

Man Behind the Mustang

Engineering professor and entrepreneur Donald Frey celebrates the beloved sports car's 40th anniversary.

by Sean Hargadon

Donald Frey gave horsepower a whole new meaning.

Forty years ago he helped create the Ford Mustang, the strong and saucy “pony car” that energized a sagging automaker and emerged as an American icon.

He credits his kids for making it all happen.

“I clearly remember sitting around the dining room table and my kids saying, ‘Dad, your cars stink. They're terrible. There's no pizzazz.’

“That started the whole thing,” says Frey, Ford Motor Co.'s product planning manager for the first Mustang and now professor of industrial engineering and management sciences at Northwestern's Robert R. McCormick School of Engineering and Applied Science.

Frey and a team of Ford stylists and engineers came up with the concept for the Mustang in 1962. Eighteen months later, in April 1964, the car made its debut at the World's Fair in New York.

In April, Frey joined Mustang enthusiasts from around the world at the 40th anniversary celebration at the Nashville Superspeedway in Lebanon, Tenn. He spent the weekend like a rock star, signing autographs and swarmed by media.

“He is an absolute legend among Mustang enthusiasts,” says Andy Jacobson (KSM00), a brand manager for the 2005 Ford Mustang. “And he's still a legend in our minds and hearts at Ford.”

Frey has his own heroes — his team that brought the Mustang to life. Former design director Joe Oros, then fresh from a trip to Europe, introduced Italian styling that made the car look like nothing else on the road. Fellow product planner Hal Sperlich kept costs low by building the car around the chassis from the Ford Falcon.

To get the Mustang in production Frey had to get the attention and approval of the company's then-president



Henry Ford II. “He told me, ‘I'm going to approve your Mustang, and it's your ass if it doesn't sell,’” Frey recalls.

It sold — by the hundreds of thousands. An aggressive marketing campaign helped move more than 400,000 Mustangs (at around \$2,500) in the first year, nearly five times the anticipated 86,000 sales. Ford sold more than 1 million Mustangs by the car's second birthday.

“The Mustang created a frenzy. It remains the most successful launch in history,” says Jacobson, who is also a brand manager for the Ford Thunderbird and Ford GT. “The Mustang defined what a sports car should look like. That's the archetype.”

More than 8 million Mustangs have been sold since 1964. (Frey has one of the originals — a two-tone merlot and white 1964 1/2 Mustang — in his North Shore garage.)

In those early years, Frey says, Ford benefited from a conflation of issues — timing, demographics, pricing and styling. He says those same issues determine the fortune of any business venture. The most important aspect is to know your audience.

“I try to get that across to the students I teach in Project Management. I don't care if you're building chairs, automobiles or schools,” says Frey, who at 81 also teaches graduate courses in innovation and entrepreneurship and information systems. He teaches Engineering Design and Communication to first-year engineers “to keep my foot in reality.”

To reward McCormick undergraduates for interdisciplinary innovation and creativity, Frey established the annual Margaret and Muir Frey Prize in fall 2001. Named for Frey's late parents, the prize

recognizes design creativity in the best senior capstone projects — projects that integrate aspects of the McCormick curriculum and are designed by a student or team of students to address known problems or credible new products or processes. Cash prizes total \$35,000.

Frey has also mentored several doctoral students. Sixteen theses line a shelf in his office. Chris Scherpereel (GMcC98, 01) says Frey's flock of graduates share a common trait — entrepreneurial spirit.

“He was always willing to take students who had rather unique ideas, rather unique perspectives. He took on ideas that looked like they would take a lifetime to complete,” says Scherpereel, an assistant professor of management at Northern Arizona University “He always guided you to focus but still maintain your intellectual curiosity. That is his greatest strength, guiding that entrepreneurial spirit in his students. And I think you saw that in his work in the business world as well.”

Frey came to Northwestern in 1988, ending a 37-year hiatus from the classroom. He initially taught at his alma mater after receiving his doctorate from the University of Michigan in 1950. The World War II veteran soon realized that he needed applicable experience to make his teaching more authentic.

He spent parts of the next two decades working his way up to vice president at Ford, where he says the Mustang came second to his most important accomplishment, improving the safety of vehicles. During his tenure he helped introduce disc brakes and radial ply tires. “We saved lives by the thousands,” he says.

After a short stint at General Cable Co., he spent 17 years as president of the engineering and manufacturing firm Bell & Howell, a company that had its origins in the creation of motion picture cameras and now specializes in mail and document processing. With Bell & Howell he oversaw the first high-volume integrated manufacturing of video cassettes for the Hollywood movie industry.

“I joined a company that he had really transformed,” says Bill White (McC61), chair of Bell & Howell from

1990 to 1998. “For example he took two microfilm properties and morphed them into something that provided contemporary electronic-age reference products... He was really a visionary in thinking about the creation of electronic databases.”

White, professor of industrial engineering and management sciences at Northwestern and 2004 recipient of the Northwestern Alumni Association Excellence in Teaching Award, says Frey has been a mentor. “Don and I came from heavy industry to a serious academic pursuit,” White says. “The average faculty member brings practical applications into the theory. Don and I have to work doubly hard to bring the theory into practical applications.... For Don, the academics come first, and the experience supports the academics.”

Jeff Lefebvre (GMcC86, 92) says Frey's ability to connect practical experience and academics inspired him to pursue his doctorate.

“In one class period he would provide you with insights it would take decades for you to discover on your own” says Lefebvre, president of the leadership development firm PriSim Business War Games. “He would not barrage you with textbook material, but you would always leave class with one or two golden nuggets.”

In Frey's mind, the roles of innovator and educator are indivisible.

“I teach from experience,” he says. “I don't have any research. I built automobiles. I created the first CD-ROM. I have the National Medal of Technology up on my wall. I have a lifetime of industrial innovation.

“For me, teaching and innovation depend on one another. I don't know how to separate them.”

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