



Professor Eric Reissner (1913 – 1996)

On November 1, 1996, the world lost an eminent scholar of applied mathematics and applied mechanics. Eric Reissner, Professor Emeritus of Applied Mechanics and Engineering Sciences at the University of California at San Diego (UCSD) and Professor Emeritus of Applied Mathematics at the Massachusetts Institute of Technology (MIT) passed away at the Pacific Regent Health Care Center in La Jolla. He was 83.

During a career that spanned 60 years, Professor Reissner expanded the foundations of theoretical mechanics, leading to advances in civil and aerospace engineering, particularly in the design of aerospace structures. His

1. theory for flat plates with transverse shear deformations,
2. variational principles for linear and nonlinear elasticity theory, and
3. a two simultaneous equation formulation for axi-symmetric finite deformations of elastic shells of revolution

are unquestionably landmarks of solid mechanics in the twentieth century. Altogether, nearly 300 of his research articles were published in scientific and technical journals, and he continued his research contributions until the last few months of his very productive life. In a review of Dr. Reissner's "Selected Works in Applied Mechanics and Mathematics" (published by Jones and Bartlett Publishers, 1996), Professor A.W. Leissa of Ohio State University wrote: "Professor Reissner is the consummate applied mathematician who, by his vast, useful research accomplishments, reached the pinnacle among distinguished scholars in solid mechanics."

In recognition of his many pioneering contributions, Professor Reissner

1. was elected a Fellow of the American Academy of Arts and Sciences in 1950,
2. received the Clemens Herschel Award of the Boston Society of Civil Engineers in 1955,
3. was awarded a Guggenheim Fellowship in 1962,
4. received the von Kármán Medal of the American Society of Civil Engineers (ASCE) in 1964,
5. received the Timoshenko Medal of the American Society of Mechanical Engineers (ASME) in 1973,
6. was elected a member of the National Academy of Engineering in 1976,
7. was elected a full Member of the International Academy of Astronautics in 1979,
8. received the Structures, Structural Dynamics and Materials Award from the American Institute of Aeronautics and Astronautics (AIAA) in 1984,
9. followed by the award of the ASME Medal in 1988

with many other honors and awards during this same period and afterwards. Among them was his election in 1992 as the 7th Honorary Member in the 70 year history of the German Gesellschaft für Angewandte Mathematik und Mechanik (GAMM) "in recognition of his exceptional accomplishments in Applied Mathematics and Mechanics."

Professor Reissner was born in Aachen, Germany, in 1913, where his father Dr. Hans Reissner was Professor of Applied Mechanics and the founder of the Aerodynamics Institute at the Aachen Technische Hochschule. In that same year, Dr. Hans Reissner followed a call from his alma mater, the Technische Hochschule Berlin; consequently, young Eric effectively grew up in Berlin during the period of 1913 - 1936. Graduated with honors from the Technische Hochschule Berlin in the Fall of 1935, the younger Reissner spent the following six months expanding his Dipl. Ing. Thesis into a Dr. Ing. Dissertation on the subject of forced vibrations of a mass supported over a finite contact area by an elastic halfspace, extending some classical work by Lamb on the corresponding massless point-load problem.

Dr. Eric Reissner moved to the United States in 1937 and earned a Ph.D. degree in mathematics from MIT. He was married to Johanna Siegel of Meiningen in April 19, 1938, in Cambridge, Massachusetts and served as a faculty member in the Department of Mathematics at MIT for the period 1939 - 1969. During this period, he had summer appointments with the Langley Field Laboratory of the National Advisory Committee for Aeronautics (NACA), Ramo-Wooldridge, Lockheed, and University of Michigan and was engaged as the Consulting Mathematics Editor of Addison-Wesley Publishing Company.

Professor Eric Reissner also served for several extended periods as a visiting professor at UCSD. While he was at La Jolla on leave from MIT, he became more and more conscious of the fact that his research and teaching interests belonged to the Engineering Sciences. He eventually accepted an appointment as Professor of Applied Mechanics in 1970 to participate in the growth of this field at UCSD, where he remained a faculty until his retirement in 1978.

Professor Reissner was survived by his wife, Johanna; a son John Eric Reissner of Lumberton, N.C.; a daughter, Eva Reissner Ewing of Guilford, Conn.; a sister, Thea Wilcken of Colton, Ore; and five grandchildren.

-tribute written in October, 1999 by Professor Frederic Y. M. Wan