



Herbert L. Hirsch

HERBERT LOUIS MISCH

1917–2003

Elected in 1976

“For contributions to the formation of a rational societal policy on matters of America’s environmental and vehicle safety.”

BY HAREN S. GANDHI

HERBERT LOUIS MISCH, born December 7, 1917, in Sandusky, Ohio, grew up in Port Clinton, Ohio. He attended Miami University of Ohio, then moved in 1939 to attend the University of Michigan. He graduated in 1941 with a Bachelor of Science in engineering.

Herb Misch made his mark first at Packard Motor Company, where he started his employment as a detail draftsman to the chief engineer. Although he had extremely limited resources and staff, he played a pivotal role in the development of Packard’s Ultramatic (automatic) transmission. Misch recalled, with considerable amusement, that, after the transmission had proven successful, Packard marketing people bragged that the company had spent \$7 million on its development. According to Misch, “We had to scrape up everything to even get close to that.”

Misch was employed by Packard from 1941 to 1956, during which time Packard applied for nine U.S. patents on his transmission inventions. When the company folded in 1956, Herb had attained the level of chief engineer. His next career move was to the Cadillac Division of General Motors as director of advanced product planning during 1956–1957.

In May 1957, Misch began his career at Ford as an assistant chief engineer for the Mercury Division. He quickly moved through various areas of the company, achieving the rank of executive engineer in production engineering, chief engineer

in the Metal-Stamping Division, and executive director of the engineering staff before being named vice president of engineering in February 1962.

Herb Misch, along with product planner Roy Lunn and stylist Gene Bordinat, led the T5 project team in developing and producing a prototype—a 1,200-pound, two-seat vehicle with a low, sloping nose and a racing style windshield sporting a V-4 mid-engine cooled by two radiators located at air vents just ahead of the rear wheels. While working with Gene Bordinat in 1960 on the redesign and performance upgrade of the Ford Falcon, the idea of a “sports car for the masses” was suggested to meet the anticipated demand of the baby boomers approaching car-buying age. The team established targets of \$2,500, 2,500 pounds, 180 inches maximum length, a floor shift, and a host of options to allow buyers to customize the car.

The racing community received the Mustang I enthusiastically when, in October 1962, Dan Gurney and Stirling Moss drove demonstration laps at Watkins Glen to introduce the concept car at the Grand Prix. Based on these successes, the T5 was given the go-ahead for production. In April 1964, just 18 months after the unveiling at Watkins Glen, Mustangs were in showrooms across the country. A prototype Mustang is still on view at the Henry Ford Museum in Dearborn, Michigan.

Herb Misch’s next major accomplishment at Ford was in the area of automotive emissions and safety. He became vice president of environmental and safety engineering in 1972, a challenging time for the automotive industry because the industry did not have the technology to meet newly enacted emission standards; they were considered overly stringent, perhaps even impossible, to achieve. Through the lens of time, these standards seem inconsequential, but, in fact, they could not be met with available technology.

Those early challenges propelled the automotive industry into massive research and development efforts that led to the sophisticated engine- and vehicle-emission control systems in cars today. These systems, and their attendant emission reductions, had not even been envisioned in the early 1970s. On behalf of Ford Motor Company and the automotive industry, Misch testified

before the Environmental Protection Agency (EPA) that premature action could be counterproductive to air-quality improvement and that a reasoned, cautious approach would be better for the country as a whole. Confronted with hostile questions during the intense political debate on curbing pollution, Misch remained collegial and non-confrontational. He described the state of the technology and explained why the automotive industry needed time to develop new systems. From 1972 until his retirement in 1982, under Herb Misch's leadership, Ford technology improved from crude, carbureted control of engines to computer-controlled fuel-injection coupled with three-way catalysts.

Bruce Simpson, who worked for Misch, recalls his unwavering integrity. Some of the managers in charge of certifying vehicles tampered with them during the certification process. When Herb Misch learned that adjustments had been made on some of the test vehicles, he immediately contacted Henry Ford II, and then the responsible government office, telling them what had happened and promising that Ford would repeat all of the tests. He then led a massive effort to recruit a new team of engineers to re-run the certification program in a fraction of the normal time to avoid plant shutdowns. Thanks in large part to Herb Misch's guidance, the program was successful and led to the formation of a new organizational structure and rigorous procedures for future programs.

Bruce Simpson also recalls that during a review of durability test results on a new model car, Misch was disappointed with the brake life tests, even though they were similar to competitors' results. He decided to change to a larger, longer life brake design, regardless of the higher cost.

Kelly Brown, retired director of vehicle environmental engineering at Ford, commented that, "Herb was a true engineer. He always sought the facts, frequently complaining that 'we too often thrive on misinformation.' "

David Kulp, assistant director, Certification Programs, said he admired Herb Misch for his ability to see and appreciate both sides of an issue and to shape a proposal that addressed both. That characteristic was crucial to his success.

Wayne Brehob, who accompanied Misch on several trips to Washington, D.C., to testify before the EPA, recalls Mr. Misch as “a down-to-earth man who dined at the local burger restaurant with the troops rather than eat at a more posh restaurant that his travel budget authorization could accommodate.” Herb Misch enjoyed helping others in the profession and always graciously accepted requests for nomination letters for former employees.

Misch received many honors for his contributions to the engineering profession. He was a fellow of the Society of Automotive Engineers, Society of Engineers International, and Engineering Society of Detroit. He was also a life member of the Society of Body Engineers, a member of the National Academy of Engineering (1976), and an honorary member of the Packard Club.

For the last 30 years of his life, Misch was an avid sailor. He raced his boat, Tiki II, in 23 Port Huron to Mackinac races in the PHRF-A Big Boat category. He had four sailboats, the last two of which were 45-foot racing sailboats. All were named Tiki II in honor of the Kon-Tiki raft that had crossed the Pacific. According to his daughter, Suzanne Wells, “He was far younger than his 85 years because he had to keep up with young people on the boat.”

Herb Misch belonged to the Grosse Pointe Yacht Club and the North Star Sail Club of Harrison Township. He was a member of the Detroit Athletic Club and a longtime member of the Drayton Avenue Presbyterian Church, in Ferndale, Michigan.

Herb Misch died June 23, 2003, from complications from cancer. He is survived by his daughter, Suzanne Wells; grandchildren, Bradley and Jennifer Wells; a niece, Judith Misch Crosser; and a nephew, James R. Misch. He was preceded in death by his wife, Caroline, in 1990, and his son, Thomas, in 1988.

