

# SANDIA BULLETIN



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SANDIA CORPORATION, ALBUQUERQUE, NEW MEXICO

NOVEMBER 23, 1951

## UNM Fireball Authority to Discuss Phenomena at Radio Club Meeting

The mysterious fireballs which have been streaking across southwestern skies during the past few weeks will be discussed before the Sandia Base Radio Club by one of the country's authorities on the subject—Dr. Lincoln LaPaz, University of New Mexico mathematician and head of the University's Institute of Meteoritics.

He will speak at a dinner meeting of the radio hams Monday, Dec. 10, at 7 p.m. at the Coronado Club.

The next meeting of the Radio Club, Nov. 26, will be in the club rooms

in Building 317 on "H" street and will feature a talk by Loren C. Watkins, Jr., W5JXO, 1512-1, on "Speech Clipping Techniques."

H. H. "Pat" Patterson, W5DAH, 1131, was elected president of the club at a recent meeting, replacing Carl Carlberg, W5IH, 2521. Other officers elected are: John C. Eckhart, W5CTG, 1621-4, vice president; Stanley McCammon, W5RVZ, 2242-1, secretary; and Lt. Harold C. Kinne, W5SPQ, TTG, treasurer.

## New Booklet Tells What Happens to Your Tax Dollar

"How High Can Taxes Go?" asks Roswell Magill in the booklet slated for the racks next week. President of the Tax Foundation and former Under-Secretary of the Treasury, Magill's article throws a clear, cold light on phases of the tax situation that most people didn't know existed.

"If you earn as much as \$3,500 a year, the Government takes over a fourth of your income now, and next year it wants more—including quite a lot for things we can easily do without. Is there a way to stop this waste of our hard-earned money?" That's the problem posed by this top-flight tax authority. There are few problems more important to the average citizen.

The booklet is a reprint of an article from the September 1, 1951, issue of The Saturday Evening Post. It's written in an informal, readable style that is shrewdly authoritative without leaning too heavily on statistics.

Another subject of vital interest to every taxpayer, especially with the presidential election in sight, is social security. Everyone pays for it. Everyone plans to benefit from it. Do you know how to figure your benefits?

The booklet on the racks this week, "More Social Security for You," tells what social security is, who foots the bill, how it affects you and your survivors, and how to figure your benefits. It even contains a big pension and insurance chart that it would be wise to clip out and hold on to.

This chart outlines your benefits after you retire in addition to giving your survivors' benefits. The payments are rated according to your average monthly wage. You should be interested—it's your nickels.

## Phi Beta Kappa Meeting Dec. 8

Phi Beta Kappa Association will have its annual dinner at 7 p.m. Saturday, Dec. 8, in the Alvarado Hotel ballroom. All members of Phi Beta Kappa and their guests are invited.

Reservations for the dinner may be made with Jane Kluckhohn, 900 N. Solano, tel. 5-2849. Miss Kluckhohn is secretary-treasurer of the association. Dinner is \$3 per person.

The program will be a symposium entitled "Synthesis of East and West" with students from India, Burma, Formosa and Okinawa participating.

## Engineers to Hear Talk on Automatic Transmissions

"Load Bearing Paths and Load Bearing Members," a discussion of construction stresses, was given by Salvatore Motta, 1211, Wednesday at a meeting of the American Society of Mechanical Engineers.

Members also heard Clyde Conover, of the U. S. Geological Survey, speak on "Local Underground Water Resources."

The Society will meet again on Wednesday, Dec. 19, to hear Vernon Field, 1243, lecture on "Automatic Transmissions." The meeting will be held at 7:30 p. m. at the University of New Mexico Mechanical Engineering Building.



**MICROBAROGRAPH OPERATOR** Robert M. Yearout of Sandia Corporation's division 1633 synchronizes timing of the pen line graph which records minute changes in barometric pressure caused by TNT blast measurement shots at the Nevada Test Site. The equipment is located in Las Vegas, more than 60 miles southeast of the testing area.



**METEOROLOGICAL AND TERRAIN DATA** which will help determine blast effects in surrounding areas are studied prior to an experimental nuclear detonation at the Atomic Energy Commission's Nevada Test Site. Shown at the Site's control point (left to right) are: Lt. Col. Eugene H. Karstens, Air Force weather officer at the project; Everett F. Cox, manager of Sandia Corporation's Weapons Effects Department; and J. C. Clark of Los Alamos Scientific Laboratory, deputy director of the AEC test organization at the Nevada Site.

## Sandians Study Wave Effects of H. E. and Nuclear Blasts at Nevada Tests

Some of Sandia Corporation's work in the current Atomic Energy Commission Nevada tests has been related in an AEC news release from Las Vegas. A program of off-site blast effects evaluation which was initiated in August is being conducted by personnel of Sandia Corporation and assisted by Air Force personnel and in close cooperation with the Test Division of the Los Alamos Scientific Laboratory.

The project's purpose is to obtain detailed data for anticipating blast wave effects resulting from nuclear detonations. This is being accomplished by studying the influence of meteorological conditions, terrain, size of detonations, and other factors upon the waves produced by conventional high explosive shots at the site, and during such operations, the waves produced by nuclear shots.

Dr. J. C. Clark, deputy director of the AEC's test organization in Nevada, has announced that this off-site blast effects evaluation project will be extended to cover a full year.

### Sandian in Charge

In direct charge of the tests is Everett F. Cox, manager of Sandia's Weapons Effects Department, who is assisted by H. J. Plagge, meteorological supervisor in Sandia's Field Test Organization, and J. W. Reed.

Blast wave effects have long been of interest to research, industrial, and military scientists. Such research has, however, been concentrated almost entirely on effects, and particularly freak effects, of major explosions.

The Nevada Test Site program is perhaps the first sustained effort to record in detail the influencing con-

ditions existing immediately prior to explosions, projecting results, then studying the effects to determine if the effects can be forecast with any certainty.

Dr. Clark stressed that results to date are only "promising." It is becoming possible to indicate which general areas in the Site region may feel effects more strongly than other areas. It appears likely that the test organization may eventually be able to forecast effects with a fair degree of accuracy.

Those familiar with explosives anticipated freak effects in the Site region during last winter's tests. Available experts were called on, including persons familiar with bombing effects in England during World War II. With the data available they could make only general forecasts, which did not prove to be accurate to the desired degree.

### Curious Effects

Curious sound and shock wave effects were observed then. Notable among these curiosities were the regular skipping of the waves over large areas of terrain, and the irregular effects and the focusing of shock waves.

On one occasion both sound and shock were much stronger in Henderson than in nearby Las Vegas. On another, this situation was reversed. On another, sound was not particularly loud in Las Vegas, but was quite loud in more distant St. George, Utah. In one instance three large show windows within a very small section in Las Vegas were broken, without equal damage elsewhere nearby. The fourth shot last winter was felt strongly in distant Las Vegas, but had far less

effect in nearby Indian Springs. Under seemingly similar conditions, the fifth shot shook up Indian Springs considerably, but was much less noticeable in Las Vegas.

The strength and direction of winds, and the warm layer of air some 30 miles above the earth's surface known as the ozonosphere, are showing up in present research as major factors.

Director Cox said that the so-called "skip zone" phenomenon was responsible for some of the odd effects noticed in previous blasts in this region. Blast waves leaving the point of explosion at varying angles return to the earth at locations varying in distance from zero point. Wherever these waves strike the ground, the sound of the blast is heard and its effect is felt. Following their initial impact with earth, these waves bounce, carrying the sound with them in diminishing degrees. This accounts for the fact that the sound may be much stronger at some points than at others. The breaking of the Las Vegas show windows last winter probably resulted partially from this, and particularly from focusing.

### Two Shocks Possible

Another phenomenon results when blast sound waves travel up through the atmosphere to the ozonosphere. This warm layer bends them back to the earth, which they strike in a circle varying from 80 to some 150 miles away from zero point. This is a reason, together with prevailing meteorological conditions in this area, why a community in such a location may receive stronger sound waves on many occasions than will other communities closer to the site. Incidentally, the distance between the explosion

and this band of sound varies with the season, expanding in the summer.

It is entirely possible for a community to receive two shocks from each nuclear blast, one from the low altitude sound waves skipping along the terrain and a second one at a later time which has traveled 30 miles up to the ozonosphere and bent back to earth.

The phenomenon of focusing can result in both types of waves and in various waves of each type being focused on a single area. The low altitude waves may overlap and be concentrated on one spot, with terrain having some local influence, and wind direction and velocity having considerable influence. The same spot may afterward feel the ozonosphere wave.

### Abnormal Sound

Mr. Cox gave an interesting sidelight on the ozonosphere influence. It was first detected at the funeral of Queen Victoria in England in 1901. During the ceremony, several guns, called "minute guns," were fired exactly one minute apart. These guns were heard clearly up to 13 miles away from the ceremony. However, the report of each gun was also heard plainly in Scotland, many miles away. In addition, the sound reached Scotland much later than it should have, based on the speed of sound and the ground distance involved. Because it couldn't be explained, it was for some years called "abnormal sound." Eventually, of course, it was learned that these "long distance" sound waves traveled not only the ground distance but also more than 60 miles up and down through the atmosphere, which accounted for their late arrival.

In discussing the project, Mr. Cox

said that eight weather stations are being used to gather meteorological data. A permanent station at the Test Site is manned by Air Weather Service personnel. There are seven mobile stations—in the vicinity of Tonopah, Beatty, Warm Springs, Pioche, Currant, Crystal Springs, and Caliente—manned and equipped by the U. S. Air Force's 2060th Mobile Weather Squadron. Lt. Col. Eugene H. Karstens is the Air Force's Project Weather Officer for Site activities.

A key piece of equipment used by the group is the rawinsonde balloon, which enables observers to plot temperatures and the direction and velocity of winds at various altitudes. Balloons sent aloft before each detonation have on occasion reached altitudes up to 100,000 feet.

Once temperatures and wind conditions aloft are known, the project experts can plot the velocity of sound and, using that plot, the prospective paths of the many sound waves emanating from a blast, and predict the effects.

Following the blast, the actual effects are recorded on sensitive microbarographic equipment located in Las Vegas, Goldfield, Beatty, St. George, Indian Springs, Henderson, Boulder City, and Caliente. Sandia Corporation personnel man this equipment.

The shock wave studies are being intensified during present experimental operations at the Site, which includes both nuclear and conventional explosive detonations. Following conclusion of the present operations, the group will continue its studies using only conventional explosives.

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Robert S. Gillespie, Editor

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## History Will Record the Tale

Some time ago in an editorial which advised "make every rivet count" we pointed out that our job here at Sandia is mighty important even though we may never see our finished product or production reports.

To more clearly emphasize the work we have at hand we'd like to call attention to the story on Page One which tells of a part of Sandia Corporation's job in the Nevada Tests.

Read that article and think it over. Not only is it interesting, but it will make you think. After you read it perhaps you can visualize a small portion of the burden on Sandia's shoulders.

Also this article tells us about some of our Sandia employees and usually you don't ask your fellow worker what his job is. The article doesn't tell everything about the Nevada Tests, security sees to that. But to any of us who might think our work only routine the article will show that our company's job is anything but commonplace.

When we read about the job Ev Cox, Herb Plagge and Jim Reed and others are doing we have a feeling of pride. When we realize that most of our scientists, engineers, technicians, and others have to go unmentioned the feeling swells.

Some day in the years to come a historian is going to pull up his typewriter and tell the story of Sandia. He is going to relate the trials and tribulations of a small laboratory which was handed one of the most important jobs in the history of the country. He is going to tell of the way men and women accepted this task and applied their brains and strength to its fulfillment, the things they developed, and how they affected the course of events.

The thought of such a report is fascinating, but not at all fantastic. You have already read about the pioneer days of the atom age. The tale will not be exclusively of plutonium, uranium, neutrons, or isotopes. The story will be of you.

## Life May Be Grim For Actor But It's Fun for Audience

The houselights were out and the curtain was up on one of the most dramatic scenes in the play "Beau Stratagem." The hero was to defend his lady-love in a duel. As he climbed a stairway, he was to bring forth his sword. He tugged, but nothing happened. The sword was stuck in the sheath and the audience loved it. There was just a murmur at first, but slowly laughter developed and the hero, Ed Oxenham, 3220, says it was the most embarrassing moment in all his experience on the stage.

Ed is a credit auditor and paymaster for Sandia Corporation, but has been interested in the theatre since his high school days. He took dramatic courses at the Park Ridge Ill., high school and had private tutoring in addition. In 1941 he joined the Pasadena Playhouse group and it was there he had the leading role in "Beau Stratagem" where his sword caused such an uproar.

### Many Memories

While in Pasadena, Ed performed in "Letters to Lucerne," "Family Album," "Romeo and Juliet," and other well-known plays. He says his favorite role is Romeo although he thinks a terrific challenge would be Hamlet.

"Beau Stratagem" brings back the most memories to Ed. The night of the dress rehearsal he had another catastrophe. He was to take his leading lady in his arms and carry her off the stage. But Ed's 5 feet 8 inches were not enough for the lady who was nearly 6 feet tall and they both fell flat, 16th Century costumes and all. On opening night, despite the fact that he had warned the stage crew to drop the curtain fast, Ed was worried. Luckily when it came time to repeat the carry-off he had no trouble.

The Pasadena Playhouse introduced several celebrities to Ed—Victor Mature, Robert Preston, Louise Albritton, Michele Morgan



Ed Oxenham

and Margo Jones who directed "Streetcar Named Desire" on Broadway.

### Interested in Directing

Ed's primary interest in his stage hobby is directing. He says to be a good director one must understand the acting field and the Pasadena Playhouse gave him experience in all types—Greek, Chinese and even musical comedy. Right now he is putting some of his spare time into writing plays.

Ed, his wife Ruth and their son, Randy, 5, now call Albuquerque their home. Once they get fully settled he hopes to get back in theatre work here as a hobby. However, he undoubtedly will always be a bit wary of dueling scenes.

## Square Dance Instruction

Square and folk dance classes for Coronado Club members will begin at the Club Tuesday, Dec. 4, 8:30 to 10:30 p.m. A complete course of five lessons will be conducted by "Doc" Rehbeck.

Come out and learn the colorful steps so that you may enjoy the regular Friday square dances. The remaining lessons will be on Dec. 11, 18 and January 8 and 15.

## AROUND THE DEPARTMENTS

Seen in Juarez over the long week end were: Pat Higgins, 1630, Luke Vortman, 1630, Nick Perea, 1630, George Rogers, 1621, and Helen Swanson, 1621.

The recent "long week end" was spent in various ways by members of 2520. Gladys Gilliland, 2521, Margaret Whalon, 2523, Richard Hickman, 2523, with their respective spouses, went to Juarez. Phyllis Hudson, 2523, Don Weldon, 2521, and Elmer Irving, 2522, saw the Lobos play football. Rosemary Trinkle visited her parents in Belen while her husband went deer hunting. Jim Hook, 2520, toured the nearby countryside with his family. Cecil Johnson, 2523, flew his Stinson to Truth or Consequences and return—the trip was rough.

Sue and Jack Mafit recently spent the week end visiting Jack's mother in Phoenix. Sue is in 2461-2 and Jack is in 3152-1.

Irene Brian's husband, Dick, was home for a few days this month on leave from Ft. Benjamin Harrison, Indiana.

Sylvan S. Harris, 2460, is back from vacationing in Philadelphia and Chicago.

Bernice Henry, 2461-2, is recuperating and "getting along fine" after a major operation.

Dale Evans is back in 2460 after an illness of several weeks.

Billie Peterson, 4135, has been at home ill with an attack of flu.

Department 3150 extends sympathies to Mrs. L. G. Lind. Mrs. Lind, whose husband is in 3151, slipped and fell and broke an arm. Last reports have it that Mr. Lind is turning out to be a wonderful housekeeper.

Jim Hinsdale, 3151, returned from a recruiting trip to Iowa and Wisconsin. Weather report on trip—SNOW!

Nick Vytlaclil, 3151, and A. Harshman, 3151, have just returned from a recruiting trip to the Pacific Northwest.

Personnel of 3150 are glad to see Joan Longhurst, 3152, back on the job. Joan recently underwent an operation, but she hasn't lost any of her sense of humor.

Barbara Hegge, formerly of 4222, has taken over as secretary to Ray Powell, 3150. Welcome, Barb!

Bill Gamberale, formerly of 1951, has become a member of 3152.

Clara Kaebke has left 3152 to take over a new job in 1623.

Carmie Smallridge, formerly of 3125, is the new secretary for Department 3120. Congratulations!

Allie Dayton, 3153, enjoyed a two weeks' vacation in Arcadia, Calif. Allie flew both ways and thoroughly enjoyed her first plane trip.

Dean Irvin, 3152, Charles Kaspar, 4231, and Neil Hansen, 3152, and their wives enjoyed a week-end trip to Juarez. Dean's recently sprained ankle hampered his pedestrian activities slightly.

Mary Ertl, 1631, vacationed recently in China Lake, Calif., with her husband.

Harlan Lenander, 1630, is happily sporting a new Buick "Riviera."

Of all the 1514 hunters who ventured forth this deer season, Gorden King, 1514-2, was the only one who brought back a deer. It was a six-point buck shot in the Cuba area.

Neysa Koger, Charlotte Feldman and Lois Campbell, all 4131, visited Juarez during the recent three-day holiday.

Helen Melancon was hostess to 4133 and to members of her own organization, 4135, at a Halloween party during the past ghost and goblin season.

Clark Read, 2234, and his wife are spending a two week's vacation in Southern California. They plan to visit friends in Arizona before returning.

Carl Baumgartner, John Cavanaugh and Bill Davis, all 4133, are among those bitten by the vacation bug. Jim Birchfiel, 4135, and his family saw the sights of the Grand Canyon on their vacation.

Bob Armstrong, 1712, and Walt Hook, 1713, went hunting together in the Jemez Mountains but returned empty-handed, cold and wet. They saw one good-sized buck up close before the season opened, so they couldn't take a shot at him. Once the season opened, they saw no more game and will have to wait until next time to try to do better.

Department 1710 showed no ill effects from their party at the Coronado Club on Nov. 9. About 60 persons attended. Among the guests were R. A. Bice, 1210, and R. P. Petersen, 1100, and their wives, and 1710 "alumnae" Jean Gillette (now 3124-1) and Ginny Roy (now 1611-5) and their husbands.

Ed Harley, 1715, is quite proud of his favorite homing pigeon, Cornelio. Over the Armistice Day week end Cornelio made a successful flight from Van Horn, Tex., to Albuquerque—a distance of about 300 miles—which is quite an accomplishment.

Jerry Hurley, 1713, motored to the Grand Canyon with his family over the Armistice week end. A ranger they met turned out to be an old friend of Jerry's and they stayed with him for the duration of their visit. It was snowing by the time the Hurleys were ready to leave, and they had several hours of rough driving before they got back to Albuquerque.

Two men in 2334 got their deer while hunting during the Armistice holiday—Robert L. Brooks was south of Socorro and Tildon Pond hunted in the Magdalena area.

Gene McClendon, 2334, is back from a week's vacation spent in El Paso, White Sands, and Alamogordo.

Congratulations to Ralph Work, 1953, and his wife, Rowena, on the birth of their son, Ralph Christopher, Nov. 9.

Joan Marie Baca, 1955, and Sgt. Leroy White of Kirtland Field were married at the Kirtland Chapel Nov. 10.

Personnel of 1950 are happy to hear that Mrs. Jameson, wife of D. H. Jameson, 1922, is home after an operation and is doing well.

Thelma Renwick, 1951-5, and her husband, Richard, celebrated their fourth wedding anniversary Nov. 15.

Celebrating their fourth wedding anniversary on Nov. 15 were Virginia Eckhart, 1951, and her husband, John.

Shirley Culver, 1955, and her husband, Eddie, have a fine eight-point buck to show for their hunting season. Eddie was one of the five hunters who got bucks out of the 200 who were in the Monzano Mountains the first day of the hunting season. It took him only two hours.

Lela Vaughn, AEC, recently visited relatives in Muleshoe, Tex.

Frankie Couch, AEC, has returned from Amarillo, Tex., where she visited relatives.

Norma Wigal, AEC, and her husband, Don, spent the Armistice Day week end in Juarez.

C. R. Barncord, 1231, R. G. Pershing, 1230, and C. B. O'Keefe, 1932, spent their Armistice holiday deer hunting in the Apache Mountains, but came home empty handed.

Roy Lambert and Jess Wright, both 1521-1, spent the Armistice week end in Juarez, Mexico.

Ray Arvidson, 1521-1, got snow-bound in the Chama area while deer hunting. He left on the opening day of the deer season.

Jim Duncan, 1521-1, and his wife are vacationing at his home town, Decatur, Ill.

Erma Fauerbach, Lois Chilton and Bonnie Walters, all AEC, motored to Kansas City, stopping in Topeka to visit Erma's mother, during the holiday week end. They reported a "beautiful trip."

The Favias—Margaret, 1533, and Mike, 1300—were in El Paso and Juarez recently. Their Irish setter won an award in an obedience show sponsored by the Dog Obedience Assn. of El Paso.

Others in 1530 who "Juarezed" over the Armistice week end include Banks Daubert, 1531-1, and his wife; Nancy Johnson, 1531, and her husband; and Betty Clark, 1533. Fred Brown, 2411, and his wife were also Juarez visitors for the holiday.

Paul Syroid, 1533, has been deer hunting around Raton during his vacation.

James Bedeaux, who is the husband of Mary Bedeaux, 2121-2, has returned from military service and soon will be back at his old job with Sandia Corporation.

Margaret Reese, 3160, and her husband Howard, 2125, spent the Armistice Day week end in Mexico and had a wonderful time.

C. W. Carnahan, 1100, and his wife attended their first bullfight in Juarez recently with their houseguests, Mr. and Mrs. Henry Kalmis of Washington, D.C.

Dale Moritz, Jim Demas, Jack Miller, Bob Marquand, all 1131, and Julian Gross, 1133, were also Juarez visitors during the recent holiday.

B. J. Bittner, 1132, N. Wilde, and J. B. Lindsey, both 1134, sported beards recently that left fellow employees aghast.

Joyce Engblom is back at work in 2122 after a tonsilectomy.

H. E. Christenson, 2121-2, and his family had a pleasant trip to Juarez during the Armistice holiday.

Margaret Benge, 2121-3, has returned from her vacation in Nevada.

Florence, 2124, and Howard, 1112, Sanders were in Juarez recently.

Ted Anderson, 3231, and family enjoyed a recent vacation around the state. Juarez and Carlsbad were on their itinerary.

Truman Daniels, 3231, literally made a flying trip to Austin, Tex., Armistice week end to see his wife who is visiting there.

Sympathy is extended to Frances Winter, 2461-3, and her family. Frances' mother passed away recently in Freeport, Ill.

# PROMOTIONS

**ALBERT "Ed" CLAMP** is the new supervisor of Section 1522-1. He joined us in 1948 after working a year in maintenance for the Rural Electrification Administration in Colorado. Before that Ed was in the Army for three years. He has studied electric and electronic engineering at three colleges. Ed is married and has a 2-year-old daughter.



**JAMES W. GALBREATH** has been named division supervisor of 3153. He came here last year with four years advertising experience. For three years Jim was vice-president of a St. Louis, Mo., advertising agency and for a year he was account executive for another agency in St. Louis. He is a veteran of four years Army service and he was graduated from the University of Missouri with a Bachelor of Arts degree in journalism. Jim is married and has one child.



**O. L. "Les" WRIGHT** was recently named manager of the newly created Department 1930. He came to Sandia in 1946 after two years in the Navy. As a Lieutenant (j. g.) Les spent a year at Oak Ridge and a year at Los Alamos. He graduated from John Brown University, Ark., with a B. S. in communications and immediately became associate professor of radio communications there. Les also served three years with Civil Service as a radio instructor for the Air Force technical training command. He is married and has three sons.



**DAVID WATT** has been promoted to section supervisor of 2352-1. He came to Sandia this year after working for the Mountain States Telephone and Telegraph Co. for seven years as a lineman. Dave graduated from the University of New Mexico with a B. S. in electrical engineering. He is a veteran of two and a half years with the Navy.



**ROBERT J. BLOUNT** is the new section supervisor of 1921-2. He came to Sandia Corporation last year. Bob started work here right after graduating from the University of New Mexico with a B. A. in business administration. He is a veteran of one year's service with the Air Force. Bob is single and lives in Albuquerque.



**CHARLES E. KATZENBERGER** was recently appointed supervisor of Division 1931. He came to Sandia in 1946. During the war Charles spent four years as an officer in the Army. He was a maintenance company supply officer. Charles studied electrical engineering at Ohio State University. He and his wife live in Albuquerque.



**JESSE D. WRIGHT** was recently named supervisor of Section 1521-1. Before joining us in 1948 he had his own radio service business in Hamilton, Mo., for three years. Previously Jesse spent one and a half years in the Air Force. Jesse is single and lives in the men's dormitory on the Base.



**JOHN L. VEENEMAN** was recently promoted to division supervisor of 2126. He worked for eight years in Cincinnati, O., as a tool and die maker and then spent four years with Wright Aeronautical, Lockland, O., as a section supervisor. Before coming here in 1948, John worked two years at the Clinton National Laboratory, Oak Ridge, Tenn., as a model and instrument maker. He is married and has four children.



**WAYLON B. FERGUSON** has been appointed supervisor of Section 2352-2. He is a graduate of Baylor University, Waco, Tex., where he received his Bachelor of Business Administration degree. Waylon is also a veteran of two and a half years with the Army. He came to us last year. Waylon and his wife live in Albuquerque.



**WILLIAM C. STADY** was recently appointed supervisor of Section 2142-3. Bill has eight years experience as a supply officer with the Veterans Administration. During World War II he served four years in the Navy. From 1947 until he joined us in 1949 Bill worked for a construction company in charge of payrolls and time-keeping. He studied pre-engineering at the University of Southern Illinois.



**LEO M. "Jerry" JERCINOVIC** is the new supervisor of 1922. While in the Army he worked at Los Alamos for two years, then switching to civilian status, he worked there another year before coming to Sandia in 1947. Before his Army service Jerry spent two years with the Western Cartridge Co., East Alton, Ill. He studied chemical engineering at the University of Illinois and Ohio State. He is married and has three children.



**ARTHUR R. EIFFERT** has been named supervisor of the newly created Division 1912. A native of St. Louis, Mo., Art was a draftsman there for three years prior to joining us in 1947. He attended night school at Washington University for two years, is married and lives in Albuquerque.



**FREDERICK A. LECKMAN** is the new division supervisor of 1955. He studied law and business administration at four different colleges including the University of New Mexico before going to work for Douglas Aircraft as a design draftsman. After two years there he was in the Army for three years and then came to Sandia in 1946. He is married and has two sons.



**JOHN J. MILLER** is the newly promoted supervisor of Division 1643. He joined us in 1948 with two years supervisory experience with the War Assets Administration in Denver, Colo. Previously he spent four years as a civilian flight instructor for the Air Force. John also worked for six years with the Soil Conservation Service. Mr. and Mrs. Miller live in Albuquerque.



**RICHARD CLIFTON** was recently promoted to supervisor of Division 2221. He came here in 1948 after working for two years with the AEC at Los Alamos as property and supply supervisor. Dick also worked in production at B. F. Goodrich, Brinkley, Ark., for two years. He served with the Army for a year before going to Los Alamos. Dick is married and has two children.



**CHARLES B. O'KEEFE** recently was named supervisor of Division 1932. Prior to joining us in 1948 Charles was office manager of a metal products firm in Batavia, Ill., for three years. He also worked for six years with the Carnegie, Ill., Steel Corporation as secretary to the superintendent; one and a half years as office manager of a Texas oil company; and a year with the Cleveland Daily News. A veteran of three years Army service, Charles is married and has two children.



**JEROME H. GIBSON** has been promoted to division supervisor of 3154. Before coming here early this year he was Director of Guidance for the Veterans Administration in Dayton, O., for two and a half years. Previously Jerry was Professor of Psychology for ten years and head of the psychology department for eight years at the University of Dayton. He was graduated from Holy Cross College with a B. A. in philosophy and chemistry. Jerry is married and has a 10-year-old daughter.



**TOM T. ROBERTSON** has been promoted to department manager of 1950. Tom came here last year. He is on special leave from the Bell Telephone Laboratories where he has worked for more than 15 years. Before joining us Tom was drafting supervisor for the military electrical development department at the Whippany Laboratory in New Jersey. He studied mechanical engineering at Heriot-Watt College, Edinburg, Scotland. Mr. and Mrs. Robertson live on the Base.



**BEN H. BRIGHT** has been appointed division supervisor of 2142. He came here in 1946 from Los Alamos where he worked for a year while in the Army with the Manhattan Engineering District as an electrical technician. Prior to his three years Army service Ben was an engineering assistant for a year with the Texas Power and Light Company. He studied electrical engineering at Texas A & M and Rutgers University. Ben is married and has a 7-week-old daughter.



**CUVIER J. MCGARR** has been appointed department manager of 2220. He came here in 1948 after three years as office manager for an Albuquerque contracting firm. Previously he was a captain in the Army Medical Corps, Administrative, for four years; technical reference librarian for a consulting mining engineering firm for three years; assistant librarian for the Bureau of Mines experimental station in Pittsburgh for two years; and a high school English teacher for one year. He has an A. B. in English from Grove City College, Pa. He is married and has a 4-year-old son.



# AROUND THE DEPARTMENTS

**Margaret Northcutt**, formerly of 2461-3, is the mother of a new daughter named Margaret Ingle. Congratulations!

**Delva "Curly" Corbitt**, 2461-3, and her husband, **Norris**, spent the Armistice Day week end visiting relatives in Elk City, Okla., and Amarillo, Tex.

All of 2417 extends sympathy to **Joe L. Sanchez** for his streak of bad luck. Last week some of his clothing was stolen from his car. Two days later he broke a finger while playing basketball, and a day later he broke a tooth.

**Jack Stagner**, while vacationing in sunny California, sent a wire reporting he was snowed in.

**G. F. Gabaldon**, 2417, and his family spent an exciting week end at Juarez recently doing their Christmas shopping.

**Roy Dunlap**, 2462, and his wife are the parents of a son born Nov. 7. Congratulations!

**Charlie Dodson's** Armistice holiday was spent visiting friends and relatives in Lubbock, Abilene, Ft. Worth and Dallas, Tex. Charlie is in 1923.

**Jim Brown**, 1921-1, is back from a trip to Illinois, his home state, where he vacationed in Chicago and Farmer City. His wife, **Sara**, formerly 3230, returned last Sunday after several weeks at the home of her parents in Farmer City.

One of the deer hunters who didn't get his deer is **Bob Blount**, 1921-2, whose hunting trip was in the Magdalena country.

The **L. W. Wheelers** are the parents of twin boys born Nov. 9. Les is in 1641.

The **Asa Wilsons** are the parents of a son, **David Brian**, born Nov. 9. Asa is in 2440. Congratulations!

**HERBERT J. BOWEN** is the new supervisor of Division 1641. He joined us in 1947 with almost 10 years experience in mechanical engineering. He graduated from Oklahoma A & M with a B. S. in mechanical engineering and for 17 months ran his own commercial refrigeration service. He worked for Montgomery-Ward for two years; Boeing Aircraft for four years; and Bethlehem Supply Co. for two years as project engineer. Herb is married and has two children.



**WILLIAM A. OTERO** has been promoted to division supervisor of 2236. He joined us in 1948 after working a year as a civilian with the U. S. Corps of Engineers. Before that Bill was five years in the Air Force as a pilot with the rank of captain. A native of Albuquerque, he studied agriculture at New Mexico A & M College. Bill is married and has two children.



**ARTHUR L. GREGORY** has been appointed section supervisor of 2423-2. Art spent most of his early life working on the family farm in Camden, Mo. He left there to serve three years with the Army. After his discharge he worked in maintenance for a Missouri gas company a year and a half before joining the Corporation last year. Art is married and lives in Albuquerque.



**Billie and Shelton Hewitt** went sight-seeing in the Petrified Forest and the Painted Desert in Arizona for their three-day Armistice holiday. Billie is in 2121 and Shelton is in 2231.

Among those visiting Juarez over the Armistice Day week end was **Charles K. Reed**, 1931, and his family.

**French Stewart**, 1931, and his family went deer hunting in the vicinity of Silver City recently, but were rained out.

**Charlie Hines**, 1955, and his family have just returned from a week's vacation in Tucson, Ariz., Charlie's home town.

**Robert J. Schick**, 1931, has undergone an operation at Veteran's Hospital. Hope you recover soon, Bob.

**C. E. Katzenberger**, 1931, is spending a week's vacation and rest at home this week.

**Jackie Hecker**, 1260, visited Juarez last week end.

**Chuck Grassham**, 1531, spent the Armistice Day holiday deer hunting.

**Glenn Hamilton**, 1531, is vacationing at his Albuquerque home.

**C. L. Lindquist**, AEC, has returned from two weeks' active duty with the Army in San Antonio, Tex.

The **Robert Borahs** and their son are back from a trip to Petersburg, Ill., where they visited friends and relatives. Bob is in AEC.

**Russell Rho**, AEC, spent his vacation visiting friends in Denver and Colorado Springs.

**Monte Lawton**, 2440, and his wife have a new baby—**Margaret Tugin Lawton**. Margaret weighed 6 pounds 3 ounces at birth. Congratulations!

**Betty Van Gundy**, 4131, reports that her husband bagged a wild turkey for their Thanksgiving dinner. But 4135 came up with something more exciting, but not so edible. **Shirley Zaluga's** husband shot a wildcat.

**Art Jones**, 4232, **Bob Schmuck**, 4221, and **Denver Dierks**, 3171-1, charged out with 40,000 other hunters this deer season and they would have each bagged a buck but—etc., etc.

**Walter White** has returned to work in 1621 after an illness of several months.

**Lewis West**, **Paul Silva**, and **Flaviano Sanchez**, all 2417, have returned to work very proud of their hunting fortunes. All three got their bucks. **Jack Stagner**, **Lloyd Kelton** and **William Peters**, also 2417, tried their luck, but they came back sad, they didn't shoot anything. **Crawford Luker**, **Joe Montoya** and **Louis White** have taken a week's vacation to do their hunting.

## Men Into Service

**Robert A. Bailey**, who worked in 1916, has been recalled to active duty with the Navy. He terminated Nov. 9. Bob, who worked as a draftsman, is married and his wife will stay in Albuquerque while he is in the service. He came to work for Sandia Corporation in January, 1951. Bob reported to the Bulletin that he didn't know where he was to be assigned but that he would keep his friends in the company posted.



# Year in Russia Grim Experience for Youth of 13

With a menacing question mark on the horizon it becomes more than a matter of curiosity to find out what goes on behind the Iron Curtain. Charles Maak, 1253, doesn't have all the answers but he's been closer to answers to the problem than most of us will ever be.

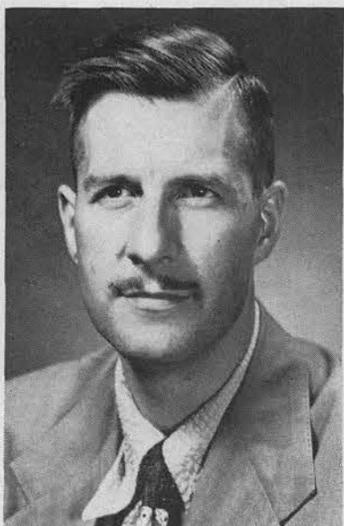
In the fall of 1929 Charles Maak, aged 13, his mother and his father were on a dirty little train rattling through Poland, Estonia, Lithuania and Latvia on the way to Leningrad, Russia. Charles's father was an engineer who went over to install steam generating equipment in Leningrad's municipal power house. It was the period when Stalin was buying American know-how.

To a young boy Leningrad was a city of bewildering contrasts. Most of the streets were unpaved—just wide muddy swathes cut through the city. The more important thoroughfares were paved with cobblestones or wooden blocks. Transportation was by droshky, a sort of one-horse shay.

### Disease Common

Disease, especially typhoid, ran rampant, Charles recalls. All water, even that out of the hotel taps, had to be boiled. Charles's parents wouldn't let him drink the milk that was sold in big open barrels in the fly-infested markets.

The Maak family lived in the city's only hotel because they couldn't find another place in Leningrad that wasn't overcrowded, dark, and filthy. In contrast, much of the Czarist grandeur was left in the



Charles Maak

city architecture. Outside the buildings were impressive—inside they were tenements.

The fear was there, too, Charlie says. The OGPU, or secret police, from which the Gestapo was modeled, kept the Russian people in constant terror. The Maak's visitors would hold a finger to their lips as they arrived and peer under tables and behind pictures for dictaphonic equipment before they would trust themselves to speak. This in spite of the high degree of respect and freedom of movement accorded American engineers.

The municipal power house in

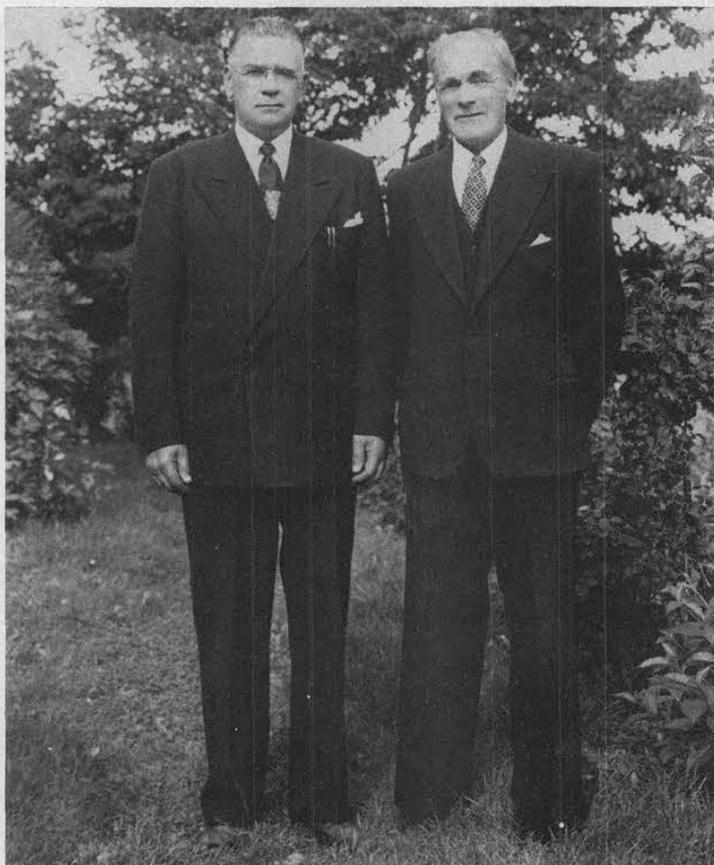
which Charles' father worked was surrounded by a high wall and all its entrances were guarded. The revolution was still a vivid enough memory to give the political commissars cause to worry about sabotage.

### Food Was Terrible

But most of all Charles remembers the food. The family ate in the hotel and their fare was appallingly tasteless to a youngster used to ice cream cones and rich meats. He can only remember three good items—blackbread, sauerkraut and caviar. They were all delicious, he says.

One section of the dining room was always curtained off and the family could see waiters going in there with heaping trays of wonderful food that they were never able to order. Charles's father finally questioned a waiter and found out that these delicacies were being served to foreigners on a short trip through Russia. The conclusion was obvious. Since the Maak family was going to be in the country for a year there was no use trying to convince them the country was prospering under the communists, but it was worth while to try to convince transient visitors—hence the unusually fine food.

Young Charles returned to America in 1930. It was a happy homecoming for the family. The real value of the freedom enjoyed by Americans was impressed on the Maaks after they saw how people live under Communism.



IN NORWAY, Olav Nerhus, 1281, on the left, was photographed with his brother, Jens, whom he hadn't seen in 24 years. Olav came to America in 1911 from Hardanger and returned for a visit with relatives and friends this summer.

## Engagements Marriages

Frances Newell, 3124, and Leslie Hines, Petty Officer First Class, USN, were married Saturday, Nov. 17, at the Sandia Base Chapel and are now on their wedding trip through the mid-west, northwest and back via California. They plan to visit Leslie's parents in Madison, S. D., and her parents in Macomb, Ill. After their return in December, Mr. and Mrs. Hines will live at 1110 W. Coal.

Fred Bentz, 3231, and Mary Jukich of Grand Rapids, Minn., were married Nov. 10 in Grand Rapids. They will live at 619 N. Madison.

Mr. and Mrs. Edwin Jenkins are back after a short honeymoon in Mexico. Mrs. Jenkins, the former Waneta Wright, 1514, and Ed, 1632, were married Friday, Nov. 2, at the Base Chapel. Waneta is a graduate of Carthage College, Carthage, Ill., and taught in the Mendon high school in Illinois. Ed received his B. S. degree from Lincoln Memorial University of Harrogate, Tenn.

## First Visit Home In 24 Years Takes Sandian to Norway

It's a big occasion when members of the Nerhus family get together. It is such an important affair that Olav Nerhus, 1281, traveled all the way to Norway this summer to see members of his family for the first time in 24 years.

Olav, who has been an engineer for Sandia Corporation since 1949, was born in Hardanger, in western Norway, and was trained to be an engineer at a Norwegian technical college. In 1911 the opportunities offered in United States beckoned strongly and Olav left his country to live in the Americas. In 1927 he made a visit back home and the trip this summer was his second in 40 years.

### Travels Air and Water

On the journey to Norway he stopped in Gloucester, England, and visited his son, Raymond, who is an engineer for Bell and Howell. The trip to England was made by air and from there to Norway he traveled by ship.

Olav reports that he enjoyed tremendously all the Norwegian hospitality showered on him by his family and friends. Norwegian pastries, wonderful sea trout, fresh-caught crabs and many other Scandinavian delicacies made the meals at his old home a thing to be remembered. But what Olav enjoyed most was the long hours of visiting with his brother and sister and their children.

The scenery in Norway is beautiful as ever, Olav is happy to relate, but he admits he missed the glorious New Mexico sunshine. Another happy report brought back from his old homeland is that the country has made remarkable recovery from the ravages of the last war and the economy of the people is sound. Despite the fact that textiles are the only thing rationed in Norway, there is ample clothing for everyone.

### Wife Stays in America

Olav's wife, Anna, did not make the trip to Norway with him. She stayed in this country with the other Nerhus children. A daughter, Marion, is married and lives in Phoenix and another daughter, Borghild, is also married and lives in Crystal Lake, Ill.

Olav becomes enthusiastic in his tales of the journey to his old homeland. His eyes light up as he tells of his experiences, and they light up even more when he talks about his homecoming to the United States and his wife, daughters and grandchildren.

## Sandia Women Work While They Wait

The women who wait don't stay idle. Wives and Mothers and Sweethearts working for Sandia Corporation wait for the day when their soldiers, sailors or airmen come back home. Pictured here are three

"women who are waiting" and they are representative of many women who work for their country while the men fight. Their work and their sacrifices are among those things which help make America strong.



Eileen Breslin is waiting. She's working here at Sandia in 1221 and she likes her job, but she's still just waiting, marking time until February when she hopes and prays her husband will be home from the sea.

A naval reservist with four years of wartime service, Bob Breslin was recalled last September. He is an Electrician's Mate First Class aboard an LST based at Pearl Harbor. Before he was recalled Bob was studying electrical engineering at the University of New Mexico.

"When he gets out," Eileen says, "he's going back and get his degree. Then maybe he'll come to work here."

The Breslins have been married for eight years. They met and married in New York and later moved to Illinois where Bob attended the University. Eileen has been working with us for three years. She started here shortly after they moved to Albuquerque so Bob could continue his education at UNM.

Bob and Eileen write each other every day. Last June Eileen called Bob long distance from San Diego.

"It cost \$35, but it was worth every cent."

The next time she hears his voice he'll be on his way home and that, Eileen says, is all she lives for.



Ruth Lilley has three sons, three daughters, two grandsons and two granddaughters. Yet of all her offsprings the one she thinks the most about is her youngest son, Ted. Since January, 20-year-old Ted C. Lilley has been in the Navy, aboard the U.S.S. James E. Keyes, a destroyer escort, somewhere in the Pacific.

Sometime within the next six months, Ruth hopes to see her son again. But it will be for only a short time, as Ted enlisted for three years. Ruth was wise enough to let the boy make his own choice, but the worry is there. She realized, of course, he would be in danger, and knew also that the boy who went away would come back a man, no longer looking to his mother in the same way for comfort or protection.

But Ted is having the greatest experience in his life. He is on his own, a member of the greatest Navy in the world and he is doing his duty for his country. His mother may well be proud.

Ruth came to Sandia shortly after Ted went in the Navy. She works as a collator in 2462-3.

Ted writes every week and Ruth and her husband Frank, a Navy veteran of World War I, answer as fast as they get his letters and sometimes even a little faster.



Peter Cook wouldn't recognize his daughter, Patricia Ann, if he saw her today. Little Pat is a year old now, but when her father left for the Navy she was only three months old.

That was last February and since then Theresa Cook, 2334, has been living at her parents' home with Patricia Ann and waiting for Pete's return. She expects him back by February.

Pete is an ex-Sandian. From March, 1948, to January, 1951, he worked here as a photo laboratory technician. Theresa says that when Pete's Navy hitch is over he is hoping to return to his old job.

But right now the job Pete's doing is pretty important. He's a Seaman First Class on the U.S.S. Pasig, a water tanker plying between Japan and Korea.

Pete and Theresa have been married for two years. Albuquerque is Theresa's home town and Pete was brought up in El Paso, Tex. They plan to make Albuquerque their home and to prove it they're building a house in town.

During this waiting period before Pete and Theresa Cook take up life together again, they, like many another Sandia couple separated by war, make their plans, write often, and hope for a better world.

## SALTON SEA NEWS

During a recent storm in which three duck hunters lost their lives, Salton Sea personnel manned boats to assist the local sheriff in rescue operations. Despite several hours of searching in rough water, aided by flares at night, their efforts proved futile.

Duck hunting season at the Base has resulted in some keen competition. Morgan Thompson, according to latest reports, is leading with four ducks. Harry Schnarr, Bill McClish, and Arthur "Pappy" Merrill, are making it hot for him.

Milo Morrison, Richard Shelsey, Owen Schutt, Kenneth Smith, and Ralph Fisher have been welcomed as new hires in Ted Sprink's administrative group.

Frances (Doc) Voorhees spent the recent holiday week end in Los Angeles where she saw the Stanford-Southern California football game.

John and Gladys Keller recently purchased a four-wheel drive, half ton jeep truck to travel around the desert. It is not known if they are rock hounds or just go for the ride.

Ted Sprink celebrated his birthday recently with some friends at San Felipe Lodge.

# The Story of a New Sandian



**GOING TO WORK** was a future Betty planned when she studied typing in high school. One day she read an advertisement in an Albuquerque paper offering positions to competent typists. She showed the "ad" to her Mother and they talked it over. As a result Betty decided to place her application with Sandia Corporation.

Sandia Corporation is New Mexico's largest employer and also New Mexico's fastest growing industrial plant. That all adds up to the fact that there are many newcomers among us all the time.

We have scientists, engineers, skilled technicians and the many other professions which make up the group of competent workers necessary to make a big business tick along efficiently. How do they get here? Where do they come from?

How do they get their jobs? What steps do they take to be hired? All these questions, and others, too, are interesting so here we have undertaken to tell you the story of a typical new employee.

This newcomer could have been a scientist, an engineer or one of the skilled technicians. We will tell you the story of Betty Cooke who is now a Corporation typist.

Before moving to Albuquerque recently Betty's father worked for a lumber company in the Jemez

Mountain area of northern New Mexico. The family originally came to this state from Texas. Betty studied secretarial science in a Houston high school and graduated this year.

After graduation Betty joined her family who had moved to this state. While living with them she started thinking of a job.

Now let's have the pictures tell the story which is so typical of hundreds of our co-workers.



**THE FIRST STEP** was taken when she visited Sandia Corporation branch employment office in Albuquerque and learned about the possibilities for the job. A paid vacation, sick leave, free insurance, a chance to participate in a retirement plan and the chance to work in a vital defense plant looked good to Betty so Homer Baldwin showed her how to fill out an application blank.



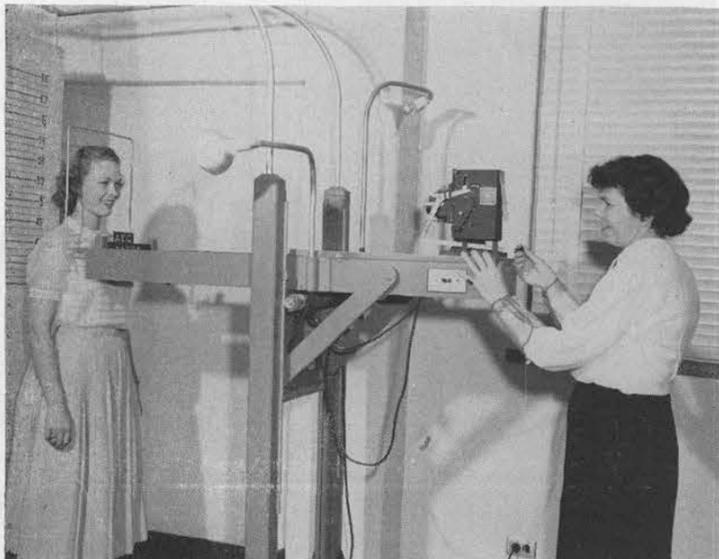
**BETTY HAD THE REQUIREMENTS** the company asked for in a good typist. She was alert, bright-eyed, anxious to apply herself as a willing worker. Next she was asked to go to the personnel office on Sandia Base where Mrs. Winifred Fellows interviewed her. Betty was offered a job and her clearance started—this meant that she was to be the subject of a careful investigation by the Federal Bureau of Investigation. She was told this was necessary for Sandia Corporation is involved in important defense work.



**BETTY'S HEALTH WAS IMPORTANT** to her new employer. She passed a thorough medical examination before coming to work. Nurse Marguerite Barncord is shown here taking a blood sample. The nurses later informed Betty she was in good health and to keep her that way they reminded her that the medical department facilities of the company are at her disposal.



**BETTY TOOK A TEST** to measure her typing ability. The careful study and hard work of her high school training paid off and she passed with flying colors. She was assigned to the typing and secretarial pool where her ability could be utilized by many different offices. Joan Longhurst is pictured here supervising the test for Betty.



**BETTY'S CLEARANCE ARRIVED** which meant that the FBI reported she is a loyal, dependable, honest American citizen. She was then ready to get her pass. She went to the Atomic Energy Commission pass office and had her badge picture taken. Peggy Henrie presided at the operating end of the camera and Betty posed for her picture which now accompanies her every time she goes into the Tech area.

**AND SO TO WORK.** C. W. Dickinson, department manager of 4220, greets Betty to her new job. Betty works in Mr. Dickinson's department in 4222-3. It took time before Betty could go to work after she and her mother had the discussion over the newspaper advertisement. But now she reports that the "wait for clearance" was worth while. She has a good job, she likes her work and she's happy. Her section supervisor is Margaret Sylvanus and division supervisor is Hal Gunn.





Hey, Dad, do the book racks have any information on fixing TV sets?

### Magicians Award Cup to Member Who Stumped Them

Magician Bill Jenkins, 2244, won first prize, a loving cup, from that toughest of all audiences, the Magician's Club, at their last meeting at the Franciscan Hotel. The second prize for the evening's prestidigitation competition went to C. N. (Doc) Hickman, 1400.

### Classified

Classified advertising is printed in the Sandia Bulletin as a service to Sandia Corporation employees and employees of the AEC on Sandia Base. There is no charge for publishing the advertisements. They must be submitted in writing and contain the name and base telephone extension of the advertiser. Each advertisement will be run one issue.

#### FOR SALE—

**Chevrolet**, 1950, two-door, radio and heater, approximately 8,000 miles, best offer. Mary Helen Sharkey, ext. 28135, evenings 27831 ext. 252.

**Colliers Encyclopedia**, complete set, \$50, E. W. Starr, ext. 33236.

**Chevrolet**, 1940, radio and heater, good tires, original owner, excellent condition, \$380. S. L. Johnson, ext. 33236.

**Car heater** \$10; car chains for 6:50 x 16 tires \$3; dining table fire resistant square top \$8; collapsible TV antenna \$5; Magic Chef stove, restaurant type, 6-burner, 2-oven, grill and broiler, good shape \$75. Greg Abeyta, ext. 27258 or Alb. 5-2938. See at 400 N. Pearce.

**Valley lot**, three acres, north, in excellent sub-division, beautiful view, perfect for ranch style home, \$4250, one-half down. S. L. Johnson, ext. 33236.

**Washing machine**, electric, portable, wringer attachment, \$14. Garratt, ext. 26142.

**Fur coat**, lady's, Persian Lamb \$25; Oriental rug, 4x7, \$35. New K-38 Smith & Wesson revolver, make an offer. W. O. Smitha, ext. 21186.

**1949 Ford Fordor**, 8 cylinder, radio and heater, perfect condition, \$1,175. Can be seen in parking lot at Women's Dormitory. Goldie Tibbs, ext. 21143 or 24245.

**J. C. Higgins Lady's Bicycle**, excellent condition. Cost \$36 new, will sell for \$35. Make a good Christmas present for your wife or daughter. Dick Scholtes, ext. 26140.

**Baby carriage**, folding type, with mattress, collapsible hood, sturdy, excellent condition, blue, \$15. Jean Jenkins, ext. 28180.

**Rug**, tan, 9'x12', good condition, clean, \$20; child's pedal operated car \$10. Sherwin, ext. 26150 or Alb. 5-8866.

#### FOR RENT—

**Three bedroom home**, stove and refrigerator furnished, \$100 per month. Doc Pasko, ext. 22131. Inquire at 809 S. San Pedro Drive.

**New home**, three room, one bedroom, garage, near Base, partly furnished, \$65. Don DeHerder, ext. 31235.

#### RIDES WANTED—

**Vicinity Seventh and Coal** to Tech area. Jean Potts, ext. 24235 or Alb. 32496.

**1107 La Poblana Drive** (vicinity N. 12th and Foraker Road). Miss Hall, ext. 29250.

**3911 E. Smith Ave.** to Tech area, Adrienne Goff, ext. 4259 or Alb. 5-6376.

**706 Del Mar Drive** (2 blocks west on 5100 block of N. Fourth). C. M. Valdez, ext. 5136.

**Yale and Garfield** to Tech area. Lucille O. Rhoad, ext. 21245 or Alb. 2-1241.

**700 block S. Yale**. Dorothy Trigg, 2101 Eaton Ave., ext. 33159.

**Walter and Central** or Walter and Coal, to S. Tech area gate. Kay Wilson, ext. 23255.

**Ride to Salida, Colo.**, or vicinity wanted for on or about Dec. 22 to return Dec. 29. Will share expenses or help drive. Jim Mansheim, ext. 4241 or Alb. 5-3751.

**6600 No. Fourth**. Wanda Loveless, ext. 25152.

**1800 Ridgecrest Drive**. Vernon E. Arnold, ext. 24258 or Alb. 5-5869.

#### WANTED—

**Bunk beds**, with or without mattress. O. B. Hart, ext. 28171.

#### LOST—

**Topcoat**, tan gabardine. Weber & Heilbroner label, New York. F. L. Dewey, ext. 33184 or 33154.

### Toastmasters Deep In Speech Contest

With the annual speech contest into its fourth week, members of the Sandia Toastmasters Club, 765, are taking extra care in the preparation of their talks.

The winner of the contest, which is being conducted in Toastmasters Clubs internationally, will be sent to an area competition. From there the steps lead to district, zone and finally the international speech contest.

On Thursday, Nov. 29, the club will have as guests the Coronado Toastmasters Club, an Albuquerque chapter. The visitors will furnish the entire program.

Then on December 6 the Sandians will meet again to hear speeches by Robert T. Ruffin, 1511; Lee Deeter, 1282; Virgil Harris, 1622; and Harlan Kelsey, 1511.

### Farewell Party for H. W. Pagenkopf At Officers Club

Plant engineering department honored W. H. Pagenkopf, 2100, and L. J. Heilman, 2400, at a dinner dance Friday, Nov. 9, at the Officers Club.

Mr. Pagenkopf is leaving the Corporation to return to Western Electric's Hawthorne Plant in Chicago. Mr. Heilman is superintendent of 2400, the organization to which Plant Engineering has been transferred.

Earl Craven was master of ceremonies. Bob Ware, celebrating his birthday, and Adam Deacon, celebrating his wedding anniversary, were introduced. Following dinner Mr. Pagenkopf played organ music.

### Bowling Leagues

INDIAN LEAGUE		
Team	Team Standing	Won Lost
1. Mohawks	18	10
2. Hopi	15	13
3. Apaches	15	13
4. Zuni	15	13
5. Blackfeet	13	15
6. Arapahoe	13	15
7. Navajo	13	15
8. Pottawattamie	10	18

Team and Individual		
High team, total pins, Mohawk, 2565.		
Second high team, total pins, Apache, 2557.		
High team, one game, Apache, 928.		
Second high team, one game, Mohawk, 911.		
Individual high series, Nendell, 623.		
Second high individual series, Lew, 611.		
High individual, one game, V. Brewster, 247.		
Second high individual, one game, Lew, 236.		

Top 10 Averages		
Nendell, 184; Whitney, 177; Baumgartner, 174; V. Brewster, 171; Northrup, 169; Eichart, Palmer, Horne, 168; Lew, 165; Cully, 164.		

JUNGLE LEAGUE		
Team	Team Standing	Won Lost
1. Lions	18	10
2. Panthers	18	10
3. Rabbits	17	11
4. Gophers	15	13
5. Lobos	14	14
6. Wildcats	13	15
7. Bears	10	18
8. Mustangs	9	19

Team and Individual		
High team, total pins, Lions, 2618.		
Second high team, total pins, Lions, 2557.		
High team, one game, Lions, 920.		
Second high team, one game, Bears, 897.		
Individual high series, Anderson, 638.		
Second high individual series, Dietrich, 625.		
High individual, one game, Dietrich, 265.		
Second high individual, one game, Jorgensen, 247.		

Top 10 Averages		
Anderson, Dietrich, 180; Duffield, 178; Dierks, 175; Kubiak, 173; Campbell, 170; Stradford, 169; Mills, 168; Hickey, Weber, 167.		



OFFICIAL VISITORS at Sandia Corporation recently were photographed after a meeting. Left to right they are Donald A. Quarles, vice president of Bell Telephone Laboratories; M. W. Boyer, manager of Atomic Energy Commission; H. C. Beal, vice president of manufacturing, Western Electric Com-

pany; Capt. J. T. Hayward, deputy director, Division of Military Applications; and Col. K. E. Fields, director, Division of Military Applications. Attending the meeting but not in the picture was M. J. Kelly, president of Bell Telephone Laboratories.

### New Employees

A welcome is extended to the following employees who joined the Corporation between Nov. 3 and Nov. 16:

James D. Shreve	1112-3
Robert J. Buehler	1123
Bertram J. Chaffee	1131
Sheldon H. Dike	1131
Horace M. Poteat	1135
Gerald H. Piele	1212
Charles H. Hutchinson	1222
Jerome F. Jones	1231
Paul B. Messenger	1243
Wm. Lyon Wood	1281
Frances T. Steckel	1511
Carl F. Zickert	1522
Gerald Ward Hinman	1913
Terrance I. McGovern	1915
Evelyn Vinson	2122
Thaddeus N. King	2122-2
Cecil C. Tolbert	2123
Charles O. Duncan	2123
Donald W. McIntire	2123
Helen M. Schweizer	2222
Frank L. Leyba	2223
Everett O. Smith	2232
Richard W. Dyer	2232
James A. Slusser	2232
Jeanne A. Hayes	2241-1
Henry Lee Cote	2242
Johnny M. Stuckey	2242
Jay W. Hughes	2331
Philip S. Mentz	2333
Jean Lois McGinn	2333-3
Benjamin R. Armijo	2351
Tircio Ortega	2411
Lawrence W. Griswold	2423
Daniel Vallejos	2423
Naomi L. Tackett	2423
Huel B. Brashears	2423
Eugene C. Moser	2452
Lillian C. Kraus	2451-2
Ralph T. Fisher	2482-2
Frank G. Vitiello	2531-1
Sosie T. Castillo	3125
Joyce A. Lethbridge	3152
Betty M. Bodley	4222-1
Joan M. Burton	4222-3
Mary M. Pasko	4222
Mary H. Davis	4222
Thomas P. Halloran	4232
Oscar J. Lewis	4310

### Christmas Party For 2200 Dec. 6

The Coronado Club will be the scene of a Christmas Party for members of 2200, Thursday, Dec. 6, from 7 p. m. until midnight.

The affair will feature a barbecue supper and dancing to the music of Max Apodaca and his orchestra. Membership in the Club is not required in order to attend. Tickets will be \$2 per person and reservations should be made before next Thursday, Nov. 29.

Tickets may be obtained from any of the following persons:

H. L. Calvary, 2231-3; Norma Dunning, 2222-2; Phyllis Harris, 2223; Mary Helen Sharkey, 2230; James Gravlin, 2225; Bert Solks, Area II; George Goldworthy, 2242; Mary LaFrenz, 2243; Joy Hunt, 2235; T. J. Meloche, 2232; Ann Padilla, 2242; Texas Maupin, 2244; Alberta Compton, 2241; or Melba Kennedy, 2221.

### Instrument Society Members Will Hear Series of Speakers

A talk on "Chlorination" will be presented by Samuel Breedlove, representative of the Wallace and Tierman chemical firm, Lubbock, Tex., at a meeting of the Instrument Society of America Monday, Dec. 3, at the University of New Mexico.

Other lectures scheduled by the group include a talk by a representative of the Beckman Instrument Co., Calif., concerning "Radioactivity Meters and Counters," to be given Jan. 7.

On Feb. 4 a local member of the Society, Al Gruer, 1624, will be the speaker of the evening and on March 4 a representative of the Manning, Maxwell and Moore instrument company is slated to speak.

### Ernie Fields to Deliver Swing for Coronado Dancers

It's Name Band time again at the Coronado Club. Tomorrow night the "Crown Prince of Swing," Ernie Fields, and his orchestra will perform from 9 p. m. until 1 a. m. for members and their guests.

The Fields orchestra, which has been classed with Duke Ellington and Stan Kenton, features a variety of



"The Crown Prince"

types of music—symphonic, swing, blues, boogie, and be bop. Fields carries four arrangers on his staff to keep each type of music individual.

The high spot of the show tomorrow night will be the Fields presentation of numbers featuring Dixieland that began in the early 20's, showing year by year how music has changed or progressed through Dixieland, swing, blues, and be-bop.

Jo Jo Evans, husky voiced singer, will take the vocalist spot and Frank James, one-legged dancer, will perform intricate dance steps without the aid of crutch or cane.

Cost of the evening's entertainment will be—members, \$1.50 per person, and guests, \$2 per person.



ENJOYING a departmental dinner party are these Sandians who were among those present when 1710 and wives and friends gathered at the Coronado Club.

From left to right they are: G. C. Hollowa, Mrs. Hollowa, Mrs. Harry K. Daniel, Richard Bice, Harry Daniel, Jean Gillette, Mrs. Bice, and Herbert Gillette.