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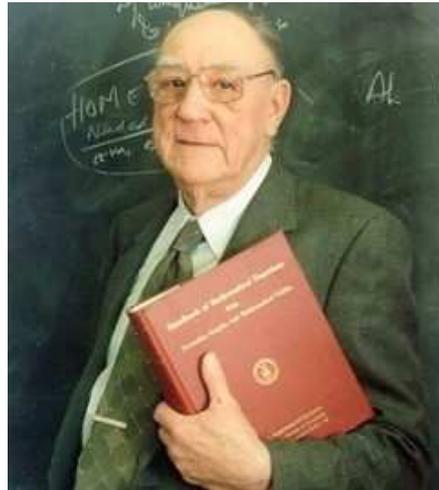
Topic #2 ----- OP-SF NET 20.3 ----- May 15, 2013

From: Peter Olver
Subject: Frank W. J. Olver, 1924-2013

Frank William John Olver, Professor Emeritus in the Institute for Physical Science and Technology and Department of Mathematics at the University of Maryland, and Faculty Appointee of the National Institute of Standards and Technology, passed away on April 23, 2013, at the age of 88.

Born in 1924 in Croydon, UK, Frank showed deep interest in mathematics and proved himself a mathematical talent at a young age. He obtained a first class honors in mathematics for his bachelor's degree from the University of London in 1944. He received a master's degree in 1948 and completed the D.Sc. in mathematical analysis in 1961.

After completing his undergraduate studies at age 19, Frank was assigned to the British Admiralty Computing Service where he was first introduced to numerical analysis. It was at that time his research direction in special functions began to take shape. Soon after the war, he joined the Mathematics Division of the National Physical Laboratory (NPL), Teddington, UK, as Scientific Officer, and became one of the founding members of the Mathematics Division of the Laboratory from 1945-1961. There, he met his first wife, Grace E. Olver (née Smith). They were married in 1948, and had three children, Peter (1952-), Linda (1953-1965), and Sally (1955-).



During 1957-58, Frank visited the National Bureau of Standards in Washington DC, which subsequently became the National Institute of Standards and Technology (NIST), to help work on the well-known and highly cited Handbook of Mathematical Functions by Abramowitz and Stegun. In 1961, he moved permanently to NIST, now in Gaithersburg, MD. He retired in 1986, but continued to be active in mathematics at NIST until his death. In 1969, he became a Research Professor at the University of Maryland where he worked and taught for 23 years until he retired in 1992 at the age of 68 and was appointed Professor Emeritus.

Frank's first book, *Asymptotics and Special Functions*, published in 1974 by Academic Press, became a standard reference in the fields of asymptotics and special functions. In 2000, a two-volume commemorative collection of selected papers of Frank was published. The 1074-page collection consisted of 56 papers covering his most important contributions in the areas of asymptotic analysis,

special functions, and numerical analysis, from 1949 to 1999. One review of the collection, said "the papers exemplify a redoubtable mathematical talent, the work of a man who has done more than almost anyone else in the 20th century to bestow on the discipline of applied mathematics the elegance and rigor that its earliest practitioners such as Gauss and Laplace would have wished for it." Frank was very active in the Society for Industrial and Applied Mathematics (SIAM). He helped found the SIAM Journal on Mathematical Analysis and served as its first managing editor, from 1970-1975. He was also a long time member of the American Mathematical Society (AMS) and the Mathematical Association of America (MAA).

Frank's "life-time achievement" was serving as mathematics editor for the NIST Handbook of Mathematical Functions, which was published by Cambridge University Press in 2010, and its web counterpart, the NIST Digital Library of Mathematical Functions (DLMF), the updated, expanded, and online version of the old Abramowitz and Stegun Handbook. The NIST Handbook took 10 years to complete, and now serves as the authoritative reference volume for the special functions of mathematics and its many applications. In April 2011, the NIST co-organized a conference on "Special Functions in the 21st Century: Theory & Applications" in Washington DC in recognition of his seminal contributions to the advancement of special functions, especially in the area of asymptotic analysis and as Mathematics Editor of the DLMF. In appreciation of his work on the DLMF, Frank was awarded the Gold Medal of the US Department of Commerce, the highest honorary award granted by the Department in 2011. In the same year, the Digital Library of Mathematical Functions was chosen as one of 10 Government Computer News Award Winners for "Outstanding Information Technology Achievement in Government".

Frank is survived by his wife of 23 years, Claire, brother Terence, two children, Peter and Sally, their spouses Cheri and Neal, and five grandchildren, Parizad, Krista, Sheehan, Brian, and Noreen.

Peter Olver