Personals

1918

Robert C. Sticht, chemical engineer at Commonwealth Fertilizer & Chemicals, Ltd., in Victoria, Australia, died last December 29, as the result of an accident. He received a fractured skull in a fall from some scaffolding while he was examining new loading equipment that he had designed for his company. Bob was largely responsible for the design and supervision of construction of Western Australia's unique bulk wheat handling system in 1932.

During the Second World War, he was engaged in supervising the design and installation of various projects associated with munitions production. After the war he was responsible for the installation of a new superphosphate factory at Albany in Western Australia. He was a Fellow of the Royal Australian Chemical Institute, a member of the Australasian Institute of Mining and Metallurgy, and a past president of the Society of Chemical Industry of Victoria.

1932

Robert W. Webb, MS, PhD '37, professor of geology at the University of California in Santa Barbara, has been re-elected vice chairman of the faculty for 1959-60. Bob joined the Santa Barbara faculty in 1948 after several years on the geology staff at UCLA.

1933

Sterling Beckwith, PhD, consulting engineer with offices in Lake Forest, Ill., has received a Lamme Gold Medal for 1958 from the American Institute of Electrical Engineers for "meritorious achievement in the development of electrical apparatus or machinery." The medal is one of the most coveted honors in the electrical engineering field.

1934

A. E. Thompson, manager of General Petroleum's Torrance refinery since 1949, celebrated his 25th year with the company in June.

Raymond W. Traynor, instructor of physics at Burbank Senior High School in Burbank, attended a Shell Merit Fellowship Seminar at Stanford University during the summer. The seminars, which were held at Stanford and Cornell Universities, are sponsored annually by Shell Companies Foundation, Inc., to strengthen the teaching of high school chemistry, physics and mathematics.

William V. Medlin, PhD, supervisor in the oil process engineering department of Shell Development Company's Emeryville Research Center, is now technical assistant to Dr. Harold Gershinowitz, president of the Shell Development Company in New York. Bill has been with Shell since 1935.

1938

Gardner P. Wilson is now head of the newly created Western Engineering Division of Brush Instruments in Los Angeles. He was formerly head of the Western Engineering Branch of the ElectroData Division of the Burroughs Corporation.

Frederic H. Moore writes that he "was recently transferred by my company, Texaco Inc., to New York and promoted to the job of assistant chief design engineer in our engineering department. I find the work stimulating and enjoy my return back to the department I started in some 21 years ago.

continued on page 40



This scientific Smoot-Holman analogue computer can find the solution to your lighting problem. After being fed all relevant facts, it scientifically determines requirement specifications of fixtures that will deliver desired performance. Contact Smoot-Holman for the correct solution to your lighting problem.

SMOOT-HOLMAN COMPANY Inglewood, California



with new HIGGINS INK-A-MATIC drawing ink dispenser

Just a slight movement of your hand, and HIGGINS new drawing ink dispenser fills ruling pens automatically – faster, easier, than ever before! SPEEDS UP INK TRACING BY 32%. Ink bottle sits securely on non-skid rubber base. Gentlest touch on lever lifts stopper, brings pen filler into

> position. No mess, no waste. Pen filler may be rotated for most convenient filling angle. Lever may be clamped down so bottle stays open when you use dip pen.



res Control

HIGGINS INK CO, INC. Brooklyn, New York The basic art medium since 1880.

Engineering and Science

"My daughter had her first child, a daughter, Kathleen Deibert, on May 1, so we are anxious to return to California to see the new grandchild.

"I am now finishing my term as District Governor of District 51 in Toastmasters International."

John C. McLean, vice president in charge of coordinating and planning for Continental Oil Company in Houston, has been promoted to vice president in charge of financial and transportation activities.

1939

Charles H. Townes, PhD, professor of physics at Columbia University in New York City, will receive a Stuart Ballantine Medal from the Franklin Institute in Philadelphia at a ceremony to be held on October 21. The award will be given for his development of the "maser," a sensitive and precise measuring device used to gather new information on planets and galaxies and to test cosmological theories. The National Aeronautics and Space Administration hopes to place an atomic clock based on the maser into orbit within two years. Experiments with the clock are expected to give Einstein's general theory of relativity one of its most searching checks.

1942

Capt. Nova B. Kiergan, Jr., AE, has retired from the U.S. Navy and will make his home in Indianapolis. He has served as commanding officer of the U.S. Naval Avionics Facility in Indianapolis since 1957. The Kiergans have three children – Nova B. III, 23; Jacqueline, 21; and John, 12.

John Miles, MS '43EE, MS '43AE, professor of engineering at the University of California, returned in June from a sabbatical visit to Cambridge University in England and other points in Europe, where he devoted his time to the problem of gravity wave generation by turbulent winds. His work was sponsored by a Guggenheim Fellowship.

John Rubel, director of the airborne systems laboratories of the Hughes Aircraft Company in Los Angeles, is now assistant director of Department of Defense research and engineering for strategic weapons at Hughes. Succeeding him in his former position is Alexander S. Jerrems '42.

David A. Young, who was Aerojet-



FATIGUE SPIN RIG uses compressed air to drive balls around the bore of a test cylinder to determine cylinder's static fatigue life.



JET ENGINE BEARING TESTING MACHINE tests main rotor ball bearings under actual operating conditions of load and lubrication.

Fafnir works with "unknowns" to come up with ball bearings you'll need!

In many fields of industry and technology, progress depends in large measure on solving increasingly complex ball bearing problems. Bearing materials and lubricants have yet to be perfected that can take certain temperature extremes. Higher speeds and heavier loads pose formidable problems. So does miniaturization.

To help its research engineers probe the unknowns in these and other areas, The Fafnir Bearing Company maintains the most up-to-date facilities for metallurgical research, and bearing development and testing. It is another reason why you are likely to find Fafnir ready with the answersshould bearing problems some day loom large for you. Worth bearing in mind. The Fafnir Bearing Company, New Britain, Connecticut.

Write for booklet, "Fafnir Formula For Solving Bearing Problems" containing description of Fafnir engineering, research, and development facilities.



General's first employee when the company was founded in 1942 and who has recently served as chief of ARPA's space technology program, is now director of Aerojet's new corporate long range planning division.

Robert A. Spurr, PhD, research scientist at Hughes Aircraft Company, died of brain cancer on June 18. He was 46. For the past four years, Bob had been doing brilliant work on the research and development team at Hughes and was slated to direct the physics wing of the new Hughes laboratory at Malibu. Bob was formerly professor of chemistry at the University of Maryland.

He is survived by his wife and four children – Stephen, 14; David, 10; Sophia, 7; and Sarah, 4.

- 1943

John E. Cushing, PhD, professor of bacteriology and chairman of the biological sciences department at the University of California in Santa Barbara, took part in the recent International Oceanographic Congress in New York. The meeting was sponsored by the American Association for the Advancement of Science and UNESCO. John recently returned from Japan, where he spent a year with his family on sabbatical leave. At Tokyo University he did research on blood-typing whales, among other projects.

1944

Dean R. Chapman, MS '44, PhD '48, aeronautical research scientist for the National Aeronautics and Space Administration in the Ames Research Center at Moffett Field, Calif., has received a Rockefeller Public Service Award to study astronomy.

1945

Dudley B. Smith, formerly patent and trademark counsel for Cluett, Peabody & Co., Inc., is now an executive member of Clupak, Inc. He will specialize in activities connected with the licensing of foreign paper manufacturers to make extensible paper and to use the company's trademark.

Hugh S. West is now assistant secretary of the agency department in the field services division of the Connecticut General Life Insurance Company in Hartford, Conn. He joined the company in 1953 as an agent in San Francisco, and has been with the home office since 1956. The Wests have four children – Ruth Ann, 6; Hugh, Jr., 5; Kathryn, 3; and Mary five months.

Joseph F. Hook received his PhD in physics from UCLA in June and is now a member of the technical staff of the continued on page 44

Engineering and Science

NON-SLIP CHUCK holds lead firmly at any length you want. Lead can't be pushed back into barrel—and won't twist in sharpener.

SATIN-FINISH METAL GRIP is knurled for easier holding. Its extra length gives more accurate control, less finger tension.

THE ANODIZED

ALUMINUM BAR-REL is unbreakable. And it can't roll off the board because it's hexagon-

NEWI

PUSH-BUTTON instantly releases the chuck's grip on the lead at the touch of the thumb. It's colored for quick identification of grade.



This lifetime lead holder for just



All-metal construction makes it the buy of a lifetime.



EAGLE PENCIL COMPANY, DANBURY, CONN.

Personals . . . continued

Hughes Aircraft Company in Culver City.

1946

Philip H. Benton writes that "my firm, Benton Engineering, which was established in 1956, specializes in foundation engineering and soil mechanics and is now incorporated. A greatly increased staff has required moving to larger offices in San Diego. We live in La Jolla and have four children – Joan, 8; Paul, 5; John, 3; and Anne, who was born on July 14."

1947

Col. Charles M. Duke, MS, is now New York district engineer for the U.S. Army in New York City. In his new job he will direct the operations of 9 military officers and about 1400 civilian employees on flood control projects, harbor maintenance and improvements, beach erosion and hurricane control studies, and supervision of construction facilities at Army and Air Force bases and missile defense sites.

Milton D. Van Dyke, MS, PhD '49, who was formerly a research scientist at the Ames Research Center of the NASA at Moffett Field, has been appointed professor of aeronautical engineering at Stanford University.

Col. William M. Linton, MS, is now in command of the 151st Engineer Group at Fort Benning, Georgia. He came to Fort Benning in 1955, after commanding the 434th Engineer Battalion in Korea, and headed the U.S. Army Infantry School Command and Staff Department's Engineer Committee before becoming operations officer in 1957.

1949

William W. Ward, MS, PhD '52, writes that he recently finished a 7-year tour of duty in Airborne Radar Systems at MIT's Lincoln Laboratory. He is now leader of the Ground Radar Systems Group. The Wards have a 3-year-old son.

Frederic T. Selleck, senior research chemical engineer in the research division of the Fluor Corporation, Ltd., in Whittier, writes that he has a second child, a son, born in September '58. Ed Bulkley, '49, promptly presented the boy with a miniature Big T sweater. William Lanz '49, is also at Fluor as principal process engineer in the L.A. office. Fred has been working for the past two years in the nuclear energy field - helping with the process design of the large-scale, high-level radioactive waste calcination facility at AEC's National Reactor Testing Station in Idaho, and currently working on the design of a large nuclear reactor system to provide heat for the multistage flash evaporation of sea water for the Office of Saline Wa-

ter and the State of California.

1951

Carl A. Hirsch received his MD degree from Washington University in St. Louis in June.

Earl C. Hefner, MS '52, writes that he has moved his family to the Bay Area, now that Holly-General Company has transferred him to San Francisco as district manager of the Northern California-Nevada division. The Hefners have two daughters – Paula, $2\frac{1}{2}$, and Kim, $1\frac{1}{2}$.

Francis R. Kramer writes that "since leaving school, I spent two years in the army, got married, had two children (Laura and Danny) and have completed requirements for my PhD in chemical engineering at Purdue University. I'm now located at Seaford, Delaware, with the Du Pont Company."

1953

Naoji Morishita, MS, is now senior engineer in the systems engineering department of the marine division of the Sperry Gyroscope Company in Great Neck, L.I.

Pierre Marien, MS, has received the degree of Docteur en Sciences Appliquées with highest honors from the University of Brussels, and is now in charge of the course in power reactors at the same university.

George Gartner, civil engineer with the Los Angeles County Flood Control District, was killed in an auto accident last June 13, when he failed to negotiate a turn in a detour and hit a telephone pole. He is survived by his wife and five children.

Gerald Graziani, MS, received his PhD in aeronautical engineering from Princeton University in June.

Howard Boroughs, PhD, wrote in July that "during the four years I spent at the University of Hawaii as associate professor of zoology, I annoyed so many of my friends in Los Angeles and Pasadena by my frequent trips to the mainland that I decided to move before I lost them all. I am now in Turrialba, Costa Rica, at the Interamerican Institute of Agricultural Sciences, which is a part of the Organization of American States. Next I either go to South America or along the east coast. James Liverman, PhD '53, and Howard Teas, PhD '47, were down here recently.

"I am in charge of an AEC sponsored Nuclear Energy Program for Latin America. We have a gamma field and an isotope laboratory. The country is beautiful, we don't pay rent or taxes, and get beer for 15 cents. Come on down."

Robert A. Koster is now an electrical continued on page 48



Douglas diversification affords broadened opportunities, combined with stability and security.

Engineering at Douglas is divided into three basic areas ...missile and space systems, transport aircraft and combat aircraft. In these military and commercial categories, each advancing beyond present frontiers of achievement, engineers and scientists can progress to the limit of their capabilities.

In addition, supervisory and executive openings are filled from within the company. Many of the top executive officers at Douglas are engineers who have moved right up to assume wide responsibility.

We are interested in engineers with backgrounds in other fields as well as avionics, aircraft and missiles.

For further information write to Mr. C. C. LaVene, Douglas Aircraft Company, Inc., Santa Monica, California. Section B.



the most respected name in aircraft, missile and space technology

Personals . . . continued

engineer in the reconnaissance systems department of the Ramo-Wooldridge Division of Thompson Ramo Wooldridge, Inc., in Los Angeles. For the past five years he has been in the civil service at the U.S. Naval Ordnance Test Station in China Lake.

1954

Paul Concus received his PhD at Harvard University last June.

Walter W. Lee, Jr., writes that he is now married and lives with wife Eve and Siamese cat Teakwood in Los Angeles. Walt is vice president of Technical Communications, Inc. – and Leon Vickman, '53, is president of the company, which produces motion pictures, publications, and audio-visual aids for engineering organizations and government agencies.

Edward J. Gauss writes that "Christy Ann, our first, was born on July 10. Inassnuch as I am working for my PhD in computers at UCLA I have her well programmed. Every time she cries she lets me pick her up."

1955

Frank B. Wallace, Jr., development engineer at the AiResearch Manufacturing Company in Phoenix, announced the arrival of a daughter, Rosalie, on August 19.

E. Vern Nogle writes that "while with Lockheed Missiles and Space Division, I spent a year at the MIT Instrumentation Laboratory working on inertial guidance electronics. I am now back at the Sunnyvale plant and live with my new wife in San Jose. The Eastern trip was profitable in more respects than one for I met and married a physical therapist graduate from Boston's Simmons College."

Vincent Marinkovich received his MD at Harvard University last June.

1956

William Purves writes that "on June 9 I married Jean McCauley of Hamden, Conn. Delbert McCune '56 was my best man. On the previous day I had received my PhD in botany from Yale University. We are now in Germany where I shall spend a year as a National Science Foundation Fellow at Universität Tübingen."

John Young received his LLB at Harvard University last June.

Theodore G. Johnson is now manager of the new West Coast sales office of the Digital Equipment Corporation at Maynard, Mass.

Hubert E. Dubb is now a research chemist at the Redstone Arsenal Division of the Rohm & Haas Company in Huntsville, Alabama. He writes that Keith Booman, PhD '56, has recently moved to Huntsville from the company's Philadelphia offices.

Thomas W. Donnelly, MS, received his PhD in geology from Princeton University in June.

1957

Lieut. James S. Sibley, MS, is now construction engineer at the U.S. Army Corps of Engineers' Eastern Ocean District in the Goose Bay Area Office in Labrador.

Lieut. Richard F. Smisek, MS '58, is now a First Lieutenant in the Air Force. He is serving as a mechanical engineer at Arnold Engineering Development Center in Tullahoma, Tenn. The Smiseks have two daughters.

Reuben Moulton, $J_{r.}$, is now with the U.S. Army Chorus at Fort Myer, Virginia. He writes that he hopes to be returning to Pacific Telephone's management training program in 1961.

1958

Lawrence T. Gurley, MS, is continuing his graduate study in electrical engineering this year at the University of Paris, on a Fulbright grant.

1959

Robert Harmon has decided to enter the Methodist ministry instead of following a scientific career. He has already been granted a local preacher's license, the first step toward ordination to the Methodist ministry.

Sam Berman, PhD, is now at the University of Copenhagen for post-doctoral studies in physics on a National Science Foundation fellowship. Sam is associated with the Space Technology Laboratories in Los Angeles.

Rolf Engleman, Jr., PhD, is now a chemist in the GMX division at the University of California's Los Alamos Scientific Laboratory in New Mexico. His wife has joined him there.

Neal de Gaston is now on the technical staff of Ramo-Wooldridge in Los Angeles, a division of Thompson Ramo Wooldridge, Inc.

John P. Wolf, III, PhD, is a research chemist with the DuPont organic chemicals research division at the Jackson Laboratory in Wilmington, Del. The Wolfs live in Wilmington with their three daughters.

Roger M. Golden, PhD, is now studying at the Technical Institute in Eindhoven, the Netherlands, on a Fulbright grant.

Stanley Roth is studying at Universität Tübingen, Germany, on a Fulbright grant.

Engineering and Science