Feb. 8, 2019

Memorial services are Feb. 24 for the Spartan inventor credited with making auto racing safer

A memorial service to remember Robert “Bob” P. Hubbard, professor emeritus of mechanical engineering, is set for Sunday, Feb. 24, at Edgewood United Church, 468 Hagadorn Road in East Lansing. The family is being assisted by Gorsline Runciman Funeral Homes of East Lansing.

Hubbard died Feb. 5 at his home. He was 75.

The inventor and biomechanical engineer joined the faculty of Michigan State University in September 1977, where he remained until his retirement in 2006.

Racer credits Hubbard as “the man who helped create one of the biggest breakthroughs in auto racing safety.”

Hubbard conceived of the Head and Neck Support (HANS) device in collaboration with his brother-in-law and IMSA SportsCar Championship racer Jim Downing.

The HANS device was created when Downing and Hubbard realized that drivers were being killed in racing accidents because their heads were not restrained, which led to basilar skull fractures. The loss of Downing’s friend Patrick Jacquemart, who crashed his Renault 5 Turbo in testing at Mid-Ohio in 1981, was the driving force behind their quest for a solution.

Hubbard and Downing’s creation was a collar-shaped device with a yoke that fits over the driver’s shoulder and is tethered to each side of the driver’s helmet. In frontal impact crashes, the driver always remained secured by the belts while the head is carried forward by the momentum, according to Racer.
AutoSport.com reported that Hubbard was closely involved in road safety long before he developed the HANS. He completed a PhD on the mechanical properties of the skull bone while working at the University of Michigan Highway Safety Research Institute. In the 1970s he worked for General Motors, researching injuries and developing crash test dummies.

See videos and tributes to Hubbard’s life and work at:
NASCAR/NBC Sports
Road and Track
WILX TV 10 Lansing

Racer wrote: The HANS likely would have saved Dale Earnhardt’s life in his 2001 Daytona crash, along with Adam Petty and Kenny Irwin Jr. before him. NASCAR recommended it in 2001, making the HANS mandatory in 2005, while F1 followed suit in 2003 and NHRA in 2004. Today it is also prevalent for drivers in midgets, sprints, stock cars, sports cars and off-road racing.

Obituary details

Related Website: Communications contact: Patricia Mroczek

Source URL: https://www.egr.msu.edu/news/2019/02/08/remembering-bob-hubbard