

The engineering test and measurement world has lost a founding father as Ralph S. Shoberg of Farmington Hills Michigan, passed away October 5, 2015 at the age of 75. The father of the rotary torque transducer, the first device to accurately measure assembly torque dynamically, and of the wheel force transducer used for vehicle road load data acquisition, Ralph was a tinkerer and inventor, a successful entrepreneur and businessman, and a devoted husband, father, and grandfather.

A graduate of the University of Michigan and a Registered Professional Engineer in Michigan, Ralph worked for several years as a test engineer for Eaton Aerospace before co-founding GSE, Inc., a successful test and measurement company known for a wide variety of strain gage load cells, reaction and rotary torque transducers, and instrumentation used for engineering research and development, and for the monitoring and control of automated assembly operations. While at GSE, Ralph spearheaded the development of the first fully integrated test system to successfully test threaded fasteners for torque vs. tension and calculate underhead and thread friction coefficients.

Ralph later went on to found RS Technologies, where his research into threaded fastener technology led to development of the patented M-Alpha analysis method for determining clamp load through analysis of torque vs. angle signatures. While there, he also helped bring the German engineering standard VDI 2230 to the Windows desktop to streamline the calculation process for determining the stresses in critical bolted joints via the SR1 software. Ralph also worked to improve the multi-component wheel force transducer for road load data acquisition to aid in the development of automotive braking and chassis design.

The holder of several patents and author of numerous publications, Ralph greatly enjoyed participating in educational seminars and spreading his knowledge of strain gage transducer design and its many practical applications to improving the quality of manufacturing operations. Over the years, Ralph mentored many engineers and technicians, many of whom have gone on to start successful companies of their own. He was an active supporter of the Industrial Advisors Board at Lake Superior State College in Michigan, an organization working to ensure that the engineering department produces graduates with skills relevant to today and tomorrow's workplace.

A member of SAE, Ralph was involved with the research and study of wheel lug nut design and tightening operations. His contributions to analyzing the bolted joint assembly process and to the development of equipment now widely used for the dynamic mechanical testing of threaded fasteners, earned him the Soaring Eagle Award for Technical Achievement from the Industrial Fasteners Institute in 2013.

Ralph loved his boats, completely restoring his grandfather's 1895 launch, the Islington, which won several classic wooden boat show awards. He will be sadly missed by many friends and associates in industry.