



GOLD BROOM held by W. Lee Hancock, AEC Sandia Area Office Manager (center), indicates a clean sweep made by the Albuquerque United Community Fund in exceeding its \$851,000 goal. Mr. Hancock was drive chairman. The Atomic Division of the drive contributed \$275,650, of which \$148,155 was con-

tributed by Sandia Laboratory employees. This amount combined with the Sandia Corporation gift was 19.2 per cent of the total UCF amount. C. W. Campbell (4000) headed the UCF Atomic Division. Bob DeVore (2630), left, will head Sandia's ECP next year. Ray Schultz (7320), right, is current chairman.

ECP Chairman Thanks Sandia Employees for Setting Record

Final tally of the Employees Contribution Plan shows a total of \$182,599.68 given by Sandia Laboratory employees, a new record. The report was made last week by Ray Schultz (7320), ECP committee chairman.

"I want to express my thanks to all those who made this year's drive a successful one," Mr. Schultz said. "This includes the committee members, captains, solicitors, and most important, the contributors. This year, 1170 ECP members increased their contributions and to them I would like to offer a special note of thanks."

"The final report of the 1963 ECP drive shows that Sandia Laboratory employees care enough about the needs of others to respond generously when called upon," Mr. Schultz continued. "This year, the Albuquerque United Community Fund will receive 81.5 per cent of ECP—a total of \$148,155.40. With the \$15,000 corporate gift of Sandia Corporation, the total is \$163,155.40 going to UCF. This amounts to 19.2 per cent of the \$851,000 raised by the entire city. I feel that Sandia employees can be justly proud of this concrete evidence of their share in supporting Albuquerque's community effort."

In addition to the Albuquerque United Community Fund, ECP supports seven other health and welfare agencies. These agencies will receive allocations based on their fund raising activities in the local area.

The distribution, to be made monthly throughout the year, will be as follows:

- American Cancer Society \$9,166
- Bernalillo County Heart Association \$7,566
- Cerebral Palsy Association of Bernalillo County \$1,274
- Muscular Dystrophy Association of America \$2,554
- National Arthritis and Rheuma-

tism Foundation \$2,381

National Multiple Sclerosis Society \$2,381

New Mexico Society for Crippled Children and Adults \$6,744

In addition, Sandia employees gave \$557.93 designated to specific agencies. The reserve fund, to be distributed next year, will be \$1,816.

"As we conclude the 1963 drive," Mr. Schultz said, "it is worth not-

ing that \$99,000 was raised in the first ECP drive, and now, six years later, Sandia Laboratory employees are contributing 84.3 per cent more than they did in 1957 compared to a Laboratory growth of only 10 per cent in the same period. Once again, on behalf of the ECP committee and the Albuquerque community, many thanks for your continuing generosity."



NOVEMBER MEETING of Sandia Laboratory Research Colloquium Committee included discussion of prospective speakers by R. T. Meyer (5153), standing. Others attending meeting were (l to r) Diane Martin

(5132), permanent secretary; D. D. Glower (5322), acting Chairman; J. D. Hankins (5422); Crawford MacCallum (5411); and W. R. Law (5131). The committee invites speakers and arranges programs.

Pres. Kennedy Names W. J. Howard Assistant to Secretary of Defense

W. J. Howard, appointed by President Kennedy to the post of Assistant to the Secretary of Defense for Atomic Energy and Chairman of the Military Liaison Committee, will coordinate AEC-DOD activities relating to military application of nuclear weapons.

Mr. Howard, formerly Director of Systems Development at Livermore Laboratory, has taken a leave of absence from Sandia Corporation to assume his new position in Washington. His appointment was made pending ratification by the U.S. Senate.

Responsibilities of the committee include the coordination of such matters as the development, manufacture, use, and storage of atomic weapons, the allocation of special nuclear material for military research, and the control of information relating to the manufacture or utilization of atomic weapons.

In his new post, Mr. Howard replaces Dr. Gerald W. Johnson, who has returned to LRL, Livermore, to resume his position as Associate Director for Plowshare.

Mr. Howard joined Sandia Laboratory in 1946 where he remained until 1956 when he was assigned to head Sandia's newly-established Livermore facility as manager of the Engineering Department. He was promoted to Director of Systems Development that same year. In that capacity he has led the ordnance engineering phases of some of the nation's most important nuclear weapons projects.

He has taken part in several nuclear test series, including Op-



W. J. Howard

eration Sandstone in 1948, Operation Buster-Jangle in 1951, and more recently in Operations Redwing, Plumbbob, and Hardtack.

As a resident of Livermore, he has been active in civic affairs, serving as a member of the Board of Directors of the Chamber of Commerce, and as a Director of the Livermore Branch of the Bank of America.

A graduate of New Mexico State University in Las Cruces, he received his BS degree in mechanical engineering in 1943. He served in the U.S. Army from 1943 to 1946.

His wife, Georgia and their two children, Melissa, 16, and Andrew, 10, will join him in Washington.

Colloquium Committee Gets Top Speakers for Sandia Lab

Forthcoming talks on "A Computer Program for Automatic Circuit Design," "Magnetic Phenomena in the Rare Earth Metals," and "Some Aspects of Optics of Spectroscopy as Applied to Metals," give an indication of the types of programs arranged by Sandia Laboratory's Research Colloquium Committee.

The committee was organized two years ago to establish the purpose of the colloquium, and to simplify the procedure for inviting speakers and arranging the programs.

The original members were Crawford MacCallum (5411), Richard T. Meyer (5153), J. D. Hankins (5422), and W. B. Law (5131). In July 1962, D. D. Glower (5322) was added to the committee. Diane Martin (5132) is the permanent secretary.

The committee meets once a month and the chairmanship is rotated among the members on a five-month basis.

The purpose of the colloquium was defined as to "keep Sandia Staff Members informed of recent advances and interesting topics in the basic and applied sciences, and of theories, problems, and policies of national defense and nuclear energy pertinent to the research and development programs of Sandia Corporation." It was anticipated that about 30 per cent of the programs would be scientific colloquia of broad general interest; 40 per cent, research colloquia of specialized interest; and the balance, Sandia-originated talks.

In practice, there have been fewer Sandia speakers than expected (the committee hopes for more) and an abundance of specialized speakers. In case of the latter, many are now addressing research seminars which are less formal and allow for an even more technical presentation.

Four colloquia during the year are jointly sponsored with the University of New Mexico and are presented at the UNM campus.

There has recently been closer coordination with Los Alamos Scientific Laboratory in inviting speakers of mutual interest. Arrangements for the LASL colloquia are made by William H. Crew, Assistant Director for Scientific Personnel.

The Sandia committee has been scheduling an average of three colloquia a month and these are arranged not more than three months in advance. Some of the speakers are proposed by members of the committee, but the committee is open to suggestions for possible speakers.

Attendance is limited by ticket when a topic of wide, general interest is expected to attract an over-flow crowd at the Sandia Laboratory auditorium (Bldg. 815). Attendance is controlled through an advance access list for all colloquia of classified nature. The committee secretary, Mrs. Martin, coordinates between a number of Sandia organizations in making up this list.

Editorial Comment

The Day We Might Forget

November 11, originally known as Armistice Day, since 1954 has been recognized as Veterans Day. Established shortly after World War I, this national holiday is a time to pay honor to those who died for their country in all its wars. The 1963 World Almanac lists our war dead thus:

Revolutionary War	4,400
War of 1812	2,300
Mexican War	13,300
Civil War	428,300
Spanish American War	2,400
World War I	115,500
World War II	407,500
Korean War	54,200

Impersonal statistics, though impressive, do not capture the tragedy of war. In no way do these statistics reveal the suffering and sacrifice borne by those who died. Nor do they measure the grief, loneliness and despair of those whom the dead left behind.

Still, with this ghastly record of sacrifice written into history, we forget the true meaning of Veterans Day. We who felt little or no loss are failing to honor those who did their utmost—those who could do no more. The passing of years threatens to erase the significance of our debt to these men and women.

True, there are some Americans who will never forget. Those who lost one close to them remember. Americans who did not feel this cold touch of war may live through Veterans Day with little thought of its significance.

As the years pass, this national forgetfulness is apt to increase until the Veterans Day arrives when only veterans' organizations pay honor to the war dead.

So that this will not be so in 1963, let's think back to 1917, 1918, 1941, 1942, 1943, 1944, 1945, 1950, 1951, 1952. Death's visit was frequent those years. All of us experienced the visit in some degree. Recall those you knew who help make up the rolls of war dead. Every American knows a Tony, a Jack, a Bob, a Gordon, a Ralph who added to these impersonal totals. Remember their faces, their families, your hours with them. You will know why we pause to honor them on Veterans Day, 1963.



THIRD YEAR GOLF CHAMPION—Jim Leonard (7419), left, holds the third consecutive trophy he's won as top contender of the Sandia Laboratory Employees Golf Association. This year, his low gross total was 294. Winning team members of the league are (second from left) Larry Smith (5414), Dick Kidd (1513), and Wendell Nelson (4138). The team was tops out of 57 competing in the league. Wendell Nelson also holds the President's Cup for his low net championship score of 271. Awards were made at banquet.

Sandia Physicist Named To Ground Shock Subcommittee

Wendell D. Weart, of Underground Physics Division 5412, has been named a member of a Ground Shock Subcommittee which has been appointed to the AEC's Nevada Operations Office Test Site Planning Board.

Other members of the subcommittee include G. C. Weath, Lawrence Radiation Laboratory; R. W. Newman, Los Alamos Scientific Laboratory; Lt. Col. Benjamin Grote, Field Command, DASA; and R. L. Kinnaman, Chief, Environmental Safety Branch, NVOO.

The subcommittee will evaluate

test programs proposed for execution; develop data pertinent to ground shock and structural effects; predict seismic levels, recommend short-term studies, investigations, and instrumentation that would assist in predicting ground shock effects and evaluating ground shock data; and recommend yield limits and other operational measures in connection with underground testing at the Nevada Test Site.

R. G. Luckey Observes 35 Years of Service With Western Electric

Sandia's Comptroller, R. G. Luckey, will mark 35 years of service with the Western Electric Co. on Nov. 7.

His first job with WE was as a payroll clerk at the Kearny, N. J., Works. After a variety of assignments in cost, payroll, and accounting, he became a department chief in 1943. In 1947 he was appointed an assistant superintendent and five years later was advanced to Superintendent of Accounting.

In 1955 Mr. Luckey became Comptroller of the Defense Projects Division, a position he held until joining Sandia Corporation in March 1959.

He attended Rutgers University, New Brunswick, N. J., and the University of New Mexico.

Congratulations

Mr. and Mrs. Florindo Salas (3427) a daughter, Victoria Dantett, on Oct. 20.

Mr. and Mrs. Andrew W. Myers (4254-2) a daughter, Janie Denise, on Oct. 24.

Mr. and Mrs. J. F. Hudson (5311) a son, Curtis Troy, on Oct. 20.

Mr. and Mrs. Bob Baker (2441-3) a daughter, Shenda, on Oct. 19. Grandparents are Larry (2441) and Margaret Platt (3126-3).

Mr. and Mrs. T. J. Flanagan (7251) a daughter, Brigitte Anne, on Oct. 3.

Mr. and Mrs. Oscar Goodwin (3465-2) a son, Robert Russell, on Nov. 2.



Mimi Walter (4611)

Take a Memo, Please

Even light objects can cause accidents when you are not in the proper position to lift them.

Sympathy

To F. B. Baldonado (4573) and George Baldonado (4152) for the death of their brother in Albuquerque Oct. 8.

To Gwendolyn Warnick (2321) for the death of her son in Albuquerque Oct. 22.

To Nick Montoya (2641) for the death of his father on Oct. 20.

To Jack Reimholz (2442-2) for the death of his mother in Phoenix, Ariz., Oct. 21.

Ski Club Members Take to Slope for Look-Before-Snow

The Coronado Ski Club will have a party Saturday, Nov. 9, at 1 p.m. at the Sandia Peak Ski Area. They'll ride the chairlift, then return to the lodge for hamburgers, baked beans, and refreshments, according to Bill Lemmon (1414-2), club president.

Prices are \$2.00 for club members; \$2.50 for guests. "Those who want to ride the chairlift should be at the area by 3:30 p.m.; the lift begins its last run then." Bill says. "Costume for the party will be after-ski apparel." Chow will be served at 5 p.m.

Advance tickets are available from Bill, tel. 299-7515; Wayne Cook (7331-3), 255-2289; Larry Johnson (1543-1), 299-5975; Jo Lundergan (1430), 255-2974; Ken Pilkington (7251-3), 265-0013; or Bruce Wickesberg (2441-2), AX 8-2872.

Sports Car Club Plans 300 Mile Navigational Event

The Rio Grande Region of the Sports Car Club of America will sponsor the Cibola Run Rally, Nov. 17.

This will be a time-distance navigational event covering about 300 miles. For additional information contact Jim Phillips or Dave Nokes (both 2451-1).



FIVE INFRACTION-FREE YEARS, the security record set by the AEC's Sandia Area Office, was honored last week with plaques to each of the Branches of the Office. Representing the Branches were, from left, Eva Chavez, Administration; Rose Sais, Quality Assurance; and Stephanie Wojdak, Security. W. Lee Hancock, Manager, presented the awards.

Sandia Authors

Current or forthcoming articles by Sandia authors in technical journals include the following:

J. E. Schirber (5151), "Determination of the Size of the 'Necks' in Fermi Surfaces of Even Valence Metals: Application to Lead," Sept. 15 issue, *The Physical Review*.

D. D. Glower and L. J. Overton (both 5322), "FE₁-FE₂ Transition in Pb(Zr_{0.65}Ti_{0.35})O₃ Containing 1 wt% Nb₂O₅," August issue, *Applied Physics Letters*.

D. H. Anderson (5132), "Some Reactions of Solid Tetrakis-(p-Dimethylaminophenyl)-Ethylene Diiodide Monohydrate," Vol. 85, p. 2622, 1963, *Journal of American Chemical Society*. Co-authors are: R. M. Elofson, Research Council of Alberta, Canada; H. S. Gutowsky, University of Illinois; R. B. Sandin, University of Alberta; and K. Schultz, Research Council of Alberta.

H. L. Davis (5151), "Application of Configuration Interaction to the 2³S State of Helium, II," Sept. 1 issue, *Journal of Chemical Physics*, and "The Radial Limit in the Configuration Interaction Method for the 1¹S State of the Helium Isoelectronic Sequence," Oct. 1 issue, *Journal of Chemical Physics*.

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Organization Studies Art, Science of Joining Metals

This is another in a series of articles describing activities of member organizations of the New Mexico Council of Technical and Scientific Societies.

Last evening, about 50 members of the Albuquerque Section of the American Welding Society heard a discussion on high energy-density electron beam welding presented by James Mansfield, Hamilton Standard Division of United Aircraft. The meeting was typical of an organization that exists to advance the art and science of welding and allied processes.

"For the practitioners of welding," Gabe Beatrice (4413-5), AWS president, says, "it's an art. As an engineering tool, welding is a science. We have members interested on one or both levels."

The American Welding Society was founded in 1919 and incorporated in 1932 in New York. Purpose of the organization has remained unchanged — to promote the art and science of joining metals. The National Society has 14,000 members organized into 93 Sections.

The Albuquerque Section was formed in 1954. Sandians who are past chairmen of the group include Vince Nelson and Larry Null (both 1121). The organization meets monthly from September through May. Meetings usually follow the pattern of a speaker discussing an advanced area of the field followed by a demonstration of the technique. The group has cooperated in presenting welding courses at the University of New Mexico and at Albuquerque High School. Currently, AWS is

working to form a student chapter at the University.

After a Christmas party for members and guests in December, the next meeting of the local Society will feature the national president of AWS. Clarence Jackson will discuss the fields of welding and metallurgy at a meeting Jan. 9, 1964.

AWS supports the scholarship program of the New Mexico Council of Technical and Scientific Societies and the group's educational activities. In addition, AWS cooperates with the New Mexico Academy of Science and the science seminar programs.

Publications of the national society include the **Welding Journal** which includes the **Welding Research Supplement** and the authoritative **AWS Welding Handbook**. More than 100 technical committees and educational committees are organized nationally which make their reports to the membership.

"The Albuquerque Section welcomes new members," Mr. Beatrice says. "Our programs offer valuable information to anyone engaged in the metals-joining field. Contact any officer of AWS for additional information."

Other Sandians who are officers of AWS include Chet Corbin (4224-4), second vice chairman, and S. C. Waldorf (4224-4), publicity chairman.

Riley's 500th Airplane Passenger Is Surprised With 'Something Special'

Charles C. Riley (4221-4), layout operator in the foundry, is a missionary of sorts. He believes that anyone who hasn't been up in an airplane ought to go. Through the years, he has convinced a number of people that flying is the greatest thing in life.

Virgie Haverty (4212-2) was his 500th convert.

"I was scared," Virgie says. "Riley first asked me about 11 years ago to go up with him but I just couldn't see it. Finally, he convinced me that his 500th passenger ought to be me. Well, it turned out to be great fun. I like flying."

Mr. Riley marked the occasion by presenting Virgie with a charm bracelet engraved with the words,

"500th passenger." "After 11 years," he says, "it called for something special."

He started flying lessons in 1948 in California. He bought his Luscombe 8-F the following year and started keeping records on the number of people that he took up. "It's my hobby," he says. "I like to fly and I like to share the experience. I've never charged a passenger."

About three months ago, Mr. Riley helped organize the Bernalillo County Sheriff's Aerial Squadron. He is secretary-treasurer of the group and has flown several search and rescue missions. Several years ago, he helped a deputy spot two stolen cars from the air.



CO-INVENTORS of humidity testing device, Vernon E. Arnold and Shary D. Holmes (both 1121-1), examine prototype model of their invention. Punched metal plate beneath pressure gauge is paint sample.

W. R. Hoagland Named to Board by N. M. Governor

Gov. Jack M. Campbell has named William R. Hoagland, supervisor of Section 1531-1, to the board of the Los Lunas Hospital and Training School.



His previous association with the Los Lunas facility has been through membership in the Albuquerque Association for Retarded Children, for which he is a board member, and the New Mexico Association for Retarded Children, for which he is currently vice president.

The board of the Los Lunas Hospital and Training School controls administration of the state-owned facility.

Mr. Hoagland has been at Sandia Laboratory since 1950 and has worked in Systems Engineering all except one year of that time.

Unique Method 'Condenses' Time In Paint-Testing

Vernon E. Arnold and Shary D. Holmes, both of Surface Chemistry Section 1121-1, have developed a steam test device for laboratory use in determining the resistance of paint and other organic coatings to high humidity.

"High humidity is the great enemy of painted surfaces," Mr. Arnold explains. "We wanted a test procedure or device which would quickly and positively determine the resistance of a given painted surface under conditions of high humidity."

The various standardized tests were time consuming (as long as 20 days), were usually difficult to evaluate, and in some cases, required the destruction of the painted article. It was decided that steam under pressure might provide a means of rapid testing and would be destructive to poor quality parts only. A pressure chamber was designed which could be clamped to the painted surface for the steam exposure test.

"After several hundred tests,

we've determined the necessary test criteria, including the standard conditions of temperature and pressure for test application—ten pounds per square inch of steam pressure for five minutes," he continued. "Using the test device, the operator can now determine in a few minutes how resistant a given painted article is. Resistance to humidity is used to evaluate the effects of surface cleaning and pre-treatment, of various coating systems, and of other variable conditions."

Advanced Manufacturing Development Division 2564, with guidance from Mr. Arnold and Mr. Holmes, is re-designing the test apparatus for production line use, and a prototype model is nearing completion. "We don't propose that the test device will duplicate conditions in the field, for it is an accelerated test," Mr. Arnold concluded, "but we feel that if the painted article passes the test requirements, it will hold up acceptably under field conditions."



VIRGIE HAVERTY (4212-3), inset, is convinced she likes flying now. She was Charles C. Riley's (4221-4) 500th passenger. He asked her to go up 11 years ago. Mr. Riley bought his Luscombe 8-F in 1949.

Wins 24 Matches

Sandia Math Analyst Plays 28 Chess Opponents At Once

Playing individual games of chess with 28 high school students simultaneously sounds pretty rugged. As Warren B. Miller explained the feat, "It was more difficult than playing in a tournament because I had to concentrate intently for four hours."

The exhibition was held recently to encourage chess playing among high school age youngsters. It certainly demonstrated Warren's ability: he won 24 games, tied one, and lost three.

Warren, a math analyst in Special Projects Section 7241-3, has been playing chess since he was 14. "A friend said I was too dumb to learn. That was enough to get me started in the game," he explained. An uncle taught him many of the opening moves, but most of his experience has been obtained through playing against other members of the Albuquerque Chess Club.

Like boxing, bowling, or any sport, you need constant practice to play well. "Having a logical mind, a good memory, and a lively imagination are helpful in playing chess, but most important is positional judgment," Warren said. "There are some moves that can't

be logically analyzed. That's where positional judgment comes in, and it's a feeling maintained only through constant practice."

Warren has won a number of regional tournaments, including first prize in last year's state Chess Tournament. He plans to participate in the University of New Mexico-sponsored tourney Nov. 16 and 17, and the state tournament in Albuquerque Nov. 23 and 24.

C. J. Nissen Died November 2; Worked Here for Nine Years

Carl J. Nissen, a Sandia employee for nine years, died suddenly last Saturday. He was 50.

Mr. Nissen was a staff assistant in Design Services Section I, 7214-1. He had resided in Albuquerque 25 years.

Survivors include his widow, a son, five daughters, two sisters, a brother, and nine grandchildren.





SOUTHWESTERN DECOR inside the rebuilt adobe house reflects taste of owners Sandy Borgrink, left, and Phyllis Swartz. The girls hired workmen to handle the heavy construction involved in restoring the house, but performed a major share of the building work themselves.

Eight-month restoration project

No Job for Women But That Didn't Worry These Builders

Two girls tackled a job that would make strong men cringe. They converted a weathered wreck of an adobe house into a comfortable, attractive home.

"It was a mess," says Sandy Borgrink (3151). "We first saw the place on a cold February morning," Phyllis Swartz (3141) says. "The snow was drifting in through holes between the roof beams. The inside was littered with rubble."

But the girls liked the location in Corrales. The land looked like a good investment—2½ acres facing Corrales Rd.

"So we bought the place and decided to see what we could do," Sandy says. "It took two weekends just to shovel the accumulated junk out of the house."

"We didn't use a broom," Phyllis says, "we shoveled. We also shoveled the layer of dirt off the roof and hired workmen to install a tar and gravel roof. We helped patch the holes in the wall between the roof beams with new adobe."

The girls were able to move in during April of this year. Sandy and her father had laid a new hardwood floor over the original sub-flooring. Electricity and plumbing had been installed. Sandy dug the 5½-ft.-deep pit to house the pump for the well.

The original raw adobe shell of the house was 38 ft. long and 14 ft. wide. It had an adjoining storeroom about 10 ft. square. The storeroom was converted to a

bathroom. A bedroom and a portal along the length of the front were added. Most of this construction was done by local craftsmen. "We carried the adobes," Phyllis says. "They weigh 38 lbs. each."

"We helped mix the plaster," Phyllis continues, "and we learned that this is an art. And we learned that local craftsmen are temperamental. We fell way behind our schedule waiting for the plasterer to feel like plastering."

One of the biggest jobs performed by the Sandians was staining the pine ceiling and roof beams.

Among the many finishing touches to the house is a hand-carved front door. This bargain was picked up at an auction. The girls designed the room dividers between the living room and kitchen and built the kitchen table, lamps, and a pole-lamp in the living room.

Corner fireplaces were added in the living room and in the new bedroom. Indian rugs and Mexican chairs add to the decor. Mexican tile were used to decorate the kitchen sink area. The tile pattern was repeated around the fireplace.

"The place is livable now," Phyllis says. "But we still have the yard-work to do. We want to plant grass and do some landscaping."

"We can look back and laugh now," Sandy says. "But if we had known what we were getting into, I don't think we would have started."

L. E. Fuller Named Director, American Compensation Assn.

Lloyd E. Fuller, manager of Wage and Salary Administration Department 3110, was elected to the board of directors of the American Compensation Association during the group's 19th semi-annual conference in Columbus, O., last month.

He will serve a three-year term as a director.

The organization has been national in scope since last spring. It previously was called the Midwest Compensation Association.

Purpose of the organization is to further the exchange of information among its members with regard to current practice and research in all phases of employee compensation, including wages, salaries, pensions, group insurance and other related forms of employee remuneration.

Mr. Fuller has been in wage and salary administration work since he came to Sandia Laboratory 12 years ago. He has been a member of the American Compensation Association since 1962.

He is also a member of the Aerospace Compensation Group and is presently attending the 10th compensation conference at Jet Propulsion Laboratory, California Institute of Technology, in Pasadena, Calif. Yesterday Mr. Fuller was moderator for a panel discussion on "Maturity Curve vs. Classification System of Salary Compensation."

Supervisory Appointment

JOSEPH E. STIEGLER to supervisor of Surface Operations Section 7252-2, at Sandia Laboratory, effective Nov. 1.

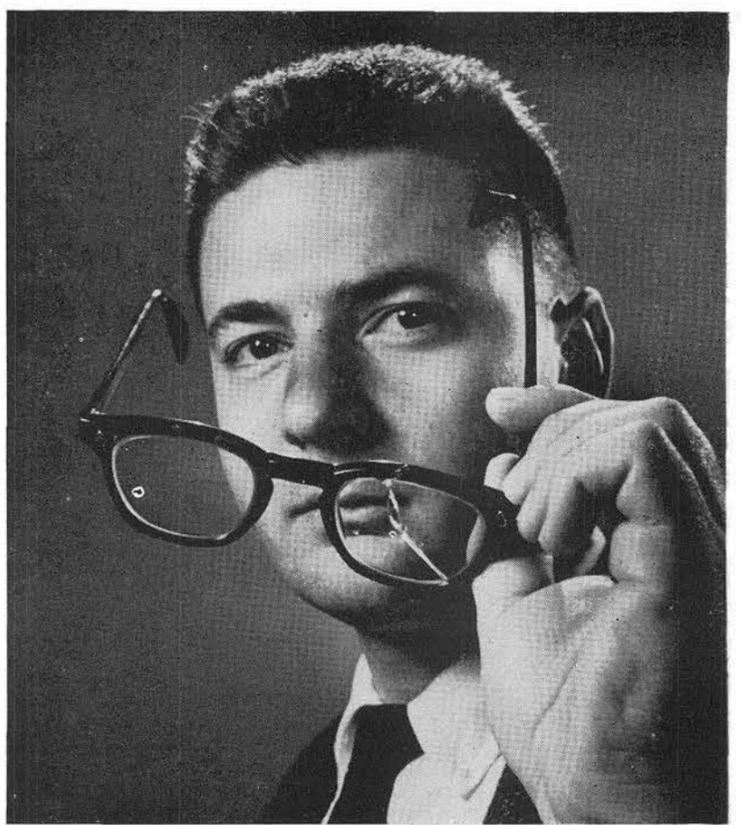


Joe joined Sandia Corporation at Livermore in January 1959, where he has been assigned to various organizations in Test Department 8120. His last assignment has been in Test Systems Section 7257-1 at Livermore Laboratory.

Before joining Sandia, Joe attended the University of Washington, where he received his BS degree in electrical engineering in 1958. From 1951 through 1953, Joe served in the U. S. Coast Guard. He is a member of Tau Beta Pi, engineering honorary society.

Welcome Newcomers

Oct. 21-Nov. 1	
Albuquerque	
Evelyn P. Carrillo	3126
Ann Faught	3126
Charlotte Fitch	3126
Guillermo F. Griego	4542
*Orlinda M. Griffin	3423
Benita J. Gonzales	3126
Naomi M. Kelly	2642
*Myrtle Bee Reynolds	3126
Returned from Leave	
Irene L. Bushmire	3452
Arthur R. Engquist	7521
Euliojo G. Sanchez	3427
* Denotes rehired	



ASSESSING DAMAGE to his safety glasses after a six-lb. sage hen smashed through his car windshield, Robert B. Foster (2411) is grateful that the glasses saved his eyesight. Accident occurred in Montana.

Sage Hen Smashes Windshield and Again Safety Glasses Come to Rescue

Safety glasses work even under the most bizarre circumstances. Ask Robert B. Foster (2411).

"There I was," he says, "driving about 50 mph on a highway about 60 miles south of Dillon, Mont. It was dark and I had slowed down. My wife was sitting beside me. We had been seeing a lot of birds during the day but they were the last thing on my mind."

"Suddenly the whole front seat of the car was full of feathers, blood, and splintered glass. A sage hen had smashed through the windshield and splattered on my face. I stopped the car and sat there, numb."

Bob's face was bleeding from a dozen or more small cuts and a large gash on his forehead. His

wife was uninjured. The car was a mess.

"We finally recovered enough to drive on a few miles to a small cowtown — two saloons and a house," he says. "There I got cleaned up a little and stopped the bleeding. Then I missed my glasses. I found them under the front seat—there was a deep cut on the frame above the right lens. The left lens was cracked and pitted and there were still splinters of glass imbedded in the frame. That could have been my eyes."

The couple spent the night at Dillon, then continued their vacation after the car was repaired. First thing Bob did upon returning to Albuquerque was order a new pair of safety glasses.

In case of fire

First Call the Professionals But Don't Just Stand There

Fire fighting is no job for amateurs. It's a hazardous occupation, to be taken up, when the need arises, only by professionals—people trained in proper techniques.

"In our community, professional help in fighting fires is as close as the nearest telephone," R. W. Hunnicutt, head of Sandia's fire prevention plant inspectors, points out. "However," he reminds us, "there are some professional things that can be done (besides calling the firemen) while we're waiting for the fire engine to arrive."

They require a few minutes of foresight and preparation, but they pay big dividends. First, everyone of responsible age in a household should know how to call the fire department (this is true at work, too). The department number should be located near the phone, where everyone knows where it is.

The firemen should be called first. Then comes the time to take what action we can, with the equipment we have on hand.

Ordinary garden hose, which can be quickly attached to an outside or inside faucet, or buckets of water can be used to extinguish roof fires or fires inside buildings. A blanket, baking soda, or other non-flammable cover can be used to smother grease or oil fires in the kitchen or garage (remember that water on such fires usually makes them worse). Commercially sold fire extinguishing devices can be used on other types of fires (electrical, etc.). They should be simple to operate.

But before you need to show your skill as a professional, learn these points:

—Call the firemen promptly.

—See that everyone is out of danger. A human life is worth more than any building.

—Don't ask women or children to endanger their lives with fire fighting. Dresses of cotton and of most light material ignite easily.

—Don't try to enter a room where much fire is in evidence.

—Don't attempt to fight a fire in a smoke-filled room, attic, or cellar.

—Insurance will pay for losses; keep your property fully insured in light of its current replacement cost.

Sandia Is Hostess To Librarian from South America

Ida Mae Gutierrez of Sandia Laboratory's technical library had an opportunity Oct. 26 to exchange views with the director of the central library and library school of the National University of Buenos Aires.

The visitor, Miss Josefa Emilia Sabor, was a participant in the Foreign Leaders Program of the Bureau of Educational and Cultural Affairs, U. S. Department of State. Her specific purpose in touring the United States was to discover ways to improve the School for Librarians which she heads, and to learn modern methods used in American libraries.

"She was impressed by our use of machines for information retrieval and noted that such usage was a far distant dream in Argentina," Ida Mae said.

Ida Mae and her husband took Miss Sabor and her State Department escort officer/interpreter to Santa Fe for a day of sightseeing.



ADOBE HACIENDA — Eight months ago, this adobe house in Corrales was a weathered shell. It was con-

verted by Phyllis Swartz (3141), left, and Sandy Borgrink (3151) into an attractive, comfortable home.

FBI Considers Stolen Autos Tool of Trade for Criminals

Editor's Note: J. Edgar Hoover, Director of the Federal Bureau of Investigation, expresses deep concern over hardened criminals and the stolen automobile. The following article, sent by the Bureau through the New Mexico agent to the Lab News, discusses the repeal of the Dyer Act, a law which makes transporting a stolen automobile across a state line a Federal offense.

To hardened criminals a stolen automobile is a tool of trade. Daily, underworld gangs and hoodlums resort to and rely on stolen motor vehicles for deception and escape in the perpetration of major crimes. Auto theft rings, many with border-to-border operations, are a recurring menace, netting huge profits for commercial car thieves.

The extent of the auto theft problem is exemplified in the estimated 356,000 cars stolen during 1962 with a property value of some \$308 million. This was a 9 per cent increase over 1961, and statistics for the first 6 months of 1963 reflect another 9 per cent rise. Assuredly, law enforcement needs every weapon at its command to cope with car thieves. Yet, in some quarters, there are a few who advocate the repeal of the existing Federal statute specifically designed to help fight auto theft — the Dyer Act. Such a proposal could not be based on an objective appraisal of the over-all problem.

Let us take a closer look at some crucial aspects of car thefts. Currently, the FBI is investigating a number of auto theft rings, some involving as many as 100 motor vehicles each. Recently, one group of thieves, operating in five states, bought late model salvaged cars for which legitimate title papers were obtained. The title papers and public serial plates of the wrecked cars were then used in the sale of stolen vehicles of similar make and model. In one case, a car was stolen in Canada, given a fictitious registration in a state not having a title law and sold in Florida. Only a few years ago, the FBI located 15 automobiles in Arabia which had been stolen in this country. The operational scope of highly professionalized car theft rings is almost unlimited.

Investigations of such violations are complex and far-flung. Usually, they require prompt, simultaneous action at different locations. On a national basis, 20 per cent of all automobiles stolen are recovered in jurisdictions other than that in which the theft occurred. In some areas, the recovery by other jurisdictions is as much as 50 per cent. Local authorities can hardly be expected to have facilities necessary to successfully follow through on cases involving multiple jurisdictions in various states.

E. M. Shonka Observes 35 Years Service With Western Electric Co.

E. M. Shonka, manager of Auditing Department 4120, will observe his 35th service anniversary with the Western Electric Co. on Nov. 19.



His first job with WE was as a raw material order clerk at the Hawthorne Works. A little more than a year later, and after supervisory training, he transferred to Headquarters, New York City, where he remained until 1959.

Through the years Mr. Shonka worked in Commercial, Treasury, and Accounting Departments, and was Assistant Superintendent-Headquarters Auditing Organization at the time he transferred to Sandia Corporation as a Department Manager in 1959.

"I acquired a liking for the Southwest during World War I," Mr. Shonka said. "I was stationed with the Army for a year near Deming, N. M., before being sent overseas."

Common logic dictates that the responsibility fall on an investigative agency having jurisdiction wherever investigation is needed.

Some reasons advanced for the repeal of the Dyer Act include: (1) delays in obtaining judgment in Federal courts because of matters being handled which have no legitimate Federal interest; and (2) the large number of Federal prison inmates, mostly juvenile, serving sentences for interstate transportation of stolen motor vehicles. The facts fall far short of supporting these contentions.

During the fiscal year 1962, of the 36,108 defendants brought before Federal courts, only 15 per cent were charged under the Interstate Transportation of Stolen Motor Vehicles Statute. Of these, the vast majority pleaded guilty, leaving only about 3 per cent of the total Federal court defendants to stand trial under the statute.

Some 1,490 auto thieves under 18 years of age were handled under the Federal Juvenile Delinquency Act during the 1962 fiscal year. Of these, 40 per cent were diverted to state courts or dismissed, 25 per cent received probation and only 35 per cent were committed to Federal institutions. In addition 73 per cent of paroles granted to Federal Juvenile Delinquency Act prisoners in fiscal year 1962 were to inmates charged with auto theft. Accordingly, it would appear that juveniles detained in Federal prisons under auto theft convictions represent a rather small percentage of the total inmates. This is particularly true when compared with their disproportionate representation in the national auto theft problem where 62 per cent of all arrests are persons under 18 years of age.

Today, with almost 80 million motor vehicles on the nation's highways and the auto theft total increasing annually, the nullification of any available means to fight the crime would be a crippling blow to law enforcement.



DOUBLES CHAMPIONS, tops in three Sandia Laboratory horseshoe leagues, are, from left, Peter A. Peshlakai (4212) and Lewis R. Fisher (4252), Class A; A. C. Taylor (4252) and Dan J. Padilla (7523), Class B; and Eldon E. Ritterbush (1372) and Robert R. Evans (7523), Class C. Some 60 Sandians participated.

R. A. Quelle Named by Governor to Advisory Committee on Aging

R. A. Quelle, Sandia Laboratory's retirement counselor, has been named by Gov. Jack M. Campbell to a 10-member advisory committee on aging.

The group will work with the State Welfare Department in a program on aging being conducted jointly by the department and the Association of University Women in New Mexico.

Mr. Quelle conducts Sandia Laboratory's pre-retirement counseling program and has made a special study of problems of the aging. He has served as a board member for the Coordinated Action for Senior Adults, as a member of the New Mexico Survey Committee on Aging, and as a representative at the White House Conference on Aging in 1961.



Sandia-Made Film In International Film Festival

A Sandia-made movie on "Project Gnome" has been entered in the First International Peace Film Festival, being held at Los Alamos this week end.

The festival has attracted entries from private film companies in the United States, Sweden, and Japan, and from the governments of Czechoslovakia, and the Soviet Union.

Sandia's entry was written and directed by Richard V. Foster (3465-1). The film is semi-technical and for public release. It pictures Sandia Corporation's participation in Project Gnome, instrumentation used, background information, detonation, and some results. The underground nuclear detonation, two years ago near Carlsbad, N. M., was part of the Plowshare Program for the peaceful uses of atomic energy.

C. A. Ashby Observes 30 Years of Service With Western Electric

C. A. Ashby will observe 30 years of service with the Western Electric Co. on Nov. 27.



Mr. Ashby has been with Sandia Corporation since 1950 and is presently supervisor of Budget Division (2000) 4138.

His first job with Western Electric was as an expeditor in the Kearny, N.J., plant. He worked in both production and purchasing organizations at Kearny until 1950 with the exception of the war years when he was at various WE plants for short periods of time.

Last summer Mr. Ashby had published his first book, "Fantasia Americana — The American Fantasy."



ALL RINGERS — Sandia Laboratory singles horseshoe champions are, from left, Alvin E. Farmer (2422), Class B; Jose L. Pecos (4135), Class C; J. B. Sweatman (4232), Horseshoe Association president; and Thomas L. Towne (1113), Class A champion. Finals were in October.

Service Awards

15 Year Pins



Rose W. Pelz 4542 Nov. 9, 1948



Leon V. Day 7215 Nov. 9, 1948



Willis M. Jobe 4511 Nov. 12, 1948



Lydia F. Waldorf 3462 Nov. 15, 1948



Andy W. Railey 4514 Nov. 15, 1948



Marion A. Williams 4518 Nov. 15, 1948



Sadie S. Sedillo 4574 Nov. 15, 1948



Vincent J. Domme 4511 Nov. 16, 1948



Charlie A. Monroe 4614 Nov. 16, 1948



Darwin G. Palmer 7251 Nov. 16, 1948



B. D. McConnell 4514 Nov. 17, 1948



Barbara Jarney 3421 Nov. 18, 1948



Joseph E. Sieglitz 4516 Nov. 18, 1948



C. A. Leemhuis 5414 Nov. 18, 1948



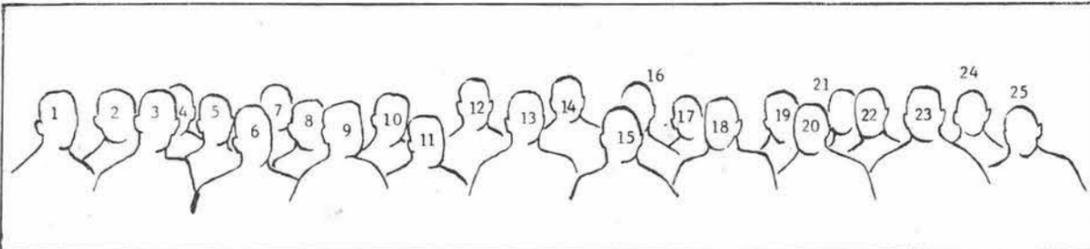
B. C. Benjamin 7251 Nov. 22, 1948

Social Security Caution Issued to Household Heads

If you employ a maid, baby sitter, or other household help, you must report their income, according to Perry A. Webb, district manager for social security.

"This report," he said, "is made to the District Director of Internal Revenue for any household employee who earns \$50 or more cash wages in a three month period. If you pay as little as \$4 a week on a regular basis, your employee is covered by social security and you must file a report."

A booklet, "Social Security and Your Household Employee," tells employers how to obtain the forms they need to make this report. A copy is available from the social security office in Albuquerque, 3018 Monte Vista NE, tel. 247-0311. At Livermore Laboratory, the social security representative may be contacted through Employee Services Section 8212-2.



MEMBERS of group attending briefings at Sandia Laboratory and Medina Base Oct. 8 were: 1. Capt. J. O'Malley, Strategic Air Command, USAF; 2. H. J. Blackwell, Manager, San Antonio Area Office, AEC; 3. James L. McCraw, Albuquerque Operations Office, AEC; 4. Capt. Joseph Morgan, Strategic Air Command, USAF; 5. J. M. Higgins, Mason and Hanger-Silas Mason Co., Inc.; 6. R. B. Jewell, Mason and Hanger-Silas Mason Co., Inc.; 7. R. W. Henderson, Sandia Corporation; 8. Col. W. M. Frarie, Strategic Air Command, USAF; 9. Brig. Gen. K. R. Powell, Strategic Air Command, USAF; 10. Col. Julius Yucker, Jr., Field Command, Defense Atomic Support Agency, USAF; 11. Lt. Col. John Bell, Strategic Air Command,

USAF; 12. S. P. Schwartz, Sandia Corporation; 13. Capt. R. C. Barnes, U. S. Navy, Field Command, DASA; 14. Col. J. W. Rawlings, Field Command, DASA, USAF; 15. Lt. Gen. Hunter Harris, Vice Commander, Strategic Air Command, USAF; 16. Lt. Col. Oscar Sundstrom, Strategic Air Command, USAF; 17. A. B. Cole, Sandia Corporation; 18. E. H. Draper, Sandia Corporation; 19. G. A. Fowler, Sandia Corporation; 20. L. E. Lamkin, Sandia Corporation; 21. Col. E. L. Bishop, Strategic Air Command, USAF; 22. Lt. Col. D. L. Barrett, Strategic Air Command, USAF; 23. Col. O. P. Thorne, Field Command, DASA, USAF; 24. Maj. Kenneth Kruse, Strategic Air Command, USAF; 25. Lt. Col. L. J. Lacagnin, Strategic Air Command, USAF.

Sandia Officials Present At Medina Base Briefing Session

A group of Sandia Corporation, military, and civilian personnel attended a demonstration and briefings of capabilities at Medina Base, San Antonio, Tex., Oct. 8.

Attending the briefings and demonstrations were S. P. Schwartz, President of Sandia Corporation; R. W. Henderson, Vice President, Weapon Programs 100; E. H. Draper, Vice President, Development 1000; G. A. Fowler, Vice President, Development 7000; and L. E. Lamkin, Director of Quality Assurance 7500. Participating in the demonstrations at Medina Base were personnel from the 39-member Sandia contingent at Medina, Surveillance Division 7536, supervised by A. B. Cole.

Military personnel at the meetings included Lt. General Hunter Harris, Vice Commander of Strategic Air Command, USAF; Brig. General K. R. Powell, Strategic Air Command, USAF; and Col. O. P. Thorne, USAF, Field Command, Defense Atomic Support Agency Deputy Commander.

Other civilian personnel included H. J. Blackwell, Manager, San Antonio Area Office, Atomic Energy Commission; R. B. Jewell, Vice President and Chief Engineer, Mason and Hanger-Silas Mason Company, Inc.; and J. M. Higgins, AEC Contract Manager, Mason and Hanger-Silas Mason Company, Inc.

The group flew from Albuquerque to San Antonio for the demonstration and briefings. At Kirtland AFB, they boarded a KC135 tanker aircraft (a military version of the Boeing 707), piloted by Lt. Gen. Harris. They landed at Kelly AFB in San Antonio.

Before their journey to San Antonio, the group was briefed at Sandia Laboratory on the efforts and procedures of Sandia Corporation to assure reliability of the Sandia-designed product. Presenting the briefings at Sandia were Mr. Schwartz, Mr. Henderson, Mr. Draper, and members of the FC/DASA Quality Assurance Liaison Detachment.

LASL Group Leader Will Give Report on Project Sherwood

Project Sherwood, controlled thermonuclear fusion, will be discussed at a joint dinner meeting of the Albuquerque-Los Alamos members of the Institute of Electrical and Electronics Engineers, Friday, Nov. 15. Speaker will be Warren E. Quinn of Group T-15, Los Alamos Scientific Laboratory. Dr. Quinn will discuss one of the Project Sherwood machines, Scylla IV, and plasma research.

The meeting will begin at 6:30 p.m. with a social hour at the Lodge Hotel in Los Alamos. If a member needs a ride or wishes to organize a car pool, he may call Fred Willins, Public Service Company, CH 3-7871, ext. 250.

fields that are important to technology. They have become convinced, through experiences such as the effect of the Lysenko incident, that this is essential to their material progress. Men can argue ideology — but they can't argue scientific fact. The Soviets are realists enough to have learned this. And freedom of thought in Soviet science, an unstable situation in itself, hopefully may lead to greater freedom of thought in Soviet non-science areas—at least we may hope so—for freedom in any form can be contagious. On the other hand, if the Soviets reimpose their former restrictive controls to halt the contagion of freedom, their rate of progress in basic science will be drastically reduced.

AEC Chairman comments

'The Strength of a Society of Free Men Lies in the Unshackled Mind - - -'



Dr. Glenn T. Seaborg

Goals for Americans, an idea first explored in a 1960 Prentice-Hall publication, was again examined in the recent issue of *Forum* magazine, published by The General Electric Company. It is, as the magazine put it, "intended to serve as a part of the continuing effort to record what leading Americans believe our goals should be and how we can best attain them."

Forum magazine interviewed a number of government leaders responsible for national security programs. Among those questioned on the matter of goals for America was Dr. Glenn T. Seaborg, Chairman of the Atomic Energy Commission. Following are his words.

I believe that if the present struggle is to be decided peaceably in favor of the forces of freedom, it will be largely the result of education and the things the educated can do. The survival of civilization and free societies depends in large part, ultimately, upon an improvement in education of the general population, maximum cultivation of the talents of gifted individuals, and upon ever-increasing advancements in science and technology.

During the last two decades we appear to have entered a new era in which our society is being driven by the sophisticated, reciprocating forces of science and technology. We have evolved from a nation of small farmers into the

first stages of the Scientific-Democratic Society. I call this the "Third Revolution" since, in my judgment, it is the next most significant development following first, the political revolution which made ours an independent country, and second, the industrial revolution. The point is that the "Third Revolution" could not take place and could not be successful in our society without freedom of scientific thought. The strength of a society of free men lies in the unshackled mind whether the objects be science or values or the rights of free men. The first revolution guaranteed political and intellectual freedom for citizens; that freedom nourished the pursuit of scientific truth. **What brought us to our present position?**

If we look back over the years, we inevitably begin by acknowledging our debt to the ethical core of Christianity and the other great codes of human conduct, and to the intellectual awakening in the Renaissance and the Reformation. There is the English tradition, with its benchmarks of Magna Charta and the revolution of 1688, and the implementation of personal and political rights through the steady march of the common law. The battle lines over the centuries have been shared equally by brave men of religion and politics, of letters, and philosophy and art, of the press and the law, and of science.

A scientific society is, therefore, critical to the outcome of the long struggle for freedom, including the preservation of the viability of our democratic system. Science and technology are the most powerful forces for material advancement unleashed by man. The changes that these forces bring—and will continue to bring—run wide and deep through society. But the power is a paradoxical one; power to create and destroy; power

to increase or to decimate populations; power to provide, if we have the wisdom, for the reasonable material needs of men around the globe. In short, science has given man the power to create his own environment—a factor clearly to be reckoned with in the survival of high civilization, perhaps of man himself, and in determining the outcome of the fight for freedom.

What resources do we have for coping with the new environment which is developing through the evolution of a new scientific society?

The best adaptive response society can make is to intensify its educational effort.

We have before us the need, as never before in our history, to realize an old American ideal—to provide the opportunity for the education of each individual to the limit of his talents, whatever his social or economic status may be. To participate in the conduct of his affairs, a citizen in today's democracy must know more and he must know it better. He needs a thorough grounding from the beginning of his training, in the fundamentals upon which more advanced learning is based. He must have a broad understanding of man and his history, of his errors and his aberrant inhumanity; of his essential humanity and his triumphs in the arts and literature; and he must have comprehension of political, economic and scientific dynamics. Above all, he must be endowed with the higher sensitivity and social responsibility that are developed through advancing education. Only through the maximum cultivation of the inherent talents of man can we expect successful adaptation to the new forces in a shrinking, complex, swiftly changing world.

I do not propose that all students become scientists or even that all bright students become

scientists. I do propose that all students have an opportunity to grow, to strengthen their minds, and to fulfill their academic capabilities. Only in this manner will we develop the men and women of resource and reason so urgently needed to win the struggle for freedom. It is important that laymen acquire a scientific literacy just as I would expect scientists, in positions of management in government and industry, to acquire a political or business literacy.

The need for this scientific understanding arises out of necessity. The problems we face as a nation, the decisions which must be made with respect to their resolution, the policies to be established—all of these increasingly involve some complex scientific or technological question.

As an educator, do you share the qualms that have been voted by some educators that when universities request Federal assistance, they invite Federal direction?

I do not agree with the idea that Federal financing means Federal control. The Federal Government already expends large sums of money to support university programs—one estimate is that 70 per cent of university research is sponsored by Federal funds—and I believe that there is general agreement that this is being done without exercising control of policy. To reject Federal financing would be to reject doing what must be done.

How do you relate the scientific advances of the Soviet Union to the complete freedom of thought you ascribe as being necessary for us to achieve similar scientific advances in our own Scientific-Democratic Society?

The Soviet advances have been possible because the Soviets have been permitting freedom of thought in science, especially in

Time-Wasting's Not For Air Minded Sandia Flyers

Pete Seward (2643-3) and Jim McFadden (7244-2) spent several weeks recently at Fallon, Nev., during preparations for Project Shoal. Their working hours were long, but they didn't waste any of their spare time. Jim taught Pete how to fly.

"Fallon is the most air-minded community I've seen," Jim says, "so teaching Pete how to fly seemed the natural thing to do." Jim's been a flying instructor for 19 years, 14 of them as a rated instructor in the Air Force. Pete had no flying time when he came to Fallon, and he made his 200-mile

cross country flight before he left.

"We flew early in the mornings, before work," Jim continues, "and after work until sundown." In all, the pair flew for 30 hours during September and October. Jim also instructed Art Tice, a supervisor for Reynolds Electrical & Engineering Co., and Mary Little, a Fallon resident, both of whom also made their cross-country flights with Jim. Dick Oliveira (7251-1) and Leo Brady (7251) also began flying lessons at Fallon during Shoal preparations.

Cross-country flights were made to Beckwourth, Calif., and Lake Tahoe, over some rugged country. "But everyone did a fine job on the flights," Jim concludes.

Coronado Club Will Provide Members With Football Bus Service

The Coronado Club will sponsor buses for use of Club members in attending the UNM-University of Wyoming game tomorrow. They'll leave from the Club up to one-half hour before game time, and will be available for the Nov. 16 UNM-Air Force game (homecoming), and the Nov. 30 game with Brigham Young University. The Club snack bar will be open after each game for members and their guests.

On Nov. 1, the Club will present the Dance Class Graduation Ball. All Club members are invited to attend.

This evening's buffet menu will feature chicken; on Nov. 15, a Mexican menu will be featured; on Nov. 22, a turkey buffet will be served.

Sandia Scientist to Make Presentation at Atlantic City Meeting

Albert Narath, supervisor of Solid-State Physics Research Division 5151, will journey to Atlantic City, N. J., to make a presentation before the 9th Annual Conference on Magnetism and Magnetic Materials, Nov. 12-15. The conference is sponsored by the American Institute of Physics and the Institute of Electrical and Electronics Engineers. He will discuss "Nuclear Magnetic Resonance Studies of Antiferromagnetic CrCl₂." On Dec. 3, he will make a similar presentation on the same subject before graduate students and faculty members at the Massachusetts Institute of Technology.

Sandia Employee Basketball Assn. Elects Officers

Phil Loeper (4412) was elected president last week of the Sandia Laboratory Employees Basketball Association. Don Smith (1124) is vice president and Jim Freese (5153), Gil Baca (4516), and John Otts (7324) are directors of the league.

Six teams have been organized. League play will start Nov. 26. Games will be played on Tuesdays and Thursdays at the Sandia Base Gym. The schedule calls for three games each night starting at 5:45, 7:00, and 8:15 p.m. Spectators are welcome.

R. A. Miller Promoted To Lieutenant Colonel In Army Reserve

R. A. Miller, supervisor of Life and Performance Laboratory Section 4632-2, was promoted to Lieutenant Colonel in the U. S. Army Reserve recently.

He is commander of approximately 350 New Mexico Reservists assigned to the 5th Medium Tank Battalion. This is the only Army Reserve Combat Unit in the state. The men meet Monday evenings at the Armory at 400 Wyoming Blvd. NE.

Mountain Club Members to Take 'Litter Climb'

H. A. Tendall (1513) will lead a group of New Mexico Mountain Club members on a hike through the Arches National Monument near Moab, Utah, starting tomorrow. Highlight of the three-day trip will be seeing the numerous arches and "fins" of sandstone formed by erosion in the area.

A clean-up hike up La Luz Trail in the Sandia Mountains is planned by the Club, Nov. 17. The hikers will climb from Juan Tabo Bowl to Sandia Crest and pick up litter on the return trip down the trail.



STUDENT pilot Pete Seward (2643-3) began flying lessons at Fallon (Nev.) Municipal Airport during preparations for Project Shoal, and completed his cross-country flight. Behind him is Jim McFadden (7244-2).

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

RULES

1. Limit: 20 words
2. One ad per issue per person
3. Must be submitted in writing
4. Use home telephone numbers
5. For Sandia Corporation and AEC employees only
6. No commercial ads, please
7. Include name and organization

FOR SALE

ENGLISH SPRINGER spaniel puppy, purebred, male, registered with AKC. Barth, 282-3134.

WATCH REPAIR equipment: timing, cleaning machine, lathe w/chucks, staking set, crystal cab. w/crystals, parts, hand tools. Anez, 299-6301.

CORNER TABLE, 2 table lamps. Will trade. Valdez, AM 8-4196.

DINING SET, mahogany, 6 chairs, table and buffet, \$60. Hinson, 299-2869 after 5 p.m.

TRAILER HITCH, \$5; helper springs, \$6; bike training wheels, \$4.50; set of four small wheels, \$1.75. Bradshaw, 268-8708.

3 BDR, separate dining room, heated workshop, \$15,000. Also 2 bdr. house, \$12,000. Both have aluminum siding, Permatone. Rudeau, 256-2380.

TWIN BED frame, antique white. Hiller, 299-7573.

SKI BOOTS, men's size 9 1/2, \$5. Stirbis, 299-5363.

3 BDR, den, 1 1/2 bath, dishwasher, w/w carpet, drapes, AC, sprinklers front and back, DR. \$500, down, \$105 month. 10505 Apache NE. Kerr, 299-7527.

SHEARED BEAVER jacket, size 12. Welch, 299-5788.

'57 LAMBRETTA 150D motor scooter. Mathias, 255-0156.

'57 CADILLAC. Cross, 912 Fayne Pl. NE, 298-0124.

GIBSON ELECTRIC guitar, case and amplifier, \$110. Barnfield, 256-6972 after 5 p.m.

'57 PLYMOUTH Belvedere, 4-dr. hardtop, R&H, PS, PB, AC, \$575 or best offer. Eisold, AX 8-1990 after 5 p.m.

MAYTAG WASHER, \$40; engine 1949 Chev. pick-up, 6 cyl., \$40. Trollinger, 268-3414.

WARDS baby-feeding table, \$12; Cosco stroller, \$12; 2-drawer file, \$8; Flo-Table lamp, \$6; 80 vinyl tiles, \$5; 1200 cfm, 2-speed cooler, \$15. Cross, 298-0470 after 3 p.m.

'61 VOLKSWAGEN camper with tent, ladder, and luggage rack. Newman, 298-2323.

2 PR. ice skates, size 2; 1 pr. ski boots with boot tree, size 11. Alden, 255-4827 after 5 p.m.

HURLEY PRESS ironer, new. Original cost, \$250, will sell for \$100. 1951 Whirlpool washer, \$15. Conklin, AM 8-6050.

NEW EQUIPMENT UMCO tackle box Model 175A; 19 assorted plugs, flies, and spinners; 21 assorted worms, bugs and frogs, all for \$22.50. Markowitz, 898-2991.

RANCH STYLE sofa, coffee table and end table. Mason, 298-4623.

TRENCH COAT, white, size 10 or 12, worn twice, \$15. Originally \$30. Daily, 255-2690.

3 BDR, den, brick home, minimum care landscape, 2000 sq. ft. living area, beautiful residential area. Devor, 256-6541.

ROCKING HORSE, larne size, \$10 or will trade. Hernandez, AM 8-5000.

DINETTE SET, bronzetone, extra leaf for table, 6 chairs (2 need repair), \$25. Fitzgerald, AX 8-2506 after 6 p.m.

3 BDR. Mankin, hwf, AC, new water heater, pitched roof, close to schools. Assume 4 1/2% GI or refinance, \$12,000. Richardson, AX 9-5052.

END TABLES, mahogany, double dropleaf, \$35 pair; occasional chairs, channel back, rose upholstery, mahogany legs, \$30 pair. Rainhart, AX 9-2887.

4-PC SECTIONAL, modern, brown, \$75; blond Zenith Hi-Fi and record case, best offer; white 4-drawer baby chest, \$5. Smith, AM 8-9982 after 5 p.m.

2 WHEELS for Chevrolet 1/2-ton pickup truck, 15 in. with 6 bolt hole pattern, \$5 each. Giddings, 298-6221.

PIANO, STUDIO, Gulbransen Super-scale, excellent tone, mahogany with bench, \$325. Gardner, 6812 Guadalupe Trail NW, 344-2547.

TABLE on casters, 22x31", \$5; record player, needs work, \$5; Higgins wardrobe case, \$5; 2-burner Kenmore hot plate, \$5. Young, 4614 Burton SE.

ELECTRICAL CABLE, 75', 3-conductor, heavy duty, never used, half price; RCA 45 rpm automatic record player, \$10; men's roller skates, size 8 1/2, \$5. Stewart, 298-6246.

'59 GMC one-ton pickup, heavy duty. Newton, 265-1042.

HOUSE—VALLEY, 2 bdr., furnished, w/w carpeting, completely landscaped, walled-in backyard, 1839 Neat Lane SW, \$13,500. Reynolds, 877-9718.

'62 VOLKSWAGEN station wagon, deluxe red and white, \$1990. Will accept VW sedan in trade. Norton, 282-3165.

'49 CUSHMAN scooter and helmet, good tires, brakes and lights, needs tune-up, \$35; mandolin, Sears, new, with pitch pipe and instruction book, \$15. Mackay, 298-1972 after 5 p.m.

'62 MCNZA, 4-dr., R&H, air, sacrifice. AKC red or black & tan miniature dachshunds at stud. Becker, 299-2539.

3 BDR home, 4819 Mescalero Rd., NE, 1 1/2 bath, near schools. Roybal, 344-5901.

AQUARIUM, 20 gal., heater, filter, full cover and lights, pump, thermometer, fish plants, complete, \$35. Mitcham, AX 9-8425.

CAMERA, Mamiyaflex, C2, professional 2 1/4 with 80mm and 180mm lens, \$245. Belden, 299-3867.

RECORD CHANGER, Garrard RC-80, three speeds, takes three record sizes, \$20. Anderson, 256-7394.

MAGNUS (grand) organ, like new, \$100. Young, 837 Valencia Dr., SE, AL 5-8193.

'60 CHRYSLER Saratoga, 2-dr. hardtop, AC, power steering, brakes, seat, torque-flite, auto pilot, 24,500 actual miles, \$1900. Nicovich, 299-1430.

WESTERN STYLE walnut bunk beds with mattresses and bookcase headboards, \$80 or best offer. Starrett, 256-0862.

24" BLOND console TV, \$35; 8mm model 98 Mauser, sporterized, stock and shells, \$30. Campbell, 10913 Elvin NE, 299-9195.

NEXT DEADLINE
FOR SHOPPING CENTER ADS
Friday Noon, Nov. 15

WESTINGHOUSE automatic washer, \$50; Kenmore electric dryer, \$125. Martinez, 11100 Bellamch NE, 299-2323.

'55 PONTIAC 2-dr hardtop, R&H, w/w, \$325. Wilson, 298-0049.

SILVERTONE stereo-TV (21") combination with 2 separate speakers, dark wood, \$100. Miller, 298-2850 after 5:30 p.m.

OLD ADCBE, nice SW valley area, 3-bdr, beam ceilings, fireplaces, near school, no qualifying, assume GI loan. Barnes, 877-2061.

JIG SAW, 18" Craftsman, \$40; 4" jointer, Shopmaster, \$40; Privacy door-locks, new, \$2 each. Liguori, AL 6-3613.

SOUTH VALLEY, 3-bdr. and den on 1/2 acre lot, one block from Barcelona school. See now, available Nov. '22. O'Connell, 255-6575.

TWO AUDAX 150x15" speakers enclosed in walnut finished cabinets, \$150 pair; one Eico 70 watt stereo amplifier, \$70. Henneke, 298-4232.

2 BDR. house, walled yard, AC, drapes, carpet, \$1500 true equity, balance \$9000. 1325 Marron Cir. NE. Ludwick, 299-2557.

1/4 HP MOTOR with pulley, \$8. Pitti, 256-1629.

10 GAL. AQUARIUM, hood, underground filter, fish, plants, \$20; 20 gal. aquarium, hood, underground filter, \$30; piston pump, \$10. Navratil, 299-3355.

REAL ESTATE contract, \$1400 at 6 per cent, will discount 25 per cent for cash. Call at 8 p.m. Vilella, 299-6261.

GAS RANGE, clean, \$50. Van Dusen, 298-1091.

'55 CHEVROLET Bel-Air 4-dr., 6 cyl., black, R&H, wsw, economical, \$350. Holt, 298-5207.

26" BIKE, middleweight, reconditioned, HD tires, thornproof tubes. Christy, 265-0247.

BEDROOM SUITE, 3-pc. walnut, double poster-type bed, vanity dresser w/extra large mirror, large chest of drawers w/mirror, \$40. DeVault, 268-9575.

SPINET PIANO, walnut, \$350. Hipsher, 10502 Snow Heights Blvd. NE, 299-0673.

'59 BUICK station wagon, AC, PS, PB, tinted glass, trailer hitch and wiring, green and white, 43,000 miles, \$1375. Shurter, 268-0490.

LARGE METAL shelves, ideal for garage or other storage purposes, cheap; complete novice train set-up, \$75. Bechtel, 268-7409.

MOSLEY SIDEBAND receiver CM-1, Heath DX-60 transmitter, new Swan SW-240 Tri-band transceiver. Hansen, 344-8985.

FM TUNER, Heathkit, asking \$20. Berger, 11620 Bellamah NE, 298-4234.

'59 CHEVROLET six, 4-dr., \$775. Roller, 10810 Claremont NE, 299-4661 after 5 p.m.

21" TV Silvertone, blond console model, \$50. Chilar, AX 8-0948.

'54 FORD station wagon, 9-pass., Ford-o-matic, tinted glass, 64,000 miles, \$375. Morgan, 299-2850.

FLEXSTEEL LOUNGE chair, \$25; men's heavy laced boots, size 10 1/2, \$5. Butler, 255-8503.

'56 SPORTS T-Bird, new tires, upholstery, paint, \$1975. Bascom, AX 9-1662.

RCK CUTTING, polishing equipment: s/b, trim, saw, grinders, sander, polisher, four motors, \$200 cash. Reed, 4930 Palo Alto SE.

'59 CHEVROLET 1/2-ton pickup, 4 speed, 6 cyl., long wheelbase, long wide bed, \$900. Forkner, 298-0284.

SKI BOOTS, men's size 8, used one season, double boot construction, by Carl Henke. Karkela, 299-2926.

HOOVER Satellite, \$10; Babebe-Tenda, stroller, all equipment—weather protector, cuddle cushion, market basket, \$20; spider-leg walker, \$1. Bryant, 268-3116 after 5:30 p.m.

RIDGECREST AREA, 2-bdr., att. garage, utility room, AC, HW floors, patio, lawn, shade, frame stove, \$11,600. Williams, 1806 Morningrise Pl. SE, 268-4812.

40" GE electric stove; 9x12' cotton weave rug (brown); 2 corner tables; size 7 1/2 girl's ice skates and roller skates. Otts, 299-3423.

'63 WREN Mini-Bike (miniature motor-scooter). Darrell, 268-0534 after 5 p.m.

26" GIRL'S bike, needs paint, \$15. Scully, 299-9373.

NEW HOME, brick, 4-bdr., den w/fireplace, all electric kitchen, near all schools, 2925 Tennessee NE. Syme, 268-1334.

3-BURNER butane camping stove with built-in oven, tank with regulator; 6" skill saw; 1/4" electric drill; Holton Collegiate trombone. Reed, 299-1684.

'55 CHEVROLET, sport coupe, rebuilt engine, floor shift. Fisher, 256-2891.

NATIONAL N-303 SSB/AM/CW receiver, also covers 11 meter band, originally \$450, best offer over \$200. Bauer, AL 5-7774.

OR RENT house in North Valley, 2-bdr plus guest house, 292 Placitas Rd., NW. Adams, 344-8274.

'55 BSA 500cc single motorcycle, \$315. Pomeroy, 265-0788.

YEAR OLD brick, 3 bdr, 1 1/2 baths, carpeted, built-ins, paneled den, fireplace, AC, landscaped, assume 5 3/4% FHA loan, San Gabriel. Weber, 298-5785.

BABY CRIB, full size w/mattress; high chair; teeter bobe; electric sterilizer. Adams, 299-2126 after 6 p.m.

3 BDR MANKIN, built-ins, 1 1/2 baths, carpet, pitched roof, patio, near golf course and base, \$13,950, will negotiate. Albert, 298-1538.

'60 CONN Caprice electronic organ with sustain mahogany finish. Rolloson, 256-1259.

LITTLE GIRL'S coat, size 5, blue wool, Shirley Temple style, \$5. Miller, 256-6020.

BOY'S SCHOOL jacket (not letter), purple with silver lining, size 18, never worn, \$8.50. Phillips, 298-0541.

MOSSMAN, 3-bdr, den, 1 1/2 baths, double garage, covered patio, fireplace, carpeting, drapes, dishwasher, AC, landscaped. Must sell by Nov. 30. Kelley, 5908 Woodford Dr. NE, 299-4753.

SPINNING WHEEL; maple bookcase headboard; pair end tables; hitching post lamp base; coffee mill; powder flask; electric heater. Elder, 898-3665.

'61 RENAULT Caravelle convertible, new clutch, brakes, shocks, tires and complete engine overhaul past year, \$1080. Schneider, AX 9-1824.

GLENWOOD HILLS lot, 85x155'. Schonberg, AX 9-9437.

'63 FORD Galaxie 500, 2-dr., HT, many extras, priced below book at \$2750. May consider trade. Schulze, 242-8388.

'63 TR-4, R&H, w/w tires, tonneau, windshield washer, rear seat, 6000 miles, \$2450. Howard, 265-0316 after 6 p.m.

WANTED

RIDE FROM Tomasita and Mountain Road in Princess Jeanne Park to 836 or 800. Lloyd, AX 8-2437.

RIDE FROM Isleta and Saunders Road SW area. Charlotte Fitch, c/o Pat Farley, 264-7564.

OLD RADIOS, TVs, etc. for Explorer Post 188, B.S.A., for their electronics project. Arning, AL 6-9229.

USED PICCOLO and treadle sewing machine, head condition not important. Becker, 299-2539.

RIDE FROM vicinity of Carlisle and Constitution to Bldg. 836. Hayes, 256-3812.

RIDE FOR man and wife or will share ride from San Lorenzo and Rio Grande to Sandia Corp. Gallegos, 344-3290.

RIDE FROM Britt and Menaul NE to Bldg. 800. Davis, 299-0472.

TO TRADE Hi-Standard, 22 Olympic model target pistol, 6 in. barrel, weights, for same type with 6 in. barrel, chambered for long rifles. Martin, 256-6785.

TO FORM or join car pool from Falcon Heights to Gate 6, 7, or 10. Box, 299-2855.

PERMANENT RIDE for two people on same block, vicinity of Menaul and Carlisle to Bldg. 880. Hodges, 256-6875 after 5 p.m.

PERMANENT RIDE from vicinity of Candelaria and Juan Tabo to Bldg. 880. Swaim, 268-2035 after 5 p.m.

TO TRADE 6.50x16 tire chains for 6.70x15. Also will sell one 6.50x16 tire and six hole truck wheel. Baxter, 1610 Boyita Lane NW, DI 4-7601.

RIDE FROM vicinity of 713 San Pedro SE to Bldg. 880. Lane, 268-8402.

USED ping-pong table. Karkalik, AX 9-8769.

RIDE or join car pool from vicinity Candelaria and Rio Grande NW to Bldg. 870 or 892. Knoff, DI 4-6623.

USED RUG w/pad, 9x12' or larger. Child to care for, day or week. Browne, DI 4-6831.

HOMES FOR four male kittens, mother Siamese. Schultz, 298-2731.

TWO 7.00x15, 6-ply tires suitable for recapping. Ronan, 299-9168.

GOOD HOMES for five male and one female shepherd setter puppies, seven weeks old. DeRuyver, 268-8463.

RIDE from intersection of Menaul and Alvarado. Salas, 264-5774.

FOR RENT

NEAR SANDIA, 2 bedroom, new, \$70 unfurnished, special allowance on first month rent for items you provide. Vilella, 8316 Trumbull SE.

LOST AND FOUND

LOST—wallet with ID of Ristin; key on chain; prescription sunglasses; keys on ring w/license tag; Esterbrook pen; keys in leather folder; prescription glasses; tan top of snap button; leopard skin head scarf. LOST AND FOUND, ext. 264-2757.

FOUND—case brown bone penknife; safety glasses in case; keys left in 301 classroom; silver loop earring; black rim prescription glasses, American Optical. LOST AND FOUND, ext. 264-2757.

Speaker to Discuss Developments In Fabrication Before AIE Members

Harry Conn, president of W. A. Whitney Manufacturing Company, Rockford, Ill., will discuss "New Developments in Fabrication Equipment" at a meeting of the New Mexico Area Chapter of the American Institute of Industrial Engineers Nov. 18.



The meeting will be held at the Red Lion Inn and will begin with a social hour at 6:30 p.m.; dinner will be at 7.

Mr. Conn will explain new developments in fabrication processes such as blanking, forming, shearing, cutting off, gang punching, notching, dieless duplicating, portable punching, and riveting. He will demonstrate the economic advantages of several processes over others and discuss new concepts for making sheet metal models and scheduling short-run production.

The speaker has lectured widely throughout the world and has

written many articles for national publications. He is active in ASTME, ASTM, ASM, and the National Writers Club.

Those persons interested in attending the meeting are invited to make reservations by contacting Dave Poli (2542-2), ext. 264-7557, or Lee Stinnett (2563), ext. 264-3609.

Patent Assigned to AEC in Name of Several Sandians

A patent for a blast yield meter has been assigned to the AEC in the name of Howard H. Sander (5322), Maynard Cowan, Jr. (5131), and Stuart C. Hight, former Sandia Corporation Vice President, Research.

The meter is defined as a device for automatically measuring the yield of an explosion productive of a pressure wave characterized by a phase of positive overpressure followed closely by a phase of negative overpressure.

The patent is No. 3,108,466.

Sandia Continues Cratering Study With HE Test Series in Nevada

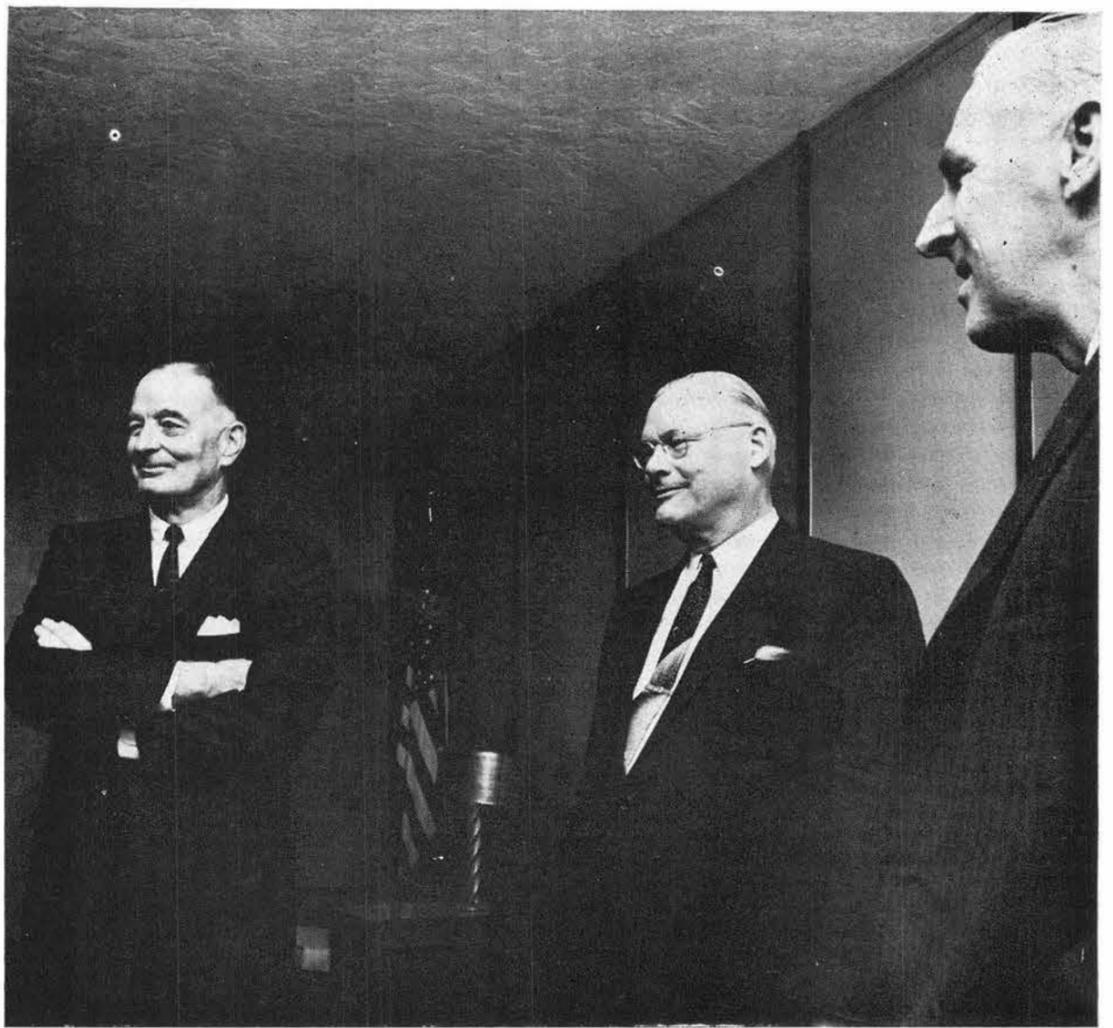
Sandia Laboratory is conducting a series of chemical high explosive tests for the Department of Defense at the Nevada Test Site during October, November, and December, 1963. Post-shot studies will continue until March 1964.

The test series, called Air Vent, is part of a continuing study by Sandia relating to cratering effects of explosions. Thirty detonations are scheduled, involving a total of more than 60,000 pounds of high explosives. There will be no nuclear detonations in the series and no radioactivity will result from the tests.

T. J. Flanagan (725-3) is

scientific advisor for Air Vent. Fred Shoemaker and W. E. Holder (7554-1) are arming and firing the explosives. Earth motion measurements are being made by D. G. Palmer (7251-3), A. M. Triest, D. B. List, H. E. Ball, and L. E. Larson (all 7251-1).

The primary purpose of the program is to obtain data on cratering effects in playa (the soil of a dry lake bed) and to correlate this information with data obtained from nuclear and chemical explosive detonations in alluvium and other types of soil. The information gained will be of special application to continuing Department of Defense studies of weapons effects.



BUSINESS VISITORS at Sandia Corporation last week were F. R. Kappel (center), Board Chairman, A. T. & T.; and H. I. Romnes (right), President, Western Elec-

tric Company. Shown here with them is S. P. Schwartz, President, Sandia Corporation.

AEC Seeks Bids to Modify Two Buildings At Sandia Laboratory

The Atomic Energy Commission will invite bids about Nov. 18 for additions to two Sandia Laboratory buildings. The additions, to be considered a single construction project, will include a new airlock and compressor room for the Development Shops Bldg. 841 and a new instrumentation laboratory for the Wind Tunnel Facility.

The Bldg. 841 addition will contain 960 sq. ft. and the Bldg. 865 addition will contain 1600 sq. ft. The work, to be completed within 90 days after the contractor is asked to proceed by the AEC, will include construction of masonry walls, metal decks, and built-up roofs. Relocation of existing utilities and ventilating systems is part of the project.

J. C. Snowdon (4543-3) is the Plant Engineering Department project engineer.

Bids will be opened about Dec. 10. They will be invited on a set-aside basis for small business firms only.

Sandia Speakers

Following is a list of speakers, titles, and places of presentation for recent talks by members of Sandia Corporation.

Max McWhirter (7325), "Shock Testing," Solid Mechanics Seminar at the University of New Mexico, Oct. 23.

P. D. O'Brien and K. L. Haynes (both 5332), "Precisely Timed Initiation of a Fast Burst Reactor," 1963 Winter meeting of the American Nuclear Society, Nov. 19-21, New York. Mr. Haynes will make the presentation.

E. H. Draper (1000), "The Role of Sandia Corporation and the Bell System," University of Arizona, Nov. 6, Tucson, Ariz.

Albert Narath (5151), "Nuclear Magnetic Resonance Studies of Antiferromagnetic CrCl₃," Conference on Magnetism and Magnetic Materials, Nov. 12-15, Atlantic City, N. J.

R. P. Baker (2441), "Instrumentation for the Use of Artificially Radioactive Water in Tracer Applications," Albuquerque Section of the Instrument Society of America, Oct. 10.

Hunting and Heart Attacks Needn't Worry Sportsmen

You see similar headlines every time the season rolls around: "First Week Hunting Toll: Six Deer, 10 Heart Fatalities." It's a fact that in most states, hunting deaths and casualties are caused by heart attacks rather than by gunshot wounds. Yet, hunting and heart attacks need not go together, the Bernalillo County Heart Association says.

Of course, hunting does have its stresses. Whether or not your heart can take the rigors of hunting is for your doctor to decide.

Some people are surprised when they hear that a friend who has had a heart attack is going hunting—with his doctor's blessing. Actually, the man who knows he has heart disease has a better chance of surviving a hunting trip than many others if he respects his limitations. If the recovered heart patient follows his doctor's advice carefully and doesn't push his luck, he can enjoy hunting for years to come.

More often than not, the hunters who make the headlines are the men who haven't had a physical examination in years. Between hunting seasons, the chances are they rarely exercise more than their vocal cords.

To take some of the hazards out of hunting, the Bernalillo County Heart Association offers the following suggestions:

—Have a physical examination several weeks before you go hunting.

—Get into condition. Start with moderate exercise for about a half-hour every day for the first two or three weeks and then step it up gradually. (Daily exercise is a good idea whether you go hunting or not.)

—On the hunting trip, take the load off your heart in every possible way. Choose warm but lightweight clothing — otherwise you might tote around an extra and unnecessary 10 to 20 pounds.

—If the hunting area is at a higher altitude than you're accustomed to, go a few days early to give your body time to adjust to the heights before you add the active strain of hunting.

—Whenever you begin to feel bushed, rest as long and as often as necessary. It's better to rest before you get overly tired.

—After the kill, never attempt to drag in a heavy carcass by yourself. This is a job for two or more able-bodied men. (A man who has heart trouble should let

the others take over this chore completely. He can make other necessary but less strenuous contributions to the hunting party.)

—Never hunt alone. If you have a heart condition, tell at least one companion about any medication you may be taking, which pocket you carry it in, and whatever he should know in an emergency. Have medication instructions clearly typed or printed on container.

IN CASE OF EMERGENCY

Emergencies can happen at any time, any place. According to the Bernalillo County Heart Association, hunters should remember these pointers on handling possible heart attacks:

- The most important thing is to keep the stricken hunter absolutely still. He should have immediate medical attention. Whenever possible, get the doctor to come to the patient rather than trying to take the patient to the doctor.

- Don't let the heart victim walk or ride a horse. If you must move him, use a litter so that the patient himself need not use a muscle. (When necessary a litter can be improvised by using two poles and a blanket, robe or strong double sheet, according to first aid methods.)

- Keep the patient warm but not so warm that he'll sweat.

- Loosen his collar, belt, neckerchief, scarf — any restrictive clothing.

- Make the patient as comfortable as possible. Usually, a position halfway between lying and sitting makes breathing easier.

- If he has a prescription and is able to swallow, give the medication in proper dosage. Give nothing else unless a doctor advises it. Never force anything, liquor included, into an unconscious person's mouth—he might choke.

Sphere of Science Open to Employees, Families Nov. 23

An Open House at the Sphere of Science will be held Saturday, Nov. 23, for Sandia employees and members of their families. The exhibit will be open from 9 a.m. until noon.

A film, "The Sandia Story" will be shown at 9:15, 10:00, 10:45, and 11:30 a.m.



CLOWNING for the Albuquerque United Community Fund, three Sandians distributed balloons to promote the final UCF report luncheon. From left are Gerald Van Gundy (2625), Bill Davis (4153), an appreciative small friend, and Floyd Hursh (2323). The trio also participated in the luncheon program which was held at the Cole Hotel last week.

Sandia's Safety Record

Sandia Laboratory HAS WORKED 1,715,000 MAN HOURS OR 49 DAYS WITHOUT A DISABLING INJURY

Livermore Laboratory HAS WORKED 1,005,000 MAN HOURS OR 194 DAYS WITHOUT A DISABLING INJURY