The special committee of the General Faculty to prepare a memorial resolution for Robert L. Helmreich, professor emeritus, psychology, has filed with the secretary of the General Faculty the following report.

Sue Alexander Greninger, Secretary
General Faculty and Faculty Council

IN MEMORIAM
ROBERT L. HELMREICH

Robert “Bob” Louis Helmreich joined the faculty at The University of Texas at Austin as an assistant professor in 1966, after obtaining B.S., M.S., and Ph.D. degrees from Yale University. He remained on the faculty in the Department of Psychology until his retirement in 2007, forty-one years later. He passed away in Granite Shoals, Texas, on July 7, 2012.

Helmreich, son of Ralph and Caroline Helmreich, was born April 29, 1937. Although he spent most of his adult life in higher education, he enlisted in the U.S. Navy after obtaining his bachelor’s degree. He was in the Navy for four years and was executive officer of the U.S.S. Decatur (DD-936) at the time of his retirement from the service. Perhaps it was his service in the Navy that sparked Helmreich’s life-long professional interest in how people work together in teams to accomplish technically precise goals. As part of Projects SEALAB and TEKTITE II, Helmreich initially examined small-group interactions among engineers and marine scientists living in a submerged habitat. He spent much of the latter part of his career studying how pilots and others interact in the cockpit of commercial airlines as part of his Human Factors Research Project. He extended his investigations to interactions among medical professionals in operating rooms. In all of these arenas, he combined the best practices of social, personality, and organizational psychologists with direct observation of the behavior of working professionals to build models of small-group interaction that would be relevant to real-world challenges.

The Helmreich approach to the study of individuals performing critical, real-world, safety-related jobs took a multi-faceted approach, which was always data and observation driven. He frequently said, “To be useful to an industry, psychologists have to get in the trenches with the workers.” He developed measures of national and organizational culture in which the work was conducted. He created attitude surveys of relevant work dimensions that influence behavior. He examined the personality types that self-selected into and performed well in the particular work environments. He and his collaborators engineered measures of individual and crew performance that were agreed upon by individuals, regulators, and management. Finally, he constructed and tested small group performance models that would incorporate all of the abovementioned dimensions. From the models, training programs and evaluation systems were eventually built and adopted by the aviation and medical communities. Pilots remarked that programs developed from his research always “smelled like jet fuel.”

Through his research (and the many hours he personally spent in cockpits of commercial flights), Helmreich became a leading expert in flight safety and a frequent consultant to the Federal Aviation Administration. He was one of the founders of the Crew Resource Management Program, a training program for airline pilots that was partially credited for successful emergency landings, including Chesley “Sully” Sullenberger’s famous passenger jet landing on the Hudson River in 2009 (“Miracle on the Hudson”). Helmreich’s conceptual model of flight crew performance was adopted by the International Civil Aviation Organization (ICAO) as a template for the analysis of air crashes worldwide. His Line Observation Safety Audit (LOSA) program has also been adopted by ICAO as a recommended safety management systems component.
In recognition of his extensive contributions to improving crew performance, Helmreich received several highly coveted awards from the Flight Safety Foundation. He received the foundation’s Aviation Week & Space Technology Distinguished Service Award (1994) and Airbus Human Factors in Aviation Safety Award (2004). He was also a recipient of the Boeing Aviation Safety Lifetime Achievement Award (2005). In 2004, the Royal Aeronautical Society awarded him the Roger Green Medal for his “significant and lasting contribution to the theory of human factors as applied in aerospace.” Helmreich also received the David S. Sheridan Award from Albany Medical College (1997), the Franklin Taylor Award from the American Psychological Association, and the Pro Bene Meritus Award from The University of Texas at Austin for his commitment to the liberal arts.

During the course of his career, Helmreich published more than two hundred research articles and monographs. Early in his career, Helmreich established a highly productive collaboration with Janet T. Spence, a prominent personality psychologist on the faculty at the University of Texas. In the 1970’s, as more women entered traditionally male occupations such as medicine, academics, and airline pilots, Spence and Helmreich helped clarify the interactions between gender and masculine and feminine roles and personality traits. They summarized some of their research on these issues in a monograph titled *Masculinity and Femininity: Their Psychological Dimensions, Correlates and Antecedents*, which was published by the University of Texas Press in 1978. Most of Helmreich’s publications dealt with issues related to airline and medical safety, and much of this work was done in collaboration with graduate students and colleagues, including his long-term research associate, John Wilhelm. Helmreich always insisted that students get out into the field to practice their psychological craft. These graduate students, which include Clay Foushee, Tom Chidester, Stephen Predmore, Ashleigh Merritt, James Klinect, Michelle Harper, Chris Henry, David Musson, Bryan Sexton, and Valery Edwards, went on to prominent careers in academia, the airline industry, regulatory agencies, and medicine.

Helmreich was a fellow of the American Psychological Association, the Association for Psychological Science, and the Royal Aeronautical Society (United Kingdom), as well as a member of the Committee on Human Factors and the Committee on Space Biology and Medicine of the National Academies of Science (USA). From 1983 to 1985, he served as editor of the premier journal in his field, *Journal of Personality and Social Psychology*. His research was supported by the National Science Foundation, the National Institutes of Health, the Office of Naval Research, the Federal Aviation Administration, and the Agency for Healthcare Research and Quality. Although he remained on the faculty of The University of Texas at Austin for his entire career (being promoted to associate professor in 1969 and professor in 1973), he also served as visiting professor/visiting scientist at the University of Texas Medical Branch, MD Anderson Cancer Center, Albany Medical College, the Risoe National Laboratory (Denmark), the University of Basel/Kantonsspital (Switzerland), and the Naval Medical Research Institute.

Helmreich was heavily sought after as a speaker. He frequently gave keynote addresses at conferences all over the world, including Australia, Bahrain, Brazil, Canada, Chile, Denmark, Egypt, England, Ethiopia, France, Germany, Ireland, Israel, Japan, Morocco, the Netherlands, New Zealand, Norway, Poland, Scotland, Singapore, the Soviet Union, Sweden, Switzerland, Thailand, and the United Arab Emirates.

When he pried his fingers off the keyboard, he would likely be found in a fast boat by his lake house, at UT Austin football games, polishing his vintage cars, watching CNN, or reading. He was supported during his career and declining years by his lifetime companion of thirty-seven years, Carlos Canales.

This memorial resolution was prepared by a special committee consisting of Professor Michael Domjan (chair), Research Associate John Wilhelm, Ph.D., and Professor James Pennebaker.

Distributed to the dean of the College of Liberal Arts on November 19, 2012, and posted under “Memorials” at http://www.utexas.edu/faculty/council/.