



ARRANGEMENTS for the Fifth National Biomedical Sciences Instrumentation Symposium are discussed by Hospitality Chairman T. S. Rathke (left) and Host Committee Chairman J. L. Mortley (both 7334). Some 200 persons will attend the sessions at UNM May 15-17.

Biomedical Sciences Instrumentation Symposium to Meet Here May 15-17

"Advances in Dynamic Bioinstrumentation for Medicine and Research" is the subject of the 5th National Biomedical Sciences Instrumentation Symposium on May 15-17 at the University of New Mexico.

Sandia is one of the six honorary sponsors of the event which is being hosted by the Albuquerque Section of the Instrument Society of America. Jack L. Mortley (7334) is chairman of the host committee.

T. T. Robertson to Retire With 31 Years BTL Service



T. T. Robertson, director of Design Information Center 2200, retires from Bell Telephone Laboratories May 31. He was employed by BTL in March 1936, in New York City, working in drafting and designing. He transferred to the Whippany (N.J.) Labs in 1939 where he was supervisor of drafting in the Military Development Department.

Mr. Robertson became a consultant to Sandia Corporation in February 1950 and in August of that year was made supervisor of the drafting division. In September 1951 he was appointed manager of Engineering Services Department and in March 1956 was named director of Drafting and Specifications. His assignment at Sandia has been to establish drafting specifications and standards, and during these 17 years many changes and improvements have been made in the drafting organization. One of the most important of these changes came in May 1963 when the directorate was reorganized and became the Design Information Center, thus bringing together all functions of product information under one director.

Mr. and Mrs. Robertson have a full schedule ahead of them. After visiting friends in New York and New Jersey and vacationing in Bermuda, they will take a 6- to 10-week trip through Canada and Alaska. En route back to Albuquerque, they will spend a week with W. A. Jenkins, Sr., a retired Sandia employee, who lives on Cortes Island (near Victoria, B.C.). Mr. Robertson plans to do some salmon fishing there.

"I have lots of ideas and plans," Mr. Robertson says. "Mostly I expect to play golf, fish and travel."

Jack, who is also chairman of the session on Biomeasurements and Transducers on May 17, expects at least 200 representatives of research laboratories, educational institutions, hospitals engaged in research and insurance companies to attend the symposium.

A total of 44 papers will be presented during six sessions. Session topics include Instrumentation and Biomeasurements, Dynamic Biomeasurement for Manned Space Research, and Bioengineering and Recent Concepts in Dynamic Biomeasurements.

President Tom L. Popejoy, University of New Mexico, will discuss the UNM Medical School at the luncheon on May 15. At the banquet the following evening, Dr. A. N. Schwichtenberg, head of the Department of Aerospace Medicine and Bioastronautics, Lovelace Foundation, will speak on the "Impact of Biomedical Sciences Instrumentation and Engineering on the Practice of Medicine."

The first five sessions will be held at the UNM Student Union Building and the sixth session and preceding luncheon will be at the Summit House Restaurant on Sandia Crest.

Other Sandians serving on the host committee with Mr. Mortley are T. S. Rathke (7334), hospitality chairman, and R. P. Baker (2441), arrangements chairman.

On May 15, W. W. Shurtleff (7334) will participate in a round-table discussion on fluid mechanics and A. B. Anderson (7334) will be a participant in one on standardization and calibration.

Registration fee for the symposium sessions are \$12 for ISA members and \$18 for non-members.



UNM FOUNDRY STUDENTS toured Sandia's Development Shops last week and watched a pour of molten aluminum in Bldg. 841. At left is foundry leadman, C. C. Riley (4221-4).

SANDIA LAB NEWS



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SANDIA LABORATORIES ALBUQUERQUE, NEW MEXICO OPERATED BY SANDIA CORPORATION FOR
LIVERMORE, CALIFORNIA THE U. S. ATOMIC ENERGY COMMISSION

Sandia Experts Write Chapter for 'Handbook of Industrial Metrology'

The recently-published "Handbook of Industrial Metrology" includes a chapter written by J. C. Moody and M. K. Laufer of Physical Standards Division 2411.

The book is part of the manufacturing engineering series sponsored by the American Society of Tool and Manufacturing Engineers. This volume is a reference book on the theory and principles for all types of measurement and also describes design and application of measuring equipment.

There were 25 contributors to the book, including four from the National Bureau of Standards.

The Sandians wrote a chapter on standards of measurement. They point out that industry, commerce, international trade and modern civilization itself would be impossible without a good system of standards especially since our entire industrial economy is based on the interchangeability-of-parts method of manufacture.

They discuss the legal bases upon which standards have been established, and trace the origin and development of both the metric and English systems of measurement. There is also a description of the master standards for mass, length, time and temperature.

Mr. Moody has been in the field of standards since 1949 when he joined Sandia. His speciality is length and mass standards.

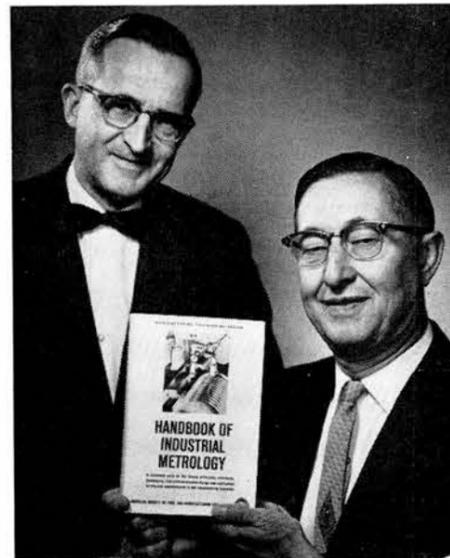
Mr. Laufer has worked in the field of

Test Range Personnel Participate in Tonopah 'Military Appreciation Days'

Three days of festivities are planned by the Tonopah Chamber of Commerce May 12-14 for "Military Appreciation Days." Personnel of Sandia's Tonopah Test Range Department 7230 will be participating in the event, and R. A. Bice, vice president 7000, will be one of the honored guests.

A parade, several official banquets and a number of displays are planned. Officials of state and local government, military, AEC, civil defense and other government agencies will participate.

Department 7230 has prepared a rocket and tracking telescope display for part of the show at the Tonopah airport. Community Relations Division 3433 is providing a telemetry and chaff rocket display for a downtown Tonopah location.



CHAPTER on standards of measurement was contributed by J. C. Moody (left) and M. K. Laufer (both 2411) to this "Handbook of Industrial Metrology," sponsored by the American Society of Tool and Manufacturing Engineers.

standards for 20 years, first with the National Bureau of Standards in Washington, D.C., and for the past 10 years at Sandia Laboratory. His speciality is pressure and vacuum science. When components are hermetically sealed and pressurized, a standard is needed to determine the effectiveness of the seal. Mr. Laufer is responsible for this new field called "standard leaks."

Physical Standards Division, Electrical Standards Division 2412 and Survey Division 2414 are basically responsible to the AEC for the weapons program standards at all integrated contractors.

Rocket Launches Set May 11-14 to Study Winds in Hawaii

Several rockets will be launched from Sandia's Barking Sands launch site on Kauai in the Hawaiian Islands May 11, 12, 13 and 14, by Sandia personnel to measure high altitude winds.

One to four Nike-Apache rockets will be fired after sunset each day. Each rocket will produce bright blue-green or white vapor trails which should be visible throughout the Islands for 20 to 40 minutes each evening.

Nike-Apache rocket systems will be used to carry nose cones containing trimethyl-aluminum (called TMA) which will produce luminous trails between 50 and 100 miles above the ocean.

The launches are part of a continuing study of the upper atmosphere conducted by Atomic Particle Physics Division 5235. L. B. Smith is scientific director for the project. Test director is R. L. Eno of Ground Systems Division 9222.

In addition to the metrology rockets, several launches will be made of Sandia-designed rocket systems under development. Included will be a single stage 13-inch Sandhawk, a Sandhawk with a Dart first stage, and two Nike-Tomahawks with instrumentation packages developed by Sandia Livermore and Lawrence Radiation Laboratory. All contain flotation gear and will be recovered from the ocean.

Project engineer for the rocket systems and payloads is Bruce Barth of Carrier Development Division 9224. Project leader for the camera stations is H. G. Sweeney of Photometrics Division 7226.

Editorial Comment

August has been named "Fiesta Month" in New Mexico. It's not premature at all, since there are things that all of us could be doing now to promote our state and this summer event.

The idea is to write to friends and relatives in other states about the attractions of our state and ask them to come see for themselves.

Volunteer groups have been organized throughout New Mexico to promote the special events scheduled for August.

These include the New Mexico Arts and Crafts Fair, Aug. 4-6; Santa Fe Opera, "Carmen," Aug. 9-17; Gallup Intertribal Ceremonial, Aug. 10-13; Santa Fe Indian Market, Aug. 19-20; and bus tours of Taos, Santo Domingo, Bandelier, Madrid, Cerillos and Carlsbad Caverns.

It's quite a package and contributes to New Mexico's economy. (If we can get visiting families to spend just one extra day, it would add \$100 million a year to the economy of the state.)

"See America First," but start with New Mexico.

Gerry Hauer Elected to Serve as Financial Vice President of Jaycees

Newly-elected financial vice president of the Albuquerque Junior Chamber of Commerce is Gerry Hauer (5541).

"That means I worry about income-producing projects," Gerry says. "It takes a lot of money to finance the community development and youth welfare programs conducted by the Jaycees."

This year the Jaycees plan to complete the new Heights Boys Club. The building is constructed near Lippett Park on north Truman Avenue, but the interior of the building remains to be finished plus installation of equipment. When complete, the facility will be valued at \$170,000—all raised by the Albuquerque Jaycees.

First project in a series to raise the remainder of the needed funds for the Boys Club is the "First Annual Albuquerque Jaycee Stampede" scheduled May 19-21. Gerry is already involved in the arrangements and planning for this three-day event. He has drummed up support from the City, Chamber of Commerce, Downtown Merchant's Association and the Winrock and Coronado retail associations.

Four performances are planned for the rodeo spectacle plus a week's activities leading up to the event including a huge downtown parade. A Stampede Queen will be elected and other promotional efforts are planned.

"Tickets," Gerry says, "we have to sell tickets, tickets, tickets. It will be a great show with top cowboys from across the nation competing in all the standard rodeo events and some special ones just for the Albuquerque Stampede."

Other projects which Gerry will be responsible for in coming months are the City Golf Tournament in July, National Horse Show in August, the Albuquerque



Indoor Track Meet next January, Globetrotters basketball exhibition in February and the Golden Gloves tournament in March.

"These are the money-making projects," Gerry says. "They will finance our money-spending projects such as the Boys Club, the Teen Age Road-E-O and local tournaments for youngsters in golf, tennis and track which are part of state and national programs."

Gerry has been active in Jaycees for the past year and a half. He has served as State Director and as social chairman for the Albuquerque group. Part of these duties remain—he will be making plans and handling arrangements for the state Jaycee convention to be held in Albuquerque in May.

"The Jaycee idea is basically simple," Gerry says. "We conduct these programs to help our community. Through participation in the projects, the individual Jaycee grows and develops. There's enough responsibility for anyone who wants to develop his leadership abilities."

Any Sandian under age 35 who would like to be a Jaycee member is urged to contact Gerry.

"We can use all the help we can get," Gerry says, "and, being an active Jaycee is a very satisfying experience."

U. S. Government Officials Visited Sandia Last Week

Forty government officials visited Sandia last week as part of a Senior Seminar on Foreign Policy conducted by the Foreign Service Institute of the U. S. Department of State.

The party included Ambassador G. Lewis Jones, seminar coordinator; Robert P. Davies, Deputy Assistant Secretary for Near Eastern and South Asian Affairs; and George C. Denney, Jr., Deputy Director of Intelligence and Research.

Other members of the group were from the Department of State, military services, Central Intelligence Agency, U. S. Information Agency, Department of Agriculture and Department of Commerce.

President John Hornbeck and W. J. Howard, vice president 1000, described Sandia's responsibilities in the weapons program during a meeting in Bldg. 892. Earlier in the day, the group attended meetings conducted by Field Command, Defense Atomic Support Agency.



MARY DEY (4251) receives help from Don Mattox (1123) and Pete Skaates (9425) in crossing an ice bridge on the upper reaches of 17,887-ft. Popocatepetl in Mexico. Both photographs were taken by Irv Auerbach (9326).

Mexican Peaks Over 17,000 Ft. High Goal for Local Climbers

There must be something more to climbing than the fact that the mountain is there—as evidenced by the great effort some sportsmen take to reach those heights.

For example Don Mattox (1123), Irv Auerbach (9326), Pete Skaates (9425) and Mary Dey (4251) recently traveled more than 3300 miles by bus to climb in Mexico.

The men reached the summits of Orizaba (Citlaltepetl), at 18,885 feet the third highest peak in North America, and Ixtacihuatl, 17,343 feet—the seventh highest, and Mary joined them for the climb up Popocatepetl, the fifth highest at 17,887 feet. Four other climbers from Socorro, N. M., joined them for the 11-day expedition.

The four Sandians are members of the New Mexico Mountain Club and frequently lead climbs in our local mountains. Don was in charge of a snow and ice practice session on Lake Peak, near Santa Fe, on April 23; Pete will lead a climb up "the needle" in Sandia Range on May 20; and Mary will organize a hike along Del Agua trail at the north end of Juan Tabo Bowl on June 17.

The Mexican trip was different in the geographical miles covered as well as the vertical feet. The group left Juarez by express bus on Thursday morning. They changed to a local bus in Mexico City, hired a jeep in Tlachichuca for the last 11 miles, and reached a hut 14,000 feet up Orizaba on Friday evening. Exhausted from the trip, they promptly fell asleep—and awakened two hours later. A sharp change in altitude frequently causes insomnia as well as headaches. The hours dragged by. When they finally got back to sleep, it was time to get moving in order



METAL CROSSES on a small elevation on the side of Mt. Popocatepetl were the source of speculation for Pete Skaates (9425) and other Sandia climbers. The seventh highest peak in North America, Ixtacihuatl, is in the background.

to take advantage of the still-firm snow.

The men agree that this climb, which took about six hours to reach the summit, was the most strenuous of the three, mostly because of the altitude. "You'd take a step, breathe once or twice, then take another step," Irv recalls. Don adds, "You gain about the same amount of altitude when climbing from Juan Tabo to the top of Sandia Crest, but you're a mile higher to start with." In addition to the thin air, they encountered very gusty, cold winds.

Orizaba sits off by itself to the east of Mexico City, so the Sandians returned to the city before tackling the other peaks, which are about 45 miles to the southeast.

Popocatepetl's last major eruption was in 1802 but it is still an active volcano (all three of the peaks are of volcanic origin and have sizeable craters at the top). There is a 2000-foot drop to the bottom of Popo's crater and numerous fissures emitting steam cause a cloud to hang over the peak at all times. The sulphur deposits were mined at one time, despite the presence of hydrogen sulphide—which is toxic.

The hut on Popo was swanky compared to the others. There were stacks of wood for the fireplace (the Sandians did have to carry in their water) and a full-time caretaker. The other huts were located above timberline so there was no wood. On Ixty, the hut was at the 16,000-foot mark. The climbers carried a tiny stove and had to melt snow for water and when it came to preparing the dehydrated beef stew, it was almost hopeless.

The Sandians blithely term the climbs "almost a walk up" and "nothing very technical," but when they mention the glaciers, crevasses, rock scrambles, crampions and ice axes, one gets the feeling that it wasn't exactly easy.

Elmer Devor Conducts Value Engineering Workshop May 1-5 at University

Elmer Devor, supervisor of Value Engineering and Cost Improvement Division 2563, conducted a technical workshop on Value Analysis/Engineering at the University of New Mexico May 1-5. The workshop was part of the state-technical services program for New Mexico and was sponsored by UNM, the Bureau of Business Research and the U. S. Department of Commerce.

Sharing responsibilities for the workshop was Weston G. Smith of ACF Industries Inc. The course was basically the same in content and concept as the Value Engineering Workshops conducted by Division 2563 for the past three years at Sandia Laboratory and for other AEC contractor personnel at various locations throughout the country. Mr. Devor took time off from Sandia to conduct the course.

Participants at the UNM seminar brought their own projects to be subjected to value engineering techniques with the goal of reducing costs without sacrificing quality, schedules, function or safety.

SANDIA LAB NEWS



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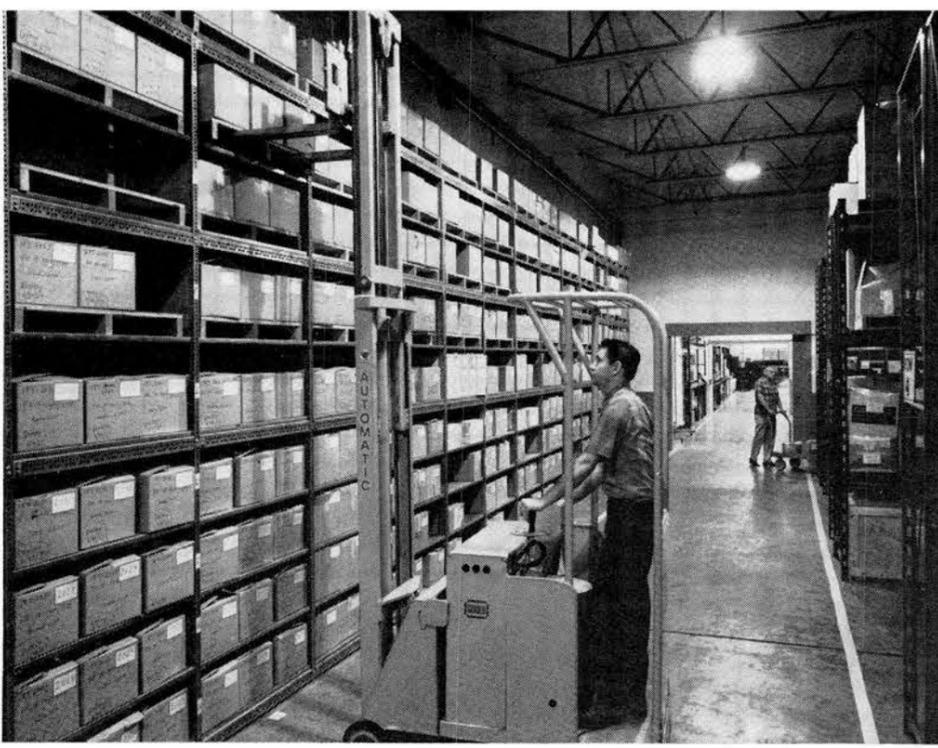
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STORING MATERIAL in Livermore Laboratory's warehouse are Chuck Sage (foreground) and Joe Fox (both 8245-3). Better use of storage space, improved traffic flow and increased efficiency resulted from a year-long study of material control operations.

Livermore Warehouse Acquires New Look and Added Efficiency

A 40 percent increase in storage capacity has been achieved in Livermore Laboratory's warehouse without modification to the building.

The increase resulted from a year-long study of warehouse operations made by Material Control and Services Division 8245. The study also netted an increase in manpower efficiency and the release of 12 percent of floor space from the General Stores area of the warehouse for other functions.

"In our efforts to improve service," says E. E. (Ernie) Alford, supervisor of Division 8245, "we try to adapt our material control operations to the ever-changing needs of Laboratory personnel. Throughout our study, we gave particular attention to the traffic flow of people, materials and vehicles. Today, operations are nearly congestion-free and material moves in and out of the Laboratory with dispatch."

The well-ordered appearance of the area bears-out Ernie's remarks.

Main aisles nine feet wide provide an uncluttered path for people or forklifts to go from one end of the warehouse to the other without leaving the building. Thus, the stocking, shipping and storing functions need not conflict with the activity at the loading or unloading docks—even during bad weather.

Areas for Receiving, General Stores, R&D controlled storage, classified and unclassified storage and Shipping are arranged in the building according to the normal material-processing sequence. This arrangement helps to eliminate backtracking or cross-traffic. Incoming shipments, for instance, continue without interruption while outbound material is being packaged for shipment. Physical protection of classified items is easier, too.

In a number of instances, employee suggestions aided the survey. Improvement in storage density was one of these.

As items came into storage, similarly shaped items were stored with odd-shaped ones on large pallet racks. Space was wasted and material handlers had to move several items before they could get to the one they needed.

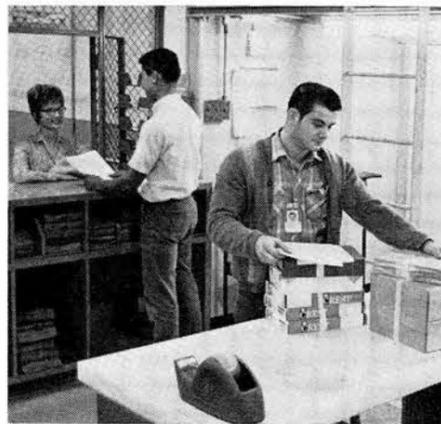
To increase accessibility and make better use of space, pallet-rack height was increased and shelves were readjusted to enlarge the capacity for bulky items (big items in big spaces). In addition, adjustable slotted-angle racks were installed to accommodate the smaller items (small items in small spaces).

Using this approach, the warehouse now accommodates twice the number of archived records as before, and instruments receive additional protection. Slotted-angle racks permit a quick change of storage requirements when necessary. Access is easy for forklifts.

"We also relocated our request counter to make it more accessible. However, we see fewer people in General Stores," reports Ernie, "because we now operate seven strategically located self-service stores instead of three. Each location stocks items peculiar to the needs of the people in the area."

Improvements other than the obvious ones in the warehouse can also be attributed to the study.

Equipment in the Receiving office is located near the people that use it. Paperwork is reduced (by as much as 38 percent



RELOCATED REQUEST COUNTER saves time and steps for Juavana Stark (left) when she requisitions General Stores material from stockkeeper Joe Alviso (center). Bob Tirnetta (right) gets replenishment stock ready for delivery to one of seven self-service stores locations. All personnel are in Division 8245.

in Receiving Report distribution). Employee communication is better and duplication of files is eliminated (because material control and stores personnel are now located in the same building). Raw Stock, Reclamation and Motor Pool areas give more attention to good housekeeping principles.

The additional time and space resulting from the study are and will be put to good use. "The time is being used to increase the services we perform for all Laboratory organizations," says Ernie. "And at the moment, the disposition of the space—though currently used for additional storage—is being discussed with three organizations who have new space requirements."



COLORFUL TRAVEL BROCHURES, PAMPHLETS, AND MAPS are available to Livermore Laboratory employees who plan to vacation in the United States or Canada this year. Lois Strandin (8200), left, and Barbara Piper (8233) check the Employee Benefits booklet rack in Bldg. 912 for vacation ideas.

H. G. Birnbaum to Serve as Judge At 18th International Science Fair

Hans G. Birnbaum, an engineer in Product Evaluation Division 8116 and a lieutenant commander in the U.S. Navy Reserve, is serving as one of the judges in the 18th International Science Fair (ISF) to be held in San Francisco's Brooks Hall, May 10-13.

The Navy participates in the ISF by sponsoring 10 "Navy Science Cruiser" awards and 10 alternate awards as well as a trip for one student to the Japan Student Science Awards to be held in Tokyo next January. The Navy Science Cruiser award is similar to other "special" awards sponsored by such organizations as the armed services, AEC, NASA, etc.

Judges for the Navy awards were selected from the various U.S. Naval Research Reserve Companies in the Bay Area. Lt. Cmdr. Birnbaum is a member of Reserve Company 12-2, Livermore.

An estimated 1200 students, teachers and scientists are expected to attend the Fair

which brings together the regional winners and their exhibits from all over the world.

Earlier regional fairs included two in the Bay Area — the 14th annual San Francisco Science Fair held at the California Academy of Science in Golden Gate Park April 8-12, and the new Santa Clara Valley Fair at the County Fair Grounds in San Jose April 5-9. Students exhibiting at these regional fairs were drawn from grades 7-12 who had taken part in county fairs around the Bay Area.

Dr. Glenn T. Seaborg, chairman of the Atomic Energy Commission, will address students and teachers during the Fair.

Others selected to serve as judges from Reserve Company 12-2, Livermore, include Capt. Roger C. Preston, LRL-Livermore; Lt. Cmdr. John E. Van Homissen, General Electric, Vallejo; Pleasanton; and Lt. Cmdr. Robert L. Chapman, Aerojet-General Nucleonics, San Ramon.

LIVERMORE NEWS

Livermore Notes

G. R. (Gib) Marguth, an electronics engineer in Telemetry and Instrumentation Systems Division 8127 and a member of Livermore's City Council, has been chosen to serve as vice mayor of Livermore for the coming year. Gib is a first-term councilman, having been elected to the post in the April 1966 Livermore City Council election. His selection as vice mayor puts him in line to succeed Mayor Robert Patterson next year.

R. W. Weaver, Materials Application Division II, 8134, will present a technical paper at the 1967 Design Engineering Conference, sponsored by the Design Engineering Division of the American Society of Mechanical Engineers, to be held in New York City May 15-18. Co-authored by A. S. Rivenes, Mechanical Sub-Systems Division 8152, the paper is entitled "Expandable Metal Honeycombs for High Temperature, Load-Bearing Structures." The presentation will be made during the Applications of Honeycomb Materials session of the conference.

Eastbay Chapter of the American Society of Certified Engineering Technicians (ASCET) was host to the first of three Western Regional dinner meetings on April 28. Guest speakers at the meeting included J. Garcia of Topeka, Kans., director of ASCET's Information Center, and L. Martin, California State President of the National Society of Professional Engineers. At present Eastbay Chapter is the only ASCET chapter in California. The other two West Coast chapters are in Oregon and Washington.

Dr. Linvill, Stanford Univ., Addresses Colloquium, May 9

Dr. William K. Linvill, chairman of the Engineering Economic Systems Department at Stanford University, will be guest speaker at the Livermore Laboratory Colloquium on May 9. The title of his presentation will be "Applications of Systems Analysis Techniques to Economic Planning."

Dr. Linvill's work has focused on servomechanisms, network theory, computers, system design, and operations research, and most recently on the computer control of large economic systems.

As one of the newest engineering fields, the application of systems analysis to large economic operations requires re-orientation of engineering education. Dr. Linvill will touch on the program now being evolved at Stanford, and will discuss two specific programs: the Pacific coast electrical power inter-tie and the regional economic planning in the Aswan Dam area.

Dr. Linvill has been a professor at Stanford since 1960. He received a BA degree from William Jewell College in 1941, and both BS and MS degrees from the Massachusetts Institute of Technology in 1945. Continued studies at MIT led to a DSc degree in electrical engineering in 1949. Dr. Linvill was an assistant professor at MIT from 1949-53 and an associate professor from 1953-58. He was a senior staff member at Rand Corporation from 1958-60. During the summer of 1964, he was a member of the Agency for International Development study on University-Industry Cooperation in Industrial Development of Latin America.

Further information concerning the Colloquium is posted on the bulletin boards. Tickets are required for the 10:30 a.m. session.

Welcome . . . Newcomers

Mar. 23 - Apr. 24

California	
Maurice A. Coil, Livermore	8253
Mary R. Gelinis, Livermore	8235
Carol M. Huebner, Livermore	8145
Carol J. Jacobs, Livermore	8255
Robert C. Nelson, Santa Rosa	8252
Andrea G. Ramirez, Livermore	8253
Nevada	
Johnny L. Ulibarri, Las Vegas	8252
Howard C. Wormington, Las Vegas	8252
Returned from Leave	
David L. VanHouten, Pleasanton	8222
Transfers from Albuquerque	
Henry G. Andreski	8252
Alfred L. Elsea	8252
Gerald F. Hastings	8252
Gerald H. McCorkle	8252
John M. McDowell, Jr.	8252
James E. Williams	8252

Sympathy

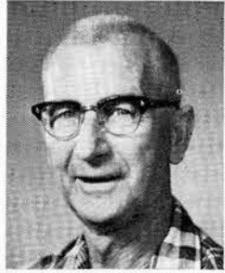
To Sid Timmings (8223) for the death of his mother-in-law in Miracle City, Ariz., April 14.

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SANDIA LAB NEWS

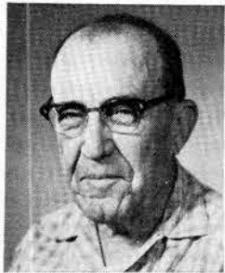
Retiring



Harry M. MacNeill of Design Definition Section B I, 2212-1, is retiring May 31. He has been in the drafting organization since he joined Sandia in 1950.

Harry had been chief draftsman for 15 years for a firm in New York City before he moved to Arizona in 1948. "We didn't know anything about Albuquerque then," he says, "but now we are here to stay." The MacNeill's daughter, son-in-law and three grandchildren live in Los Alamos.

Harry and his wife like to stream fish and will be making a number of fishing trips this summer in Colorado and New Mexico. They will also visit friends in California. "We like to fish in summer, bowl in winter and make a few short trips," Harry says, "so retirement should be very enjoyable."



Edwin V. Gloss, a boxmaker in Shop Section 4514-2 of Maintenance Service Division, will retire May 31.

He was employed by Sandia in March 1948. Before coming to Sandia, Ed had worked on Sandia Base as a Civil Service employee in the procurement organization.

Mr. and Mrs. Gloss live at 2116 Maderia Dr. NE. Ed has been in New Mexico since 1908 when his family moved from Illinois. He has three sisters living in New Mexico and visits with them often.

"My wife and I like to fish," Ed says. "We have had a camper for a number of years, but I plan to replace it with one that is self-contained, which will make our trips even more enjoyable. Now that I'm retiring, we'll be able to go whenever the notion strikes us."

Gaynor Atkinson to Direct Again; Current Play, 'See How They Run'

Many actors aspire to directing a play, but Gaynor Atkinson (7331) was a director before he ever "read" for a dramatic role.

Gaynor will be directing "See How They Run" when it is presented at Old Town Studio, May 18-21. "It's an English farce by Philip King with lots of action and appeal for all ages," he says.

The play will be produced by the Friends of the Albuquerque Children's Theater, which is another of Gaynor's interests.

His entrance into the theatrical world occurred six years ago when he became producer and director of "The Promised Valley," a three-act musical drama presented by his church. "I was in charge of the young people's group at that time and was acquainted with members' dramatic, musical and dancing abilities. We needed them all to fill out our cast of 117," he said. The play was presented in Albuquerque and Los Alamos.

That fall Gaynor read for a part in the Albuquerque Little Theater's production of "Roman Candle" and got the role. Since then he has appeared in plays presented by Old Town Studio, Robin Hood Theater and the Albuquerque Children's Theater.

The Children's Theater was started here six years ago and stages an average of four plays a year for youngsters. Both adults and children are in the plays. The theater group has a board of directors (Gaynor is vice president) which is primarily concerned with raising funds for the activity.

A subsidiary group is FACT (Friends of the Albuquerque Children's Theater) which actively supports the theater in various



GAYNOR ATKINSON (7331) as Lord Canterbury, a recent role for the Albuquerque Children's Theater. He is currently directing "See How They Run."

ways, such as reading new plays at each monthly meeting and producing "See How They Run." Gaynor is president of this group comprised of adult actors, stage helpers and other interested persons.

"I find that directing takes twice as much time as acting in a play," Gaynor says. "It's more fun being an actor because you have only one segment of the whole effort to worry about." He'll get his chance soon. He plays the hero in a melodrama entitled "Lydia Sagebrush's Dilemma, or At the Stroke of Midnight," which was presented in Old Town last summer and will be repeated in August during the annual Arts and Crafts Fair.

Use of Breathing Apparatus

Sandians Enter Smoke-Filled Room for Know-How



Wearing face masks and tanks strapped to their backs, nine Sandians stepped into a smoke-filled van last week as part of their training for emergency situations.

Purpose of the relatively brief exposure to the dense smoke in the chamber was to acquaint three members of Health Physics Division 3312 and six members of Weapon Safety and Aircraft Compatibility Division 1544 with self-contained breathing apparatus.

The Sandia Base Fire Department created the smoky environment for the exercise in their training area.

Those who entered the van with the equipment were P. J. Jones, K. A. Sarason, R. P. Lambert, D. R. Lewis and R. E. Reed (all 1544). The three Health Physics Division participants were J. C. Golden, L. R. Carter and T. R. Crites.

Other Sandia groups interested in obtaining training in the emergency use of self-contained breathing apparatus should contact Industrial Hygiene Division 3311, which maintains a respirator fitting room and administers Sandia's respirator program.

SANDIANS HELPED CO-WORKERS adjust the self-contained breathing apparatus before the group entered the smoke-filled chamber. Shown during the exercise are (l to r) L. R. Carter, K. A. Sarason, R. P. Lambert and D. R. Lewis.

Experience in 'Water Witching' Told By Earl Shannon in New Book

Earl V. Shannon (9232) is a water dowser. During the 22 years of "water witching," he's located more than 60 proven wells. He has established an amazing record of 98 percent success in favor of good wells against dry holes.

In his recently published book, "Water Witching," Earl describes his experiences and findings as a water dowser and particularly his original skepticism of this mystical method of finding water. During the years, he has kept a complete log of his work and learned a great deal about geology, hydrology and mineral assaying along the way. He has scientifically tried to understand how a man with nothing more than a forked stick can locate water.

His book is fascinating reading and has a relaxed, conversational style.

"There has been and still is so much hocus-pocus going on in this dowsing business that you can't blame people for thinking you are some kind of nut if you do this sort of thing," Earl says. "But, regardless of all the things that have been said against dowsing, the good dowser has a large following by people from all walks of life.

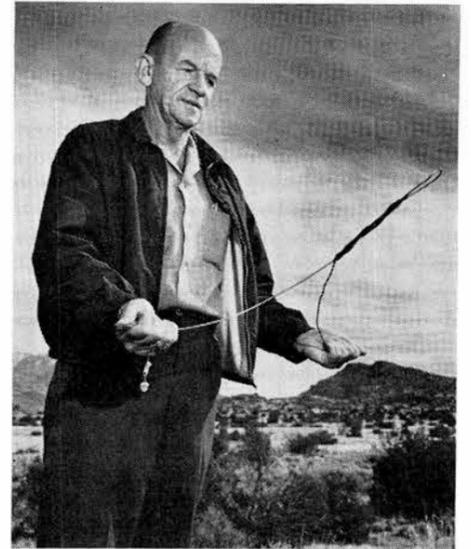
"Over the period of years I have followed this interest," Earl continues, "I have worked with many people who have degrees in various fields of science and who are rated highly in their professions. I've yet to hear any of them ridicule dowsers. They ask many questions on dowsing and show a great deal of interest in the subject. They usually want to know how to hold the fork."

One of the highlights of Earl's book tells of his experiences exploring the California and Arizona deserts with a forked rod. He did it during weekends and vacations from his job at Sandia's old Salton Sea Test Base.

During the five years Earl was at Salton Sea, he spent as much time as possible on the desert gathering specimens for his extensive rock collection, exploring old mines, and continually checking and recording his findings with the "divining rod." He had many confrontations with snakes and lizards, and episodes with bears and a mountain lion.

At one time, Earl used the rod to find an old stream bed in a former '49er gold rush area in California. "I found gold, but it was too much digging for \$7," he says.

Other dowsers claim to be able to locate



EARL SHANNON demonstrates his technique with a "divining rod," an instrument used by water dowsers to locate underground water. Earl uses a wire fork, although a forked branch of a tree will also work for him.

oil or mineral deposits. Earl figures that if they were so smart, they should be rich.

He does, however, describe the peculiar relationship between the "fracture zones" where the rod indicates water and underground mineral deposits. He discusses this in the book along with some of his experiences in mining.

Earl has been a staff assistant in electronics at Sandia for 18 years. He is currently in Electro-Optics Division 9232. On weekends and during vacations, he still heads for the hills to find a well for a rancher or farmer (he has more requests than he can handle) or to explore with the fork to see what happens.

Someday, he may have the explanation as to why it works.

Twenty Invited Papers Will Be Presented at IEEE's Conference Here Next Week

J. D. Shreve, supervisor of Aerospace Sciences Division 5234, will present one of the 20 invited papers to be delivered at the Institute of Electrical and Electronics Engineers Region Six annual conference to be held in Albuquerque May 9-11.

Mr. Shreve will speak on "Energy from Nuclear Explosions" during the morning session May 11. All of the technical sessions will be held at Holiday Inn. Conference headquarters are at Sheraton Western Skies Motor Hotel.

Other papers to be presented during the three-day meeting include such topics as radioisotope power sources, electro-optical energy converters, Project Gasbuggy, fuel cells, thermionic energy conversion and Project Plowshare.

Frank J. Thomas, assistant director of Defense Research and Engineering, Department of Defense, will deliver the keynote address, and Gov. David F. Cargo will be the guest speaker at the luncheon on May 9.

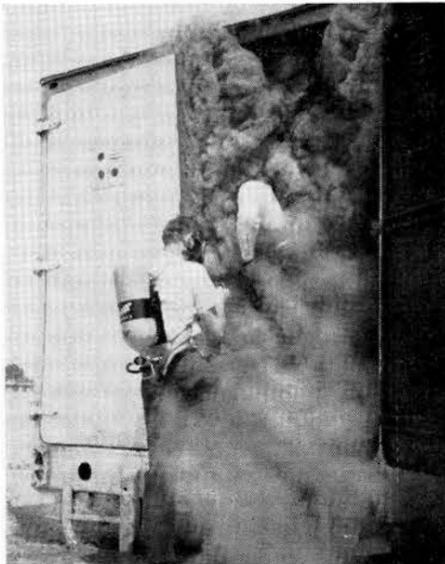
The program also includes tours of the Public Service Company's system operation control center, some facilities in Sandia's Technical Area III, Air Force Weapons Laboratory and Los Alamos Scientific Laboratory.

About 800 engineers from the 11 states in the IEEE's Region Six are expected to attend the conference.

T. L. Pace (7210) is general chairman of the conference. Other Sandians serving on the committee are K. D. Hardin (1434), O. M. Stuetzer (1420) and L. J. Seligman (9215).

Sympathy

To Phyllis Neff (4152) for the death of her father-in-law in Albuquerque, April 20.



SMOKE BILLOWS OUT of the chamber as the Sandians enter the dense environment to become familiar with the operation of the breathing apparatus. The exercise was conducted on the Sandia Base Fire Department's training grounds.

PAGE FOUR

MAY 5, 1967

SANDIA LAB NEWS

20 Years



R. E. Hepplewhite
2550

Service Awards

15 Years



L. A. Baca
3242



V. L. Barcarfor
7256



F. D. Carpenter
4518



E. P. Cave
3112



R. W. Cruzen
3242



L. F. Denton
2434



G. B. Drummond
8243



H. C. Frahm
4512



George Gleicher
7211



E. W. Lehmann
4252



W. G. Levy
1334



C. E. Longfellow
2213



Alice Marks
3463



F. Martinez
8213



Phil Meekins
4211



J. W. Mitchell
4254



K. T. Moriarty
4121



R. C. Mueller
4123



W. E. Neitzel
2564



J. A. Ozmina
4632



H. C. Psillas
2541



L. O. Romp
8154



H. J. Salazar
4254



J. L. Sanchez
4624

Authors

O. E. Jones (5133) and D. L. Hughes (3134), "USE—An In-House Continuing Education Course," April issue, JOURNAL OF ENGINEERING EDUCATION.

W. E. Warren (5261), "The Axisymmetric Thermoelastic Problem in Bispherical Co-Ordinates," March issue, JOURNAL OF APPLIED MECHANICS; "An Electrostriction Problem for the Notched Half-Plane," Vol. 2, No. 3, 1966, ACTA MECHANICA.

L. S. Nelson (5234), "Yellow-Green Luminescence Accompanying the Injection of Triethylborane (TEB) into the Upper Atmosphere," April 8 issue, NATURE.

A. R. Sattler and F. L. Vook (both 5211), "Partition of the Average Energy Deposited in Silicon as a Function of Incident Neutron Energy," March issue, PHYSICAL REVIEW.

R. L. Park (5123), "Electronic Reduction of Tape Recorded Partial Pressure Data," April issue, REVIEW OF SCIENTIFIC INSTRUMENTS.

T. W. H. Caffey (9424), "The FM Spectrum of a Single Pulse," March issue, PROCEEDINGS OF THE IEEE.

R. C. Heckman (1134), "The Conductivity and Hall Effect in Cerium Dihydride," March 15 issue, JOURNAL OF CHEMICAL PHYSICS.

N. J. Delollis (1133), "Strength Characteristics of Aluminum Honeycomb," May issue, SAMPE JOURNAL.

D. M. Mattox and R. D. Bland (both 1123), "Aluminum Coating of Uranium Reactor Parts for Corrosion Protection," March issue, JOURNAL OF NUCLEAR MATERIALS.

D. M. Mattox (1123), A. W. Mullendore (1122) and F. N. Rabarchik (1123), "Film Deposition by Exploding Wires," March issue, JOURNAL OF VACUUM SCIENCE AND TECHNOLOGY.

J. R. Holland (9332), "Self-Aligning Grip System and Tensile Specimens for Instron Machines," May issue, JOURNAL OF SCIENTIFIC INSTRUMENTS.

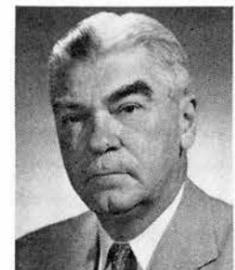
Management Society Honors C. J. McGarr

C. J. McGarr, director of Service Operations 4600, was presented a managerial excellence award by Area 15, Administrative Management Society, during the group's recent conference in Phoenix.

The award is made yearly to persons whose present responsibilities are in the field of office or administrative management and who make a distinguished contribution to the field. The 1967 awards were presented Mr. McGarr and I. J. Lambka of El Paso Electric Company by Larry Lynett, international president of AMS.

Considered an authority in the field of inventory control, work measurement and computer data processing operations, Mr. McGarr was cited for his presentations at national meetings of Data Processing Management Association, Systems and Procedures Society, and the American Production and Inventory Control Society. He has had 12 papers published in various fields of business and manufacturing and has participated in many workshop seminars conducted by IBM Corp. (IBM has published his presentation in brochure form).

As a member of AMS he serves on the national work measurement committee and is functional program advisor on systems for Area 15.



Death

Nicholas Vytlačil, who retired from Sandia seven years ago, died in Albuquerque April 20.

A retired Navy captain, he came to Sandia in 1950 and was supervisor of the employment division.

Survivors include his widow, a son and a daughter Natalie (3153).

10 Years

May 5-18
L. W. Morrison 5222, H. G. Fifer 2212, Betty L. Baumgarten 3153, A. P. Leyba 3462, Flora M. Burch 4131, Wanda M. Gross 4611, H. W. Olson 8112, Henry Harada, Jr. 2211, Ruth O. Way 3412, J. F. Reid, Jr. 5635, R. P. Striker 2212, J. T. Pavelko 2431.

Marie H. Hannan 4213, H. F. Sisson 7255, L. G. Sisneros 4135, F. J. Mistretta 1334, Mary K. Beard 3421, L. I. Burright 4513.
L. T. Holt 9324, T. C. Corpe 1325, R. E. Howell 7331, Daris M. Fueller 9423, L. P. Wilson 2221, Walter Powdrell 4574, R. D. Hole 4615, and M. E. Gilmer 7125.

SHOPPING CENTER

CLASSIFIED ADVERTISING
Deadline: Friday noon prior to week of publication unless changed by holiday.
A maximum of 125 ads will be accepted for each issue.

RULES

1. Limit: 20 words
2. One ad per issue per person
3. Must be submitted in writing
4. Use home telephone numbers
5. For Sandia Corporation and AEC employees only
6. No commercial ads, please
7. Include name and organization
8. Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.

FOR SALE REAL ESTATE

5-ACRES, lots w/well, wooded, Frost Rd., 1 mile west 217, \$650 per acre. Browne, 344-9675.

NE HEIGHTS, 2-bdr., fp, garage, big back yard, sidewalk in, down payment and assume loan. Proctar, 255-1042 after 6.

TWO acres in Bosque Farms, building site, in alfalfa, irrigated, within 30 mins. Sandia. Gay, 1-636-2781.

3-BDR., sale or lease, den 1 1/4 bath, roofed screened patio, detached garage w/storage space. Wynant, 344-3528 after 6.

SALE OR TRADE: clear, new 3-bdr., dbl. garage, pitched roof, wood floors, adobe, w/3/4 acre, 5 miles north of Belen; for clear house in Albuquerque. Ayala, 268-8066.

1/2-ACRE wooded cabin site, Jemez Mountains, fishing nearby, electricity and water available. Holpp, 265-1951 after 5:30.

190' X 150' LOT, South Valley, located between Arenal & Blake, 2 blks. east of Foothill. Benton, 877-2473.

FIVE or ten acres 12 miles south on Highway 10. Romero, 344-0302.

3-BDR., outside storage bldg., 60x100 lot, right off base, \$10,500. Miller, 255-7842.

2-BDR., attached garage, fp, 1 blk. east of University, \$1000 assumes \$96/mo. 5 1/4% FHA payments. Johnson, 256-3473.

4-BDR., new den w/fp, fresh paint throughout, paneled LR, \$14,500, assume w/down payment, or refinance. Logsdon, 344-7278.

3-BDR., extra built-ins in lg. kitchen, fenced, landscaped, \$1000 assumes \$87/mo. FHA payments. Stomp, 298-3824.

CATHEDRAL ceilings, carpet, country kitchen, 3-bdrs., 1 bath, cfa, 2-sp. AC, landscaped, fenced, \$400 down. 828 Marcella NE. Pass, 299-0474.

3-BDR., 1 1/4 bath, carpet, built-in stove, utility rm., landscaped, near base & golf course, 5 min. to Winrock, \$14,500. Davis, 299-0297.

ONE OR TWO lots in Loma Del Rey subdivision in prime residential area, terms available. Dunaway, 299-1422.

3-BDR. HOUSE, near base, carpeted, patio, corner lot, low down and low monthly payments. Conally, 298-2389.

3-BDR. HOUSE near Lady Fatima Church, hw/floors, AC, fireplace, landscaped, new carpet, 329 Morningside NE, \$13,500. Nelson, 255-2364.

3-BDR., lg. den, hw/floors, 2 fireplaces, SE heights, landscaped, selling for FHA appraisal. Miller, 256-6020 after 6.

3-BDR. Bellamah, garage, patio pad, walled 3 sides, NE heights, low down to new loan. Gobi, 298-6682.

SOUTH VALLEY, almost 3 acres w/3 bdr. home, 4 3-room apts., 5-stall garage, irrigation available, below appraisal. Barrett, 268-2963.

TRIPLEX: near base, brick, 2 bdr., carpeted, good rental record; low down payment or trade for late model car. Elliott, 256-7909.

ONE acre lot in Corrales, one acre or more on County road in the Sandias. Clement, 298-4994.

CARS AND TRUCKS

'65 FORD pickup, styleside custom cab, V8, 4-spd., Positraction, EZ load hitch, heavy duty. Shoemaker, collect 865-7970.

'65 MUSTANG HT. V8, PS, Cruise-O-Matic, AC, vinyl roof, \$1650; factory floor mats, \$4. Dippold, 296-3873.

'40 FORD pickup, \$150. Cobb, 268-3151.

'54 PLYMOUTH, \$100. Ridlon, 299-0378.

'66 MODEL 1300 Volkswagens, one owner, 16,000 miles, Bahama blue, book price. Feeny, 298-3594.

'63 JEEP WAGON, 4-wd., Warn hubs, 6 cyl., OHC engine, radio, PTO winch; new paint, \$1700. Schuster, 299-1072.

'63 TRIUMPH SPITFIRE, convertible, radio, tonneau cover, Bliss, 255-7980.

'63 CHEVY 327-V8 or '59 Plymouth 4-dr. 154 Chama NE. Gallegos, 268-0271.

'66 VOLKSWAGEN, 14,000 miles, \$1395 firm. Caine, 264-7925.

'51 OLDSMOBILE, 42,000 miles, \$165. Causey, 299-0089.

'63 VW SEDAN, 37,000 miles, \$800. Grothe, 299-4395.

'55 CHRYSLER New Yorker, V8, AT, PB, power everything. Russell, 299-0159.

'58 STUDEBAKER 2-dr. sedan, new motor, 6000 miles on it. Cundy, 255-0381.

'62 VW camper, fully equipped, new tires, engine recently rebuilt, book value. Adams, 344-8274.

'63 FORD Fairlane 500, 4-dr. sedan, V8 engine, AT, R&H, new w/s w tires, 27,000 miles, \$895. Dillingham, 268-2707.

'59 MERCEDES Model 220S, \$1000. Randolph, 255-1452 after 5:30.

'57 PONTIAC 4-dr. V8, R&H, AC, new muffler, AT, \$200 cash. Johnson, 255-2846.

'59 FORD Fairlane, \$300; R&H, PS, air, Van-Gundy, 877-5835 or 877-2213 evenings.

'64 CHEVROLET pickup, 6-cyl., R&H, two-tone, short wide box, Lotz, 299-2804.

'63 MERCURY Colony Park 9-passenger station wagon. Curry, 298-5028.

'63 FORD Country Squire station wagon, 9-passenger, AC, PS, PB, radio, \$100 below book at \$1300. James, 298-0709.

KITCHEN ceiling light, 15x15, 4-bulb, chrome and frosted glass, \$6. Johnson, 255-5427.

BICYCLE, 26" ladies, Royce-Union English type w/3-spd., \$40. Sinnott, 299-1300.

HI FI equipment: Eico HF-12 amplifier, Collaro changer, Garrard turntable plus GE tone arm and cartridge. Schmitt, 296-3267.

BOA CONSTRICTOR, 6'; bull snake and garter snake; Siberian-Husky-Cross pups, \$5. Harrell, 282-3251.

MAYTAG DRYER, pink, \$15. Cowham, 298-4249 after 5:30.

BOY'S bicycle, Schwinn 26", \$15; race car set, HO gage on 4x8 plywood (easily stored). Dodd, 9706 Morrow NE, 299-6330.

BELL & HOWELL 8mm movie outfit, camera is Director series w/Auto-Zoom lens, projector is automatic threading type. Pass, 256-9663.

MAGNAVOX portable TV, walnut case, removable attached walnut stand, model 1MV142D, just overhauled, \$75. Maglioti, 268-7601.

REBUILT Chrysler engine, 365 cu. in., 4-spd. trans., radiator included, \$150, use in truck, for well pump or power saw. Reynolds, 299-0932 after 5.

40" ELECTRIC RANGE, deep-well cooker plus 3 burners, oven, storage space, \$35. Smailer, 299-8413.

RABBIT cage, about 3x5', \$4. Summers, 299-4674.

.22 SMITH & WESSON, \$50; .22 Hi-standard revolver, \$30. Chavez, 11101 Woodland NE, 299-8194.

'66 AMERICAN mobile home, 12x60, 2 bdrs., 1 1/2 bath, utility rm., drapes, carpeting. Leyba, 344-7202 after 6.

7-YR.-OLD MARE, gentle, \$195; 3-yr.-old mare, gentle, untrained, \$150; Triumph 250cc Tiger Cub, \$75. Shock, 877-3728.

SLIDING mahogany closet doors, \$7.50; kitchen exhaust fan, \$5; 4-pane steel bathroom window, \$3.50; 3 trellises, \$1.50. Schuster, 256-0029.

1950 MOTOROLA TV-radio-phonograph combination in walnut cabinet, \$25. Martin, 282-3794.

ZIPPED canvas luggage cover tailored for rack on Rambler station wagons, half of Rambler's list price. Baxter, 344-7601.

BRIGGS & STRATTON gasoline engine, approx. 2 1/2-hp w/centrifugal clutch, \$15. Stromberg, 255-6131.

REVERSE MODEL 80 movie camera w/adjustable view finder, variable framing speed; Dalite 30"x40" screen, \$20 for combination. Mayer, 345-0567.

TRAVEL TRAILER, 16' Santa Fe, self contained, sleeps 6, equalizer hitch included, sell or trade. Mauldin, 1101 Kentucky SE, 255-8356.

CUSTOM BUILT pedestal dinette table, kidney shape, oak grain formica w/6 matching chairs, best offer over \$75. Lucero, 298-3656.

POWER PLANT, gasoline motor driven, manual start, 2.5 KVA, 110 volts AC, \$149. Houts, 256-7218.

'64 LOWERY HOLIDAY organ, AOC, glide pedal, bench, walnut finish, \$975; electric guitar, Gretsch amplifier, case, \$75. Harper, 298-0146 after 5:30.

STORKLINE 6-yr. crib, toe release, dbl.-drop-sides, birch hardwood, adjustable springs, teething rails, Kant-wet mattress, \$20. Daut, 255-2529.

STUDENT XYLOPHONE; boy's Schwinn bike; Wol-lensak telescope w/case, 15-20-30-40 power. Siegrist, 299-3088.

YAMAHA 60cc, less than 800 miles, \$225. Chorley, 296-1454 after 6.

12' ALUMINUM PRAM, light weight, will carry 3, will handle up to 7 1/2-hp engine. Holliday, 298-8106.

STEEL CASEMENT WINDOW, glazed, 53w by 51h, 3 lites wide by 4 lites high, 2 crank-out sections, screens and cranks, \$15. Roberts, 255-9527.

PARKER shotgun, 12 gauge Trojan; compressor, tank, safety valve, filter; muzzle loading shotgun. Wilson, 282-3225.

KENMORE 3-cycle washer, \$100; self-defrosting refrigerator, \$40; electric stove, \$40; baby stroller, \$8; playpen, \$4; hand mower, \$4. Mattson, 255-9910.

HEYWOOD-WAKEFIELD, champagne finish, gate-leg dining table, 4 chairs, coffee table, end table. Blair, 256-6414 after 5.

PIANO, upright, black, \$80. Price, 298-0262.

5-PIECE dining room set, plus large buffet, dark wood, \$30. McCorkle, 344-4719.

PIANO, Baldwin Howard spinet; sidewalk bike w/training wheels; swing set. Randall, 256-1853.

REGISTERED yearling filly, 1/2 Morgan-1/2 Standard Bred, gentle, will make good riding or driving prospect. Ault, 282-3280.

30 YD. Shakespeare forward weighted sinking fly line, number 4322-4M, \$5; 1 ea. 8.00x14 re-capped whitewall tire, \$5. Scranton, 299-4902.

ROTARY LAWN MOWER, gasoline, 18" blade, runs but needs carburetor overhaul, \$15. Colquitt, 298-2113.

AUTOMATIC GE dishwasher, full size, under-counter type, \$65; mobile home entrance porch steps, steel, adjustable, \$15. Barth, 345-0172.

UPRIGHT PIANO, \$200. Buksa, 298-1073.

CHROME HIGH CHAIR, convertible to youth chair, complete w/tray, \$10. Lowe, 299-7725.

BIRCH CRIB, grow-up style, \$15; 16 cu. ft. freezer, Coldspot, 5 yrs. old, \$150. Perkowski, 299-9156.

HARMONY electric guitar and Sear's amplifier, \$60; hand lawn mower, \$10; patio table umbrella, \$7.50. Lynch, 298-7817.

360 MM TELE-XENAR f5.5 lens in MX compound shutter, \$225; 4"x5" speed graphic body, \$25. Graving, 299-0117.

PEKE-A-POO puppies, 7 wks. old, Curry, 298-9105 after 5:30.

40" GE electric range, \$25. Sandlin, 299-8786.

CAMERA, Leica (Russian), f3.5, case, 2 filters, lenshood, instruction book, \$35. Nima, 256-1362.

SOFA, grey nylon upholstery, \$20; matching chair, \$15; platform rocker, green nylon, \$15. Holmes, 299-4167.

REGISTERED quarter horse, 5-yr.-old mare, excellent for barrels and reining, \$800; 7.4 cu. ft. refrigerator, \$10. Bassett, 898-1840.

POODLES, AKC registered, 1 wk. old, 3 apricot, 2 males, \$50 ea.; female, \$75; for immediate sale, will hold 4 wks. Blythe, 243-7190.

BLUE chair upholstery, \$50. Johnson, 298-0296.

C-B RADIO, 23 channels, 30' steel tower, Mosley antenna, desk mike, cables etc., complete station new, \$275. Eifert, 299-3970.

FULL SIZE gas range, Jukes, Bosque Farms, 636-2995.

ELECTROLUX, deluxe, automatic pop-out bag, cord winder, \$40. Roberts, 256-3901.

NYLON CARPET, 15'x18', \$50; vibrating sander, \$15; Black & Decker 1/2" elect. drill, \$15; small walnut desk, \$12. Hansen, 268-3261.

BABY CRIB, \$10. Bouton, 299-5591.

PORTABLE TV, 17", \$20. Moore, 256-2748.

TEEN FORMAL, 5JP, white lace, worn only twice, \$15. Duvall, 299-8744.

LAWN MOWER, rotary, \$20. Tuffs, 255-9663.

WOOD LINED aluminum pickup cover, short box, hinged windows. Neil, 298-1645.

CAR TOP BOAT RACK w/side loading roller, \$15; trailer hitch for '60 or '61 Chrysler product, \$5. Harley, 299-7172.

14" MAG WHEELS, Keystone brand, new, never been used, \$120. South, 296-2326.

BLACK WIDOW BOW, 36 pound, 54", \$140 value for \$50; dozen XX75 arrows, No. 1916, \$18. Swain, 265-0098.

FREE PUPS: 6 wks. old, part Collie, 2 male, 3 female. Neas, 11617 Snow Heights NE.

WANTED

RIDERS for carpool originating in vicinity of 400 block Dartmouth NE, have 3 riders, want 1 or 2 more. Johnson, 256-3473.

SIX-HOLE, 15-inch wheel, with or without tire. Holliday, 298-8106.

ONE, good used 6-inch slide rule. Hooper, 299-4896.

WATER SKIS, outboard motor tachometer. Harley, 299-7172.

SMALL, used electric welder, 100 amp or more; electric hand grinder. Jukes, Bosque Farms, 636-2993.

NIKKOR LENS, automatic normal f1.4 or f2; would also consider Nikkor Micro, wide angle, or telephoto lens. Driver, 299-2063.

SAXOPHONE. Hurley, 298-5250.

RIDE to Bldg. 802 from Lomas and Palomas NE (between San Mateo and San Pedro). Swayze, 268-5222.

FOR RENT

TRAVEL TRAILER, 15' sleeps five, \$30 per week, reserve now for summer vacation. Colp, 268-8035.

UNFURNISHED 2-bdr. apt., large kitchen, ample closets, utilities paid, 10 mins. from Sandia. Bernyk, 299-9171.

1 BDR. apt. all electric—heat, AC, stove, refrig., hw heater; carpet, swim. pool, rec. rm., storage, off-street parking, \$81/mo., June 1. Dancy, 298-8008 or 298-3832 after 6.

LOST AND FOUND

LOST—Red enamel earring, black notebook, prescription glasses w/brown frames, man's watch, wedding ring, five keys on ring, man's blue sweater, ladies Hamilton watch, prescription sunglasses. LOST AND FOUND, tel. 264-2757, Bldg. 610.

FOUND—Luggage and house keys, pen, ring, two keys on chain. LOST AND FOUND, tel. 264-2757, Bldg. 610.

MISCELLANEOUS
MOWER, rotary, electric, Smith, 255-7389.



PAST PRESIDENTS and new officers of the Sanado Woman's Club will be honored during the 10th Anniversary Ball Saturday, May 13. From left are Mrs. C. R. Pritchett, newly-elected president; Mrs. J. N. Colquitt, immediate past president; and Mrs. T. L. Pace, first president of Sanado Club.

Tenth Anniversary Ball Scheduled By Sanado Woman's Club May 13

Tenth anniversary of the Sanado Woman's Club will be observed Saturday, May 13, with a dinner and formal ball at the Coronado Club. Honored during the festivities will be the nine past presidents of the organization and the new officers for the coming season.

The new officers are Mrs. C. R. Pritchett, president; Mrs. S. D. Brooks, first vice president; Mrs. G. C. Goettsche, second vice president; Mrs. Eugene Lazarus, third vice president; Mrs. T. W. Royman, fourth vice president; Mrs. P. E. Eyer, fifth vice president; Mrs. J. B. Ayers, secretary; and Mrs. C. C. Fornero, treasurer.

The Sanado Club was founded in 1958 by Mrs. James W. McRae, wife of Sandia's former president. Mrs. T. L. Pace was the club's first president followed by Mmes. R. E. Hopper, W. S. Sharp, R. S. Lemm,

T. M. Cowles, George Dennis, O. B. Tjeltweed, R. W. Mottern and J. N. Colquitt.

Also introduced during the ceremonies will be the club's honorary board members, Mrs. J. A. Hornbeck and Mrs. L. P. Gise.

"Lilac Time" is the theme of the ball and decorations throughout the Club will feature the purple spring flowers. Mrs. G. C. Goettsche is general chairman for decorations.

The event will begin with a social hour at 6 p.m. Dinner is scheduled from 7 to 8:30 p.m. and dancing to the music of the Rhythm Masters is scheduled from 9 p.m. to 12:30 a.m.

Table reservations should be made with Mrs. E. E. Bylander, 3303 Tiley Drive NE, by Friday, May 12.

Ceiling Now Remodeled; Activities Resume Today at Coronado Club

With the ceiling remodeling project in the main ballroom completed, the Coronado Club returns to a full schedule of activities at 5:15 p.m. today with social hour. Tommy Kelly will be on the bandstand. The chuck wagon beef and shrimp creole buffet will be served. The buffet costs \$1.75 for adults, \$1.50 for children.

Social hour on Friday, May 12, will feature swinging Sol Chavez and the Bernalillo Brass. The seafood buffet will be served.

The Mexican buffet will be served for social hour Friday, May 19, and Rex Elder will be on the bandstand.

Teenage A-Go-Go

Teenagers will return to the Go-Go event Saturday, May 20, after last month's bash was cancelled due to the construction project on the ceiling. "The Groove" group will be on the bandstand. Parents of teenagers should pick up tickets (25 cents for members, 50 cents for guests) by 5 p.m. May 20.

Bridge

The duplicate bridge group meets Monday, May 8, at 7 p.m. for a men's pair versus women's pair competition. On Monday, May 15, regular duplicate bridge will be played at 7 p.m. The Ladies bridge group will meet Thursday, May 18, at 1:15 p.m.

Bowling

Coronado Club bowlers will celebrate the end of the season with a party in El

Dorado Room tomorrow. Dinner starts at 7:30 p.m., dancing to Tom Kelly's combo at 9 p.m.

New officers will be introduced. They are Jake Gonzales (4251), president; Ciss Kelly (3113), vice president; Joyce Simpson (4212), secretary; and Lewis Sisenos (4135), treasurer.

Two Coronado Club bowlers won the women's handicap doubles at the recent state tournament in Hobbs. The champions are Jan Nelson (husband Palmer works in 7247) and Mary Erbert (husband Virgil in 5612).

C. W. Dickinson Retiring; Completes Long WE Career



After more than 37 years of Western Electric service, C. W. (Dick) Dickinson, Jr., will retire May 31. Dick is manager of Employee Benefits & Services Department 3120 and has been at Sandia since October 1949.

He joined Western Electric Co. in June 1929, in Manufacturing Business Methods at Headquarters, New York City. In 1932 he transferred to the Treasury Department and in 1937 moved to the General Personnel Department. In 1943 he transferred to the Kearny (N. J.) Works as department chief in charge of the newly established labor relations research organization. He returned to Headquarters in 1948 in charge of Industrial Relations Business Methods Department.

Dick came to Sandia to help organize an industrial relations and payroll methods group. He was promoted to manager, Office Services Department in 1951. He has served as department manager in Business Methods and in Disbursements Accounting and has been in his present position since 1963.

Mr. and Mrs. Dickinson have two sons—one living in Albuquerque and the other in Brussels, Belgium. Immediate plans include a trip to Brussels followed by a tour of Germany, Austria, Switzerland, Italy and France. Later in June they will travel to Great Britain to visit England, Scotland and Ireland, returning home about mid-July.

"We were in Europe three years ago," Dick says, "but our time was limited, so we are looking forward to this trip with a great deal of pleasure. When I do get home, I hope to be busy with church work and civic interests."

Events Calendar

May 5-7—"How to Succeed in Business Without Really Trying," UNM Concert Hall. Reservations, tel. 277-3121.

May 5-7—"On A Clear Day You Can See Forever," Albuquerque Little Theatre, 224 San Pasquale SW. Reservations, tel. 242-4750.

May 5-7—"The Knack, and How to Get It," and May 18-21, "See How They Run," Old Town Studio, 1208 Rio Grande NW, Reservations, tel. 242-4602.

May 11-12—Mountain climbing talks, slides, and movies by Allen Steck, Berkeley, Calif. For details call George Steck, tel. 299-2313.

May 13-14—Albuquerque Council of Garden Clubs' annual flower show, Floriculture Bldg., State Fair Grounds.

May 14—Encirclement of Embudo Canyon in the Sandias. N.M. Mountain Club, leader Will Snyder, tel. 299-4172.

Congratulations

Mr. and Mrs. J. F. Schimke (1313), a son, Timothy Lee, April 25.

Mr. and Mrs. L. A. Suber (1543) a son, Kevin Lee, April 17.

VE Workshop Set May 15-24

About 40 Sandians and several representatives of DASA and the AEC are expected to attend a Value Engineering Workshop at Sandia Laboratory May 15-24. As in past VE workshops, the participants will be organized into teams and apply value engineering techniques to various projects and programs in an effort to reduce costs without sacrificing quality, reliability, delivery schedules or safety.

J. R. Cejka of Value Engineering and Cost Improvement Division 2563 will be workshop leader.

Sandians desiring to participate in the workshop should contact Division 2533, tel. 264-5973.

Welcome . . . Newcomers

April 17-28

Albuquerque	
*Fidelino Carrillo	4231
Frank H. Chavez	4233
Clyde E. Earhart	4231
Dennis E. Geister	4631
David G. Graves	3415
Walter Henderson	4234
J. Frederick Laval	3465
Maxine E. Natzke	3126
Patricia A. Sanchez	9412
California	
Walter A. Stark, Berkeley	9332
Georgia	
Joe L. Entreklin, Columbus	1425
Illinois	
Karl W. Schuler, Chicago	1141
Maryland	
Edward W. Roberts, Jr., Annapolis	1431
Michigan	
Paul A. Lemke, Saginaw	9421

* Denotes rehired



MINIATURIZED COMPONENTS were examined by 14 members of the Chi Sigma Alpha honorary mathematics and science fraternity, Eastern New Mexico University, during a recent visit to Sandia. L. D. Stull (right) of Advanced Development Division 1322 talks with the group which also toured clean rooms, computer facilities and the Sphere of Science.

Sandia's Safety Scoreboard

Sandia Laboratory:

16 DAYS
560,000 MAN HOURS
WITHOUT A
DISABLING INJURY

Livermore Laboratory:

190 DAYS
984,870 MAN HOURS
WITHOUT A
DISABLING INJURY