

DATATAPE INCORPORATED

Although the exact name, Datatape Incorporated, only goes back to 1983—when Eastman Kodak purchased the Datatape Division of Bell & Howell and incorporated it as a wholly owned subsidiary—the firm has a long and distinguished history in Pasadena.

It was a part of a company founded as Consolidated Engineering Corporation (CEC) on March 1, 1937, by Herbert Hoover, Jr., son of the thirty-first President of the United States, as an affiliate of United Geophysical Corporation. CEC's function was the design and development of geophysical instruments for United. Hoover, an engineer and a Stanford graduate, had launched the latter company in 1935 to engage in geophysical exploration for oil.

In 1938 CEC introduced the first experimental model of a commercial-type mass spectrometer. Modified and improved versions of this instrument are still used today in analyzing complex gas and light liquid measures. The first of these spectrometers was sold to Atlantic Refining Company in 1942, and within a short time the vast majority of U.S. refineries had purchased the product.

Consolidated began a long association with U.S. government agencies in 1940, when it signed its first contract with what was then the U.S. Army Air Corps. As World War II began, CEC equipment was being used in testing the prototypes of many of the aircraft that would play a vital role in America's victory. In September 1944 the company received the first of its three Army/Navy "E" awards for production excellence. Participating in the award ceremony was ex-President Hoover himself.

One of CEC's original staff members was Philip S. Fogg, who was destined to play a major role in the firm's future. He served as its first treasurer, then was named executive

vice-president in 1941. By that time the number of employees had grown to eighty, and gross income had reached a new high of \$164,000. The following year that figure nearly tripled, to \$470,000, and the company had 156 employees.

CEC began to separate itself from United Geophysical Corporation in 1942, and by 1945 had completed its severance. Herbert Hoover, Jr., sold his CEC interests to concentrate en-



Philip S. Fogg served Consolidated Engineering Corporation with distinction for many years as treasurer, executive vice-president, president, and chairman of the board. In 1948-1949 he was president of the Pasadena Chamber of Commerce.

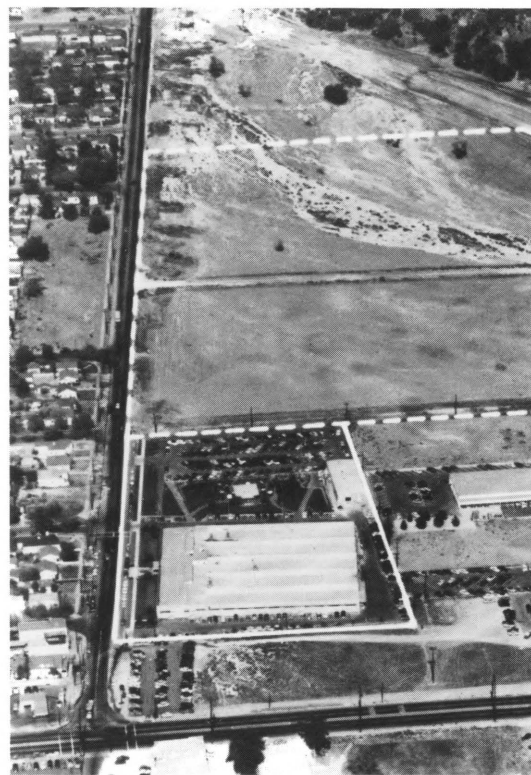
tirely on United. CEC conducted its first public stock sale; and Fogg was appointed president and chairman of the board.

Under his leadership CEC continued to grow and prosper. The tenth-anniversary year, 1947, saw the organization pass the million-dollar level in revenues and the \$100,000 level in net profit for the first time. By the following year the firm exceeded \$2

million in revenues, and after-tax profits were \$250,000. There were 280 people on the payroll.

CEC moved into new, 25,000-square-foot facilities at 620 North Lake Avenue in January 1947, marking the fourth move in the ten-year history of the fast-growing enterprise. That space also soon proved inadequate, and in 1950 the company broke ground for a 70,000-square-foot plant in the Hastings Ranch area of Pasadena. It was occupied early in 1951, but by the end of that year had exceeded its capacity—requiring the reuse of the Lake Avenue facility to handle overflow.

By this time the well-established firm's common stock had been listed on both the American and Pacific Coast stock exchanges. From fewer than 1,000 shareholders at the time of the listings in 1950, there were more than 3,500 by year-end 1953. Revenues during that time climbed from \$2.8 million to \$14 million, and after-tax earnings jumped from



\$291,000 to more than \$2 million.

In 1953 the number of employees passed 1,000, making CEC Pasadena's largest employer. This period of rapid growth was also marked by the opening of branch offices nationwide. New products were continually being added; for example, in 1952 CEC had acquired the Vacuum Equipment Department of Eastman Kodak—renaming it Consolidated Vacuum Corporation—and offered a complete line of high-vacuum products, with headquarters in Rochester, New York.

Ironically, a major portion of CEC itself, after a number of changes in its corporate structure and name, would be acquired by Eastman Kodak in 1983.

In 1955, to better reflect the expanded scope of its activities, CEC

changed its name to Consolidated Electrodynamics Corporation. In that same year the company introduced a new product line that was to have a major impact on its future. Called Datatape, a magnetic tape recording system that collected test data from airborne vehicles for ground analysis,

ell subsidiary, and was named vice-chairman of the board of the parent corporation.

Fogg relinquished the presidency of CEC in 1961, but remained as vice-chairman until his retirement in 1965. He had guided the once-tiny Pasadena firm as it grew to become a

An aerial view of the Consolidated facility and the surrounding area as it looked in 1954. Hastings Ranch is at the upper right. The dirt road behind the drive-in theater is now Rosemead Boulevard.



it had undergone two and a half years in research and development and was the organization's largest development project to date.

In 1959 CEC, now a New York Stock Exchange-listed company with annual revenues of more than \$40 million, began merger negotiations with Bell & Howell Company. The merger, involving an exchange of \$44 million of stock, was completed in 1960. Phil Fogg remained as president and chairman of the board of CEC, which became a Bell & How-

In September 1983 the Space Shuttle made its seventh flight into space. Playing a key role in the photography equipment used on the mission were Datatape Incorporated's magnetic tape recorder and digital encoder.

major industrial complex, known and respected around the world. However, it was by no means his only accomplishment.

In 1954 Fogg and several associates had purchased an obscure Illinois operation called the Siegler Corporation, and in 1962 they ac-

quired the Lear Company. By 1970 the merged company, Lear, Siegler, Inc., had more than fifty divisions and close to \$600 million in revenues. Fogg served as a director and chairman of the executive committee.

The entrepreneur also had a distinguished record of service to Pasadena. He was an active member of the Pasadena Tournament of Roses Association and president of the Pasadena Foundation for Medical Research. He took a great interest in the local municipal planning process, and was one of a four-member panel that drafted a twenty-year blueprint for Pasadena's progress.

Fogg served as president of the Pasadena Chamber of Commerce during its 1948-1949 fiscal year, and in 1950-1951 was president of the Rotary Club of Pasadena. He also served for a number of years as a director of Security Pacific National Bank.

The dawning of the space age saw CEC very much involved. The "Datatape System" introduced in

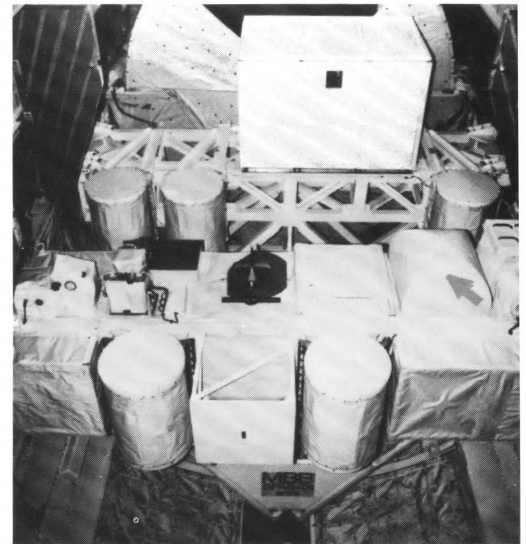
1955 had received widespread acclaim throughout the aerospace community, while still in the developmental stage. A year later, with testing successfully completed, the first airborne recorders were delivered to Edwards Air Force Base to be used in testing jet aircraft.

Datatape played a key role in the Mercury spacecraft program, which would send American astronauts to frontiers beyond this planet. So it was that, on May 5, 1961, as Alan B. Shepard, Jr., was launched into space aboard Mercury I shouting "Man, what a ride," a Datatape recorder weighing less than nine pounds was measuring the responses of both the astronaut and his spacecraft and transmitting them to eighteen tracking stations around the world.

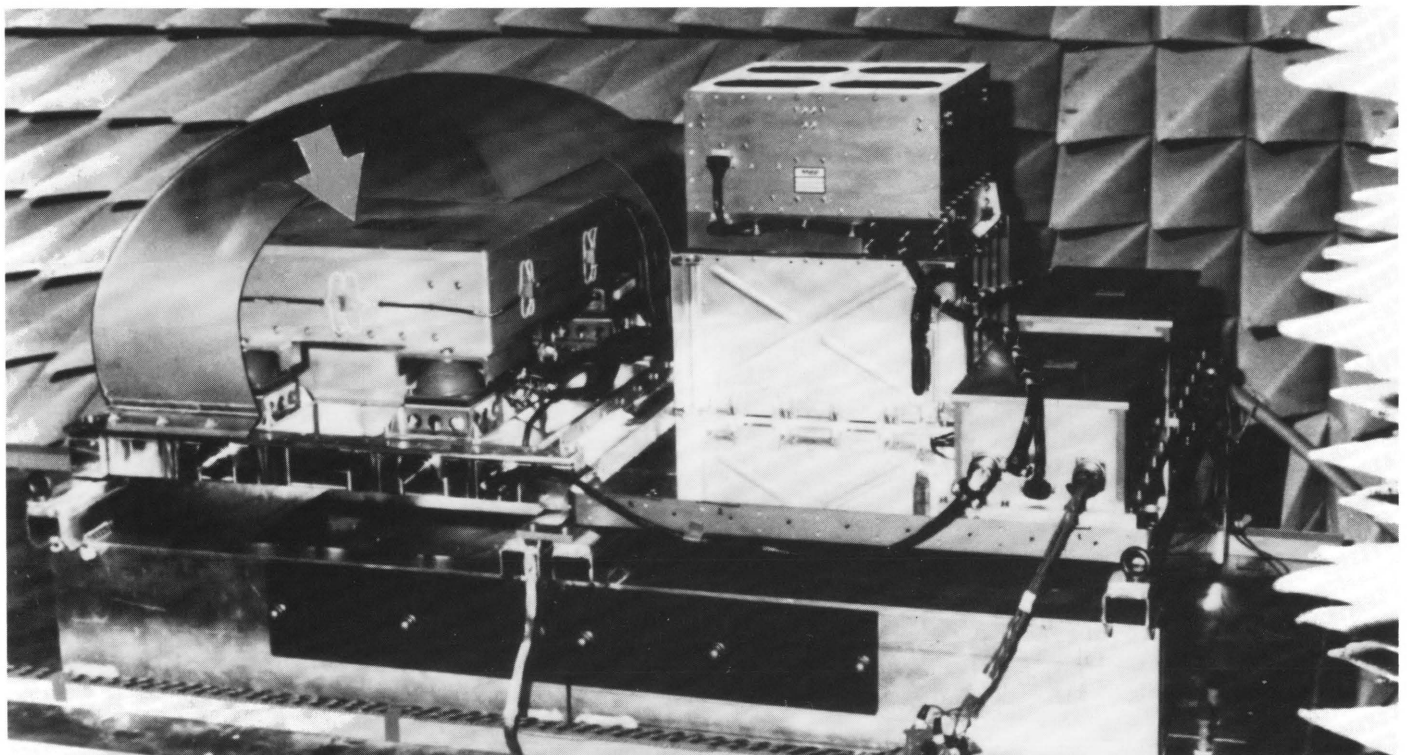
Twenty years later, on April 12, 1978, America's Space Shuttle made its first successful flight into orbit, and Datatape was again heavily involved. From NASA's space-flight center in Houston came a letter of congratulations to Datatape president Russell W. Frame. It read, in part: "On behalf of NASA and the Space Shuttle program, please allow me to

express our congratulations and sincere appreciation for your company's participation in the first Space Shuttle launch. One of your MARS-2000 flight-tape recorders was installed in each of the solid rocket boosters used on the flight, and they survived launch, boost, reentry, water impact, and recovery operations in excellent

The arrow in this photo indicates location of Datatape's recorder (MARS-1428) inside of dome.



The arrow indicates the position of Datatape's MARS-1428 recorder.



condition. Their performance was highly satisfactory during all phases of the flight, and they provided much-needed, high-quality data. . . ."

In the two decades between the first manned space flight and the Space Shuttle, Datatape and its 1973 acquisition, Astro Science Corporation, were heavily involved in many other aspects of the space program. Datatape recorder/reproducers were placed aboard ships in the Atlantic Ocean to record and analyze critical flight-test data of missiles and rockets launched from Florida. When Neil Armstrong became the first man to set foot on the moon, in 1969, a significant amount of his mission's data evaluation and communication relied on Datatape equipment at Mission Control in Houston.

Datatape recorders have been included as part of the instrument ring on the solid rocket booster of every spacecraft used in the Mercury, Gemini, Apollo, and Space Shuttle pro-

grams. Despite the rigors they endure, as partially described in the letter above, they not only have performed as designed but are able to be used on subsequent missions.

Today Datatape's business can be summed up as the design, development, manufacture, sales, service, and logistics support associated with sophisticated high-technology data storage and retrieval devices—primarily magnetic-tape oriented—for use in the defense electronics and test instrumentation markets. Its products, however, are by no means limited to those markets. Datatape equipment is used wherever high-quality instrumentation data is required from aircraft engine testing to the measurement of

stresses placed upon earth-moving equipment.

In October 1983 the Datatape Division of Bell & Howell was sold to Eastman Kodak, and became Datatape Incorporated, a wholly owned subsidiary. Led by president Russ Frame, a Bell & Howell veteran who became president of Datatape in 1980, the firm occupies more than 250,000 square feet of space on about ten and one-half acres in Pasadena. Although the company has offices in almost all major U.S. metropolitan areas, all manufacturing is done at that location.

The staff of more than 1,000 includes many of Pasadena's top engineers, attracted by this tomorrow-oriented organization that has played a vital role in America's exploration of new technological frontiers. Datatape Incorporated has indeed come a long way from its humble beginnings in 1937 as Consolidated Engineering Corporation.

Messerschmitt-Bölkow-Blohm technicians perform final adjustments and assembly of SPAS-01 satellite at MBB in Ottoburn, West Germany, before the spacecraft was shipped to the Kennedy Space Center.

