The opportunity is often lost by deliberating. -Publius Syrus Roman slave and poet, Ist Century B. C.

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PERSONALS

1922

Edward G. Kemp, who has his own business as an insurance broker in Hermosa Beach, writes that "perhaps some bragging is excusable after 35 years; I now have 5 grandchildren-2 Californians and 3 Texans."

1925

John E. Maurer's 22-year-old daughter, Phyllis Ann, won the \$1,000 Tom Treanor-Los Angeles Times Fellowship in Journalism last month. This provides for a year of study in the UCLA department of journalism. John is owner of the Tidi Products Manufacturing Company in Pomona.

1933

John C. Monning, assistant superintendent of the Los Angeles City Department of Building and Safety, was recently appointed a Reserve General of the U.S. Army Reserve. John has commanded the 409th Engineer Brigade for the past 15 months. This particular brigade was the only U.S. Army Reserve unit to be called to active duty as a unit, serving throughout the Korean War.

1936

Tyler Thompson is now professor of philosophy of religion at the Garrett Biblical Institute, the graduate theological school of the Methodist Church, on the campus of Northwestern University in Evanston, Illinois.

1937

Bernard Walley, Western district field engineering manager, in the tube division of RCA in Los Angeles, received an RCA Victor Award of Merit in Philadelphia recently. He's been with the company for 20 years, and has been manager of his department since 1955.

1938

Yuan C. Lee has been appointed as director of research and planning of the liquid engine division of the Aerojet-General Corporation in Azusa, California. He's been with the company since 1949.

1940

Robert C. Brumfield, MS '41, PhD '43, writes that "by virtue of being a founder and stockholder, I am now vice president and secretary treasurer of Automatic Fire Control, Inc., in El Monte, California. We manufacture and install automatic fire protection systems and automatic fire sprinklers.

"I have been hobbling around on crutches for a couple of months as a result of a skiing accident at Mammoth

Mountain. Our two daughters-Corinne, 11, and Cynthia, 8-have been swimming and diving for several years with the Caltech Swim School under the able tutelage of Coach Warren Emery."

1941

Joseph F. Rominger, head of the geology section of International Petroleum, Ltd. (an affiliate of the Standard Oil Company) in Bogota, Colombia, writes that "after finishing graduate work with a PhD from Northwestern in 1948, I left the U.S. Geological Survey and began working for the Carter Research Laboratory at Tulsa, Oklahoma. The geologic section there does nearly all of the geological research for the parent company, the Standard Oil Company of New Jersey. During my five years there I spent six months in Venezuela, then worked all over the States. Four years ago we moved to Colombia, where I started work with International. The section has 85 people, including 35 North American geologists.

"I see by the 'we' in the above paragraph that I left out a very important event. In 1948 I married Betty Jordan of New York, who attended Northwestern when I did. We have a daughter, Kathryn Lvnn, soon to be 5.

"I have met Tech men in various places since leaving school. Clyde Wahrhaftig, '41, Henry W. Menard, Jr., '42, MS '47, and Bob Greenwood, '42, MS '43, were all at Harvard when I was there after the war. I saw them all again in Mexico City last August at the International Geological Congress.

"Probably the most unusual encounter was with Norm Svendsen, MS '42, and his wife on the streets of Copenhagen two years ago while we were vacationing in Europe. They were three-quarters of the way around the world, having gone west from Pasadena. Norm and I used to play on the tennis team together.

"I saw Bill Chapin at his home in Houston a couple of years ago. Then last year Francis D. Bode, '30, MS '31, PhD '34, was in Bogota on business and had dinner with us. He was my field geology professor at Caltech and is now with the Texas Petroleum Company in New York City, as some sort of coordinator of geological work for South America and Africa.

"I've also seen John Maxson, '27, MS '28, PhD '31 (another former geology teacher) and Warren Beebe, a geology grad student, on several occasions.

"I am going to attend Cornell's sixweek executive development program starting June 16. After that we will go on our two-month foreign vacation ('foreign' means outside of Colombia). Part of that trip will include visiting my parents in

ENGINEERING AND SCIENCE

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ELECTRON BEAM PLASTIC SCINTILLATOR PHOTOMULTIPLIER SHOCK TUBEL The electron densitometer shown here was designed and built at Los Alamos Scientific Laboratory to study the structure of shock waves and to investigate the fast reactions associated with strong shock and detonation waves. This instrument provides space resolution of less than 0.2 mean free path under normal operating *conditions*.

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Personals . . . CONTINUED

Long Beach-and a trip to the Caltech campus, I hope."

1943

John W. Otvos, PhD, was appointed head of the chemical physics department of the Shell Development Company in Emeryville, Calif., this month. He has been with Shell since 1946.

1945

Robert F. Schmoker is now branch manager of the Sacramento office of American Blower, a division of the American Radiator and Sanitary Corporation. He was formerly sales engineer for the company, in Berkeley. The Schmokers and their three children—Linda, Nancey and Robert —now make their home in Sacramento.

1948

George S. Holditch is now superintendent of Procter & Gamble's Kansas City factory. He was formerly general production supervisor at the Chicago factory. George has been with the company since 1948.

Hugo D. Schwartz, MS, writes that "after I left Caltech, I journeyed to Chile, where I stayed for a short time, until the outbreak of the war of independence in Israel changed my plans. From the end of 1948, until 1951, I worked for the Israel ammunition plants, where I was in charge of planning the purchase of materials and machinery. In 1951 my brother and I opened a consultant engineers office, designing molds and planning production for plastic and metal factories.

"At the end of 1952 I founded the Israel Brake Lining Manufacturers, of which I am managing director. We are gradually making it a first class production unit—exporting to half the world, including the U.S.

"Lately I started a shipping enterprise and we are planning to build some tankers and ore carriers in Germany.

"My family has grown to three-my latest boy having been born last February. Besides business, I have been appointed Chili's Honorary Consul in Tel-Aviv."

1949

Gene D. Six, mathematics teacher at Pasadena High School, announces the arrival of the newest model Six—Laura Lynn, born on April 20—a companion to their 1955 model.

1950

David B. MacKenzie is now a research geologist at the Ohio Oil Company's research center near Denver, Colorado. He was formerly with American Overseas Petroleum, Ltd., in New York.

Richard H. Knipe has been working at the U.S. Naval Ordnance Test Station in China Lake, California, since his graduation from Caltech.

ENGINEERING AND SCIENCE

MARS outstanding design SERIES



birth of a satellite

Most new ideas, like this inhabited satellite, start out as drawings on a sheet of paper. Here artist Russell Lehmann shows the first step in building the space station proposed by Darrell C. Romick, aerophysics engineer at Goodyear Aircraft.

Two ferry ships, one stripped of rocket units, are joined end to end. As others are added, this long tube forms temporary living quarters for crews. Eventually, outer shell will be built around core, making completed station 3,000 feet long, 1,500 feet in diameter.

No one can be sure which of today's bright ideas will become reality tomorrow. But it is certain that in the future, as today, it will be important to use the best of tools when pencil and paper translate a dream into a project. And then, as now, there will be no finer tool than Mars — from sketch to working drawing.

Mars has long been the standard of professionals. To the famous line of Mars-Technico pushbutton holders and leads, Mars-Lumograph pencils, and Tradition-Aquarell painting pencils, have recently been added these new products: the Mars Pocket-Technico for field use; the efficient Mars lead sharpener and "Draftsman's" Pencil Sharpener with the adjustable point-length feature; and — last but not least — the Mars-Lumochrom, the new colored drafting pencil which offers revolutionary drafting advantages. The fact that it blueprints perfectly is just one of its many important features.

> The 2886 Mars-lumograph drawing pencil, 19 degrees, EXEXB to 9H. The 1001 Mars-Technico push-button lead holder. 1904 Mars-lumograph imported leads, 18 degrees, EXB to 9H. Marslumochrom colored drafting pencil, 24 colors.



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Personals . . . CONTINUED

Dr. Peter T. Knoepfler is now a captain in the Medical Corps of the 3750th Technical Training Wing ATC at Sheppard Air Force Base in Wichita Falls, Texas. He had been working at the Bronx Municipal Hospital in Bronx, N.Y.

1951

Elmer F. Ward, president of Task Corporation, writes that the company has moved from Pasadena to Anaheim, California. The Wards have three children two sons, 13 and 1, and a daughter, 9.

1952

Wilbur Barmore, mechanical engineer at the Wiancko Engineering Company in Pasadena, writes that he now has a third daughter. Bill adds that he's working with William Rihn, Keith Winsor and six other Techmen at Wiancko.

1953

John C. Behnke, Jr., writes that he'll receive his MD degree this month at UCLA, and will then begin his internship at the San Francisco City-County Hospital. The Behnkes have a seven-month-old son.

1954

Paul Concus, in his third year at the Harvard Graduate School of Arts and Sciences, has been awarded an Eastman Kodak Company Fellowship for 1957-58.

John L. Abbott graduated from the U.S. Navy's Officer Candidate School in Newport, Rhode Island, last March. He was formerly with the Calmec Manufacturing Company in Los Angeles.

1955

Dorothy A. Semenow, PhD, who has held a National Science Foundation postdoctoral fellowship this year at Pomona College, has been appointed assistant professor of chemistry there for 1957-58.

Hendrick H. Paalman, MS '56, who is studying for his PhD in chemical engineering at Stanford, announced his engagement to Nancy Creer of Pasadena last month.

1956

Frederick N. Benning, working in the control system division of the Ramo-Wooldridge Corporation in Los Angeles, will be married in August to Miss Sandy Hawkins, who graduates from UCLA this month. Fritz is studying for his MS in night school at UCLA.

William M. Chapple, who received his MS in geophysics at Caltech this month, will be studying at the University of Paris on a Fulbright grant for the 1957-1958 academic year.

1957

Don L. Bunker, PhD, is now a chemist at the University of California's Los Alamos Scientific Laboratory. Don is married and has one child.