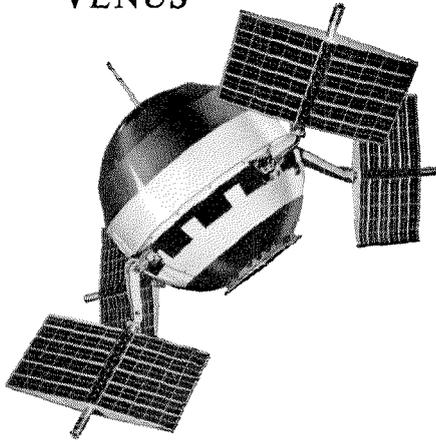


PIONEER V  
IS VAULTING  
TOWARD THE  
ORBITAL  
PATH OF  
VENUS



Pioneer V is seeking deeper into space than ever before attempted, as it nears the orbital path of Venus — 26 million miles from earth.

Pioneer V was designed, constructed, launched under the supervision of, and tracked by Space Technology Laboratories, Inc. for NASA, at the direction of the Air Force Ballistic Missile Division.

STL's technical staff brings to this space research the same talents which have provided systems engineering and technical direction of the Atlas, Thor, Titan and Minuteman programs since 1954.

Scientists and engineers with outstanding capabilities relating to these activities are invited to investigate positions at STL. Resumes are welcome.



SPACE TECHNOLOGY  
LABORATORIES, INC.  
P.O. Box 95004,  
Los Angeles 45, California

# Personals

## 1918

*James P. Steele*, president and general manager of the J. P. Steele Construction Company on the University of Wyoming campus in Laramie, passed away on October 27, 1959.

## 1926

*Theodore C. Coleman*, president of the Coleman Engineering Company, Inc., in Torrance, and his wife left on May 3 for a business trip to Australia, Singapore, Bangkok and Tokyo. The Colemans have a son, Sam, who is attending Colorado College and a daughter, Judy Ann, a graduate of Stephens College, who was married recently.

## 1930

*John W. Towler*, director of manufacturing at the Union Oil Company in Los Angeles, has been elected a vice president of the company.

## 1932

*Franklin J. Cline, Jr.* opened an office in Fullerton in February as a certified public accountant. He is also secretary of a newly-organized Exchange Club there. The Clines have two children; Tom, 16, and Susan, 8.

*William M. Bleakney*, PhD, is now senior scientist in the advanced projects laboratories at the Hughes Aircraft Company in Culver City. He designs new systems for military and space projects.

*James R. Bradburn* is now vice president of manufacturing and engineering for Electro-Data and the Burroughs Corporation in Detroit. He was president of the ElectroData Corporation when it merged with Burroughs in 1956, and has been vice president and general manager of the company's ElectroData division in Pasadena since then.

## 1934

*Nick T. Ugrin*, director of industrial relations at the Union Oil Company in Los Angeles, was recently elected a vice president of the company.

## 1936

*Frank W. Davis*, vice president of the Convair Division of the General Dynamics Corporation and manager of the Fort Worth plant, received an honorary PhD from West Virginia University on May 30. The Davises have three children; Caroline, 18, Frank, Jr., 15, and William, 9.

## 1937

*Edward J. Horkey*, MS '38, is now vice president of engineering at Houston Fearless. He will continue as head of the Horkey-Moore Associates unit.

## 1938

*Charles F. Robinson*, MS, PhD '49, has been appointed director of a new research division in Pasadena which has resulted from the consolidation of Bell & Howell Company in Chicago and its subsidiary, the Consolidated Electrodynamics Corporation. He was formerly associate director of research at CEC and has been with the company since 1947.

*Howard S. Seifert*, PhD, is now on the technical staff of the United Technology Corporation in Sunnyvale, California. He is also professor of aeronautical engineering at Stanford University and is serving as 1960 president of the American Rocket Society. Howard was formerly a lecturer in rocket design at Caltech and most recently was a visiting professor at the University of California, and special assistant for professional development at the Space Technology Laboratories, Inc. in Los Angeles. The Seiferts and their three children are now living in Palo Alto.

*Donald D. Davidson* has been elected vice president of the Golden Bear Oil Company in Los Angeles. He will be responsible for all manufacturing operations of the company. He has been with Golden Bear since 1952.

## 1940

*Don L. Walter*, MS '41, is now vice president of the Marquardt Corporation in charge of the Power Systems Group. Don has four daughters; Terri, Susan, Lisa, and Tina.

*John C. Carey*, engineering manager of Microdot, Inc., in South Pasadena, fell from the second floor of a building under construction on May 3, while inspecting the work. He died a week later of a skull fracture. He leaves his wife and three adopted children; Deena, 11, John, 11, and Muriel, 7.

## 1946

*Comdr. A. Dave Pollock*, MS, was killed in a Navy plane crash on November 1, 1952. After leaving Caltech in 1947 he worked toward the placing of jet aircraft aboard carriers. He not only had one of the first jet carrier-based squadrons but also did the early experimental flying qualities tests for catapulting and arresting jets. This information about Dave, who has been listed as one of Caltech's "lost alumni," came from *Comdr. W. C. Wilburn*, MS, AE '47.

*Jose D. Cortes-Guzman*, MS, writes from Mexico City that "I have been doing Federal work as a contractor since 1951 in different Mexican states. I own

*continued on page 26*

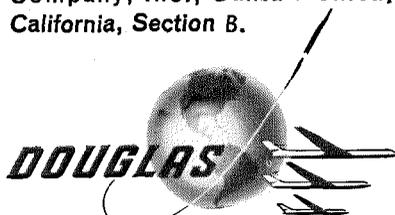


Donald W. Douglas, Jr., President of Douglas, discusses valve and fuel flow requirements for space vehicles with Dr. Henry Ponsford, Chief, Structures Section.

## Spaceliners have the biggest thirst in the universe

Each 6,000,000 pound thrust rocket ship now being planned for manned interplanetary exploration will gulp as much propellant as the entire capacity of a 170 passenger DC-8 Jetliner in less than 4 seconds! It will consume 1,140 tons in the rocket's approximately 2 minutes of burning time. Required to carry this vast quantity of propellant will be tanks tall as 8 story buildings, strong enough to withstand tremendous G forces, yet of minimum weight. Douglas is especially qualified to build giant-sized space ships of this type because of familiarity with every structural and environmental problem involved. This has been gained through 19 years of experience with missile and space systems.

Douglas is now seeking qualified engineers, physicists, chemists and mathematicians for programs like ZEUS, DELTA, ALBM, GENIE, ANIP and others far into the future. For full information write to Mr. C. C. LaVene, Douglas Aircraft Company, Inc., Santa Monica, California, Section B.



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## Personals . . . continued

all my equipment such as draglines, tractors, scrapers and smaller machines and have my main office in Mexico City. Even though the competition is hard and there aren't many opportunities for work because of the many industrial, social, and political problems of our government, I'm still working for myself and my wife and four children—one girl and three boys, 7, 8, 9 and 10."

### 1947

David L. Douglas, PhD '51, is now manager of fuel cell engineering at General Electric's aircraft accessory turbine department in Lynn, Mass. He was formerly a physical chemist at GE's Schenectady plant. The Douglases live in Marblehead with their two children.

Joseph Rosener, Jr. is now president of the Plasmadyne Corporation in Santa Ana, a subsidiary of the Giannini Scientific Corporation. He was formerly vice president and general manager of the company.

L. Edward Klein, MS, is now director of development at Monsanto Chemical Company's organic chemicals division in St. Louis. He was formerly assistant director of development.

### 1950

Robert Duff Clark, MS, has been appointed director of research and development at the Axelson Manufacturing Company, a division of U.S. Industries, Inc. Axelson is a 65-year old firm which manufactures pumping equipment for the petroleum industry in Los Angeles. Bob was previously chief engineer at Clary Dynamics in San Gabriel. The Clarks and their two sons live in Fullerton.

Wilbur A. Wikholm writes that "at present I am working for RCA in Van Nuys. I received my MS in engineering from UCLA in 1959. My wife and I now have three daughters—Gretchen, 9, Janine, 7, and Annette, 9 months."

Jerome K. Delson, MS, PhD '53, writes that "after leaving Caltech in 1953 I joined the General Electric Company where I worked with power transformers in Pittsfield, Mass. Then I went to Schenectady, N.Y., and worked in GE's analytical engineering section and in their general engineering laboratory.

"In 1958 I received a Fulbright grant and went to the Weizmann Institute of Science in Israel where I programmed their digital computer, the WEIZAC, for load-flow studies of electrical power systems. After that, I accepted a one-year position with the Palestine Electric Corporation as a consultant to their newly-formed technical development group.

"My wife, the former Esther Harrison of Chicago, and I have enjoyed living

in Rehovot at the Institute, and now in Haifa. In our travels throughout Israel, we feel that we have an intimate contact with its ancient history. In September we start our return to America, possibly visiting India and Japan on the way."

### 1951

Clarence Allen, MS, PhD '54, associate professor of geology at Caltech, recently returned from a three-month trip to Chile, where he studied earthquake faults (and, incidentally, came down with hepatitis—from which he has now recovered). On his travels around Chile, Clarence met a number of Caltech alumni. In Santiago, Pierre St. Amand, MS, PhD '53, who is visiting professor of geology at the University of Chile and Cinna Lomnitz, PhD '55, director of the University's Institute of Geophysics; in Maria Elena, Henry B. Suhr, '33, director of research for the Anglo-Lautaro Nitrate Corporation.

### 1953

Lawrence Starr writes that he is doing development and sales work in food processing equipment at the Koch Equipment Company in Kansas City, Mo. The Starrs now have two children; Laura, 2½, and John, born on May 2.

Bruce Holloway, PhD, senior lecturer at the University of Melbourne in Victoria, Australia, writes that he recently had a visit from Sherman Ripley, PhD '53. "Sherman is a South African," writes Bruce, "and was an official delegate to Sydney in March, 1960. After attending the conference, Sherman came down to Melbourne and stayed with me for a week. He is senior lecturer in physiology in the Medical School of the University of Natal in Durban."

### 1957

Jacob Lubliner has received his PhD in engineering mechanics from Columbia University and is now working at the Bell Telephone Laboratories. He writes that this is only a temporary job, however, since he will be going to Paris in the fall on a National Science Foundation postdoctoral fellowship. He will be doing research in mechanics at the Polytechnic School. Jacob also writes that Serge Lang, '46, (listed as a "missing alumnus" in the Alumni Directory) is associate professor of mathematics at Columbia University.

Rube Moulton, Jr. writes that he has just a little over one year left in the Army. He hopes to take some leave, and travel in Europe this summer.

### 1958

Richard K. Nelson, ME, is now applied science representative at IBM in New Mexico. Dick was married last summer.