

MEMORIAL RESOLUTION WILLIAM C. REYNOLDS

(1933 -2004)

Professor William C. ("Bill") Reynolds died of a glioblastoma brain tumor on Jan. 3, 2004, aged 70. A Memorial Service was held on Jan. 20, and the Memorial Church was so full that people were standing at the back. The Memorial Resolution could almost end here, with that demonstration of the respect and affection he was held in by the Stanford community and by many outside it. This full Memorial Resolution simply adds explanation to demonstration.

Prof. Reynolds received his B.S. in Mechanical Engineering from Stanford in 1954 and was appointed to the faculty in 1957, before finishing his Ph.D., becoming a full Professor at the age of 33. Apart from two Sabbaticals and a part-time appointment as Staff Scientist at NASA Ames Research Center, he spent his whole career at Stanford. His reputation, however, was worldwide and achieved at an early age. The Editors of the *International Journal of Heat and Fluid Flow*, in dedicating an issue to his memory, said that the world of Fluid Mechanics had lost "one of its strongest and most inventive and charismatic leaders".

He was a notably enthusiastic lecturer, putting as much energy into his teaching as his research. He won three awards for "Outstanding Teacher", from the American Society for Engineering Education, from Tau Beta Pi, and from the Society for Women Engineers.

He supervised over 40 Ph.D. students and wrote or co-authored over 200 scientific publications including four books and several widely-used computer programs. He had wide experimental, theoretical and computational research interests in fluid dynamics, notably turbulence, and in thermodynamics.

He worked practically up to the last week of his life, making sure that his last two PhD students had successfully defended their dissertations before he was gone.

Reynolds served twice as Chair of the Department of Mechanical Engineering; from 1972 to 1982, and for a second term from 1989 to 1993. He was Chair, Co-Chair or Program Director of several institutes within Stanford, and was instrumental in starting the Center for Turbulence Research, a collaborative venture of Stanford and of NASA Ames Research Center.

He received many awards, including election to the National Academy of Engineering and to the American Academy of Arts and Sciences, an honorary Doctorate from Manchester University, England, and fellowship of the American Society of Mechanical Engineers and of the American Physical Society. . He was a Guest Scientist at the National Physical Laboratory in England in 1964-1965, and Fairchild Scholar, California Institute of Technology in 1984.

Bill Reynolds was a practical engineer as well as a research scientist. He designed his own house, many experimental test rigs, the air conditioning system of the Center for

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Turbulence Research, and the “cannon” (impulse horn) fired at every Cardinal football game - and played the major part in the construction of all of them.

The Department of Mechanical Engineering has established the William C. Reynolds Memorial Lecture. The first Lecturer (Fall 2004) is Prof. Brian Launder of Manchester University, a former collaborator of Reynolds.

Committee:

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