

# SANDIA LAB NEWS

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ALBUQUERQUE, NEW MEXICO

August 24, 1956

## Erickson Names Staff to Handle United Fund Drive

Committee members for the forthcoming Sandia Corporation United Fund Drive have been announced by Chairman Ken W. Erickson, 5130.

Deputy chairman for the fall campaign will be William C. Kraft, 2530. Last year's chairman, Luther J. Heilman, 3200, will serve as a special advisor.

Other committee members are: Haddon C. Redding 7213, coordinator; Joseph I. Hegge 1470, publicity; Harold F. Gunn 3150, program; Robert L. Lynes 4123, treasurer; Richard M. Allan 4113, statistician; Mrs. Winifred M. Fellows 7225, special projects; Peter J. Cook 5532, Office Employees International Union; William F. Leverenz 2152, Atomic Projects and Production Workers Metal Trades Council; and Robert L. Byrd, International Guard Union of America.

## E. L. Amonette Awarded Certificate to Practice Before U.S. Patent Office

Edward L. Amonette, Patent Department, 6010, recently was awarded a certificate of registration as a patent agent. He passed an examination covering patent law and patent office procedures which entitled him to practice before the U. S. Patent Office.

He has been employed at Sandia for five years, first as a design and development engineer with the Field Test Organization and then for the past three years with Sandia's Patent Department.

## Mr. McRae Speaks to AOA Members on 'Common Defense'

J. W. McRae, president of Sandia Corporation, will address a dinner meeting of the Albuquerque Post of the American Ordnance Association Thursday, Sept. 6, at 6:30 p.m. in the Kirtland Air Force Base Officers Club.

The title of Mr. McRae's talk will be "The Common Defense."



WORM'S EYE VIEW of recent experiments with fast rising balloons by the Meteorology Section, 5243-2, sees Elmo Hirni, (left) Salton Sea Field Operations Division, 5214, and Herb Plagge, 5243-2 holding the mooring line of a new type balloon which helps speed up the many experiments.

## New Type Balloon Helps Speed Upper Atmosphere Research

Sandia Corporation's Meteorological section has been releasing a new type of helium-filled neoprene balloon recently in its continuing study of the upper atmosphere.

From helium bottles on the north side of Bldg. 880, T. J. "Tim" Raftery and Herb Plagge, both of 5243-2, fill the 10-foot in diameter balloons and send them into the air.

"This new type of balloon," says Herb Plagge, "is supposed to rise 1800 feet per minute. We are conducting these tests to determine the feasibility of using them for upper air measurements before tests at the ballistic range at Salton Sea, Tonopah and Yucca Flat."

### Not Flying Saucers

In releasing the balloons they may be giving rise to new reports of "flying saucers" in the Albuquerque area. The balloons are similar in appearance to the weather balloons released daily at the municipal airport, however.

Launching of the balloons is a simple yet most interesting procedure.

Herb and Tim tie a series of nylon string loops to the underside of the balloon while W. S. Denham and T. Y. Palmer hold the balloon in position. To these loops is tied a wood and metalized paper "kite" to reflect the tracking radar signal.

A mooring line is attached to the balloon and it is allowed to rise about 100 feet. Palmer and Denham contact a radar unit stationed south of Bldg. 838 by telephone. Radar contact is verified and the balloon is cut free.

### Rises Rapidly

It rises rapidly and within minutes it is a mere speck in the sky. Sun rays glinting off the metal kite are barely visible. But the

electronic eye of radar continues to follow the kite.

Using the old type balloon it would take the meteorologists an hour to run an upper-air reading, due to the slow rate of ascension.

"It is important," Plagge points out, "that the information be available as near to the time of the test drop as possible, hence the new balloons."

At the radar trailer, Bob Peterson, Harold Pike and Addison Cockrill, all of the Tracking Systems Division, 5221, compile results of the test.

In this particular experiment it was learned that the balloon rose 1750 feet per minute shortly after release, but increased to 2700 feet per minute when it reached about 60,000 feet altitude. At this point the dangling kite began to break up and radar contact was lost. Burst height of the balloon was 64,000 feet.

It was a quick test, not spectacular, and one of many.

"But with each ascension," Plagge says, "we learn a little more about what goes on 10 or 11 miles up in the air."



Dr. Sheldon P. Bliss  
—new Medical Director—



Dr. Frederic G. Hirsch  
—resigns September 1—

## Dr. Bliss New Medical Head As Dr. Hirsch Resigns Post

Appointment of Dr. Sheldon P. Bliss as Medical Director to succeed Dr. Frederic G. Hirsch, who is resigning, was announced this week.

Dr. Bliss joined Sandia Corporation as Supervisor of Clinical Division 3162 in February of this year.

For two years previously he was medical director for the M. W. Kellogg Co. of New York City. Dr. Bliss was medical director for Blue Cross in Texas for six years and was with United Aircraft Co. and Chance-Vought Aircraft Co. in Stratford, Conn., and Dallas, Tex. for seven years. He has also worked in industrial medicine for Bethlehem Steel in Quincy, Mass.

Dr. Bliss is a graduate of Tufts Medical School, Boston, and has done graduate work in occupational medicine at Yale University. His internship was at Burbank Hospital in Fitchburg, Mass.

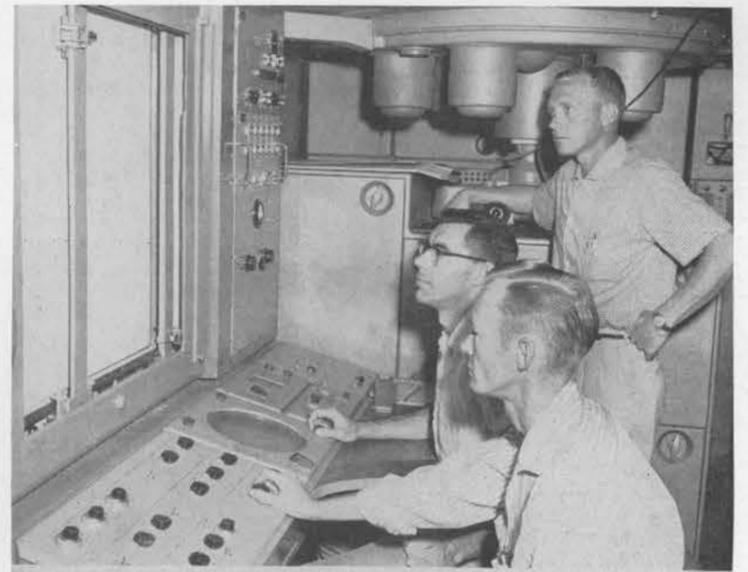
He is a Fellow in the Industrial Medical Association and a member of the American Academy of Occupational Medicine.

Dr. Frederic G. Hirsch, who has headed the Medical Department at Sandia Corporation since July, 1950, is leaving the Corporation Sept. 1 to take up private practice in Albuquerque.

In 1950 he became Medical Director of Sandia Corporation and manager of the Medical Department, 3160. He will continue to serve Sandia Corporation as consultant in occupational medicine and industrial hygiene. Dr. S. A. Bliss, head of the Clinical Division, 3161, is replacing him.

A Flight Surgeon in the U. S. Navy from 1938 to 1950, Dr. Hirsch left the service as a commander; he is now a Medical Director in the U. S. Public Health Service Commissioned Reserve.

He is a graduate of Cornell University Medical College. He interned at Lucas County Hospital in Toledo, Ohio, and was interne and assistant resident at New York Hospital in New York City. He has done further graduate work at Cornell University and the University of New Mexico in physiology and biophysics.



RADAR READINGS during the rise of a new type balloon under experimentation by Sandia Corp., were taken in a radar trailer of the Tracking Systems Division, 5221. Watching the ascent on the radar screen are (closest to camera) Addison Cockrill, Harold Pike and Bob Peterson, standing, all of Tracking Systems Div.



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Robert S. Gillespie, Editor



## Science's Selling Job

Recently some research experts asked a group of teenagers and adults which they considered the more desirable careers. The two groups gave these as their 10 first preferences — in this order:

### Adults

1. Physician
2. Scientist
3. College professor
4. Minister or priest
5. Lawyer
6. Public school teacher
7. Officer in armed forces
8. Farm owner or operator
9. Carpenter
10. Radio or television announcer

### Teen-Agers

1. Physician
2. Scientist
3. Lawyer
4. College professor
5. Officer in armed forces
6. Minister or priest
7. Radio or television announcer
8. Public school teacher
9. Farm owner or operator
10. Owner of a small store in a city

Both groups rated a scientific career as their second choice. This would indicate that parents are encouraging their children to embark on scientific careers and that their words are being heeded.

This is not the case. Only half of the top third of our high school graduates go on to college. The reluctance of these students to study engineering, chemistry, physics and mathematics has resulted in the forecast that four years from now this country will be short 100,000 scientists.

The easy out would be to throw up our hands and say the "younger generation" is to blame. Or we might point the finger of guilt at the parents.

But placing the blame will do little to help solve the problem. The responsibility probably rests with those who are today pursuing scientific careers. Many of them are already assuming the burden of "selling" science to high school students. This work will bear good results.

However, the efforts of these few must be bolstered by the combined cooperation of all men and women of science.

It's a big job. Failure to accomplish it could result in disaster. We must maintain our world leadership in science and humanity.

## Wedding



A newcomer to Sandia Corporation, Wendy Woods 2221, will be married Saturday, Sept. 1, at 7:30 p.m. to Bill Sandlin of Albuquerque.

The ceremony will be at the Immanuel Presbyterian Church followed by a wedding reception at the Hilton Hotel.

The couple will honeymoon in Colorado for a week then be at home in Albuquerque.

### Teach Quality Control

Two Sandians will teach a course in "Statistical Quality Control" during fall and spring semesters at the University of New Mexico. They are Lloyd Williams, 5511, and Al Hayes, 2712.

The course is sponsored by the Albuquerque section of the American Society for Quality Control in cooperation with the University as part of its evening adult education program.

Starting Sept. 19 the class will be held each Wednesday from 7 to 9 p.m. in room 120, Mitchell Hall.

### Flood Water Adventure

It's a long way from Harrisburg, Pa., to Albuquerque, but the trip from home to his new job at Sandia Corporation seemed like almost a lifetime to Richard J. Mickey, staff assistant in 2463.

When Dick and his family stopped at a motel in Sunset, Pa., near the West Virginia border, nothing seemed amiss. However, during the night a flash flood came roaring down through the lowlands.

As the waters started to rush into their cabin Dick helped his mother and 17-month-old baby to a nearby hill, but when he was assisting his wife, Mary, the current was so strong they were knocked over. Several men helping with the rescue work grabbed them as they went down and fortunately, too, as Mary can't swim.

The Miceys were marooned for three hours until the flood waters receded.

### Air Force Promotion

A promotion to lieutenant colonel in the Air Force Reserve has been recently received by Leslie H. Minnear, 5222.

Les is a member of Research and Development, Flight D of the 985th Air Reserve Squadron.

He was originally commissioned an officer in March, 1942, and served with the Air Corps in New Guinea and Iceland during World War II.

### T. A. Sprink III

Ted Sprink, manager of Salton Sea Department, 2480, is in a Brawley, Calif., hospital after being taken sick while working in the yard of his home at Salton Sea Test Base. Mr. Sprink will be in the hospital for several weeks and will rest at his home for several more weeks before returning to work.

During his absence Sylvan S. Harris, manager of Document Department, 2460, is acting Salton Sea Department Manager.

### Hospital Report

Co-workers in 2721 are glad to see Joe Ozmina back on the job after a recent operation.

Also recovering is "Red" Hanen, 2553-1 who recently underwent eye surgery.



### Fish 'n Frog News

I. D. "Tiny" Hamilton, 5212, is the envy of about 10 men in 5200 who have been trying their fishing luck in Colorado, New Mexico, Nebraska and Idaho. Tiny landed the five and one-half pound German Brown trout pictured here on the Red River recently. The fish measured 25 and one-half inches.

Less successful anglers include Henry G. Sweeney 5216, Robert L. Hostetler 5215, Loyt L. Lathrop, Armand F. Fink, Robert L. Culley, Clyde J. Northrup, Ivan W. Marshall, Melvin D. Peterson, O. A. Phelps and Ivan H. LeValley, all of 5213.

Fish stories don't much interest Wilbur B. Schaeffer, 5215, Clyde Leyba, 5215, and Jasper Mason, 5212. They prefer comparing the number of frogs each caught on the Alameda drainage ditch or perhaps exaggerating distance covered in frog jumps.

### Visits Venezuela

Frank Bachicha, 2472, recently returned from a month's visit with his son, Frank, Jr., in Caracas, Venezuela. Frank flew from Albuquerque to New Orleans, to Havana and Caracas. His journey included a 600 mile motor trip through the interior of Venezuela.

### On City Board

Ray B. Powell, Superintendent of Personnel and Public Relations, has been appointed to the Personnel Board of the City of Albuquerque. The Board advises the City Commission and City Manager in personnel matters effecting the several hundred city employees.

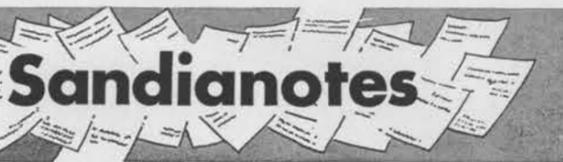
### Earns Master's Degree

Vern E. Blake, supervisor of 1245-1, received his master's degree in mechanical engineering from the University of New Mexico recently. It marked the end of seven years of study during night classes.

Vern also received his BS from UNM. He has been at Sandia since 1947.

### Wedding Anniversary

Mr. and Mrs. Allan Beck, 5132, observed their 13th wedding anniversary on Aug. 14.



### Country Enterprise

Country living is great, according to Gordon P. Barnett, Supervisor of Environment Test Section of the Test Laboratory Department, 1610.

He and his wife, 10-year-old son and mother-in-law are currently living in the middle of an alfalfa patch about 15 miles south of the city limits on Highway 47.

In three weeks the Barnetts constructed a cinder block barn with a tin roof, which will be "home" until they build a house. The present two-story structure has sleeping facilities upstairs and living quarters downstairs as well as a utility room. A special feature is a disappearing stairway which operates on hinges through a counterweight and pulley system. Mornings they literally float down to the kitchen on the stairway.

Gordon has already drawn up plans for their future home and the family also intends to lend a hand in its construction.

### Soap Box Racer Smash

Young Douglas McDonald, the 10-year-old son of Mr. and Mrs. Corry McDonald, 2580, will be spending the next three months in a hip cast as the result of an accident.

Douglas and Billy Henderson, also 10, son of Mr. and Mrs. R. W. Henderson, 1200, decided to take a ride in Billy's soap box racer. As the homemade vehicle slid out of the driveway into the street it was struck from the rear by an automobile.

Billy was only shaken up but Douglas suffered a fractured leg and numerous bruises and abrasions.



BACK in Albuquerque is Nora-Belle Byrd, 5142, who for six months was a secretary at the Livermore Branch. On her departure from the California installation she was surprised with a "cake and coffee" farewell.

### Anniversaries Celebrated

An 18th wedding anniversary was observed last Wednesday by Ruth Romero, 2711, and her husband, Pat. The couple was married in Albuquerque and have a 16-year-old daughter. They celebrated with members of their families.

Also in 2711, Mr. and Mrs. Willard Flowers observed their fifth wedding anniversary Aug. 11.

## Speaking of Reporters



Georgia M. meets Georgia F.

This is another in a series of articles telling about the volunteer reporters of the Sandia Lab News.

Any confusion arising from stories submitted by Reporter Georgia Howard is purely understandable.

That's because there is Georgia M. Howard, 2471, and Georgia F. Howard, 5213, and during the past two years they have become well accustomed to receiving each other's mail and telephone calls. Last week, however, was the first time they were introduced.

One of the Georgias has an extensive background in reporting—for the daily Manhattan, Kans., Mercury, as past president and magazine editor for the Kansas Federation of Business and Professional Women's Club, and as publicity chairman for the auxiliary to the New Mexico Association of Osteopathic Physicians and Surgeons Club. That must be Georgia F. Nope, we're confused already, it's Georgia M.

Georgia F. is the Howard inter-

ested in oriental furniture, "objects d'art" and oriental water color painting, her current leisure activity. She also designs and sews most of her own clothes.

Georgia M. and her husband, a physician, are already looking forward to Christmas. Their two children will be away at school this fall for the first time and the Howard home will seem quiet without them.

Visitors to the home of Georgia F. and her husband, Orville L. Howard, 5254, often are alarmed by the appearance of "Chang," their Chow dog. Georgia says, "Chang isn't vicious, but then we haven't told him that he is a Chow."

Editor's Note: Another Georgia Howard, wife of W. J. Howard, 1250, has done her bit to untangle the confused situation by moving to Livermore recently, where her husband is assigned.



## New Sign-Up Period Opens For Hospital Insurance

Persons not already covered by Group Hospitalization and Surgical Benefits will be given an opportunity during the month of September to enroll in the plan.

The insurance committee, headed by R. B. Powell, 3100, is sending out letters, sign-up cards and information booklets this month to each employee not already covered. In addition, employees already subscribing to the plan who now wish to include their dependents under the benefits may do so during September.

### 31-Day Period

New employees are given 31 days to sign up for the plan with its automatic payroll deduction feature, but after that time enrollment can only be made during scheduled periods.

October 1 is the current enrollment deadline date. The first month's payroll deduction will be made in October with the actual insurance coverage effective Nov. 1, 1956.

Cost of the plan is \$2.16 a month for single coverage and \$7.77 per month for family coverage, regardless of size of the family. "Family" is considered to be husband or wife and any children, including those legally adopted, from birth to 19 years of age. Students, if unmarried, dependent and attending school full-time, are covered up to age 23.

### 6000 Claims Paid

During the first 21 months the plan was in operation over 6,000 claims totaling more than \$525,000 were paid for hospital, surgical and medical care of members and their families. At the present time 85 per cent of eligible employees are participating in the plan.

For further information contact Employee Services and Benefits Section 3122-1 in Bldg. 829 or members of the insurance committee, who are: R. B. Powell 3100, James W. Jones 1214, Charles W. Campbell 7200, Robert Findlay 2230, David S. Tarbox 2440, C. W. Dickinson, Jr. 4110, Robert D. Statler 5254, Arthur J. Roth 1422, E. W. Baldwin 4130, and E. W. Pearce 3120.

## Labor Day Features Big Santa Fe Fiesta

The calendar of Indian celebrations finds several fiestas and dances scheduled in the next two weeks. Next Tuesday, Aug. 28, the Isleta Pueblo, 17 miles south of Albuquerque, has a fiesta and dance planned.

Sunday, Sept. 2, the Acoma Pueblo, 60 miles west of Albuquerque, will celebrate St. Stephen's Fiesta with ceremonial dances.

Labor Day weekend the lid will blow off the annual Santa Fe Fiesta with the burning of Zozobra, or "Old Man Gloom." Indian dances, Spanish dances and music, parades, artist's exhibits, and religious pageants will be held during the three-day celebration.

Sept. 6-7, the San Ildefonso Pueblo, between Santa Fe and Los Alamos, will hold their annual Harvest Dance.

## Service Awards

### FIVE-YEAR AWARDS Aug. 24-30

Clara E. Taylor 7225, Celeste M. Meilner 7225, William M. Simpson 7329, Leonard J. Nelson 2711, Winston W. French 2151, Oscar I. Thompson 2452, Donald A. McFadden 1451, Harley D. Moody 5214.

Charles E. Horner 2111, John H. Samuelson 2351, Robert P. Kelly 7213, Ralph T. Miller 2417, Thomas B. Cook, Jr. 5111, Clayton A. Loftin 1442, Kay Marie Graff 4133, Herman Romero 1621, K. R. Dickerson 1651, B. J. Coveney 2481 and L. C. Hillebrand.

### Aug. 31-Sept. 6

V. A. Southerland 7225, Don Van Couden 1423, Ross L. Birdsall 7315, Harley E. Walker 5313, Seth O. Lewis 5521, G. W. Browning, Jr. 2353, Marion L. Drago 1215, Bertha A. Vencill 5512.

Charles H. Christie 7411, Ernest C. Cordova 2151, Delia C. Jaramillo 7225, James T. Grier, Jr. 2221, Frances J. Rinn 2335, Delmar W. Duffy 2151, Charles A. Tucker 7411, Louis J. Price 2414, Eloy V. Sedillo 2351, David A. Mayhew 1421 and R. J. Kronberger 2352.

### TWO-YEAR CERTIFICATES Aug. 24-30

A. J. DiBenedetto 7411, Mary E. Coleman 2333, Everett V. Bredens 2464, Freddie L. Leslie 2122, Joe D. Hankins 5124, Merlin A. Manteufel 5215 and Robert L. Corey 2461.

### Aug. 31-Sept. 6

David L. Schaefer, Jr. 2482, John M. Stott 7411, Dale E. Haskins 1242, Frank W. Neilson 5133, Seth O. Lewis 5521, B. J. Lawrence 1421, Irving M. Kodel 2552, M. J. Madlener, Jr. 1471, Manuel J. Apodaca 2462, M. Muriel Denison 7225 and C. F. Trimble 2353.

## Sandia Flower Show Entrants Earn Awards

The second annual midsummer flower show sponsored by the Uptown Garden Club this month had a goodly number of Sandia men and women participating and walking off with top honors.

G. C. Holloway, manager of department 7120, was runner-up for the horticulture sweepstakes.

Mrs. Edward L. Johnson, whose husband is administrative assistant to 5210, was the grand sweepstakes winner. She also placed first in the arrangement competition and second in the special challenge class of horticulture.

The special challenge class, horticulture, trophy winner was Mrs. A. Richard Charlton, whose husband is in 7111. She, too, took first in the tri-color arrangement category for her vertical floral display depicting "New York or the Skyscrapers."

First in the special challenge class, arrangements, was Mrs. John M. Lohse. Her husband's organization is 5133.

Other Sandia wives participating on committees included Mrs. John D. Greco, Mrs. Ellis T. Turner, Jr., Mrs. William O'Neill, and Mrs. William H. Chown, Jr.

## LASL Scientist Speaks To Research Colloquium

The Sandia Research Colloquium will meet Wednesday, Aug. 29, at 9:30 a.m. in the Basement Conference Room of Bldg. 802. Dr. Kenneth Watson, Los Alamos Scientific Laboratory, will discuss "Problems in Hydromagnetic Stability."

## Congratulations

Born to:

Mr. and Mrs. Nick Pavletich, 2711, a daughter, Koral Ann, Aug. 7.

Mr. and Mrs. Pablo Maes, 2711, a daughter, Deborah, July 31.

Mr. and Mrs. Joseph Valdez, 2711, a son, Joseph, Jr., Aug. 9.

Mr. and Mrs. Josue L. Martinez, 5241, a son, Albert Lee, Aug. 6.

Mr. and Mrs. James Slusser, 2232, a daughter, Sharon Lynn, Aug. 12.

Mr. and Mrs. Francis L. Shea, 2151-2, a daughter, Judith Ann, Aug. 8.

Mr. and Mrs. Mark Sloan, a son, Aug. 16. Betty is on leave from 7225-5.

Mr. and Mrs. T. H. Takahashi, 5232, a son, Thane H., Aug. 19.

Mr. and Mrs. Joseph Lobato, 7231, a daughter, Betty Jean, July 20.

Mr. and Mrs. Robert Corey, 7231, a son, Kip Lawrence, Aug. 2.

Mr. and Mrs. Candelario Trujillo, 7231, a daughter, July 31.

Mr. and Mrs. E. H. Copeland, 1471, a son, Robert Eugene, on Aug. 15.

Mr. and Mrs. Don R. Cotter, 1261, a daughter, Elaine Palmer, Aug. 17.

Mr. and Mrs. John V. Willems, 1261-1, a son, Steven Lee, Aug. 4.

Mr. and Mrs. Mearle G. Hicks, 1262-2, a son, Jeffery Alan, Aug. 17.

ARTHUR M. HILL to supervisor of Design and Application Section 1464-1, Component Development I.



He began full-time at Sandia in May, 1955, after working here during the summers of 1953 and 1954.

He has been in development and application work since then.

For 27 years he was on the teaching staff at Tulane University, New Orleans, and the last few years was head of the mechanical engineering department there.

Art was employed five years by General Electric in the Lynn, Mass., plant where he worked on construction of steam turbines.

He received his BS in Mechanical Engineering from Tulane and his Master's from MIT.

He is a member of Tau Beta Pi, engineering honorary, the American Society of Mechanical Engineers, and is former editor of the official publication of the Louisiana Engineering Society.

He is also a registered professional engineer in the state of New Mexico and a member of the American Society of Safety Engineers.

ROBERT P. STROMBERG to supervisor of Advanced Component Division 1473, Component Development Department II.



Bob came to Sandia Corporation in Sept., 1950, and for nearly four years has been supervisor of Section 5352-2.

Immediately prior he was employed two years by the Direct Service Oil Co. in Minneapolis, Minn.

He was awarded BS and MS degrees in Physics at the University of Minnesota and also was an assistant teacher in Physics at the same school for a year.

Bob served two years in the U. S. Air Force as an aerial navigator and radar observer.

## Promotions

EDWIN P. BRUCE to supervisor of Division 1461, Component Development Department I.



He is transferring from Section 1224-1, Project Division 1224, Engineering Department. Ed joined the Corporation in November, 1950.

Prior to coming here he was employed as an electrician by various contractors in Colorado. New Mexico, however, was quite a change from six cold months in Alaska, where he worked on a tunnel near Anchorage being constructed jointly by the Alaska railroad and the U. S. Army Engineers.

Ed served two wartime years in the Navy in the Mediterranean and Pacific Theaters as an electrician. He has a BS degree in Electrical Engineering from Colorado A & M College.

PETER J. KOMEN to supervisor of Section 1411-1, Engineering and Operations Division, Electronic Research Department.



He has been with the Corporation two years and previously was a communications design engineer for the Bonneville Power Administration in Portland, Ore.

After receiving his MS degree in Electrical Engineering from Washington State College, Pete worked three years as an electronics instructor and one year as an engineer in the college experimental station. His BS degree is from the University of Washington.

During a three year stint in the Signal Corps, Pete was a radar officer at the Army Electronics Training Center at Harvard University and MIT and later helped set up a radar school at Fort Sill, Okla.

He is a member of Tau Beta Pi, honorary engineering society, and Sigma Xi, honorary science fraternity.

ROBERT D. WEHRLE to supervisor of Piezoelectric Device Development Division 1464, Component Development Department I.



He started with Sandia Corporation in 1952 and has been in the same type of

work the past three and one-half years.

Immediately prior Bob was employed by Standard Oil Co. for one and one-half years as an engineering inspector in Whiting, Ind.

He received his BS in Mechanical Engineering from Iowa State College and is a member of Pi Tau Sigma, honorary mechanical engineering fraternity.

During World War II, Bob served three and one-half years in the Air Corps as a radar observer bombardier. He was stationed in the Philippines.

ROBERT S. PINKHAM to supervisor of Section 1471-2, Component Development Department II.



He has been with the Corporation four years and has worked the entire time in design and development of electro-mechanical instruments for use in the weapons program. In his new position he will supervise the same type of activity.

For two years before his employment here Bob was designing packaging and bottling machinery in Quincy, Mass.

He attended the University of Massachusetts and has a BS in Mechanical Engineering.

Bob served one year in the Navy at Great Lakes Naval Training Station.

ELWOOD F. INGLEDUE to supervisor of Section 1411-2, Engineering and Operations Division, Electronic Research Department.



Elwood has been at the Corporation for two years. He came here from Cleveland, Ohio,

where for three years he had been project engineer for Thompson Products, electronics division. The previous four years he was production manager of Antenna Research Laboratory, Inc., in Columbus, O., which he helped to found.

Elwood has also worked three years as a machinist for a locomotive works in Lima, O.

After six and one-half years in the Air Force as a radar instructor in Florida, he obtained his BS in electrical engineering from Ohio State University.

## Informal Dance At Club Tomorrow

Holding forth in the Coronado Club ballroom tomorrow evening from 9 to 1 will be the orchestra of Tommy Kelly for informal dancing of club members. Cost is 50 cents for members, \$1 per guest.

Feature entertainment on the Club program this month is an Aqua Show, complete with fancy diving, clown acts, ballet and water races at the club's twin pools Sunday afternoon, Aug. 26 from 2 to 5 p.m.

Following the Aqua Show will be Family Night. "Column South," a movie centered around life on a U. S. Cavalry post in New Mexico prior to the Civil War, will be shown.

## Schedule of Educational Classes For Fall Released by Division 3124

A schedule of after-hours educational classes to begin in the fall has been released by General Training and Education Division, 3124.

Sandia Corporation will sponsor five courses that will meet in Bldg. 849. At least 15 people must enroll with maximum enrollment of 40 persons. Classes will start about Sept. 24. Enrollment fee will average about \$10 per course according to the enrollment.

### Blueprint Reading

Blueprint reading (electronics) will be offered for employees who want to develop a better understanding of electrical schematic drawings. A preliminary meeting to discuss course content, meeting nights, time and tuition charges, is scheduled Wednesday, Sept. 26, at 4:45 p.m. in Rm. 3 of Bldg. 849.

Blueprint Reading (mechanical) a similar course in the mechanical field will be organized at a meeting Wednesday, Sept. 26, at 4:45 p.m. in Room 1, Bldg. 849.

Shop materials, a basic course in metals, alloys and plastics, will meet Thursday, Sept. 27, 4:45 p.m. in Rm. 1, Bldg. 849 to organize.

Radar principles, covering the general theory and operation of the components of radar units, will have a preliminary meeting Monday, Sept. 24, in Rm. 3, Bldg. 849 at 4:45.

Radar systems, a course in radar circuitry, will organize at a meeting Monday, Sept. 24, 4:45 p.m., Rm. 1, Bldg. 849.

Shop processes, dealing with theoretical phases of machine shop work, will be organized Thursday,

Sept. 27, 4:45 p.m. in Rm. 3, Bldg. 849.

Employees interested in enrolling for any of these courses are urged to contact the General Training and Education Division, Bldg. 849.

### Vocational School

Albuquerque Vocational Evening School is offering three 18-week courses in mathematics to begin around Sept. 18. There will be no charge for the courses. They will meet at Albuquerque High School, Broadway and East Central.

Shop arithmetic, one of the courses offered, will cover fundamental skills in arithmetic with emphasis on practical problem solving. It will meet from 7 to 9 p.m. on Thursdays.

Elementary shop mathematics will cover algebra, geometry and trigonometry as applied to practical shop problems. The class will meet from 7 to 9 p.m. Tuesday and Thursday evenings.

Advanced shop training will cover the more complex machine shop problems such as indexing and compound angles. The class is scheduled from 7 to 9 p.m. on Thursdays.



**SOFTBALL LEAGUE CHAMPS, the 2500 team, pose for a victory picture. First row, L to R, are Fred Hansen, Joe Highfill, Leo Reynolds, Dave Poli and Roland Pyetzi. In the middle row are Dan Grim, George Hildebrandt, Fred Villa, Harry Olson, Lee Schulz and H. T. Cushman. Perched in the top row are R. C. Gauerke, Ed Stang, Ed Cave, John Souza, Tom Kelly and C. M. Coats.**

## Sandia Softball Tournery Marked by Upsets

Upsets are the rule in the Sandia Employees Softball Double Elimination Tournament now underway. League champs 2500 dropped into the losers' bracket their first game as 7400 defeated them 12-2. The 7200 team defeated second place 1200-1 15-14 in another upset. Team 3100 dropped the highly rated 1400 team 11-10.

Team 1600 upset 2400, 17-10. Then 3100 dropped 1600 to the losers' bracket with a score of 23-4. Bouncing back, 2400 rolled over 1200-11, 22-4 and then defeated 1600, 9-5. Still under full steam, 2400 defeated 1400, 14-4. In the losers' bracket 2500 recovered their top form and drop-

ped 2100 and 1200-1 out of the running. Two defeats end a team's contention for championship honors in the tournament. Final games will be played Monday, Aug. 27, at 7 p.m. on Diamond A. If a second game is necessary to determine a champion, it will be played same time, same place on Wednesday, Aug. 29.

## Peewee Racing Cars Scoot Drivers Over Indoor Track in Hot Competition

Designing and building micro-midgets, pint-sized racing cars weighing about 275 lbs. and powered with nine-horsepower motors, occupies the evening and week-end hours of many Sandians who are members of the Albuquerque Micro-Midget Club.

To test the soundness of design and construction, the club has scheduled a race for the micro-midgets Sept. 8 at 8 p.m. in the Ice Arena. Between 17 and 20 cars will compete.

"The track is 1/15th of a mile long," Lowell Sharp, 7242, president of the club, says, "and the little cars will average about 30 mph. Consider the relative size of these cars and the fact that the driver is sitting only 3 inches off the ground — it's easy to see that

all the thrills and excitement of the big racers will be present."

Sandians who are members of the club include Bill Bounds 2124, Charles Horner 2111, Jerry Pierce 2221, K. L. Wiley 7329, Walter B. Howerton 5254, Edwin C. Wittwer 5212, M. L. Heisler 1611, C. R. Pogue 7210.

Dean Hitchcock 1247, Carl Hawk 1243, Will Freed 7241, Richard E. Bohannon 1611 and J. R. Johnson 5252.



**SUMMER CHAMPS of the Coronado Club Mixed Bowling League are the Hudsons. Standing, L to R, are Carl Boxx, 2133, Benny Montoya, 2131-1, team captain, and Fred Leslie, 2133. Sitting are Sybil Milligan and Barbara Donaldson, both of AEC.**

### SHOPPING CENTER

#### CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication.

#### RULES

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

Next Deadline: Noon, Aug. 30

#### FOR SALE

COCKER PUPPY, blond, male. Young, Alb. 6-1387.

WHITEWALL TIRES, two 800x15 and 760x15, including tubes; will sell in pairs for \$10 or four for \$20; wardrobe closet \$3. Dale, Alb. 5-7343.

2 BR. HOME, attached garage, \$8,000. Grey, Alb. 5-3470, 226 Texas NE.

ELECTRIC RANGE, Nash-Kelvinator, 30", \$100; Hotpoint 9 1/2 cu. ft. refrigerator, \$125; studio couch & easy chair, \$25. Galbreath, Alb. 4-4306.

KODAK RETINA IA, Case, \$49.50; 22 Hi-Standard Auto Unfired, List \$71.60, sell \$56.50; 22 Beretta Olympia, \$125. Morgan, Alb. 6-9637.

SILVER SERVICE SET, \$50; Desk & chest of drawers, \$35 each; sofa bed, \$50. Miller, Alb. 5-3280.

KROLL CRIB, Kaitwet mattress, \$35. Ryan, Alb. 9-3318 after 5.

UPRIGHT PIANO, \$100; portable evaporative cooler, \$15; 1400 cfm evaporative cooler, new pump, \$25. Williams, Alb. 6-0149.

BEAGLE PUPS, 6 weeks old, champion lines, AKC registered. Schuknecht, Alb. 4-3501.

HIGH CHAIR and crib w/mattress, \$12. Chemistrak, Alb. 6-5840.

2 BR. HOME, w/w carpets, drapes, venetian blinds, GE appliances, brick bar & planter, walled patio, \$9800. Sherman, 416 Britt NE.

LAWN MOWER, 16" cut, \$15. Fuller, Alb. 5-2114.

UNSELFISH aid to drive families through United Fund Drive contributions. 600 Sandia solicitors needed. Call Shepherd, ext. 47234.

'48 WILLYS JEEPSTER, new motor & top, R&H, overdrive, \$300. Gomel, Alb. 6-9098 after Aug. 26th.

MAPLE FINISH DINETTE SET, 4 chairs, 1 leaf, table pads included. Maginnis, Alb. 9-0069 after 5.

WELSH TERRIER MALE PUPPIES. Patter-well, Birch Camp, Sandia Park P.O. N.M.

'41 FORD, four door, radio, new rebuilt Sun motor, \$200. Glass, Alb. 6-2485.

FOR SALE or will trade for North Valley property, 2 br. home, block construction, garage, patio, 7521 Cutler Ave. NE. Regan, Alb. 6-9202.

2 LEE SILENT TREAD MUD & SNOW TIRES, size 6:70x15; Kay auditorium tires guitar. Cox, Alb. 6-1977.

RIFLE, Winchester 1873, octagon barrel, 44/40 caliber, \$25; trade for pistol or revolver. Smitha, Alb. 9-1096.

CAR, COOL, 9-cylinder, \$10. Kersey, Alb. 9-0281.

DRAPES, floral, forest green background, lined, two pairs, 17 1/2 feet, total width, floor length \$50. Frantz, Alb. 5-4094.

ELECTRIC MOTOR, 1/4 HP, \$5; Boy's jig saw, \$5. Chandler, Ext. 5-4286 after 5.

TWIN BEDS, Hollywood style, \$50. Armstrong, Alb. 6-6555.

SOLAR ENLARGER, size 2 1/4 x 3 3/4, 4.5 lens. Herrera, Alb. 2-3612 after 5.

'50 INDIAN MOTORCYCLE. Hollifield, Alb. 9-2519.

CORNER CHINA CABINET, genuine Mahogany, glass doors, \$85. Champe, Alb. 9-0066.

RADIO CONTROL EQUIPMENT, transmitter, receiver & escapement, all single channel, \$15; portable air conditioner, \$20. Lenz, Alb. 9-5075.

TYPEWRITER, Remington Noiseless, \$30. Ankeny, Alb. 4-5541.

2 BR. HOME, 1 bath, large kitchen, landscaped, walled yard, \$800 down. Dean, 1911 Madeira NE, Alb. 5-6954.

5 RM. HOUSE, den & garage, walled back yard, lawn front & back, trees & shrubbery. Pena, 1110 Princeton, Alb. 2-6707.

2 WHEEL ALL METAL UTILITY TRAILER, \$70. Campbell, Alb. 2-7347.

CALORIC GAS RANGE, \$50. Schooley, Alb. 9-4750.

BABY BUGGY, baby clothes, scales, evening cape, cocktail set, miscellaneous articles. Rudeau, Alb. 6-2380.

COOLER with recirculating pump, \$20. Amonette, Alb. 3-8928.

TV, 17" Admiral blond console combination w/doors, \$225. Mahboub, Alb. 6-5721.

'54 BLUE & WHITE PLYMOUTH Belvedere, 4 dr. Highdrive, R&H, 2 extra mudlug tires, \$1200. Jones, Alb. 5-2984.

TV, living & bedroom furniture, desk, studio chair, refrigerator, matching end tables & coffee table, chest of drawers. Stoneking Alb. 6-0974.

GEIGER COUNTER, 0-20, Model 107B "Professional", head set, blinker light. Paul, Alb. 6-5609.

COLDSPOT REFRIGERATOR, 9.4 cu. feet, \$84. Berger, Alb. 5-0265.

2 PCS., LIVING ROOM SET w/slip covers, \$50; four used w/wall Firestone tires, 6.70x15, \$12. Pilot, Alb. 6-9376.

BICYCLE, boy's English, \$50. Boyden, Alb. 5-3456.

COLEMAN LANTERN & 1 gallon fuel, \$9. Strand, Alb. 6-7371.

VANITY, 2 hand mirrors, bench, bed, 2 chairs, \$20; child's car seat, metal steering wheel, gear shift, \$3. Hicks, Alb. 2-7144.

POWER LAWNMOWER, 21-inch cut. Hostetter, Alb. 6-3803.

BABY STROLLER, \$7; '47-16' House Camping trailer, \$525. Danzer, Alb. 3-5103.

2 PAIRS LINED DRAPES. Jaramillo, Alb. 3-8747.

ARGUS C-3 CAMERA, flash attachment & carrying case, \$35. Hughes, Alb. 9-5054.

DEEP FREEZE, 14 cu. ft., 2 years old, \$235. Natoi, Alb. 2-0573.

STUDIO COUCH, occasional chairs, Reinertsen, Alb. 5-1954 after 5.

2 BR. HOFFMAN HOME, lawns front & back, trees, \$8100, \$500 down, 9500 Claremont Ave. NE. Springer, Alb. 9-5490.

WINCHESTER 20 Ga. Mod. 12 & Winchester 270, Mod. 70. Gregory, Alb. 5-8066.

MAN'S NARROW WHEEL BICYCLE, non-gear, \$14; 18" lawnmower, \$11. Toft, Alb. 4-5166.

ONE BEDROOM HOME, hardwood floors, walled back yard, carport, store room, furnished or unfurnished 308 General Bradley NE. Vinson, Alb. 6-9520.

2 HOLLYWOOD STYLE TWIN BEDS, box springs, mattress, \$55. Armstrong, Alb. 6-6555.

'50 FORD 6 cyl. 2 ton truck, 13 ft. stake bed, \$450. Siser, Ext. 2-5173.

WONDA-CHAIR, chrome & plastic, \$20; combination high chair, stroller, table & chair set, car seat, \$51; car bed, \$3. Weber, Alb. 9-1389.

110 V. AC, 3450RPM, Capacitor Start, 1 HP saw motor, \$32; 2 wheel trailer, 4x6 bed, \$35. Gonder, Alb. 6-5289.

WEDGEWOOD CHINA, Ashford pattern, 108 pcs. Foley, Alb. 6-0557.

WEDDING GOWN & BLUE COAT. Stewart, Ext. 4-6282.

4 RM. MODERN HOUSE, 2 bdms., seven vacant lots included with house, \$9,000, terms arranged. Vallejos, 213 1/2 Coronado, Belen.

STALL SHOWERS, heavy grated, polished aluminum with stainless base, fixtures included, \$50 each. Denison, Alb. 5-8495.

SOCIAL WELFARE for your United Fund dollar. 600 to 700 solicitors needed to contact employees. For information call Shepherd 47234.

GE TANK TYPE VACUUM CLEANER with attachments, \$15; Royal upright vacuum cleaner with attachments, \$15. Talmie, Alb. 6-1636 after 5.

WALL HEATER, still in carton, retails for \$140, sell for \$50. Good, Alb. 6-8088.

'51 AUSTIN SEDAN, 30 MPG, \$350. Folkings, Ext. 2-2162 or Placitas, N. Mex. evenings and week ends.

1 BOY'S BICYCLE, 20", 1 girl's bicycle, 20"; 1 portable typewriter. Benneche, Ext. 4-8192.

'51 PLYMOUTH, 4 door, R&H, \$395. Farmer, Alb. 5-7279.

2 BR. HOME, 8516 Summer NE, completely redecorated, immediate possession, no closing costs, \$500 down. Reeder, Alb. 9-1736.

'52 PLYMOUTH, R&H, overdrive, white-wall tires. Blanchard, Alb. 9-4234 after 5.

WALTHER PPK 7.65 mm automatic, 100 rounds ammunition, \$50. Gravin, Alb. 6-7189 evenings, week ends.

SOLID MAPLE 21" TV, console cabinet, with or without TV, suitable for Hi-Fi system enclosure. Nylander, Alb. 6-7437.

10 PIECE SET STAINLESS STEEL COOKWARE, \$25. Wiesch, Alb. 6-7236.

2 BR. HOME, den, landscaped, walled, lawns, sprinkler, brick patio, G.I. refinancing available, 732 Cardenas SE. Hart, Alb. 5-4004.

MAYTAG FREEZER, 15 cu. ft., upright, take over payments, \$22.05 month. Chappell, 2620 Jeffers NE.

LAUNDRY TUBS, galvanized white enameled table top including all connections, \$12. Tillman, Alb. 5-6292.

#### LOST AND FOUND

WEDDING BAND, man's; pen, Parker black & silver; ring, Masonic, turquoise; watch, man's Arctco; glasses, sun mirror type; pen, ball point, Parker; pencil, w/Albuquerque Gravel; keys, on ring w/penknife; keys, 2 auto on ring; keys, 1 house, 1 car, on chain; raincoat, grey plastic; glasses case, brn. w/name & address. Lost & Found, Ext. 2-6149.

#### FOR RENT

MODERN ONE BR. HOME, 3132 San Saulo SW. Chavez, Alb. 6-6332.

3 RM. UNFURNISHED APARTMENT, stove, refrigerator, garage, patio, \$67.50. Adults, no pets. Carter, 4150 Mesa Verde NE, Alb. 6-1763 or 5-4403.

FOUND—Worthwhile endeavor for 600 to 700 Sandians as solicitors for United Fund Drive among your organization. For information call Shepherd ext. 47234.

#### WANTED

CAR POOL from vicinity Snow Heights No. 1 to Bldg. 880. Houghton, Alb. 9-3386.

TWO DRIVERS for car pool from Hoffmanton to parking lot adjacent to gate 6. Rainhart, Ext. 2-4263.

TO JOIN CAR POOL from vicinity of 3200 North Fourth. Newman, Ext. 2-3244.

SANDIANS with charity in their souls to contact 10 other persons. Purpose—United Fund contributions. Volunteer solicitors call Shepherd, ext. 47234.

FROM 3600 HEADLINGLY NE to vicinity of Cafeteria or Medical Bldg. Gallegos, Alb. 4-5441.

BUNK BEDS with or without mattresses. Cacy, Ext. 3-1160.

RIDE from Five Points or Bridge Blvd. SW to Bldg. 880. Drury, Alb. 3-8303.

RIDE vicinity Louisiana SE, Smythe, Alb. 6-3211 after 5.

TO JOIN CAR POOL, vicinity Blake, Isleta Highway, Bridge. Guajardo, Ext. 3-3159.

HOMES FOR MALE KITTENS, weaned & housebroken by Sept. 1, Angora type. Bell, Alb. 6-4064.

RIDE from vicinity Washington & Lomas to Bldg. 832. Horan, Alb. 6-2078.

RIDE or join car pool vicinity 1213 Girard SE to 802. Holdridge, Alb. 5-0256.

35 MM SLIDE PROJECTOR, 3-500 watts and screen, Hartley, Ext. 3-1270.

RADIO to fit '53 Chevrolet. Coleman, Alb. 5-7480.

RIDE from Girard & Constitution to vicinity Bldg. 813. Davis, Alb. 5-9564.

RIDERS to Richmond, Va., and Boston, Mass., leaving Sept. 5. Jolly, ext. 3-5145.

FUNCTIONAL METRONOME. Scharpen, Alb. 6-7701.

BABY CRIB with wetproof mattress. Alderete, Alb. 2-5632.

RIDE from 1801 California NE to Building 802. Bernard, Alb. 6-3104.

RIDER to Columbus, Ohio, can leave Sept. 7 through Sept. 14. Rudolph, Alb. 5-4911.

# Sandians in Redwing Recovery Project



**AERIAL RECONNAISSANCE**—After a test at the Eniwetok Proving Grounds members of a recovery party looked the situation over from the air before going in on the ground to bring back records from instrument shelters. L to R: Richard A. Bice, Director of Field Testing, 5200; Donald B. Shuster, 5230, Sandia Task Unit Commander; James H. Scott, 5231, Program Director; Edward Hansen, 5231.



**RECOVERY PARTY** at Eniwetok Proving Grounds approaches the test site where they pick up records from shelters near the point of detonation. Type of clothing worn is to protect them from radiation. L to R.: Emery L. Whitlow, 5231, Glenn A. Fowler and James W. McRae. The latter two were Proving Grounds official visitors.

## General Chemistry Class to be Given For Sandia Students

A University of New Mexico extension course will be offered on Sandia Base for Corporation employees this fall.

The course in general (or freshman) chemistry will be taught by Dr. Guido H. Daub, associate professor of chemistry at the University.

Lectures will be given on Sandia Base at a location to be announced later, each Thursday from 7 to 9:30 p.m., beginning Sept. 20. Laboratory work will be done from 9 a.m. to noon each Saturday at the University chemistry department.

Tuition for the four-hour full credit course is \$48 per semester plus books and normal school fees. The course runs two semesters.

Interested employees may contact Frank Taylor, 3123, extension 5-2161, for additional information.



**CITY SOFTBALL CHAMPS**—This team composed mostly of Sandia Corporation employees won first in the Duke City Softball League and represented the city in the state tourney in Clovis. Top row, L to R, are Harold Cushman 2552, Dale Landis 2461-3, John Alvarado, Sandia Base, and Sam Dehaan 2223-1. In the middle row are Dick Doherty, Sandia Base, Nick Pavletich 2522, Bud McClure, Sandia Base, and John Hart 7214. Bottom row are Ray Brunacini, sponsor of the softball team, Bob Bailey, 2236, Jim Kelly 2231, Cliff Rudy, 2443, Jack Reynolds, 7214, and Roland Kurth, Albuquerque.

## Sept. 10 Starting Date For the Coronado Club Winter Bowling Leagues

Winter bowling leagues at the Coronado Club will begin the week of Sept. 10. Any club members desiring to bowl who are not now affiliated with any of the leagues should leave their name and telephone number at the Coronado Club office or contact the league secretaries.

Plans are also under way for a junior bowling league this fall and winter for boys and girls between the ages of 10 and 16 inclusive. This group will meet each Saturday morning from 9 to 12.

Parents interested in enrolling their children should register their names and telephone numbers at the Club office. It is planned to have experienced bowlers conduct the league play.

League secretaries are: Monday league, R. W. Heuer; Tuesday league (Ladies Night), Peggy Willet; Wednesday league, R. M. Dayhoff; Thursday league, George Peel; Friday league, E. H. Simonson.

## Hudsons Win Coronado Club Summer Bowling Rolloff

The Hudsons bowling team took the Coronado Mixed Summer Bowling League championship in rolloff play recently defeating the Packards 2-1 in the series. The two teams had tied for first place in the league each collecting 30 wins and 18 defeats.

Benny Montoya, 2131-1, captained the winning team. Members are Sybil Milligan, AEC, Barbara Donaldson 7225, Carl Boxx, 2133, and Fred Leslie, 2133.

Members of the Packard team are Mamie Burg, AEC, Bob and Gladys Loux, AEC, and Al Salas, AEC.

## Bowlers Organize

Organizational meeting of the Jewellette League of the Coronado Club Bowling Association is scheduled Thursday, Aug. 30, at 7:30 p.m. in the Coronado Club. Margaret Whalon, 2464-2, president announced this week.

All former members of the League and anyone wishing to participate in the women's league are urged to attend the meeting, Margaret said. Eight teams were organized last year and it is hoped the same number or more can be formed again.



**DELICATE TOUCH** of Joe Chouinard, 1413, eases a wire filament into a vacuum tube being blown in the Physical Electronics Laboratory. Joe holds a flame torch to melt the glass and gently puffs through the tube to shape it into the desired form.

## Ancient Glass Blowing Craft Given Modern Twist by Sandia Technician

The ancient craft of glass blowing takes a modern turn when applied at Sandia Corporation.

Gone is the need for the skills necessary to turn out the graceful and decorative figures which have adorned showcases through hundreds of years. The graceful swan, and the prancing steed, so often blown from glass by the artisans of old, are not found among the glass-made tools of modern industry.

Joe Chouinard, Sandia Corporation's blower of glass, has as his specialty vacuum tubes.

Working in the Physical Electronics Laboratory of the Special Problems Division, 1413, Joe and Gary Krieger, head of the laboratory, decide on the specifications for tubes to be used for experimental purposes.

It's Joe's job to make, or as they say in the trade "blow," the tubes.

Glass is heated to the consistency of taffy. In this state it can be pulled, twisted, moulded and

blown. Put on a lathe, it is turned as it is blown and it can be worked with tools, knives, chisels, but the secret of getting the tube as it's needed lies in Joe's ability to puff lungs-full of air through the tube into the heated glass and shape it as he wishes.

Joe has been blowing vacuum tubes for Sandia Corporation for 10 months. During his life he has been a machinist, worked on battleships in the Canadian shipyard, fought with the Canadian infantry during World War II, served with the U. S. Air Force, made golf clubs and earned an electronics diploma from Capital Radio Engineering Institute.

Joe came to Sandia Corporation in June, 1955, and showed an aptitude for glass blowing. He received his initial instruction in the skill from master glass blowers in Los Alamos.

"Learning glass blowing is a matter of applying yourself," Joe believes, and attributes his ability to master the skill to the excellent equipment and a fine laboratory at Sandia.