URBANA — Richard Patterson Jerrard died at Carle Foundation Hospital in Urbana on Wednesday, July 23, 2014, his 89th birthday, after a long illness.

The son of Leigh Patterson Jerrard and Lillian Taylor Jerrard, he was born and grew up in Winnetka, where he attended public schools. He spent childhood summers in a log cabin on the Brule River in northwest Wisconsin with his family. His love for the north woods remained with him throughout his life.

In the summer of 1943, he graduated from New Trier High School, and then enlisted in the Army Air Corps. He was sent to a hotel in Miami Beach, where he roomed with seven other recruits, to begin basic training. In the spring of 1945 after flight training, he received his wings and was commissioned as a second lieutenant.

He was sent to Madison, Wis., where his tall, thin physique and scholarly ways earned him the nickname "the Flying Pencil." He made many practice flights while he waited for orders to go overseas to Japan as a pilot on a B-17 Flying Fortress. The Japanese surrendered, the war ended, and he was discharged.

Following the war, he enrolled in the University of Wisconsin. At first he was assigned to the same barracks at Truax Field that he had lived in while in the Air Corps. In later years, he liked to recall that, when an attractive female classmate asked him what he had done in the war and he told her he had been a pilot, she replied, "That's what they all say."

He received his bachelor's and master's degree in mechanical engineering from Wisconsin in the spring of 1950. That fall, he began to work as an engineer at a research laboratory at General Electric in Schenectady, N.Y., under the supervision of Hillel Poritsky. He met his future wife, Dr. Poritsky's daughter, when invited home for dinner.

In 1954, he started to work on his doctorate in mathematics at the University of Michigan in Ann Arbor. He received his Ph.D. in 1957 and went to work at Bell Telephone Laboratory in Summit, N.J., joining a group researching vibrations in quartz crystals. He felt that there he was getting far away from mathematics. He began to look for a job in academia after visiting Ann Arbor in June 1958 to obtain his doctoral hood.

Very soon afterwards, he received, by phone, an offer from the University of Illinois' Mathematics Department, which he accepted on the spot. In September 1958, he came to Champaign-Urbana to
begin teaching and remained here until he retired in 1995, writing and publishing over 20 papers in mathematics journals.

His mathematical research was unusually broad by today's standards, and included papers in the applied mathematics, algebraic topology, number theory, complex analysis. He is remembered for a theorem in which he proved that, given any simple closed (analytic) curve on the plane, there exists a square whose vertices all sit on the curve; in 2007, he was awarded the George Polya Award along with John Wetzel and two others.

He also devoted a great deal of energy and care to university governance; he spent time as chair of the University Senate Council and was a member of numerous committees, including the University Senates Conference, the Graduate College Executive Committee and the LAS Executive Committee. In the Mathematics Department, he served a term as director of graduate studies.

He spent three years in Warwick University in England and a year in Cambridge on sabbatical leave, doing research, and three terms teaching at Deep Springs College, a small experimental college and cattle ranch in the California high desert. He and his wife were co-authors of "The Grad School Handbook" published by Perigee Press, a division of Penguin Putnam.

He was treasurer of the Funeral Consumers Society and had been treasurer of the C-U Montessori Society. After he retired, he worked as a volunteer with Provena Hospital to help older people. On one occasion, he managed to secure a passport for a woman who tried to join her son in Mexico but was thwarted by the lack of a birth certificate. For many years, he also coached the Math Club at Urbana High School.

He is survived by his wife of 63 years, Margot Jerrard; daughter Laura Jerrard of Oakland, Calif., married to Andrew Blackwood, and sons Leigh Jerrard of Los Angeles and Robert Jerrard of Toronto, Ontario, married to Nara Jung; and two grandchildren, Niko and Kailee. He is also survived by his brother John of Batavia, a niece and two nephews.

A service to honor his life will be held at 3 p.m. on Oct. 12 at Clark-Lindsey Village in Urbana. Anyone who wants to give a contribution in Richard's memory can send it to the University of Illinois Mathematics Department. Condolences may be offered at renner-wikoffchapel.com.