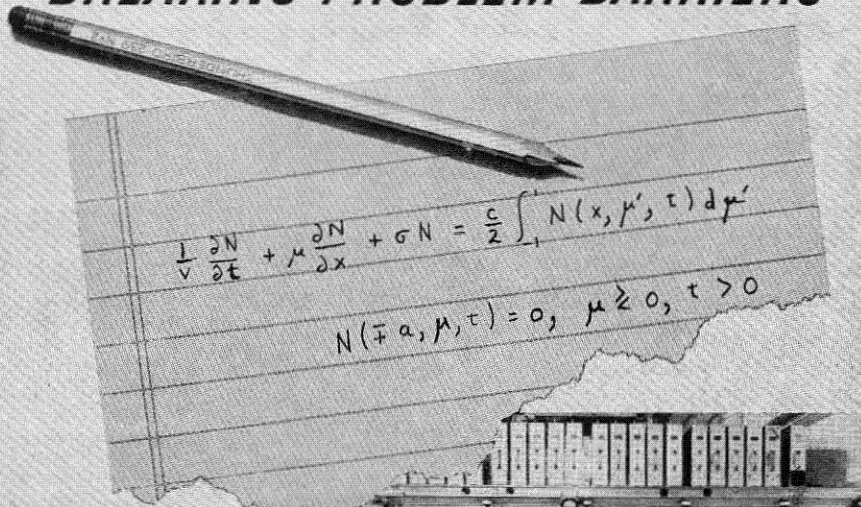
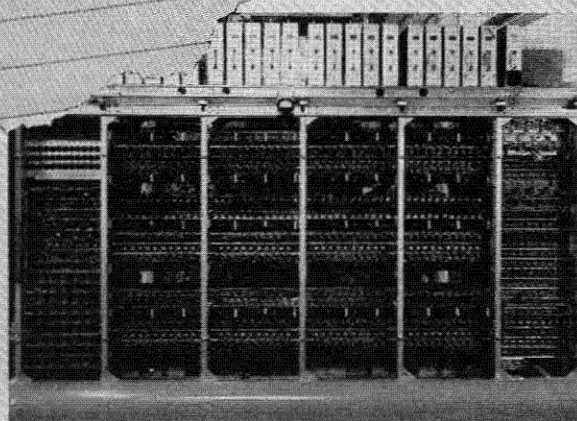


another example of exciting work at los alamos...

BREAKING PROBLEM BARRIERS



Mathematical support for many of the Laboratory's programs is given by the Theoretical Division, which also pursues its own investigations in hydrodynamics, magnetohydrodynamics, computer theory and design, and other fields. The vast amount of computation involved has brought about the creation at Los Alamos of the largest known computing center devoted exclusively to scientific work.



The linearized Boltzmann equation shown above describes the transport of neutrons in a slab. Its mathematical structure was first completely worked out at Los Alamos. Many fundamental studies in disciplines, ranging from pure mathematics through biology, have been published by scientists at the Laboratory.

The Laboratory is entering a new phase of scientific endeavor. Pioneering activities in the unexplored realms of nuclear power, nuclear rocket engines, and controlled thermonuclear power have been added to its weapons program; experiments are being planned and carried out at pressures and temperatures far beyond any previously created by man. These activities exemplify the imaginative approach by which the Laboratory maintains its pre-eminence in scientific achievement.

los alamos
scientific laboratory
OF THE UNIVERSITY OF CALIFORNIA
LOS ALAMOS, NEW MEXICO

PERSONALS

1925

Earl D. Stewart has been appointed associate technical director of Schwarz Laboratories, Inc. in Mount Vernon, N.Y. He was formerly chief chemist of the company.

1930

Roland F. Hodder has moved from Denver, Colorado, to Tulsa, Oklahoma, where he is now staff geologist in the foreign department of the Stanolind Oil and Gas Company. His daughter is a sophomore at Stanford and his son a sophomore in high school.

Edward E. Kinney, MS, retired from Michigan State College in East Lansing last December, after 36 years of service. He served on the faculty for 24 years as an instructor in electrical engineering, and since 1944 had been superintendent of buildings and utilities. Ed writes that 19 members of the Kinney family have attended MSU — including his son and daughter.

Nathan D. Whitman, Jr., MS '32, consulting engineer in Pasadena, writes that he's moved from San Marino to Arcadia, mainly to provide room for four cars and one horse. He was elected president of the Los Angeles section of the ASCE for 1957—and he did the structural design on Pasadena's Rosemead-Foothill Shopping Center, which was completed last year.

1931

Carl F. J. Overhage, MS '34, PhD '37, has just been appointed director of MIT's Lincoln Laboratory in Lexington, Massachusetts. He was formerly head of the aircraft control and warning division at Lincoln.

1932

Henry B. Pounall is now president of the Velda Corporation in Miami, Florida, and also president of Freezing Equipment Sales, Inc., in York, Pennsylvania.

1934

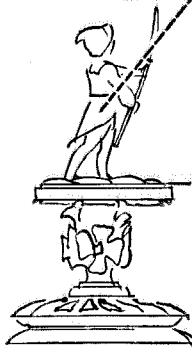
Kenneth A. Willard, MS, MS '35, has been made coordinator of the Southern California Industrial Research Center at USC's School of Engineering. In this capacity, he will establish and maintain liaison with industry in the fields of cooperative educational programs, access by industry to the University's facilities, industrial student training, and secondary school guidance service. A mechanical engineer, pilot, and meteorologist, Ken's special hobby these days is building and flying radio-controlled model airplanes.

1938

John L. Merriam writes from Jeddah, in Saudi Arabia, where he has been sta-

CONTINUED ON PAGE 50

ENGINEERING AND SCIENCE



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MOTOROLA

tioned for the past year: "I'm within a couple of months of finishing my contract with the Ralph M. Parsons Engineering Company who sent me here as senior irrigation engineer for the Ministry of Agriculture. I took this job after 17 years with the Soil Conservation Service in Southern California.

"Here in Saudi Arabia, our group of five specialists is starting a Division of Water Resources. It is a unique satisfaction to be the first one to do something . . . I've investigated several irrigation and drainage problems and have things about ready to go. It's a real disappointment not to be able to follow them into construction but I have to be back in the States by fall. With two children—daughter Elizabeth in junior high and son Sandy in high school—one year out is about the maximum.

"They've been doing their work by correspondence, and doing very well with their mother's guidance . . . but over here there is no one their age to play with, and social life gets pretty dull with just adults, even though life in Jeddah is rather exotic—with such things as the Red Sea to skin-dive in, and Moslem pilgrims to observe."

Howard S. Seifert, PhD, senior staff member of the Ramo-Wooldridge Corporation in Los Angeles and former member of Caltech's Jet Propulsion Laboratory, has been reappointed for the third year to the Subcommittee on Rocket Engines of the National Advisory Committee for Aeronautics.

1939

Jose P. Ortiz, MS, is general director of Public Works and Communications in the state of Vera Cruz in Mexico.

1940

Douglas B. Nickerson has been appointed chief engineer of Hydro-Aire, Inc., in Burbank, California. He's in charge of the company's 130-man engineering department and will be responsible for all design, research, and development activities. Doug has been with Hydro-Aire since February, 1952. The Nickersons and their three children live in Flintridge.

Harrison A. Storms, Jr., PhD '41, is now chief engineer of the Los Angeles division of North American Aviation, Inc. He was formerly manager of research and development. He's been with the company since 1941. The Storms live in Rolling Hills and have three children—Patricia, 14; Harrison, 12; and Richard, 11.

Joseph F. Manildi, MS '42, PhD '44, was recently appointed associate director of the Electronic Instrumentation Division

of the Ramo-Wooldridge Corporation in Los Angeles.

1942

Alvin R. Piatt, project manager at Librascope, Inc., in Glendale, California, died on December 20, of leukemia. He had been ill for almost four years but had worked regularly at Librascope, where he had been employed since 1947. He is survived by his wife, Glenna, and a son, Michael, 6.

1944

Joseph H. Chadwick, Jr., research engineer in the marine instruments engineering department of the Sperry Engineering Corp.'s marine division, received the Captain Joseph H. Linnard Prize at the annual banquet of the Society of Naval Architects and Marine Engineers on November 16 in New York City. The prize was given for the best paper contributed to the society's 1955 *Transactions*.

Rudolph W. Hensel is now chief of the Propulsion Wind Tunnel at the USAF's Arnold Engineering Development Center in Tullahoma, Tennessee. Prior to this, he served for six years as chief of the data analysis section of the Southern California

Cooperative Wind Tunnel at Caltech.

Philip B. Smith writes that "after six years at the University of Sao Paulo in Brazil, I am moving on. We have completed a very good Van de Graaff accelerator which is beginning to produce some physics. My decision to leave is principally due to the realization that while it is possible to produce something here, the efficiency of production is at most 1%. That does not mean that I have not learned a great deal, however. What is worse is that, in the last few years, the Brazilian policy toward foreigners has become distinctly unpleasant. It is now, since 1953, impossible for a foreigner to have a regular job here (this does not refer to short time contracts) without revalidating all of his diplomas, from high school up. This means about five years wasted, in practice.

"I am leaving this month for Holland. There I will work for a year or so with Professor P. M. Endt in the State University of Utrecht."

Howard H. C. Chang is now with the engineering division of the Rand Corporation in Santa Monica. He was formerly with the General Electric Microwave Lab-

oratory in Palo Alto. Howard is now the father of a 16-month old daughter, Cecily Chin-Yu.

1946

Robert C. James, PhD, associate professor of mathematics at Haverford College in Pennsylvania, has been appointed professor and chairman of the mathematics department of the new Harvey Mudd College, one of the Associated Colleges of Claremont, which will open next September. Bob taught at Harvard University and the University of California prior to joining the faculty of Haverford in 1951.

1947

Ernest Pritchard, MS, AeE '48, chief of the data analysis section of Caltech's Southern California Cooperative Wind Tunnel in Pasadena, announced the arrival of a son, Jon Clark, on December 12.

1948

Col. John D. Holm, MS, has been assigned as acting Sixth United States Army Engineer at the Presidio in San Francisco. This new post gives John administrative responsibility for engineer activities in

CONTINUED ON PAGE 58

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the eight western states of the Sixth U.S. Army area. John has been at the Presidio since September, 1955, when he and his wife and their daughter, Donna Irene, arrived there from Texas.

1949

Rafat Mirza, MS, writes from Manchester, England, that "after I left Caltech, I worked with Sir Robert Robinson for my doctorate at Oxford. Until I received it in 1951, I had the good fortune to be able to travel through France, Switzerland, Germany, Italy and all over Britain on my motorcycle.

"After a brief stay in Hyderabad in 1953, I returned to Switzerland to do postdoctorate research with Professor Prelog at the Swiss Federal Institute of Technology in Zurich.

"The next year was spent at Harvard working with Professor Woodward. It was a great experience to see a master-mind at work and the fine training in semi-micromanipulation learned with Koepfli and Niemann made work a pleasure. After two years of postdoctorate work in the States, I returned to England.

"I'm doing full-time research in heterocyclic chemistry here at the Imperial Chemical Industries. My wife and I (I

got married last year) spend our time in the mountains—climbing and taking pictures. We miss the California sunshine. Here we have six months of winter—followed by six months of bad weather."

Jack L. White reports that his National Research Council Research Associateship in the Metallurgy Division of the Naval Research Laboratory in Washington, D.C., has been renewed for the second year.

Carl A. Price has been appointed Milton Research Associate in Medicine at Harvard Medical School and will be affiliated with the Peter Bent Brigham Hospital. Carl received his MA in 1951 and his PhD in 1952 from Harvard University.

1950

Floyd B. Humphrey, PhD '56, a member of the technical staff at the Bell Labs, reports the arrival of a daughter, Victoria Irwin, on December 9. The Humphreys make their home in Madison, New Jersey.

1951

Robert F. Connelly is now sales manager of the aircraft and chemical divisions of the Bray Oil Company in Los Angeles. He's been with the company for four years, except for six months spent recently as the western representative for Emery Indus-

tries, Inc. The Connellys announced the arrival of a son, Neil Dwight, on Thanksgiving Day—which makes a total of five; four sons and one daughter.

Edward E. Zukoski, MS, PhD '54, was appointed assistant professor of jet propulsion at Caltech on January 1. He had been a resident engineer at JPL since 1954.

Cdr. Arthur D. Struble, Jr., AE, is now class desk officer for the Navy's nuclear seaplane, attached to the Bureau of Aeronautics. In preparation for the assignment, Art attended the Oak Ridge School of Reactor Technology. The Strubles, who have four children, are living in Arlington, Virginia.

Oliver H. Gardner has been appointed general manager of Walter R. Cole & Co. in Oakland, California, a steel plate and tank fabrication firm. He was formerly division manager of Jacuzzi Brothers, Inc.

1952

James La Fleur is the new president of Kemsco, Inc., and makes his headquarters at the firm's Los Angeles engineering and production division. He was formerly with the Garrett Corporation, and was chief engineer of Wall Cryogenics, a division of Paul Hardeman, Inc.

1953

David Wittry, MS, who is doing graduate work in physics at Caltech, reports an addition to the family — a boy, born last August.

1955

Lt. Jack W. Rocchio received his silver pilot wings last month in graduation ceremonies for Class 57-I at Goodfellow Air Force Base in Texas. His next assignment will be at Clark Air Base in Luzon, Philippine Islands.

Oreste W. Lombardi, who is doing graduate work at the New Mexico Institute of Mining and Technology at Socorro, New Mexico, announced the arrival of a daughter, Margaret Ann, on February 4.

Lt. Frank C. Michel recently received the silver wings of an Air Force jet pilot at Laredo Air Force Base in Texas. Frank was employed by the Firestone Tire and Rubber Company Guided Missile Division before he joined the Air Force.

1955

Lloyd E. Best, MS, is now a geologist with the California Company in New Orleans, Louisiana.

Bruce O. Nolf, MS, is acting instructor in the department of physical sciences at the University of California in Santa Barbara.

1956

Charles A. Norman is a geology trainee at the Continental Oil Company in Ponca City, Oklahoma.



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