shortage alert, R. L. Boase, supervisor of Heating Plant Section 4514-2, had his crews immediately change fueling from gas to oil.

At times oil consumption reaches nearly 35,000 gallons per day to supply the heat demand of all the major AEC, military and Sandia Laboratory buildings and facilities on Sandia Base. Steam plant personnel practice this changeover of fuels weekly on all shifts in order to be prepared for these emergencies.

E. H. Craven, supervisor of Plant Engineering Design Division 5543, reports that in recent winters an average of 8.5 gal-

Welcome Newcomers

Albuquerque	2440
E. Ruth Barth	4413
Earl S. Behrand	2713
Betty J. Bryant	3126
Gertrude Cleary	3126
Margaret L. Clem	3126
Margaret L. Clem Anna Lee Goodall Jerry L. Hitchcock	3126
Jerry L. Hitchcock	4413
Roy H. Lauretzen	3462
Flora S. Perea	
Ruth A. Rhodes	
M. Aileen Trull	3120
Arizona	5001
Lester L. Steele, Tucson	5221
California	0425-250
Linda Lee Burrow, Livermore	8212-3
Louise S. Converse, Livermore	8123-1
*Carl D. Holmes, Inglewood	8223-4
Harold E. Hunt, Livermore Lee E. Kessler, Livermore	8222-2
Lee E. Kessler, Livermore	8212-5
Gordon R. Kibby, Niles	8223-3
Ronald B. League, Escalon	8232-4
Dorothy L. Stewart, Castro Valley	8212-3
*Willard L. McCormick,	1621
Corona Del Mar Mary A. O'Neal, Livermore	
George E. Pinsonneault, Oakland	8232-3
Michigan	0202-0
Earl W. Beck, Midland	8115-2
Ohio	01.10.2
Francis L. Boron, Jr., North Canton	8114-2
David J. Timmer, Dayton	8142-2
Oklahoma	
Gerold L. Thompson, Oklahoma Cit	y 4121
Rhode Island	
Danforth Clement, Middletown	4111
Washington	122.110
Kenneth A. Mitchell, Seattle	8141
* Denotes Rehired	
Returned from Leave (Albuquerque)	0.101
Willie M. Servis	
Thomas H. Martin	1322
Ethel U. Callison	4151

lons of oil was used to convert 1000 pounds of water to steam. Consumption this winter has been only 7.6 gallons of oil per 1000 pounds. At current oil prices this saving would amount to about \$500 on a peak output day.

Mechanical Section 4543-2 has the engineering responsibility preparing all basic operating instructions and steam plant engineering changes. The Section conducts the overall observation and control of water treatment and steam generation and distribution facilities. Carl Whitcomb of the section recently completed a special course at Hays Instrument Corporation Laboratories in Michigan City, Ind., which covered all phases of automatic safety and operational controls for steam plants.

Some of the many accurately calibrated automatic operational controls regulate the fuel-air ratios for combustion, boiler draft, boiler water levels and rate of

The addition of these automatic devices to the original steam plant, to assist the crews, has been made over the past several vears. The mechanical, electrical and electronic control systems allow the boilers to be operated safely and efficiently at a rate far beyond safe limits for manual

Dr. Burton Adkinson To Speak Feb. 17 at **Development Seminar**

Dr. Burton Adkinson of the National Science Foundation will speak on "Trends in Collection, Storage and Retrieval of Information" at a Development Seminar Wednesday, Feb. 17, at 10

No tickets are required for the meeting will be held in Room 231, Bldg. 802.

Because of construction in and near Bldg. 815, no further meetings are being scheduled there until the first part of April.

Presents Tech Paper

A technical paper by Charles W. Harrison (1424-1) was presented recently at the Earth-Current Communications Seminar of the National Bureau of Standards in Boulder, Colo.

Title of the paper was "General Theory of Antennas in a Conducting Dielectric."

Sandia's Safety Record

Sandia Laboratory Has Worked 7,110,000 Man Hours Without a Disabling Injury

Livermore Laboratory Has Worked 2,663,000 Man Hours Without a Disabling Injury

AEC-SAO Branch Has 1000 Days Without Security Infraction

Personnel of the AEC's Security Branch, Sandia Area Office, proved they "practice what they preach" by completing 1000 days without a security infraction on Dec. 28, 1959.

To celebrate this milestone, Branch employees enjoyed coffee and cake at the Area Office and women employees were presented corsages on the occasion.

Florence G. Heineman, Branch secretary, who has completed almost eight years of employment with AEC without a security infraction, was accorded the honor of receiving the 1000 day Security Achievement Certificate for Branch from Charles C. Campbell, manager, Sandia Area

University of Nebraska Alumni in New Mexico Receive Charter Feb. 18

A Charter Day dinner meeting for University of Nebraska alumni will be held Feb. 18 at the Four Hills Country Club. Dr. B. N. Greenburg, regent of the school. will be the guest speaker.

Members of the Executive Committee of the Alumni club in Albuquerque include Vice Chairman R. E. McCallum (2752-3), A. F. Cone (5510), and D. E. Irvin (4112).

All Cornhusker alumni, their spouses and guests are invited to the affair, which will begin at 6 p.m. with a social hour followed by dinner at 7 p.m. Reservations should be made with Ted L. Gunderson, 1710 Hoffman Dr. NE by Monday, Feb. 15.

Mental Health Needs To Be Discussed at Meeting Next Week

Major mental health needs in New Mexico and the Southwest will be discussed during a joint meeting of the New Mexico Branch of the American Personnel and Guidance Association and the New Mexico Psychological Association on Saturday, Feb. 13. The session will be from 10 a.m. until noon in La Cana Room, Coronado Club.

Program chairman for the meeting is Jerome H. Gibson, supervisor of the Personnel Testing and Staff Functions Division 3154.

Featured will be a panel discussion with the following participants: Dr. Phillip L. Sirotkin, representative of the Western Interstate Commission for Higher Education; Dr. Lester Libo, state director, Division of Mental Health, Department of Public Health; Dr. Virginia Keehan, director, Guidance Division, State Department of Education; and Dr. Warren Brown, Albuquerque psy-

Moderator will be Henry Weihofen, professor of law, University of New Mexico.

The meeting is open to the public and admission is free.

LAB NEWS

PAGE FIVE

PRE-OLYMPIC SKIING is enjoyed by Darlene Cahill (8212-3) who recently accompanied a group of 40 Sandians on a trip to Squaw Valley. Arrangements for the trip were made by Employee Services (8212-2). The ski area is a few hours drive from Livermore.

Michael Modis Dies After Long Illness

FEBRUARY 5, 1960

Michael Modis, staff assistant senior draftsman (8114-3), died

Jan. 25 following a lengthy illness. He was 33. Mr. Modis

joined Livermore Laboratory in May 1957, coming from Kett Corporation, Cin-

cinnati, Ohio, where he had been a designer, engineering assistant. He had been on leave of absence from Sandia since Sept. 16, 1959.

Survivors include his father and one brother in Livermore.

Curriculum This Spring In Nuclear Engineering The University of New Mexico

UNM Establishes New

has established a curriculum in Nuclear Engineering with the first course to be offered during Spring semester.

The three-hour course, Engineering 197 (Introduction to Nuclear Engineering), will be taught by Dr. Glenn Whan with the first class meeting Feb. 8 at 5:30 p.m. According to W. H. Bailey, Staff Training and Education Section 3131-2, the classes will be scheduled for the convenience of Corporation employees. Additional information may be obtained from Mr. Bailey at ext.

Sandians Honored By Meteorology Society

Two Sandians were among 22 men named certified consulting meteorologists at the 40th anniversary meeting of the American Meteorological Society last month.

They are Bernard N. Charles (5121) and Jack W. Reed (5111). Certification is based upon education, knowledge, character and experience of candidates.

The American Meteorological Society is the national professional scientific organization in this country through which the collective interests of the profession are organized and represented.

Salton Sea's Fire **Prevention Rates** National Award

Sandia Corporation's Fire and Safety Section 4582-2 at Salton Sea Test Base recently was awarded 18th place in the 1959 Fire Prevention Contest, Industrial Division.

The contest is sponsored by the National Fire Prevention Association International. The section competed against 125 entries in

Last year Salton Sea placed 11th in the same contest.

Saturday Morning Bowling for Youngsters Planned at Club

Saturday morning bowling leagues for children between the ages of 10-18 will be formed at the Coronado Club tomorrow. All youngsters whose parents are members of the Club are invited to-join.

Cost will be 50 cents for a year's membership in the American Junior Bowling Congress, and 75 cents for every three lines of bowling. Bowling balls and shoes will be supplied free.

Instruction will also be given while the children are bowling.

To join, children should come to the bowling alleys at 9 a.m. tomorrow. For further information contact Arlene Held, ext. 37370.

Livermore Basketball Team Leads League With Three Victories

Livermore Laboratory Employees basketball team continued its winning streak by defeating the Livermore Teachers 50-36.

Team captain Mike Ferrario (8114-1) scored 20 points during the game. The victory put the team in first place in the league with a three-win record.



PRIZE WINNING fire fighters at Salton Sea Test H. L. Dillard, H. V. McNabney, fire and safety su-Base include (I to r) S. W. Wilkinson, J. A. Culver, pervisor, S. W. Ward and W. R. Erwin (all 4582-2).

Sandia Lab's Safety Record Tells of Suffering, Lost Time Not Occurring

By A. B. Metzger, Manager of Safety Engineering Department

As we go to press Sandia Laboratory worked 7,110,000 employee-hours representing 201 consecutive days without a disabling injury. Each of us has a right to be proud of this record since it represents the combined efforts of every employee to perform his or her work in a safe manner.

Let us go a little further and see what it represents in pain, suffering, and time lost from production that never occurred.

Compare Sandia Laboratory's record with the average record of industries throughout the United States performing similar work according to the figures of the National Safety Council. Our people prevented 50 disabling injuries, and averted 2,900 days of time lost from work during the accident-free period of time shown above.

Continuing the comparison, according to the figures of the Bureau of Labor Sta-

"When you're becalmed on a

sailboat without an auxiliary motor a hundred miles off the

coast of Mexico the only thing

to do is spend the time drying

out everything on the boat which

was soaked during the last storm."

what happened a number of times

while on a 22 day cruise between

the west coast of Mexico and

Baja California.

This is the way Jim Roy tells

tistics, 43,900 industrial plants in the United States employ an average of 268.3 employees per industry. Based on these figures, the average industry would have to work more than 13 consecutive years without a disabling injury in order to equal Sandia Laboratory's safety record to date.

Nobody wants to get hurt, nor does anyone want to hurt his or her fellow worker. Close to 90 per cent of disabling injuries in industry are caused by chance-taking and/or unsafe practices. Sandia's record is indeed a tribute to all of our people since it clearly indicates careful thinking and an evident desire on their part to protect themselves and their fellow workers from injury.

Sandia Laboratory employees are giving their answer to Cain's question to our Lord in the fourth chapter of Genesis, ninth verse, which asks "Am I my brother's keeper?"

Wind and Sail Power Yawl on

800-Mile Mexican Coast Cruise



SNOW BUNNIES Ruth Burns (8232-1) and Peggy Flindt (8212-3) romp in rare snow in Livermore's back yard. The snow covered the higher elevations of the foothills around the city late last month.

AEC Announces Two Construction Projects for Sandia Laboratory

The Atomic Energy Commission has advised contractors that bids will be opened in March on two construction jobs at Sandia Lab-

Bids will be invited about Feb. 15 for modifications to an underground electrical system in Tech Area I. The project will include construction of three manholes, installation of concrete ducts and cables and miscellaneous electrical work. Bids are scheduled to be opened Mar. 1. Work is to be completed within 45 days after the contractor receives notice to pro-

Bids are scheduled to be invited Feb. 16, and opened about Mar. 8. for construction of a water treatment and distribution system to serve Area III. The project will include approximately 6,146 linear ft. of eight-inch asbestos cement water line, including four fire hydrants; a water treatment plant, including one 40x40 ft. pre-fabricated metal building; one 100,000 gallon steel reservoir, with pumps; 540 linear ft. of eight-ft. fence; and miscellaneous valves and fittings. Work is to be completed within 150 days after the contrac-

Sandian Will Teach YWCA Folk Dancing Class Starting Feb. 10

A folk dance class for beginners will be taught by Lynn M. Barker (1283-3) at the YWCA starting Wednesday, Feb. 10.

The course will last 10 weeks and will be taught each Wednesday at 8 p.m.

Instruction will be given in the polka, schottische, two-step, waltz, and dances from many foreign countries. Cost of the course is \$4 per person, which includes a year's membership in the YWCA. Both men and women are welcome to attend the classes.

For additional information, Mr. Barker may be reached at ext. 36138.

Moving Time

Philip A. Gelt (1424-3) has moved into a new home at 10919 Fairbanks NE.

Retirement Problems Are Discussed at University Conference

"Aging employees," William G. Funk (3120) told an audience at the University of New Mexico recently, "are a great concern to industrial organizations." Funk discussed this subject as member of a panel which appeared on the program of a conference on Problems of the Aging.

The concern, he explained, has three facets: hiring the older worker, keeping them productive and satisfied, and retirement arrangements for these employees.

Mr. Funk pointed out that few workers plan for retirement very far in advance. This makes financial aspects of retirement especially difficult to handle. In addition there are the many other personal problems which arise at itretirement time-all of which make it a more trying time unless the employee is adequately prepared for the change.

The panel members discussed what steps industry could take to assist employees in the years before their retirement age is

Now Who Was It That Wanted Those Turquoise Earrings?

Brian Finley (3111-2) is in a quandry over a pair of needlepoint turquoise earrings.

About a year ago, someone at Sandia Laboratory asked him if he could get hold of a pair of needlepoint earrings and Brian said he'd try. He mentioned this to an Indian trader who was a friend of his and then forgot about

Last week he got the earrings through the mail, and now he can't remember who wanted them. He hopes the person will see this article and contact him.

Tickets Available for Community Concerts

Community Concert member-ship drive for the 1960-61 season will be conducted Feb. 8 to 13, according to Mrs. J. E. Gross (whose husband works in 1413), team captain for Sandia Base.

For further information or tickets the following persons may be contacted: Mrs. Gross, AL 5-7327; Mrs. A. J. Clark, ext. 33267; Mrs. John Durant, ext. 29272; Mrs. R. W. Crain, AX 9-1509 and Mrs. L. J. Frenkel, AX 9-3258.

Sandia Base Chapel Protestant Men Group Plan Sweetheart Dinner

Feb. 6 is the deadline for making reservations to attend the Sweetheart Dinner of the Sandia Base Chapel, according to Lee Stinnett (2531), president of the Protestant Men of the Chapel organization.

The dinner will be held on Feb. 9 at the Chapel beginning at 6:30 p.m. Call ext. 33224 or 48211 to make reservations.

tor receives notice to proceed.

STRANGE PINNACLES arising from the waters near Los Candeleros were investigated by the New Mexico sailors.

Jim, a staff assistant in 1625-1, and the boat's owner, Maj. R. D. Brewington of Holloman AFB, left their families at home in Albuquerque and Alamogordo, respectively, and car-towed their craft to Guaymas, Mexico. After a shakedown cruise around the cape of Guaymas they set out Nov. 4 with food, water and emergency supplies for 30 days.

Their 22 ft. fiberglas boat was originally a racer of Polaris class but had been converted to a masthead yawl type. The mast was 30 ft. high and a maximum of six dacron sails could be used. Jim had been sailing for a year on week-ends at Elephant Butte Lake and "Rusty" had additional experience on Galveston Bay.

Caught in Storm

Their first day out from Guaymas a storm began to build up. That night they had to lay to on sea anchor and lost their dingy during the ensuing storm. From then on a rubber emergency raft had to make-do for landing expeditions.

Once across to Baja California they dropped anchor at midnight

of Loretto. In fact the residents of the village were lined up along the dirt road staring at the two The entrance to Puerto Escondido further south remained hidden beyond a distance of 50 ft. With low tide the navigable width their draft. Three miles from

in Concepcion Bay and discover-

ed in the morning they were di-

rectly in line with the main street

was only 40 ft. for a boat of shore Alto Gracia peak of the Sierra de la Giganta range rose to 4,773 ft. Upon leaving the sheltered harbor, the sailboat swept out on high tide and was whirled around several times before being brought under control.

Strange Pinnacles

During the long spinnaker run down the entire length of Baja California Jim and Rusty also investigated the strange pinnacles rising from the waters near Los Candeleros.

They reached the vicinity of La Paz, their destination, during a period of high tide and had to wait several hours until twilight before bringing their boat into the harbor. The passage between shoals and cliffs is only 30 to 40 yards and three sets of range lights on the nearby hillside were used in finding their way through in darkness. Once there, Jim and Rusty spent several days before returning to Guaymas.

This return trip proved more difficult than the trip down. They were becalmed several days and twice were laid up by storms. It was seven days before the New Mexico sailors set foot on land.

Jim figures that they covered an estimated 800 nautical miles and fishermen at Guaymas were amazed that they had completed or even attempted - the trip without auxiliary power.



DRYING OUT after one of several storms encountered in the Gulf of California found every available rope used as a clothes line.

Scientific and Technical Meetings

Feb. 9
American Meteorological Society
UNM Administration Building, Rm. 253
7:30 p.m.
Speaker: Ralph L. Calvert (5121)
Topic: "Earth Satellite Orbits for
Meteorological Applications"
For further information contact
B. N. Charles (5121), Ext. 48161

American Society for Quality Control
Sandia Base Officers Club
Social Hour: 6:15

Dinner: 7:00 p.m. (north dining room, \$2.00)
Technical meeting: 8 p.m. (Mesa Lounge)
Speaker: Roy A. Wylie,
Manager, Quality Control, Instrumentation
Division, Ampex Corp., Redwood City, Calif.
Topic: "Repeatability of Gaging"
For further information contact
W. H. Robertson (1442), Ext. 39149

Feb. 11 American Welding Society Silver Spur Restaurant Dinner: 6:45 p.m. Technical meeting: 8:30 p.m.

Speaker: Dr. Alexander Lesnewich, supervisor of research,
supervisor of research,
Central Research Lab., Air Reduction Co.
Topic: "Control of Metal Transfer
in Gas Shielded Ace Welding"
or reservations or further information contact
V. G. Nelson (1621), Ext. 32246

Feb. 16
Society of Technical Writers and Editors
Place to be announced
7:30 p.m.
Program: Panel of editors in an informal discussion, plus a question and answer session.
Don Emerick (5322), will be moderator
For further information contact
Myrtle Patterson (5321), Ext. 22161

Feb. 17

American Ordnance Association
Mesa Lounge, Sandia Officers Club
8 p.m.

Program: Business meeting followed by
speaker and social hour.
Speaker: Eaton H. Draper (1200)
For reservations or further information
Dick Poe (5532), Ext. 23239

Feb. 18
Albuquerque Group of
National Association of Accountants
Silver Spur Restaurant
Social Hour: 6:00 p.m.
Dinner: 6:30 p.m.
Speaker: Ralph Eiden
Manager of Data Processing Division Manager of Data Processing Division
Ernst & Ernst, Chicago Public Accountants
For reservations contact
Robert Duke (4122), Ext. 44253

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



LA PAZ at the southern end of Baja California meant fresh fruit and a few days on solid land for Jim Roy after sailing.

Sandia All Stars Selected; Face Tournament Feb. 15-18



PRACTICE SESSION of the Sandia All Stars found this group expertly sinking baskets. From left are Jim Sanchez (2227), Julian Lovato (4411), Wally Jungmeyer (5126), Bob Hedges (1624), Tom Sheldon (4411) and Gil Baca (4516). All star tourney Feb. 15-18.



SANDIA ALL STARS confer with coach Jerry Olguin (2732) during a practice session last week. From left are Olguin, Malcolm Woodward (1614), ass't. coach, Leo Chavez (3464), Lou Sanders (5150), Clyde Hughes (4412), Tom Patterson (4132), Lon Kracko

Players for the Sandia All Star Basketball team were announced this week by coach Jerry Olguin (2711). After a series of practice games the all stars will face tough competition against Sandia Base, Manzano and KAFB star players in a double elimination tourney beginning Feb. 15.

Sandia players open against Kirtland AFB at 8:30 p.m. in the Sandia Base Gym. It will be the second game of the evening. At 7 p.m. Sandia Base will play Manzano.

The tournament will continue with games starting at 7 and 8:30 p.m. through Feb. 18 when the tournament champion will emerge. Admission to all games is free.

Named to the Sandia all star team are the following players:

Ken Flynn (1264), Frank Comiskey (4153), Fred Millsap (5241), Tom Patterson (4132), Clyde Hughes (4412), Lon Kracko (1652), Julian Lovato (4411), Lon Sanders (5150), Joe Costales (4153), Leo Chavez (3464), Gil Baca (4516) and Ron Smith (2534).

Assistant coach is Malcolm Woodward (1614).

Selected for honorable mention for the all star team were Joe Abbott (2421), Allan Ness (4413), Bill Northrip (5132), Ray Chandler (5511), Carl Duimstra (1331), Howard Heil (4541), Jim Johnson (5243), Warner Jones (3464), Wally Jungmeyer (5126), Art McCarthy (5131), Tom Sheldon (4413), Paul Hersey (3445), Jim Tichenor (6021), Bob Hedges (1624), Jim Sanchez (2227), Verle Swinney (4413) and Jack Thompson (AEC).

Get Well

Get well wishes are extended to Louis White (4573-2), who is convalescing at home.

Sandia Service Awards



William L. Dickens 4514 Jan. 23, 1950



Hubert R. Hanen 2551 Feb. 6, 1950



Raymond E. Butler 5524 Feb. 8, 1950



1651 Feb. 8, 1950



Awards



Mary M. Criswell 4112 Feb. 10, 1950



Edward J. Vulgan 1542 Feb. 12, 1950



Oliveros Gallegos 2551 Feb. 13, 1950



Samuel K. Tabet 4512 Feb. 13, 1950



Chester S. Wolowicz 8114 Feb. 13, 1950

Five Years

Five Tears

Feb. 6-19

Barbara L. Bruner 2713, Richard S. Cook, Jr. 8161, Alburtia Stevens 3364, George H. Smith 1262, Bette J. McKenzie 3464, William F. Carstens 3423.

Clarence H. Meyer 4411, Everett L. Westfahl 1414, Albert L. Gower 4541, John A. Anderson 1246, Mary Helen Wolfe 3126, Kenneth S. McNabb 4573.

SHOPPING CENTER

SHOPPING CENTER

MATERNITY CLOTHES, size 12 tall. Jennings, AL 5-5950.

'58 BUICK Special, R&H, automatic trans-mission; will trade for older model. Hammonds, AM 8-3800.

SHOPPING CENTER

SHOPPING CENTER

SHOPPING CENTER

CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication unless changed by holiday.

RULES

1. Limit: 20 words

One ad per issue per person Must be submitted in writing

Use home telephone numbers For Sandia Corporation and

AEC employees only No commercial ads, please Include name and organization.

FOR SALE

EXPLORER UNIFORM, dark green; shirt: neck 12, sleeve 30; pants, waist 26, inseam 33 unfinished; leggings; \$5. Hobart, AX 9-2698.

30HP ELGIN OUTBOARD Motor, '57 model, excellent for water skiing, \$200. Meikle, AX 9-4640.

MALE BOXER, 8 mos., AKC registered, has some obedience, training by L. Stowder. Simmons, AX 9-3823.

HORSE, gentle for children, 6 yrs. old, will show at 2448 De Vita Rd. SW, \$100. Montano, CH 2-6584 evenings.

TOBOGGAN, 6 ft. long, seats 4 or 5, \$14. DeSelm, AL 5-2634. '52 OLDS ENGINE, recently overhauled;

ventilated aluminum patio awning used 18 mos., 10 x 24. Cannon, AX 9-4592, 10713 Baldwin Ave., NE.

10713 Baldwin Ave., NE.

'55 BUICK Century station wagon, PB & PS, dynaflow; will consider trade for late 4-speed pickup. Smith, AX 9-0574 after 5 p.m.
BICYCLE, English style, Schwinn, regular size w/hand brake, gear shift & saddle bags, \$15. Owens, AL 6-3789.

SLIDING GLASS DOOR, new, 6 ft., com-plete \$95. Abeyta, AX 9-4757, 9129 Cordova NE.

KARLSON HI-FI speaker enclosure w/RCA speaker; will swap for tri-band beam antenna. Stueber, AX 9-2414 after

SINGER, electric, round bobbin, cabinet model, \$45. Turner, DI 4-7082.

WASHER, GE, automatic filter-flo, \$85. Coleman, AL 5-7480.

WEBCOR TAPE RECORDER w/five tapes, dual speed 3½ & 7½, \$50. Weir, AX 9-1160.

WEIMARANER PUPS, 8 wks. old, three males left. Graves, CH 2-1068, 1221 Entra Bonita.

ELECTRIC DRILL, Craftsman 1/4 in., \$14; Craftsman soldering gun complete set, \$12. Pitti, AL 6-1629.

3 BRM HOME, den, utility room, 13/4 baths, AC, w/w carpeting, large patio, landscaped yard w/sprinklers, extra stor-age. Massey, AM 8-1660.

5:30 p.m.

MATCHING SOFA & chair; dinette set; coffee table, wrought iron; two end tables, Westinghouse vacuum; chest of drawers; Hollywood bed. Heineman, AL 6-6387 after 6 p.m.

2-WHEEL TRAILER, steel frame, hitch for car, new fires, new tarp & spare; English racer bike, \$25. Myers, ext. 4-6290 after 5 p.m.

GE IRONER, used 3 months, \$90. Chavez, CH 4-2725.

WINCHESTER model 95, .35 caliber; will take snub nose .38 special in trade. Pritchard, AL 5-6949.

CARBED, folding, \$3. Joseph, AX 9-6989. BEDROOM SET maple, single bed, vanity, chest, \$50. Beadersted, AX 9-2829.

'57 LAMBRETTA 150D scooter, many ex-tras, \$175. Salazar, AL 5-1301, 420 tras, \$175. Graceland SE.

3 BRM BRICK, 13/4 baths, service room, dishwasher, disposal, carpeting, drapes, garage, covered patio, \$16,900. Adams, AX 9-0454 after 4:30 p.m.

CUTE PUPPIES, large assortment, free. Tatum, ext. 2-9021. MOTOROLA

Philco table model, \$10. Nissen, AL 5-5657

DAVENPORT, 3-cushion, Damask brown & beige, French Provincial styling, w/ zippered slip covers, \$25. Richter, AX 9-0409.

RABBITS & cage; ladies coat, size 14; mens white dinner jacket & black pants, size 40-42; reasonable offers ac-cepted. Simmons, ext. 3-6295. BEAGLE PUPS, AKC, 2 mos. old Feb. 14, select now, \$40 each. Smith, DI 4-5542.

8 VOLKSWAGEN, combi-transporter w/ seats, \$1600. Ridlon, AX 9-0378.

'59 FORD CONVERTIBLE, Galaxy 500, turquoise, R&H, Fordomatic, \$2600; \$210 below book. Schowers, AL 5-9279. '49 DODGE, 2-dr., good second car, \$150 or best offer. Starr, AM 8-0839.

'53 INTERNATIONAL, ½ ton; '56 Chevrolet Bel-Air, 4-dr., overdrive, R&H. Weaver, CH 3-8944 after 6 p.m. MOVIE PROJECTOR, 8mm 500 watt Bell & Howell, used several times only, \$100. Sublett, AL 5-0660.

LEICA IIIG CAMERA, F3.5 lens w/Leica meter, leather case, 2 yrs. old, barely used, \$225 or best offer. Coughlin, AX 9-9215.

NORGE ELECTRIC RANGE, regular size, will deliver, \$50. Olson, AX 9-0617.

SILVER COFFEE SERVICE, 9 cup coffee pot, creamer & covered sugar, 12 in. round tray, \$15. Janney, AM 8-8074.

'59 PLYMOUTH, Belv. 4-dr., R&H, torque-flite transmission, V-8, under-coating, tinted glass, will consider trade. Ghol-son, AX 9-2663 after 5 p.m.

NEXT DEADLINE

FOR SHOPPING CENTER ADS Friday Noon, Feb. 12

'42 FORD V-8 coupe, good transporta-tion, \$75. Cotter, AL 6-0326.

'49 DODGE 1/2 ton pick-up truck w/camping cover, \$350 or best offer. Pumphrey, AX 9-5259.

CAMPING TRAILER, 15 ft. Mercury de-luxe '59 model, sleeps 5, butane stove & oven; \$130 down, assume approx. \$845 loan. Skender, CH 7-4555.

PUPPIES, German Shepard, AKC registered, have shots, 6 wks. old, \$50. Armstrong, DI 4-6586.

HI-FI EQUIPMENT, AM & FM receiver, \$25; pre-amplifier, \$15; AR-2 speaker, \$62; console cabinet, \$9; equipment cabinet, \$12; other parts. Browning, AX 9-6384 after 5 p.m.

TV TUBE, 21 in., \$5; 3-speed turn table, \$10. Calvery, AX 9-5800.

TV CONSOLE, 17 in. late model, practically new, \$100. Marchant, AL 5-1152. '55 CHEVROLET, std. transmission, push-button radio. Giannini, CH 3-5197, 1023 5th St. NW.

ELECTRIC HEATER, Knapp & Monarch, 1650 watt, \$40. Reinertsen, AL 5-1954. SEWING MACHINE, new Morris, never uncrated, \$125. Sanchez, 8500 Roma NE, AM 8-5432.

MARE, 5 yrs., 2-horse trailer, will sell or swap both for 14-16 aluminum boat; 2-wheel luggage trailer, \$40. Green, DI 4-4472.

MARTIN GUITAR, 2 yrs. old, oria. cost \$105, sell for \$75. Sutfin, AX 9-6805. ARGUS C-3, 35mm MatchMatic camera w/case and GE light meter, \$30. Karcher, AL 6-3708.

'50 CHEVROLET club coupe, deluxe model, R&H, approx. 11,000 miles on rebuilt motor, \$225 or offer. Maes, AL 5-0207 after 4 p.m.

WINCHESTER 30-30 carbine, \$45; will trade for old guns or coins. Zaluga, DI 4-1564. '56 PONTIAC, 4-dr., R&H, \$1095. Potter, AM 8-4541.

3/4 TON GMC w/comper mounted,

engine, 4-speed, 4 six-ply 7.50x17, camper sleeps 5, butane stove & tank. Lockwood, AL 5-9296, 941 Madeira SE. MOVIE CAMERA, Keystone K-25 Capri w/F 2.5 lens, \$29. Jefferson, AX 9-1125.

TABLE SAW, 10 in. T.A.; 6 in. jointer, bench model drill press; all Sears equip-ment. Pliner, AL 6-1907, 6210 Bellamah

AIRCRAFT Cessna 140, 340 Hr. S.M.O.H., metal prop., Narco Superhomer, new license. Ortiz, CH 3-9597 or DI 4-5630.

MAPLE BUNK BEDS complete, \$40; floor lamp, 6-way, \$3; chest & bookcase matching, \$15; coffee table, \$3. Negaard, AX 9-9443 after 5 p.m.

SKIS, 2 pr. men's with poles and one pair woman's; reasonable. Bidwell, AL 5-5434.

FREEZER, 15 cu. ft. Maytag upright, \$250. Ceferatti, AX 9-2603, 10313 Norman

TIRES, five 6.00x16, \$30. Fenstermacher, AX 9-0200.

LEICA IIIF-F1.5, 90mm F4, 135mm F4.5, 28mm F3.5, flash gun, exposure meter, filters, sunshields, many extras, \$300. Cundiff, AL 6-4649, 5905 Constitution NE.

BABY CRIB, baby carriage and other baby furniture. Stein, AX 9-8875.

3 BRM BRICK, 13/4 baths, H-W, Carpeting LR, DR, hall; CH, AC, walled, patio, landscaped, sprinklers low down payment. Seay, AX 9-5270.

SPEAKER SYSTEM, Klipsch type three-way, \$199; Hallicrafter communications receiver SX42, \$49. Winblad, DI 4-3109, 4413 Palo Duro NE.

3 BRM ROBERSON, 13/4 baths, HW floors, CH, walled, sprinklers, many extras, no qualifying, \$1000 down, \$102 mo. FHA. Steele, AM 8-8323.

2-PIECE SECTIONAL sofa, gold; green ove; 4 large TV trays; and. Willis, AL 5-3860 or tique day bed. AL 5-9148.

'56 PORSCHE Speedster convertible. Foder-aro, AL 5-3677.

CUSHMAN MOTOR SCOOTER w/wind-shield & carry box, rebuilt engine; corner of Ortega & Guadalupe in Ala-meda. Shreve, DI 4-7146.

WOLLENSAK 2-speed tape recorder, T-1500, w/hi-fi speaker attachment, cost \$289, sell for \$125; MGA luggage rack, detachable, \$10. Bartolucci, AX 9-9072. HORSE TRAILER, quite old, but worth \$25. Haley, DI 4-3919.

RIFLES—J. C. Higgins model 50, .270 w/Higgins 21/2 scope; Winchester model 70, .308 w/Lyman sights. Burroughs, AX 9-1851, 2803 Altez NE.

'58 RANCH WAGON, 4-dr., 6 cyl., over-drive. Fife, BU 2-3214 or ext. 26136 between 12 & 1 p.m.

CHEVROLET sport coupe, powerglide, &H. Lochtefeld, DI 4-0136.

AUTOMATIC WASHER, Bendix, \$15; Norge 36 in. gas range, \$15. Landis, AM 8-8472.

'51 DODGE 6, new paint, seat covers, \$275; Cushman Eagle '56 scooter, \$150 or best offer. Gallegos, AX 9-7270, 1409 Guaymas Pl. NE. 3 BRM HOME, 1½ baths, den, oversized garage, AC, landscaped, near schools, shopping heights, \$12,850. Summers, AX

NIKON S-2 CAMERA f1.4 Nikkor lens, w/case, \$135. Zanetti, AX 9-7582. 17 INCH DUMONT console, \$60. Glenn, AX 9-2743.

WINTER SPINET, walnut finish, full key-board piano, \$450. Brake, AM 8-8320. SKIS, hickory 6' 3", cable bindings, poles, \$10; youth's ski boots, size 4, \$6; ladies' ski ponts, matching fleece lined jacket, \$12. Sherwin, AL 5-8866. PIANO, Chickering spinet, one owner, original price \$1,200, modern lines, \$680. DeSelm, AL 5-2634.

WANTED

GENTLEMAN to share furnished home in NE heights with one other. Oglesby, AX 9-0025.

TRADE Colt .22 Match Target Woodsman pistol for German luger or Mauser pis-tols or Nazi daggers. Smitha, AX 9-1096. BABY SITTING for child 2-4 yrs. in SE heights. Cash, CH 2-3721.

PLAYMATE for my 5 yr, old boy, 5 days a week, Farrelly, AL 5-9880. TO RENT vacation 15 ft. trailer for 3 wks., May 30th through June 17th. Garcia, AL 6-6609.

A UNIT HEATER, not over 25,000 BTU. Brownson, AX 9-0449 after 5 p.m. SHOP OR OWNERS MANUAL for 1957 Mercury. Lopez, ext. 23144.

GIRL to share house in Hoffmantown. Burroughs, AX 9-1851, 2803 Altez NE. BABY SITTING in home for 2 yr. olds or older, weekly or monthly rates. Vetter, AL 6-7786, 3217 Arizona NE. PERSONS INTERESTED in Go-Kart racing every other Sunday, GPM, Feb. 4. Ed-wards, AX 9-5496.

WOMAN to care for 1 small child in SE heights; good salary and paid holidays. Miller, AL 6-6020 after 6 p.m.

FOR RENT

2 BRM HOME, stove, washer, combina-tion refrig., w/w carpeting in LR & DR, 1337 Columbia Dr., NE. Harper, AM 8-0357 after 9 p.m. weekdays, before 10 a.m. Saturdays.

2 BRM, unfurnished modern home, 18 Arno SE. Write Mr. Aragon, Rt. Box 479, Las Lunas, N. M.

LOST AND FOUND

LOST: University of Dayton class ring, gold w/red stone, initials ALW, lost near La Madera ski area. Winkeljohn, near La Mi

LOST: Ladies gold watch JMF, 12-25-47; '48 Albuque JMF, 12-25-47; '48 Albuquerque High ring w/initials JRR; Bank of N. M. check book; black leather wallet w/ID of Geo. Gleicher; gold earrings w/red square stone; plaid scarf; gold tie bar; key chain w/belt clip; ODK key w/initials REC; black leather gloves; plastic case. Lost and Found, ext. 26149.

FOUND: Safety glasses; brown fur lined glove; lighter engraved Windsor, Pampa, Texas. Lost and Found, ext. 26149.

FOR SALE AT LIVERMORE '50 PLYMOUTH, 4-dr. sedan, make offer; Hotpoint washer, \$75. Ingledue, HI

7-2695 FOR RENT AT LIVERMORE

VACATION TRAILER, 15 ft., sleeps five, complete w/ice box, stove, sanitary facilities. Gregory, HI 7-5269.



RETIREMENT COUNSELING is performed above by O. J. Foster (3122-1), right. Administrative procedures are explained to Harold W. MacGregor (4221) who plans retirement from Sandia March 1.

YMCA Workshop on **Health Education** At UNM Tomorrow

The second semi-annual workshop on "The Amazing Thing is You" will be presented by the Heights Branch, YMCA, tomorrow at the University of New Mexico for junior high school age youngsters and their parents.

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

The first workshop last September attracted more than 100 per-

The day-long program (9 a.m.-3:45 p.m.) at Mitchell Hall, UNM, will include talks by Dr. James J. Calvert, director, Human Re-Institute; Stuart W. sources Adler, MD, and Rev. Charles A. Fish of St. Marks on the Mesa Episcopal Church, in addition to two movies and group discussions. Lunch will be included in the registration fee.

Members of the YMCA's Health Education Committee, which is responsible for the workshop, include Sandians K. A. Smith (3400), D. J. Jenkins (3130) and W. G. Funk (3120). Registration blanks for the workshop may be obtained today from Mr. Funk in Bldg. 829 or you may register at Mitchell Hall before the workshop starts.

Employee Group to Encourage Singing Formed at Livermore

Rene St. Sauveur (8114-3) has been elected president of the newly organized Livermore Laboratory employees singing group.

Purpose of the organization, according to Rene, is to provide an opportunity for employees to together and form vocal groups. The club plans to meet each Tuesday at noon at a place yet to be decided.

Other officers of the club include Bill Mack (8122-3), vice president; Phyllis Bell (8212-3), secretary; and Dave Kirk (8114-3), treasurer. Named as director of the new organization was Ellen Cunningham (8233-2).

Persons interested in learning more about the club may contact Rene for information.

Army Association To Install Officers

The Association of the United States Army will hold its annual installation of incoming chapter officers at the Sandia Base Officers Club at 6:30 p.m., Feb. 10. Maj. Gen. Waldo E. Laidlaw, Commanding General of the White Sands Missile Range, will be the principal speaker. Price for dinner and social hour is \$2.75. Tickets can be obtained from Wilson Maglidt (3460), ext. 28245.



MEDICAL CLAIMS are processed in Bldg. 829, Services and Benefits Division headquarters. Shown above are Geri Friday, Equitable claims representative, and Ed Opland (3122-1).

Movie Schedule

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

Feb. 8

"The Windsors" — Prudential's Award Winning TV Series (b&w) Feb. 9-10

"The Female Animal" with Hedy Lamarr, Jane Powell, Jan Sterling (b&w) Feb. 11-12

"The Big Beat"—18 top record-

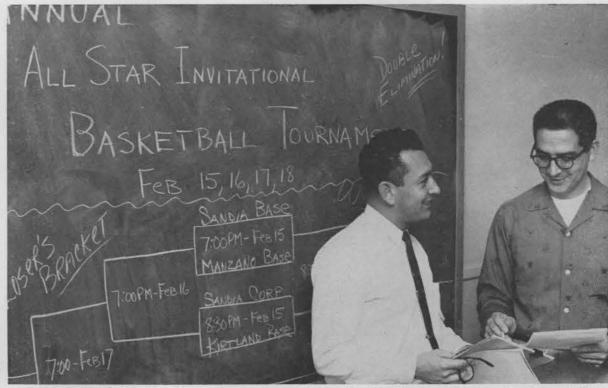
ing stars (color) Feb. 15-16

"Son of Ali Baba" with Tony Curtis, Piper Laurie, Susan Cabot

Feb. 17-18-19

"Man of a Thousand Faces" with James Cagney, Dorothy Malone (b&w)

All movies start at 12:10 p.m. in the Sandia Base Little Theater which is located south of the Military cafeteria. Average duration of showing is 35 minutes.



RECREATION PROGRAM of Services and Benefits Division is handled by George Banos, left, and of coming all-star basketball tournament Feb. 15.

Ken Guerin. They are shown discussing details

From Births to Retirements

Services, Benefits Division Gets Queries, Gives Help In Variety

A new employee looks for a car pool. An employee approaching retirement has questions. A young father has doctor bills. A key punch operator has lost an ear-

What do all these Sandia employees have in common?

They go to Services and Benefits Division 3122 for help.

"The work of the division touches the lives of all employees," Noble Johnson, division supervisor says. "From administering the \$85 million group life insurance program to finding the lost earring, the division's purpose is to serve Sandia."

In the insurance area, the Benefits Section headed by Jack Mafit handles Sandia's group life insurance, supplemental life insurance, hospital-surgical plan. health care plan and retirement plan. Staff members Jim Kelly and Ed Opland are available to employees for counseling in these

Claims Serviced

Claims for Sandia's hospitalsurgical and health care plans are handled by the section through a representative of Equitable Life Assurance Society. An office is maintained in Bldg. 829 and hours for processing claims are from 9 a.m. to 1 p.m. and 2 to 5 p.m. Mondays through Fri-

In administering Sandia's group life and supplemental life insurance programs, O. J. Foster of the section helps survivors of deceased employees with financial and other arrangements. He also handles paperwork connected with leaves of absence and as requested counsels employees on personal debt problems.

This section also conducts special studies of other benefit, insurance and retirement programs.

Insurance counseling is also carried on within the section by representatives of the Minnesota Mutual Life Insurance Company who have offices in the same

Save Time, Trouble

"Under the heading of services," Noble says, "are many activities designed to save employees time, trouble and money, And through the recreation program we try to provide a little pleasure, too."

George Banos runs the recreation program. Seasonal sports as flag football, softball, basketball and golf are organized here. Noontime recreation such as movies, table tennis, or badminton are available.

The recreation program is in the Recreation, Services and Housing Section, John Timmons, supervisor. Here also is a lostand-found service, share the ride center, off-base housing information and a notary public service for employees operated by Roseanne Bascom and Mary Lee Peckumn.

From the division is maintained Sandia Corporation's contact with the Coronado Club and restaurant concessionaires, the Anderson-Dunham Company. Sandia's defense and disaster plan and liaison with civil defense and military authorities are also carried on here.

Car Insurance

The section has the job of making it easier for employees to keep the Provost Marshal informed on their compliance with Sandia Base automobile insurof Corporation mail facilities, this work saves employees a trip once or twice a year to Military Police headquarters.

Although houses and apartments on the Base will not be available to civilians after a time, many employees still remain in AEC housing. For many years Services and Benefits has managed this operation. This function will eventually be assumed by the military.

These are continuing services of the division, those which are part of the regular routine.

It's in the special service field that many Sandia employees know the section. The section has helped lost children get home, in emergency cases they have located employees on vacation, on occasion they can get entertainment tickets at a discount. In season they will help plan a vacation, provide income tax forms, loan horseshoes for the organization picnic and can tell you the best road to High Lonesome.

Vacation Information If someone wishes to go to California on vacation they will get a discount at the most popular center on the West Coast-Disney-

They are the employees' contact with the Military Police and civilian authorities.

If an employee is shopping they can steer him to a good price, they can tell where and when to fish with best luck and hunters have used the section's information to help them get the big ones.

"Service is our job," says Division Supervisor Noble Johnson, "and if employees have a problem, they should try us."



CONFERENCE on Sandia Corporation's retirement plan is pictured above. Periodically details of the plan are discussed by Services and Benefits personnel and representatives of Prudential Life Insurance Company. From left are R. D. Morgan, Prudential service consult-

ant; Noble Johnson, 3122 division supervisor; Jim Kelly, 3122-1 staff member; W. G. Funk, 3120 department manager; Jack Mafit, 3122-1 section supervisor, and C. T. Eckman, Prudential Group assistant director. Such conferences are frequently held by 3122.