

# Van de Graaff Accelerator to Be Installed at Sandia



published every other Friday for the employees of sandia corporation, contractor to the atomic energy commission

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March 22, 1957

## S. C. Hight Gives Three Lectures At BTL Locations

Sandia's Director of Research S. C. Hight (5100) was invited by Bell Telephone Laboratories to deliver three lectures in the East this week describing Sandia's place in the atomic weapons program.

Once a month BTL invites outside speakers for out-of-hours lectures to describe to their employees the activities of other elements of the Bell System. This is the first time Sandia Corporation has participated in the program.

Mr. Hight spoke March 18, 19 and 20 to BTL audiences in New York City, Summit and Whippany, N. J. The first lecture alone attracted a capacity audience of 1,500.

He described Sandia's current function in the AEC and military complex, illustrated with slides of special apparatus developments for testing weapons (such as special optical and radar tracking devices, wind tunnels, supersonic sleds and other devices), and tested a movie of an atomic testing operation in the Pacific Proving Ground.

## Sandians to Counsel Students for High School 'Career Day'

Sixteen Sandia Corporation representatives will participate in the annual Career Day activities at Highland High School, Friday, Mar. 29.

John Murphy, school counselor who issued the invitation, said that each student will attend three meetings during the day to hear speakers discuss various vocations.

Sandians and the vocations they will discuss include: D. F. Pinochio (1463), Chemical Engineering; F. F. Eichert (7410), Drafting; J. H. Findlay (1450), Electrical Engineering; P. F. Meigs (1264), Industrial Design; D. R. Morrison (5121), Mathematics; J. W. McKiernan (1283), L. E. Bothall (1261), and W. A. Gardner (1610), Mechanical Engineering; K. E. Mead (1621-2) and D. W. Grobecker (1621), Metallurgical Engineering; T. B. Cook, Jr. (5111), Physics; A. F. Cone (5510) and G. O. Hawley (5511-1), Quality Assurance; S. C. Hight (5100), Research, and Kay Sadler (7225-7) and Jean Gillette (3124), Secretarial.

## Military Police Restate Bicycle Riding Rules

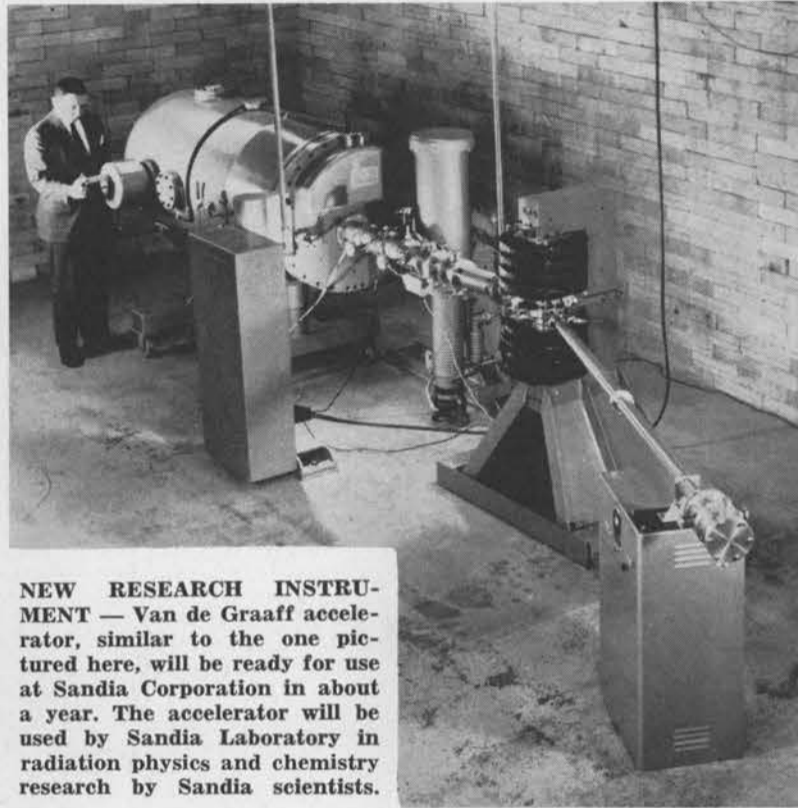
Persons riding bicycles on Sandia Base or in the Wherry Housing Area are reminded of military regulations applying to them.

According to the Sandia Base Provost Marshal, cyclists must obey the same traffic regulations as motor vehicles.

Additional regulations are: Cyclists will ride astride the bicycle and will not carry any other person, unless the bicycle is equipped with an additional seat. Cyclists will not ride more than two abreast.

At night bicycles will be equipped with a headlight and taillight or reflector light.

Bicycles will be equipped with a brake which will enable the operator to make the braked wheel skid on dry, level, clean pavement.



**NEW RESEARCH INSTRUMENT** — Van de Graaff accelerator, similar to the one pictured here, will be ready for use at Sandia Corporation in about a year. The accelerator will be used by Sandia Laboratory in radiation physics and chemistry research by Sandia scientists.

## Two Noon Hour Movies Scheduled for Showing

The Wednesday noon movie showings in Conference Room B-4, basement of Bldg. 802, will feature "The Magic Cup" on March 27 and "Measure of a Man" on April 3.

The movies, which last 30 to 40 minutes, were arranged by J. J. Michnovich (2462) through the Modern Talking Picture Service and are shown free of charge.

## Construction of New Warehouse to Start

Work will start within a few weeks on a new 35,000-square foot model storage warehouse in Sandia Corporation Tech Area I. Cost of the building will be \$228,195.52.

The concrete-frame masonry-block structure will be located between the Reclamation Foundry, Bldg. 866, and the Receiving Warehouse, Bldg. 894.

## High Voltage Generator Tool for Nuclear Research

A Van de Graaff accelerator for use in radiation physics and chemistry research by Sandia Corporation scientists in the testing of various materials will be installed in the Corporation Technical Area I within the next year. Plans call for the \$120,000 instrument to be located in a building west of Building 808.

The Van de Graaff accelerator is a high voltage generating device used to produce high energy particles of various types, and is used widely in nuclear research.

Dr. Frank Hudson, Research Division II (5133), points out that if a proposed Sandia Corporation reactor is installed, the reactor and the Van de Graaff will complement each other in nuclear studies.

He explains Sandia's use of the accelerator thus: Nuclear reactors produce radiation which is composed of several types of nuclear particles with wide ranges of energies and intensities. The changes produced in materials exposed to such radiation are difficult to interpret because of the complex nature of the radiation.

The accelerator will make it possible to study various materials under bombardment by single types of particles at controlled energies and intensities. The bombardment is expected to produce molecular changes, or changes in energy levels, within these materials. This will establish the scientific basis for understanding and interpreting the effects of radiation environments.

The generator will be able to accelerate protons, deuterons and electrons to energies as high as 2,000,000 volts. The high energy particles can be used directly to bombard materials, or may be used to produce X-rays or neutrons.

The laboratory housing the accelerator will have approximately 3,000 square feet of floor space. Concrete walls up to four feet thick will shield the room containing the accelerator.

Weapons Research Division II (5133) under Dr. Richard S. Claassen is planning the program for the new facility. Research scientists in this division will work with personnel of the Stanford Research Institute in Menlo Park, Calif., at a similar installation during the next year to become familiar with the instrument and to initiate Sandia's research studies.

Other personnel associated with the project are Dr. Asher D. Kantz, Dr. Irving Auerbach, and Herman J. Stein.

## Sales Tax Deductible Item on Income Tax Under Some Conditions

Sales taxes in New Mexico must be separately stated on sales slips and passed on to consumers to be allowed as deductions in determining federal income tax. New Mexico state sales tax is 2 per cent and residents of Albuquerque pay an additional 1 per cent city sales tax.

The Bureau of Internal Revenue district office indicates that Albuquerque residents may deduct 1½ per cent of their adjusted gross income for New Mexico sales tax without itemizing. However, if this deduction figure is more than \$200, an itemized justification will have to be included.

New Mexico sales tax is not deductible for New Mexico income tax purposes.

April 15 is the deadline for filing New Mexico as well as federal income tax returns. Forms may be obtained from the Employee Services Division, 3122, Bldg. 829.

Corporation employees residing outside of Albuquerque city limits should check with their local District Director's office regarding the amount of sales tax allowable for deduction from federal income tax. In California the sales tax is 3 per cent and in Los Angeles there is an additional 1 per cent city sales tax.

## Berenice and Kelly Need Ride to Work

Transportation to and from work is urgently needed by Berenice Henry (2464-1) and her Collie leader dog, Kelly. Berenice lives at 2020 Inez Dr. NE. Her driver rates a reserved parking space in front of Bldg. 800. For information call Velda Hampton, ext. 37261.

# Scott, Shreve to Head Plumbbob Groups, Merritt Named Sandia Scientific Advisor

**Editor's Note:** In previous issues the participation of Sandia Corporation personnel in Operation Plumbbob as members of the Test Director's staff and organization was described. This article deals with the groups formed to carry out Sandia Corporation's responsibilities in the operation.

Sandia Corporation's support organization for Operation Plumbbob at Nevada Test Site has been announced.

James H. Scott, supervisor of Full Scale Test Division I (5231), will be Sandia's Test Group Director and M. L. Merritt, Manager of Weapons Effects Department (5110), has been named Scientific Advisor to Mr. Scott.

J. D. Shreve, supervisor Model Studies Division (5112), will be director of Test Group 57 in Sandia's operation.

### Sandia Test Group

Deputy to Mr. Scott will be G. W. Rolloson, supervisor of Full Scale Test Division III (5233). Reporting directly to the Test Director of Operation Plumbbob will be E. L. Jenkins, supervisor of Electrical Section (5212-2), who will participate in arming and firing.

The Fallout Prediction Unit—Blast Prediction, will be headed by J. W. Reed, Full Scale Effects Division (5111). The unit will report directly to the Test Manager.

B. D. Neil, superintendent of Material and Field Services Section (7232-4), will be in charge of the administrative and logistic services. J. W. Tanner (7232-4) is to be Sandia's representative at Plans and Operations. N. A. Littrell (5232) will have Construction Liaison.

### Test Group 57

Radiation Safety Advisor for Test Group 57 is W. H. Kingsley, supervisor of Industrial Hygiene Division (3161). Particle Physics Program is to be headed by Maynard Cowan (5112); Biomedicine Program, has Dr. J. N. Stannard, University of Rochester, in charge; Survey Metering is to be handled by R. E. Butler, supervisor of Nuclear Division (5524).

In charge of personnel, housing and vehicles for the Group will be H. V. Lewis, Scheduling and Ordering Division (7231). D. G. Palmer, Model Studies Division (5112), will handle Operations and Planning.

Sandia's Support Program 63 will be headed by J. H. Scott and project officers will be H. G.



J. H. Scott



J. D. Shreve



M. L. Merritt



G. W. Rolloson

Laursen (5231) assisted by T. C. Looney (5231), deputy; C. E. Ingersoll (5231) assisted by R. G. Scharrer (5231), deputy; and H. C. Walker (1272), E. L. Jenkins will also be a project officer in addition to his other duties.

J. W. Wistor (5232) will serve as officer on three projects Sandia is handling for the Department of Defense and Civil Efforts Test Group.

A. D. Thornbrough (5233) will head Test Program 41. Project Officers will be W. B. Pafford (5233) and N. A. Littrell (5232).

The AEC has announced that Operation Plumbbob, a series of low-yield nuclear tests, will begin in the late spring.

Varying numbers of Sandia Corporation employees will be at the Nevada Test Site during the operation with the maximum at any one time being about 110.

## Hospital Insurance Enrollment Period Lasts Until Apr. 10

Sandia Corporation employees who are not members of the group hospital and surgical plan have an opportunity to secure insurance protection during a special enrollment period running through April 10.

Letters telling of the enrollment period have been sent to all non-participants. Accompanying the letters were booklets explaining the plan and enrollment cards.

During this period all participants having single coverage and desiring family protection may change their policy by contacting Employee Services and Benefits Section, 3122-1.

More than 5,000 employees are currently enrolled in the plan.



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### Cartoons to Emphasize Security

On this page is the first in a series of cartoons by Artist Cecil Kinney of Sandia Corporation's Technical Art Division which utilizes the lighter side of life to bring a serious message.

The message: Security.

As the years of peace enjoyed by our country increase, the need for security measures may be thought by some people to decrease. This is not so. The careless word, the thoughtless action and the ill-advised public statement still are dangerous.

Vigorous security measures practiced in the past two years by Sandia Corporation, and by all contractors to the AEC, are continuing. The need for intelligent security-consciousness on the part of employees also continues.

As Artist Kinney's figures appear in these columns we hope they will produce chuckles, but it is more important that they serve as reminders of the continuing need for security consciousness. The situations dealing with unlocked safes, carelessly handled materials, loose talk, improper classification and other security problems are of serious concern to people charged with policing security.

Let them be of concern to all Sandia Corporation employees—all the time.



#### Record Breakers

Two Sandians were members of the Canada Dry Bowling Team, which was defeated by a total score of 3071 to 3023 by Leonards Fine Foods in the Albuquerque major league. This was the first time in the Albuquerque league that two competing teams had bowled 3000 or more.

Al Dadian (2221) scored 211-201-176 for a total of 588 and Andy Vinovich (2221) rolled games of 246-170-216 for a total of 632.

#### Return to Work

Back in Division 1625 after a lengthy illness is Al Quant.

Organization 2711 welcomes back Fred Gonzales after his recent illness.

#### Appear on Stage

The lure of the theatre has caught Marillyn Mansour (7411) and Nate Wineberg (2543), who have parts in "The Great Sebastians" to be presented March 26-31 by the Albuquerque Little Theatre.

This will mark the initial stage appearance for Marillyn, who has done considerable art work for the Little Theatre.

#### Get Well Wishes

Get well wishes are extended to Wanda Bishop (3164), who is convalescing at home after recent surgery. She is the wife of Paul Bishop (2221-2).

#### Sandianotes . . .

### Technical and Professional Groups To Aid City Convention Program

#### Speaks at Northwestern

A technical paper by Frank Neilson (5132) provided the basis for a talk by Richard Claassen (5133) before an Electrical Engineering Seminar at Northwestern University.

Title of the paper is: "Ferroelectric and Ferromagnetic One Shot Explosive Electric Transducers."

#### New Home

M. A. "Pete" Palmer (5216) and his family have just moved into a new home at 9513 Arvada, NE.

A number of Sandia Corporation employees who are members of state and national technical and professional organizations were guests of the Albuquerque Chamber of Commerce last week at a luncheon meeting where they were invited to bring their organizations to Albuquerque for conventions and conferences.

Speakers from the Chamber of Commerce explained the city's interest in bringing such groups here and solicited the help of their guests in the effort.



LA MADERA SKI PATROL benefit recently found Richard Czerner (2531), left, awarding a pair of Head skis to Al Quant (1621). The benefit was held to raise funds to replace the patrol toboggan, which was stolen from La Madera area early this winter. Other Sandians active in rescue and emergency aid for skiers are Art Lawrence (1614) and Zelma Beisinger (5123).



CHECKMATE doesn't bother George Dixon (7216), who was recently given these lovely carved ivory chessmen. The set of games in a rosewood box is over 100 years old and was given to Thomas Jefferson's sister, Ann Scott, on her 15th birthday. It was handed down to George's grandfather and later to his mother. The set includes a flexible inlaid wooden checker board, the chess set, dominoes, ivory checkers the size of a nickel, and two sets of ivory dice. The set is complete except for one missing die.

#### Sick List

Division 2552 extends get well wishes to Richard Kavet (2552-3), who had a recurrence of a recent illness.

Hope for a speedy recovery goes to Ione Pierson (5142), who has been ill for the past two weeks.

Best wishes for a quick recovery are also extended to Thomas W. Moody (1452), who has been confined to his home for the past three weeks.

Division 2223 welcomes back Ernest Gurule after an extended illness and wishes "Cap" Carmody and Al Abergo a quick recovery.

#### Cake 'n Coffee

Dave Kleinecke was the guest of honor at a recent coffee break party.

Dave is transferring from organization 5123 to 1811. The transfer to California will bring him close to home as Dave's parents live near Livermore. His wife is currently in New York City working on her Ph.D. at Columbia University.

#### Paul Rowe Speaks

Paul W. Rowe (5141) presented a paper before the Iowa State College Student Branch of the Institute of Aeronautical Sciences recently. The subject was, "Problems Relating to the Need for Heat Tolerant Metals for Aerodynamic Applications," which was also presented before the ASM sponsored Albuquerque Conference on Heat Tolerant Metals for Aerodynamic Applications.

### Congratulations

#### Born to:

Mr. and Mrs. Charles F. Drummond (7411) a son, Deane Robert, on Feb. 19.

Mr. and Mrs. H. A. Mullin (1224) a daughter, Susan Lynn, on March 4.

Mr. and Mrs. Abel S. Lucero (2711) a daughter, Susan Jane, on March 2.

Mr. and Mrs. Norman L. Brisbin (5513) a daughter, Gloria, on Feb. 5.

Mr. and Mrs. Art Costillo (4153) a son on March 1.

Mr. and Mrs. F. X. Vogel (2523) a son, Michael Thomas, on Feb. 24.

### Engagement

The engagement of Ann Sale (5142) to John C. Weydert (5143) was announced this week.

The wedding will take place April 11 at Ann's home in Atlanta, Ga. Following the ceremony the couple will leave on a wedding trip to Florida.

Ann has worked for the Corporation more than two years and John, whose home is in Indiana, has been with Sandia four and one-half years.

### Sympathy

To John R. Halliday (1411) for the death of his mother in Pleasant Grove, Utah, on Feb. 27.

To Bennie Lucero (1625-2) for the death of his father on March 11.

To Roy Carlson (2553-1) for the death of his father in Mishawaka, Ind., on March 12.



SIXTH ANNUAL BALL of the Albuquerque Civic Symphony Orchestra Association attracted some 450 guests when it was held March 13 at the Coronado Club. Guests at the event included L to R, Mr. and Mrs. J. W. McRae and Rear Adm. (ret.) and Mrs. John M. Bristol.

# Personal Advancement Is Reality for Sandians



QUALITY CONTROL representatives of Sandia Corporation suppliers attended a quality development conference sponsored by the Corporation last week. Representatives heard presentations from key Sandia personnel. In the above group are, L to R, J. E. McGovern (2320), K. S. Spoon (2300), L. C. Myers, Empire Tool Engineering Co., Inc., and Joe Repichowski, Ultradyne Engineering.



MICHAEL ZOWNIR — Project Shops Division A (2153). Self application and knowledge gained on the job brought Mike from a Grade 5 Bench and Machine Operator to Grade 11 Model and Instrument Maker.

In the past 12 months 1140 graded Sandia Corporation employees have advanced to better jobs with better salaries. These upgradings and promotions resulted in pay increases totaling \$15,830 a month. Following is the story of how this business-world success is made possible.

The desire to get ahead receives a healthy boost at Sandia Corporation every time there's a job vacancy. This comes about from the concerted effort made to promote the best qualified Sandia employee into a better job—with better pay.

One of the happiest qualities of this upgrading process is that you don't have to be "next door" to the vacancy to be considered as a prospect for filling it.

The method of placement is so set up that to find a well qualified employee for one section the search can extend into all of the 500 other sections in the Corporation.

Through the process of posting and bidding, jobs represented by bargaining units are widely advertised. Employees have the privilege of applying for these jobs—and hundreds of them do.

At the same time, in Sandia's personnel organization Personnel Representatives carefully review records of employees in the continuous search for qualified persons to fill job vacancies throughout the Corporation, both within and without the bargained units, in both non-bargained and graded jobs. Personnel forms are examined in great detail to find employees who are properly trained to fill vacancies.

### Not Easiest Way

Sandia Corporation's practice of filling job vacancies with employees already on the roll whenever possible is not always the easiest way to take care of a vacancy. But it comes from the desire to give faithful, qualified employees the opportunity to better themselves—and be of greater value to the Corporation.

This policy of promotion from within the company has brought about opportunities for advancement which have been happily seized by large numbers of Sandians through the past years.

Success stories in abundance are found throughout the Corporation. The pictures accompanying this article show only a few examples of employees who proved themselves capable of advancement to better paying jobs calling for greater responsibilities.

A study of why Sandia employees are advancing to better jobs reveals that progress is their most important motivation. Be it desire for a better home for the kids, a college education for junior, or a bigger insurance program for their family's protection—everyone wants to "get ahead," to earn more money. As employees advance they increase their worth to the Corporation and at the same time enjoy that pleasant feeling of accomplishment which accompanies job improvement.

### Employees Prepared

"Going up" for these Sandians wasn't just the result of being at the right place at the right time. Placement procedures are estab-

lished to provide a means by which employees have the same opportunity to be considered for vacancies elsewhere in the Corporation as for those in their own organization. But, more importantly, these employees were prepared for advancement when the opportunity came. They applied themselves diligently to learn everything they could while on the job and to turn in the best possible performance. Many studied outside working hours, either in Sandia Corporation sponsored classes, at home with correspondence courses, at the local high school or at the University of New Mexico.

Recent issues of the Sandia Lab News have mentioned that hundreds of Sandia employees have become part-time students. For example, at the present time there are 439 employees enrolled in such classes as Shop Mathematics, Slide Rule, Electronics, Mechanical Measurements, Blueprint Reading, and Efficient Reading, and enrollments are still going up. During 1956, 225 Sandians completed courses in Algebra, Geometry, Trigonometry, Solid Geometry, Shop Processes and Blueprint Reading.

### Company Sponsored Courses

Earlier history of Sandia Corporation reveals that study outside working hours has long been a common practice for many employees with the desire to advance. Opportunities are now better than ever to prepare for advancement. Company-sponsored courses are available in greater number, and studies offered by the Public Schools and University at the request of Sandia Corporation are increasing steadily.

As the years go by and Sandia Corporation grows older the practice of placing employees in the kind of work best suited to their abilities and helping them progress in the Corporation's service will be continued and expanded.

## Quality Control Representatives Of Sandia Suppliers Meet Here

Quality control representatives of Sandia Corporation suppliers met with Sandia officials last week for a day-long quality development conference at the Coronado Club.

Forty-six men from suppliers in several states heard presentations from key personnel in Sandia's Engineering, Manufacturing, Inspection, and Purchasing organizations.

Topics presented to the suppliers included:

F. E. Burley, Superintendent of Operations Engineering (2500), spoke on Sandia's engineering assignment and quality development work. The need for reliability was stressed by W. C. Kraft, Manager, Engineering Component Department (2540).

Supplier relations with manufacturing engineering was the topic for A. K. Leupold, Manager, Manufacturing Engineering Department (2550). G. C. McDonald, Manager, Manufacturing Engineering Systems Department (2530), talked on Engineering the Job.

Other speakers were K. S. Spoon, Purchasing Agent (2300); R. P. Lutz, Vice-President, Operations (2000); and M. H. Howarth, Vice-President and General Manager.

Other subjects covered in the meeting were: Sketch of Inspection Assignment, Operation of Receiving and Inspection Organization, Supplier Quality Rating, and the Role of Purchasing. Speakers were: G. A. Parker, Superintendent of Inspection and Plant Security (2700); W. E. Boyes, Manager, Reliability Department (1290); A. L. Thornton, Supervisor, Inspection Control Division (2731); and J. E. McGovern, Assistant Purchasing Agent (2320).

A visit to the Receiving and Inspection Area concluded the meeting.

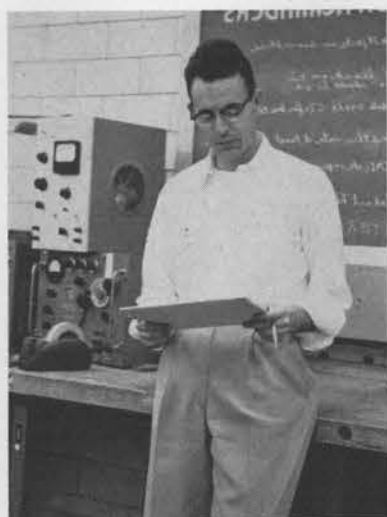
## Caravan Club Searches In Transmitter Hunt

Two meetings in the next two weeks are scheduled for the Amateur Radio Caravan Club of New Mexico, according to Keith Nelson (1442), secretary. The regular monthly business meeting will be held Wednesday, Mar. 27, at 8 p.m. in the Radiation Therapy Lab at Lovelace Clinic.

Johnny Price (1414) will hide the transmitter for the club's hidden transmitter hunt Wednesday, April 3. Members will meet at 8 p.m. at the parking lot of the First National Bank at San Mateo and Central NE.



SALLY MOORE — Classified Document Division (2461). Started work as Grade 32 general clerk and with knowledge gained on several Sandia Corporation jobs progressed to Grade 37 Document Investigator.



RAYMOND CASTER—Electrical Inspection Division (2211). UNM night studies, Corporation classes and hard work brought advancement from Grade 1 Wireman to Grade 9 Layout Operator.



JOSE D. JOJOLA—Branch Shop Division (2152). Education received while on various Sandia Corporation jobs brought advancement from Grade 4 Machinist Helper to Grade 10. He is now a Precision Machinist.



R. R. "BOB" BOYD—Plant Inspection Division (2442). Home studies, classes at high school and job experience brought advancement from Grade 2 Laborer through Grade 9 to become a Sandia Staff Asst. Technical.



LEO CHAVEZ—Final Assembly Division (2221). On-the-job training and evening study resulted in advancement from Grade 3 Laundryman through grades to Grade 8 Assembler.



EPIMENIO ORTIZ—Pipefitting and Plant Operating Division (2414). On-the-job training earned him welding operator certificate and advancements from a Grade 2 Laborer to a Grade 9 Welder (Pipefitter).

1956 1956

**Certificate of Merit**  
**Sandia Corporation, Sandia Base**  
 Albuquerque, New Mexico  
 is hereby awarded **Thirteenth Place-Industrial Division**  
 for outstanding activity in  
**FIRE PREVENTION**  
 In witness whereof the undersigned have affixed their signatures  
 this twenty-fourth day of January, 1957.

*Ray Bughe*  
 Chairman, Committee on Fire Prevention and Clean-up Campaigns

Committee: \_\_\_\_\_ of Judges

THIS CERTIFICATE OF MERIT was awarded Sandia Corporation recently by the National Fire Protection Association. The Corporation earned thirteenth place in a field of 73 industries entered in the national contest last year. Plant Inspection Division (2442) directed Fire Prevention Week activities that included fire drills, demonstrations, displays and inspections. Sandia earned the same position in the contest in 1955 competing against 102 entries.

## Supervisory Appointments

J. HUBBARD HARRELL, JR., to supervisor of Secondary Standards Section 1614-2, Instrument Services Division.

"Hub" has been in dynamic testing work since he came to Sandia Corporation in Jan., 1953.

For the previous 10 years he was connected with Dr. E. J. Workman in secondary standards research projects for the military which were first carried on at the University of New Mexico and later transferred to New Mexico School of Mines at Socorro.

From 1942-43 Hub was at Sandia Base when it was an air depot training station. He was a radio instructor and in charge of the radio school.

He has studied Engineering at the University of New Mexico.

EDWARD C. HIRT to supervisor of Technical Section 7322-1, Operations Division B II.

"Ed" has been in the same organization since he was employed by the Corporation five years ago.

He was previously 11 years with Commonwealth Edison Co. in Chicago as a turbine operator in a generating station.

From 1942-45 Ed was in the Navy operating and maintaining machinery aboard ships. In 1950 he was recalled to duty and helped activate decommissioned ships of all types.

Ed is a graduate of Lane Technical High School in Chicago.

ROBERT W. DeVORE to Manager of Incoming Inspection Department 2710.

"Bob" has been connected with site operations since he started at Sandia in May, 1951. He was appointed section supervisor in 1953, and division supervisor a year later.

Previously Bob was five years with General Electric, first as a development engineer in Cleveland, O., and later as a test engineer in Schenectady, N. Y.

He served in the Navy three years in the construction office of the Navy Seabees. One of those years was in China and the Philippines.

Bob has a Bachelor's degree in Electrical Engineering from the University of Colorado and is a member of Tau Beta Pi, engineering honorary, Eta Kappa Nu, electrical engineering honorary, and the American Institute of Electrical Engineers.

WILLIAM H. CROSS to supervisor of Dynamic Test Section B 1612-3, Structural Test Division.

"Bill" has been working in the same field since he started with the Corporation nearly five years ago.

He was previously a year and one-half with Allis-Chalmers in Milwaukee, Wis., as an engineer.

Bill received a Bachelor's degree in Mechanical Engineering from Montana State College. He is a member of the Society of Experimental Stress Analysis and is a registered professional engineer in New Mexico.

During two and one-half years in the Army Air Corps he served as a flight engineer.

FRED A. BENTZ to supervisor of Program Coordinating Section 2332-1, Procurement and Program Coordinating Division.

During Fred's six and one-half years at Sandia Corporation he has had a wide variety of jobs: job evaluation in wage administration, reclamation engineer, a field representative in purchasing, and industrial engineer.

Prior to employment here Fred was a teaching assistant for one year in Production Management at the University of California at Los Angeles. He also taught Industrial Engineering for a year at Virginia Polytechnic Institute.

Before entering the teaching field Fred worked as a job analyst at the Glenn L. Martin plant in Baltimore, Md.

Fred has a Bachelor's degree in Mechanical Engineering from the University of Minnesota, and Bachelor's and Master's degrees in Business Administration from U.C.L.A.

He served in the Army for 18 months during World War II.

Fred is a member of Pi Tau Sigma, Mechanical Engineering honorary, the American Society of Mechanical Engineers, and is currently president of the Albuquerque area chapter of the American Institute of Industrial Engineers.

LOUIS E. BOTHELL to supervisor of Design Section A 1613-1, Facilities Division.

During the three and one-half years "Lou" has been at Sandia, he has worked mainly in design and escape studies.

Previously he taught two and one-half years at Brayton Flying Service, an aircraft technical school in St. Louis, Mo., and was head of the aeronautical engineering department at the time he left.

Lou also worked one year as an equipment engineer for Fairchild Aircraft in Hagerstown, Md.

He holds MS and PhD degrees in Mechanical Engineering from the State University of Iowa and a Bachelor's degree in Aeronautical Engineering from St. Louis University.

Lou served two and one-half years in the Army including some time in the Southwest Pacific.

He is a member of the American Society of Mechanical Engineers, Sigma Xi and is education director of the New Mexico Council of Technical and Scientific Societies.

CARL R. CARLSON to supervisor of Section 1261-3, Electrical Systems Division.

Carl has been in general weapons analysis work since he started with the Corporation in March, 1953. From Feb., 1955, to Sept., 1956, he was on a special leave of absence to assist in the operation research office of Johns Hopkins University.

During the period 1947-53 Carl was a graduate assistant in experimental nuclear physics at Purdue University.

He served two and one-half years in the Navy in electronic technical sub service, including one year at sea.

Carl has BS and MS degrees in Physics from Purdue University.

He is a member of the American Physical Society and Sigma Phi Sigma, Physics honorary.

## Hayenga Talks on 'Spare the Rod' To Win 1957 Speaker-of-Year Title

Ron Hayenga (1441-1) earned the "Speaker of the Year" title of Sandia Toastmasters Club 765 recently with a talk entitled "Spare the Rod and Spoil the Child." Competition for the award was keen with Sandians Jimmy Williams (1444) and Ken Sutton (3152) in the finals.

Ron was presented a gold statuette trophy by past winner Nate Wineberg (2543).

Next competition for Ron will be the Area Contest scheduled Mar. 23 at the Hilton Hotel. He will meet the winners from seven other Albuquerque Toastmasters clubs. If he survives this meet, Ron will compete in the District finals. Later competitions for the winners are Zone and International contests.

Ron has been a Corporation employee for five and one-half years. He was an electrical engineer for Creole Petroleum in the Maracaibo Lake district of Venezuela before joining the Corporation.

He taught at the University of Kansas for two years during 1949 through 1951. He earned his BS degree in electrical engineering from the University of Kansas in 1946 and took a year of graduate study from Iowa State College in 1947.

The art of public speaking became Ron's hobby about three years ago when he joined the Toastmasters organization. Other activities include teaching an Adult Christian education class at the Immanuel Presbyterian Church.



Ron Hayenga (1441-1) - Sandia Toastmaster's "Speaker of the Year"

## Juan L. Baca to Retire After Seven Years With Sandia

Juan L. Baca (2419) will retire April 1 after seven and one-half years with Sandia Corporation.

Juan figures that he can well use his new leisure time to take care of the fruit trees and vegetables on the acreage surrounding his home at 1725



Eucariz Dr., S.W.

Mr. and Mrs. Baca have lived in Albuquerque 14 years, coming here from the Socorro-Magdalena area where Juan's family still has ranching interests.

He may also be called upon by his daughter to do some baby sitting for his young grandson.

### Military News

Word is received from Fort Belvoir, Va., that Second Lt. John A. Anderson, a former Corporation staff member, was recently graduated from the 14-week army officers' basic course at the Engineer School.

## Service Awards

### Five Year Pins

March 22-28

William E. Bosken 1611, Ben F. Blythe 5522, Paul L. Field 1472, Leo E. Paxton 2152, Hadley M. Rowe 4213, Merrill O. Murphy 1433, George E. Chaffee 2711, Thomas E. Zudick 7214, Josue L. Martinez 5241, Jack M. Miller 2151, Ruth D. Derrick 2221, Kermit V. Nixon 5213, James R. Bowser 2124, Jesus Gutierrez 2418, Salomon Hidalgo 2232, James F. Rabold 2452, Delfin O. Salazar 2711, Bernice P. Sanders 3152, James T. South 2124, Eduardo M. Chavez 2351, Deana B. Piper 2461, John S. Armijo 7232, and Henry M. Baker 7314.

March 29-April 4

Oscar M. Schroll 2571, Eusebio E. Montano 2414, Ismael Ortega 1223, Rollin W. Russell 1611, Gene Anselmo 2711, Edward G. Dlyo 2320, James J. Weber 2152, Ralph D. Lepore 2711, Fred W. Lovato 2112, Viola Ann Maestas 2461, J. R. Wimborough 2531, T. V. Crawley, Jr. 5221, Valentine Hoffman 1620, Fernie F. McEwin 1231, Ralph L. Farnham 7412, Marion M. Fogg 7325, Bob C. Holt 7314, V. G. Dalesandro 7221, Margaret L. Grover 7411, Lawrence E. Leierer 2151, Gilbert T. Leyba 7232, and Mike Silva 2414.

### Two Year Certificates

March 22-28

Mark A. Elich 7113, Gresham G. Downs 1234, Gloria G. Baca 7225, Helen E. Batchelor 2463, Juliette O. Wolff 7225, Robert B. Allison 5143, John S. Cowan 7123 and Joann G. Johnson 4135.

March 29-April 4

James B. Gibbons 2122, Gladys M. Leierer 2740, L. Jean La Paz 5512, Deana F. Ward 2551, William H. Carman 1452, Fae M. Parker 5241, Ethel U. Peterson 4135, Elaine T. Schwars 2221, James R. Volpe 2463, Mahlon G. Baker 5213, Charles I. Westmark 1451, and Edward J. Krapf 2722.

MILTON R. MADSEN to supervisor of Design Section B 1613-2, Facilities Division.

"Red" started with the Corporation in July, 1951, in Environmental Test Division and remained there until a year and one-half ago when he transferred to 1613.

He came to Albuquerque from the University of Utah, where he received a Bachelor's degree in Mechanical Engineering. He also attended Utah State College.

For one year Red worked as a draftsman at the Naval Proving Ground, Port Hueneme, Calif.

From 1943-46 he served in the Air Corps as a B-17 pilot on weather reconnaissance planes here and in England.

He is a member of Pi Tau Sigma, Mechanical Engineering honorary.

## Welcome Newcomers

March 1-15

From Albuquerque	
Virginia L. Adamson	4135
Elaine H. Aidikonis	2541
Bert R. Anderson	5216
Prospero Armijo	2419
Elisabeth M. Arthur	7225
Wilma R. Ash	2464
Velma L. Bain	3151
Eddie J. Berry	1832
John J. Blomberg	2461
Sidney C. Bowie, Jr.	1245
Wilbur E. Boyd	7311
Elizabeth N. Bowden	1831
Margaret B. Burgess	2224
Ruth J. Cesarz	7225
Barbara Clemmensen	3152
Jerry A. Cole	2464
Eunice A. Cope	7322
Edgar E. Davignon	2351
Elizabeth A. Dietrich	1832
Joseph R. Doyle	1243
Melba S. Fitzgerald	1831
Lorris L. Fox	3151
Joan J. Gallegos	2419
Gladys L. Goodlive	7225
Ralph R. Hamilton	2742
Sheila E. Head	7225
Shawkeet Hindi	2461
David D. Hurley	1832
Barbara A. Illig	7226
Antonio M. Jaramillo	2553
Dorothy M. Jordan	7225
Clarence W. Karfs	1811
Loyd E. Kelley	4152
Joan A. Keith	7225
Horace Lucero	7231
Rudy Lucero	2351
Tomas Lucero	2419
Garnet I. Mastin	2231
John C. McKinley	7411
Betty F. McKinstry	2462
Joseph F. McManus, Jr.	1812
Marcia L. Morgan	1831
Betty J. Musgraves	2461
Bruno D. Navalesi	4153
Melba J. Nickolds	2462
Katherine Pappas	7411
Mary Ann Perkins	3153
Sue B. Propst	7225
Kathleen L. Radinsky	7225
G. Robert Sharp	2441
Paul J. Sikkel	2411
Rodney E. Stambaugh	7329
George S. Steinhauer	1821
Ether I. Stevenson	2222
Charles P. Thomson	2411
Richard F. Turnbough	2234
Patricia A. Whittington	2225
Bruce Wilcox	5142
Penny E. Wilkes	7225
Joan B. Yancey	7225
California	
Paul J. Carlton, Altadena	7111
Henry G. Gallegos, San Diego	2463
Herman Johnson, Livermore	1812
Elbert L. Paine, Livermore	1822
Illinois	
Robert W. Healy, Chicago	1626
Richard H. Miner, Morrison	2553
Iowa	
Kenneth Medearis, Des Moines	1282
Kansas	
Irma A. Mack, Leavenworth	7411
Michigan	
Clement J. Wagner, Saginaw	2553
Missouri	
Vester L. Harker, Rock Hill	7411
New Mexico	
Merlene E. Medina, Santa Fe	7225
Manley O. Van Orsdol, Roswell	4152
New York	
James S. Zappas, Long Island	4112
Ohio	
Irving Auerbach, Akron	5133
Wilkinson Howard, Dayton	1264
Oklahoma	
Sandor L. Erickson, Ponca City	1621
Frank A. Ross, Stillwater	2551
Pennsylvania	
Frank A. Delnick, Sharon	7412
Rhode Island	
George Dupre, Pawtucket	2124
Tennessee	
Robert Thomas, Milan	2531
Texas	
James F. Gallagher, Houston	4111
Virginia	
... vv. Church, Falls Church	5111

## Civic Symphony Features Violinist In Carlisle Gymnasium March 23

The Albuquerque Civic Symphony concert tomorrow evening at 8:15 will mark three special occasions: the appearance of New York violinist Joyce Flissler, guest conductor Carl Fuerstner, and the orchestra's last performance in Carlisle Gym.

Miss Flissler has won highest praise in the East, France, Germany and South America. The Washington Post called her playing and musicianship "magnificent."

She will be featured artist in Bach's Concerto in E Major and Wieniawski's Concerto No. 2.

Mr. Fuerstner will display, as guest conductor, a wealth of experience obtained at the Eastman School of Music, the Cologne Opera House in Germany, and more recently the Utah Opera Theatre and Brigham Young University Chamber Orchestra.

Orchestra selections will include Beethoven's Eighth Symphony, Overture to Weber's Der Freischutz and Prelude to Wagner's Die Meistersinger.

Carlisle Gymnasium has provided a "home" for the symphony for 26 seasons, however, on April 26 the orchestra will open the new Civic Auditorium and will play its concerts thereafter in the auditorium.

Sandians working with the symphony include Charles Runyan (2120), publicity committee, Kimball Prince (6000), and Howard T. Stump (3152-1), both of the board of directors.

Admission will be by season tickets available at Albuquerque music stores and at the Gym box office.



Miss Flissler

## Research Colloquium To Hear Talk About Pacific Test Fallout

Meeting Wednesday, Mar. 27, the Sandia Corporation Research Colloquium will hear a discussion of the subject "Fallout Due to the Pacific Tests," according to Craig Hudson (5111), Colloquium Committee.

Dr. Lauren R. Donaldson, Director of the University of Washington Applied Fisheries Laboratory, will be the speaker. The meeting will be held at 9:30 a.m. in the basement conference room of Bldg. 802. Tickets will be required for admission.



**BASKETBALL CHAMPIONS**—Team 5200 won the Sandia Employees Basketball Association championship 47-45 after a see-saw battle with 2400-I in the final game between the two teams. Both teams finished the regular season with a 15 won, 1 lost record. The game was the second heartbreaking defeat for 2400-I at the hands of the champs.

Previously 5200 had downed 2400-I 44-42. In the first row L to R above are Paul F. Scheele, Josue L. Martinez, Rush D. Robinett, Fred K. Millsap, and William C. Peterson. Standing are Daniel F. Power, W. Daril Gutscher, Wally E. Jungmeyer, Paul H. Jennings, Charles R. Eisenhour, and Dale L. Fastle. Wally Jungmeyer is captain of the winning team.

### First Round Singles Playoffs Completed In Ping Pong Finals

First round of the playoffs for the championship of the Sandia Corporation Employees Table Tennis Singles Tournament had been completed as the Sandia Lab News went to press. First round playoffs for the championship in the doubles category began during the noon hour today and will continue through next week. All matches begin at 12:15 and will be held in the northeast corner of Bldg. 892.

First round singles results are as follows:

Jack Deveneau (2300) defeated Larry Garcia (2100), Larry Woolrick (1600) defeated Bob Christopher (5500), Jack Chavez (7200) defeated Sam Tol-da (2200), Don Gregson (7100) defeated Winfred Bergsten (2700), Roy Dell (7400) defeated R. J. Edwards (1400), Tom Kelley (2500) defeated George Banes (4100), Grover Hughes (1200) defeated Maynard Cowan (5100), Bill Palmer (2400) defeated Frank Cottner (AEC), Dave Hill (3100) defeated forfeit Bill Palmer (2400), and Jack Deveneau (2300) defeated F. E. Lundy (5200).

### ASTE Members to Use Closed Circuit Radio To Install Officers

To celebrate the 25th anniversary of the American Society of Tool Engineers, the Albuquerque Chapter will join with other chapters in a closed circuit radio broadcast for a simultaneous nationwide installation of local and national officers Monday, Mar. 25.

The broadcast will originate from the Shamrock Hotel in Houston, Tex. The local chapter will mark the occasion with a Ladies Night and dinner meeting at the Hilton Hotel beginning at 7 p.m.

Albuquerque Chapter officers to be installed include Paul Stewart (2553-1), chairman, Jim Felter, ACF, first vice chairman, Robert Frow, ACF, second vice chairman, E. W. Gray, Equipment Sales and Engineering Co., secretary, and A. E. Stuart, ACF, treasurer.

### Patent Issued in Name Of Armand F. Fink for Small Pressure Switch

A patent in the name of Armand F. Fink (5213) has been issued the U. S. Atomic Energy Commission, Gene Newlin, Office of the Patent Manager (6010), announces.

The patent is for a Miniature Pressure Switch invented while Mr. Fink was working in the Transducer Applications Division. It is a special device for micro-timing contact switching.

Mr. Fink has been employed at Sandia Corporation since 1948. Previously he was an experienced instrument model maker with the Taylor Instrument Co., Rochester, N. Y.

He attended the Rochester Institute of Technology.

### AOA Elects

Annual election of officers of the Albuquerque Post of the American Ordnance Association is scheduled for 7:30 p.m., Thursday, April 4. The meeting will be held in Room 100 of the Biology building, University of New Mexico. W. H. O'Neill (5530) is Vice President of the Albuquerque Post.

### Two Sandians Placed On Metals Congress Program Mar. 25-29

Douglas W. Ballard (1624) and J. C. O'Neal (5511) will be in Los Angeles Mar. 25-29 participating on the program of the 10th Western Metals Congress. Mr. Ballard will be chairman of a technical session on the subject "Non-Destructive Testing With Isotopes."

Mr. O'Neal will monitor the session. The Metals Congress is held in conjunction with the Society for Non-Destructive Testing.

### Tech Directors Meet

Board of Directors for the New Mexico Council of Scientific Societies will meet Monday, April 1, at 7:30 p.m., according to Larry Snodgrass (2543), president. The meeting will be held in the Warehouse Building conference room, University of New Mexico.

### Millsap Scores 24

# Team 5200 Basketball Champs

Team 5200 emerged champions of the Sandia Employees Basketball Association last week by defeating 2400-I 47-45 in the playoff game. Both teams had finished league play with 15 won, 1 lost records.

A brilliant hard fought game.

### IRE Groups Schedule Two Coming Meetings

Two meetings in the next two weeks are scheduled for Professional Groups of the Institute of Radio Engineers, John McLay (1455), group coordinator, reports.

#### Microwaves—Antennas

A joint meeting of the Professional Groups on Microwave Theory and Technique and Antennas and Propagation will be held Wednesday, Mar. 27, at 8 p.m. in the Student Union building at the University of New Mexico.

Howard Jacobs (1423) will discuss "Design of UHF Triode Oscillators."

#### Circuit Theory

The Professional Group on Circuit Theory will meet Thursday, Mar. 28, at 8 p.m. in Rm. 217 of the Electrical Engineering Bldg., UNM.

Col. L. T. Boatwright (assigned to 1413) will be the speaker.

the playoff saw the lead changed many times. Team 5200 led at the end of the first quarter, 2400-I led at the second quarter. The last half of the game was a free for all.

Fred Millsap was the powerhouse of 5200. He scored 24 points for the champs. Leo Chavez was high point man for 2400-I with 17 points.

During the season 5200 had managed to squeak by 2400-I with a two point margin in a tightly fought 44-42 game. In the last two games of the season, 5200 defeated 5500, 38-26, and 7100, 58-45.

Only close call for 2400-I was its narrow one point margin over 7400, 48-47. Team 2400-I in its last two games defeated 7200-I, 62-37, and 2400-II, 50-34.

Final standings at the close of regular league play were as follows:

Team	Won	Lost	Pct.
5200	15	1	.938
2400-I	15	1	.938
7400	14	2	.875
7200-I	12	4	.750
3100-4100	12	4	.750
2100	10	6	.625
5500	8	8	.500
1600	8	8	.500
1200-I	7	9	.438
2300	6	10	.375
7100	6	10	.375
1400-II	5	11	.313
2400-II	5	11	.313
1400-I	4	12	.250
2200	4	12	.250
1200-II	4	12	.250
7200-II	1	15	.061

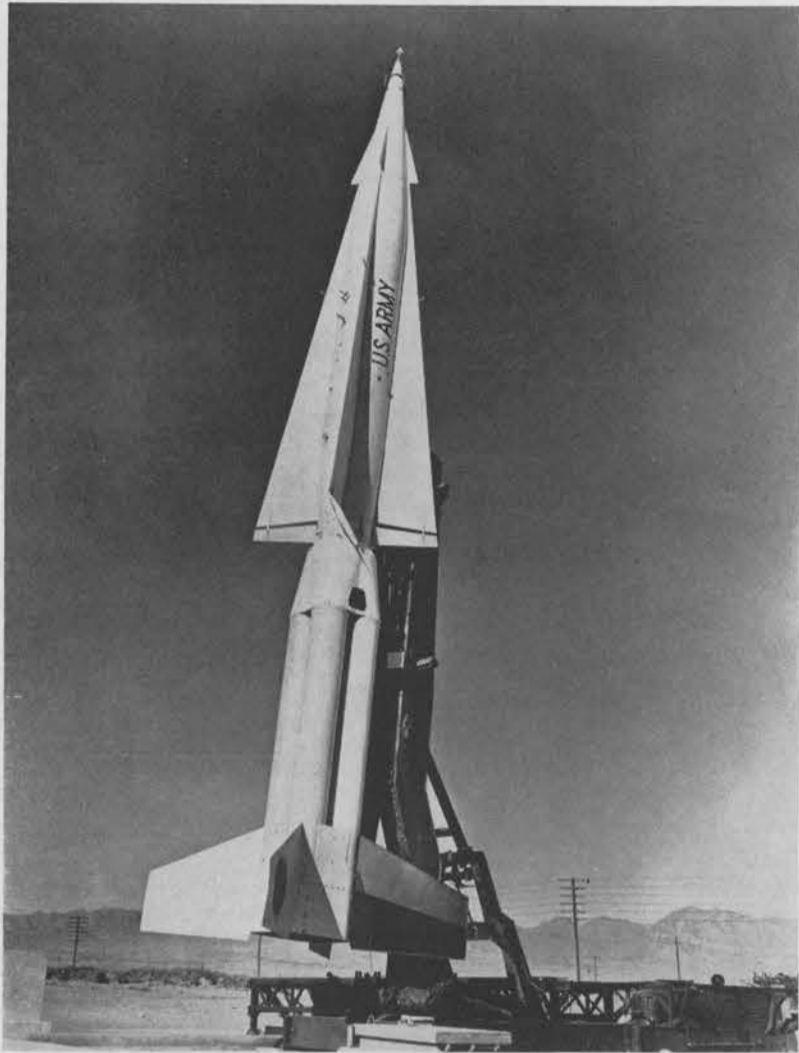


**TEAMWORK**—Sandia Corporation Public Relations Division (3125) recently teamed with representatives of Western Electric Company and the Bell Telephone System to arrange movie location scenes of downtown Albuquerque. The movie, "Making Conversation," currently under production by WE, will illustrate how the telephone is made and the vast telephone communications service. At the camera is Bob Randall, WE motion picture supervisor. Entering the phone booth is J. B. McBurney, sales manager of the Mountain States Telephone and Telegraph Company at Albuquerque.



SHOPPING CENTER	SHOPPING CENTER	SHOPPING CENTER	SHOPPING CENTER	SHOPPING CENTER
<p><b>CLASSIFIED ADVERTISING</b></p> <p>Deadline: Friday noon prior to week of publication.</p> <p><b>RULES</b></p> <ol style="list-style-type: none"> <li>1. Limit: 20 words</li> <li>2. One ad per issue per person</li> <li>3. Must be submitted in writing</li> <li>4. Use home telephone numbers</li> <li>5. For Sandia Corporation and AEC employees only</li> <li>6. No commercial ads, please</li> <li>7. Include name and organization.</li> </ol> <p>Next Deadline: Noon, Mar. 29</p> <p><b>FOR SALE</b></p> <p>EASY SPIN DRY, practically new. Make offer. Whitehill, Alb. 6-6777.</p> <p>TWIN BABY CARRIAGE. Wanted: twin stroller. Anderson, Alb. 9-4616.</p> <p>2 BR. HOME, near bases. FHA. Total price \$4,750. Down payment \$985 and \$49 per month. Chavez, 1608 Gerald SE, Alb. 2-1791.</p> <p>ROLLAWAY BED, 3/4, good mattress, \$13 or trade for 26 in. bike, boys or girls. Odell, Alb. 2-8727.</p> <p>HOLLYWOOD BED FRAME w/o headboard, springs; twin size, \$10. Rector, Ext. 43185.</p> <p>FRIGIDAIRE, small size; apartment size range; accordion, 120 base Noble Dwarf, w/case. Poindexter, Alb. 9-1444.</p> <p>'49 FORD, 2 door, 8 cyl., fair motor, make offer. Serna, 806 Cool SW, Alb. 6-3476.</p> <p>TURNTABLE: VM model 920, 3 speed changer, less cartridge, \$8. Cole, Ext. 1160.</p> <p>TV: 17" Motorola, blond console, \$60. Findlay, Alb. 9-5422.</p>	<p>IRONER, GE, flat type. Garcia, Ext. 43149.</p> <p>'51 PLYMOUTH, R&amp;H, low mileage. Brooks, Alb. 5-8264.</p> <p>VACUUM SWEEPER, upright, GE, reasonable, \$8.50. Welker, 8510 Flower Pl. NE, Alb. 9-1179.</p> <p>2 BR. HOUSE, large, wall, lawn, air-conditioned, electric range, \$1200 down or best offer. Myer, 9214 Cherokee NE, Alb. 9-2117.</p> <p>'57 MERCURY VACATION TRAILER, 15 ft. w/electric brakes, floor furnace, Princess Range w/regulator. Russell, 2820 Vermont NE, Alb. 9-0159.</p> <p>2 VIOLINS, \$35 and \$25, 1 cello, \$85. All complete w/case. Duffy, Alb. 6-1886.</p> <p>'42 FORD PICKUP, \$145. Tiley, Alb. 6-8110 after 5:30.</p> <p>TRAILER, 1954 custom made Platt, 37 1/2 ft., bed 4, \$3,250. Hopkins, 701 Alvarado Drive SE, Alb. 6-5849 or Alb. 6-1970.</p> <p>SADDLE, Western style, light-weight, medium size, \$30; one bridle and bit, \$5. Amole, Alb. 9-2171.</p> <p>GERMAN SHEPHERDS, one male, one female, 3 months old, with papers, \$50 or best offer. Fleming, Alb. 5-9747.</p> <p>GIRLS BICYCLE, 24", Columbia. Breslin, 3248A "A" St., Sandia Base, Ext. 51294.</p> <p>DISHMASTER ATTACHMENT for kitchen sinks, never been used, \$50 new, sell for \$30. Goris, Alb. 9-2924.</p> <p>TIRE AND TUBE, 650x16, 6 ply, \$20. Pedroncelli, 3834 Pedroncelli Rd. NW.</p> <p>RECORD CHANGER, 78 rpm table model, includes radio, \$25 or trade for guns, etc. Pritchard, Alb. 6-5667.</p> <p>BICYCLES, 26 in. boys and girls English Deluxe models, 3 speed, fully equipped, \$40 each. Meloche, 7315 Fairchild SE, Alb. 6-4703 after 5.</p> <p>BUNK BEDS, two each, oak w/metal frames less mattresses, \$20. Fox, Alb. 6-2606.</p> <p>JET PUMP &amp; 42 gal. tank, Montgomery-Ward shallow well. Waldorf, 301 53rd St. NW, Alb. 3-0589.</p>	<p>'53 PONTIAC, 4 dr. Chieftain deluxe, original owner, '56 Pontiac, Catalina, RH, Hydro. Original owner and miles. Hanen, Ext. 25268.</p> <p>'50 CHEVROLET 4 door sedan, R&amp;H, \$195. Lynes, Alb. 9-5028.</p> <p>MOTOR BIKE, Whizzer, runs but needs some repairs, \$35 or best offer. Maintenance manual included. Donaldson, Ext. 46233.</p> <p>148 BASS ACCORDION, black and white, \$175. Lambert, Alb. 5-9630.</p> <p>'46 DODGE, 4-door, reconditioned ('49 motor), four new (5,000 mi.) tires, RH. '57 plates, \$150. Schaechter, Alb. 5-7072.</p> <p>'56 OLDS SUPER Jet-away Holiday coupe, loaded with extras. One owner, 7,800 miles. \$2,800. Fosmo, 1836 Kentucky NE.</p> <p>35MM SLIDE PROJECTOR, Argus C-300, \$25; 1-wheel trailer, \$20; Hollywood bed, \$30; 3/4-size Hollywood bed, \$20. Yarbrough, Alb. 5-4087.</p> <p>MODEL B ENGINE and transmission, \$45. Fay, Alb. 3-6244.</p> <p>BLUE VELOUR couch and chair, \$35. Cornev, Alb. 6-4244.</p> <p>CRIB-PLAYPEN combination and car or travel bed, 3/4 size, \$12.50. Cultreri, Alb. 9-0579.</p> <p>'49 STUDEBAKER CHAMPION Starlight 5-passenger coupe, radio, fresh air climatic, overdrive, \$195. Shew, Ext. 32234.</p> <p>'49 CROSLY STATION WAGON, new tires and battery, \$85. Ladies white bowling shoes, size 6 1/2, \$4.50. Holmes, Alb. 6-8203.</p> <p>SOFA BED and chair, forest green, mohair frieze, \$45; coffee table and 2 end tables, blonde, \$18. Bassett, Alb. 9-5685.</p> <p>BEAUTYREST box springs and mattress, extra long with frame, 4 years old. Rabenhorst, Ext. 48255.</p> <p>MINIATURE FRENCH POODLE pups, four need yards by May 1, registered, \$100. Fenced yards required. Bray, Alb. 6-9257 weekends.</p>	<p>'56 CUSHMAN Highlander Deluxe motor scooter with extras, 75 miles per gallon. Pardo, 3131 Sierra Dr. NE, after 5 p.m.</p> <p>3 BR. HOUSE, 1 1/2 baths, fully landscaped, wall, patio, sprinklers, near three schools, base \$13,000. Couden, 737 Florida SE, Alb. 6-0709.</p> <p>MEAT GRINDER and food chopper attachment, Model FW 6-A, fits all Sunbeam Mixmasters, \$4.00. Padilla, Alb. 2-6867.</p> <p>BOY'S SUIT, all wool, size 16, light tan color, \$15. Owens, Alb. 6-3789.</p> <p>COUCH and matching chair, light grey, \$40. Wagoner, Alb. 5-9974.</p> <p>FARMALL TRACTOR, 4 row planter and cultivator. Also garden tractor with all kinds of garden implements. Sanchez, Alb. 3-1470.</p> <p>CRIB, Storkline, 6 year size, maple, full width panels, double drop sides, adjusts four positions, Kantwet mattress, \$20. Grebe, Ext. 32178.</p> <p>LAWN MOWER, used one year, \$12. Palukovic, Alb. 6-4196.</p> <p>'55 BUICK CENTURY, R&amp;H, power steering, power brakes, air conditioning, new tires, brakes, battery, \$2,150. McCoy, 817 Dakota SE.</p> <p>PREMIUM TIRES, 4 new white walls, 6-00x16, \$80 or trade. Sell or trade ski equipment. Aaron, Alb. 3-4684.</p> <p>3 BR. HOUSE, carpeting, air conditioner, garbage disposal, patio, walls, landscaped, close to schools, \$11,400. Shea, 3112 La Veta NE, Alb. 6-4306.</p> <p>MOTORCYCLE, 1954 Triumph Terrier. Sanchez, Alb. 3-9376 after 6 p.m.</p> <p>2 BR. HOUSE, \$500 down, \$55 per month. Total \$6,200. In Valley. B. Lopez, Ext. 43149.</p> <p>MOVIE CAMERA, 8MM Bell &amp; Howell magazine loading. Cost \$135, sell \$80 or trade for gems, minerals, guns, etc. Hinds, Alb. 7-8543.</p> <p>FREEZER, '56 Amana, 19.5 cu. ft., best offer for \$307 equity. Payments \$20.70 mo. Shelton, Alb. 5-1887.</p>	<p>YOUTH BED, Storkline, 3/4 size with plastic covered mattress, \$25. Murray, Alb. 4-5289.</p> <p>BOOK SETS, "The American Peoples Encyclopedia," "Children's Hour," plus two others, with bookcase. Porter, 2801 Parsifal NE, Alb. 9-1583.</p> <p>POWER LAWNMOWER, Briggs &amp; Stratton engine, rotary, 21". Purchased new for \$95, sell for \$75. Ives, Ext. 20241.</p> <p>'55 MOBILE HOME, 44' Anderson, 2 br., will take auto or small camp trailer in trade. Calvary, Alb. 9-1804.</p> <p><b>WANTED</b></p> <p>GENTLEMAN to share home with owner. Completely furnished, nice location, close to Base. O'Trimble, Alb. 9-5168 after 5 p.m.</p> <p>PORTABLE SEWING MACHINE, electric, reasonably priced for use by Sandia Women's Club sewing class. Schreiner, Alb. 9-1208 or 6-0718.</p> <p>LUGGAGE TRAILER, one-wheel type or chassis, used. Cleveland, Ext. 33245 or 45269.</p> <p>BICYCLE, boys 24-inch, in good condition. Adams, Alb. 6-7265.</p> <p>TO CARE for children, my home, by hour, day, or week. Canfield, Sandia Base, Wherry, Alb. 6-9687.</p> <p><b>FOR RENT</b></p> <p>3 ROOM furnished house, \$65 per month. Mrs. Newman, 428 Texas SE, Alb. 7-2901.</p> <p><b>LOST AND FOUND</b></p> <p>LOST—Turquoise earring, gold button earring, red sweater, turquoise ring, black pocket knife, knitting needle, ring of keys, gold leaf earring. Lost and Found, Ext. 76149.</p> <p>FOUND—Cream glove, GM-9217 key, pair of silver loop earrings, 3 loose keys. LOST AND FOUND, Ext. 26149.</p> <p>LOST—Grey Persian cat, large male, on Feb. 22, Morse, Ext. 36285 before 8:30 a.m. or after 6 p.m.</p>

# Nike Hercules Takes Its Place In Nuclear Weapons Arsenal



NIKE HERCULES, with many times the destructive power and faster than the original Nike is now undergoing tests according to an announcement made today by the U. S. Army and the Western Electric Company, prime contractor to the Nike System.

An improved version of the Nike guided missile, recently designed as Nike Hercules, with nuclear capabilities, is undergoing final tests according to an announcement made recently by the U. S. Army and the Western Electric Co., prime contractor for the Nike system.

Known as Nike B during its development stage, Nike Hercules is substantially faster and has a much greater range than Nike Ajax which has guarded key cities and strategic areas of the nation for the past three years. It is expected that the new missile will be in the hands of operational Nike batteries around the country in the relatively near future.

#### Extremely Maneuverable

Although longer, heavier and more than double the diameter of Nike Ajax, the Hercules model will have extreme maneuverability at altitudes far in excess of those capable of being reached by Ajax. Its higher velocity will permit swifter interception of the most advanced types of aircraft and its increased lethality will make Nike Hercules one of the most effective weapons in America's defense arsenal.

Certain modifications in existing ground control equipment make it possible for Nike Hercules to be integrated into existing Nike batteries throughout the nation. Both Nike Ajax and Nike Hercules can then be fired with the same system. The equipment changes also add to the effectiveness of Nike Ajax.

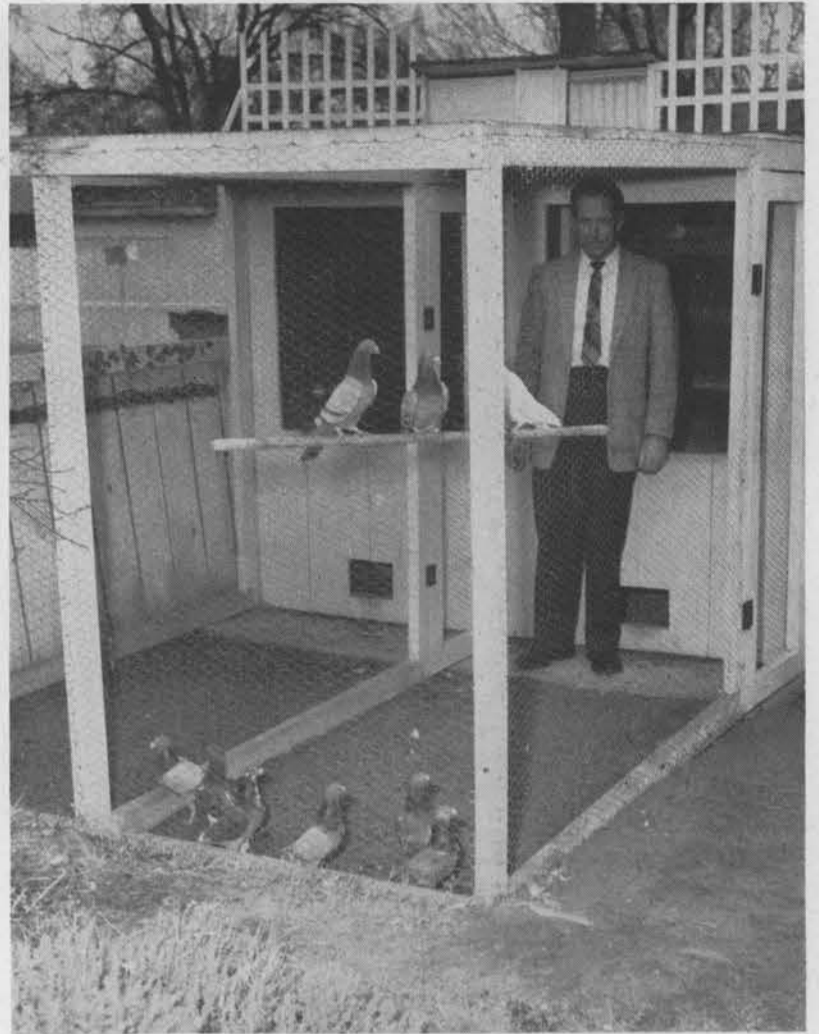
#### Work Started in '53

Research and development studies were begun on the improved version of Nike in 1953 by the same Army-Industry team which assumed responsibility for the original Nike missile. This included the U. S. Army Ordnance Corps, Bell Telephone Laboratories, Western Electric Co. and Douglas Aircraft Co.

The ground guidance and control equipment and missile guidance are being manufactured by the Western Electric Company at its Burlington and Winston-Salem plants in North Carolina, while Hercules missiles will be produced initially at the Douglas Aircraft Santa Monica Plant and followed with additional production at the Douglas-operated Charlotte Ordnance missile plant at Charlotte, North Carolina.

Components of the associated launching equipment, also, are the responsibility of Douglas.

The first prototype production model of ground equipment has been released for testing at the Army's White Sands Proving Ground.



LOOKING OVER HIS STOCK of homing pigeons is Ed Harley (7111), who consistently wins top honors. One of the birds here won "Best Homer" award three consecutive years at the New Mexico State Fair, another flew 300 miles in one day when only six months old. Ed supplements his breeding stock with imports from Germany.

## Army Drops Homing Pigeons Hobbyists Still Train Them

The Army may have decided that electronic communications have made homing pigeons obsolete, but bird fanciers remain steadfast in their devotion to the feathered racers.

One of Albuquerque's most enthusiastic pigeon owners is Ed Harley, supervisor of Sandia Corporation's Joint Task Group Division, 7111. Off and on for 20 years, he has maintained a back-yard vigil, waiting for his birds to "home."

Ed's birds are now being readied for the spring races. The Albuquerque Racing Pigeon Club plans to obtain weather forecasts and magnetic storm forecasts before each race in an attempt to prevent heavy losses experienced last year and in 1952.

"Exact cause of the loss is not known," Ed says, "perhaps altitude or mountains or maybe a magnetic force confuses the pigeons."

One of Ed's birds won the Granville Dare Trophy last year in competition with 225 other young pigeons in a race from El

Paso. The trophy is named for a Buffalo, N. Y. fancier who donated breeding stock after the disastrous 1952 race.

In the spring, breeders from all parts of the United States send four-week-old birds to San Antonio, Tex. where they are trained. In the fall the Great Southwest Futurity is held.

One of Ed's birds took first place in competition with 1,000 others in the 1954 race and the same year Ed was named "Master Breeder." The same year he also won first for best average speed during eight races by a young bird. His bird averaged about 35 miles per hour over a total 1,050 miles.

One of the Albuquerque Club's continuing projects is to encourage members to limit the size of their flocks and to keep the roosts from becoming an eyesore to neighbors. Ed's backyard loft is trim and white and one special feature is a rooftop "trap." After a race Ed takes a fishing pole and shoes the bird into the trap where he can readily remove the leg band and register the finish time.

The homing instinct is equally strong in the hen and cock pigeon, and it can be inconvenient. Ed bought a pigeon from a fancier in San Antonio. The day after the bird arrived in Albuquerque it got loose and promptly winged its way back to Texas.

## D. B. Owen Author Of Math Article

An article by Donald B. Owen (5125) was published in the December issue of *Annals of Mathematical Statistics*. "Tables for Computing by Bivariate Normal Probabilities" was the title of the article.

The paper is related to work Dr. Owen performs in Sandia Corporation's Statistical Division (5125).

He has been employed at the Corporation since June, 1954. Prior, he was an assistant professor of mathematics at Purdue University for two years and an instructor at the University of Washington for two years.

He received his PhD degree from the University of Washington in 1951, his MS degree in 1946, and his BS degree in 1945.

## Professional Engineers To Hear Discussion Of City Planning

Monthly dinner meeting of the New Mexico Society of Professional Engineers will be held Monday, Mar. 25, at El Camino restaurant, 6800 Fourth St. NW. Cocktails at 6 p.m. will be followed by dinner at 7.

"City Planning" is the topic to be discussed by Robert W. Fairburn, a partner in the firm of Flatow, Moore, Bryan and Fairburn, Architects.

Reservations may be obtained from Marvin Causey (1282) ext. 42157.

## Sandians Appear On Radio Club Program

"Cubical Quad Beam Antennas" will be discussed by Tom Banks (5252) and Cedric Senter (1451) at a meeting of the Sandia Base Radio Club Monday, Mar. 25.

Members will also discuss details of the 1957 Field Day activities. All interested radio amateurs are invited to the meeting, Reuben Barwick (4112), secretary, reports. The meeting will begin at 8 p.m. in Bldg. T-319 on Sandia Base.

## ISA Meets Mar. 27 At Lovelace Laboratory

The Albuquerque Section of the Instrument Society of America will meet Wednesday, Mar. 27, according to Nick Sannela (1422), secretary.

"Applications of Standards Procedures in Instrumentation" will be the subject discussed by D. M. Button, Director, Instrumentation Division, Hoover Electronics Co., Albuquerque.

The meeting will begin at 7:30 p.m. in the Radiation Therapy Laboratory of Lovelace Clinic.

## On Phoenix Program

A. L. Thornton (2731) appeared on the program of a meeting of the Phoenix, Ariz., chapter of the American Society of Quality Control recently. He participated in a panel discussion of the subject, "Impact of High Quality Requirements on Small Vendors."

## Nuclear Symposium Held for Sandians, Other AEC Groups

An annual Nuclear Symposium sponsored by Nuclear Division (5524) and Surveillance and Operations (7300) was held recently at Sandia Corporation and at Los Alamos Scientific Laboratory.

The Symposium included lectures, tours and round-table discussions of current technical problems in the atomic weapons program.

R. E. Butler (5524) was in charge of the Symposium program. H. R. Shelton, R. M. Jacobs, and Hunter Lewis (all 5524) were program coordinators.

In addition to other Corporation personnel, participants included representatives from AEC Albuquerque Operations Office and other AEC prime contractors.



PARTICIPATING in a recent Nuclear Symposium held at Sandia Corporation and Los Alamos Scientific Laboratory were, L to R, R. W. Mottern (7315), J. C. Conant (7311), J. J. Coursey (7313),

A. L. Wyer (7326) and R. E. Butler (5524), Symposium program planner. The Symposium members discussed current technical problems in the atomic weapons program and related subjects.