Jay Henry Lieske

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Jay Henry Lieske died on Friday February 19, 2021 at the age of 79.

Lieske was born in Warsaw, Indiana on June 22, 1941, the son of Reverend Henry Louis Lieske and Marguerite Jones Lieske. He spent most of his childhood in Ohio and Oregon. Following high school, Lieske went to Valparaiso University where he majored in Mathematics and Physics. In May 1965 he married Sarah Crichlow.

After completing his bachelor’s degree, Lieske went to Yale University and earned a Ph.D. in Astronomy under the mentorship of Gerald Clemence. His thesis, completed in 1968, was “A Dynamical Determination of the Solar Parallax from the Motion of 433 Eros.” Astrometry, geodesy and celestial mechanics would be Lieske’s primary research focus throughout his professional career.

Lieske was a scientist at NASA’s Jet Propulsion Laboratory (JPL) in Pasadena, California for over thirty years. His work on time and coordinate definitions contributed to the adoption of the new J2000.0 standard equinox standard at the International Astronomical Union’s General Assembly of 1976. Lieske’s precise orbital computations for planets and their satellites also contributed to planning the Voyager, Galileo, and Cassini missions. His models for the orbits of the satellites of Jupiter are likely to still be useful for to planning the Europa Clipper mission due to launch in 2024.

In 1980, Lieske was awarded the Humboldt Research Prize from the Alexander von Humboldt Foundation. As a Humboldt Fellow, Lieske worked with Prof. Walter Fricke at the Astronomisches Rechen-Institut of Ruprecht-Karls-Universität Heidelberg. In 1981, asteroid 3454 Lieske was designated in recognition of “his work on the Galilean satellites, ephemerides and astronomical constants, the precessional formulation in the J2000 system and for an accurate determination of the solar parallax from the motion of 433 Eros.”

Lieske and his wife Sarah moved to Franklin, Tennessee after he retired from JPL. In retirement, Lieske was an active member of the Fourth Avenue Church of Christ. Lieske’s interests in genealogy prompted him to edit a book “From Prussia with Love: The Descendants of Christoph Lieske and Henrietta Warnke” which documents his family’s history throughout the United States and central Europe.
Lieske is survived by his wife Sarah, son Jay Jr., son-in-law Jude, daughter Camilla, son Stephan, daughter-in-law Laura, granddaughter Hannah, and sisters Jeanne, Jacquelyn, Judy as well as their families. His sisters Joy and Janice preceded his passing.

*Lieske's Minneapolis Star Tribune obituary*

*Lieske's AstroGen entry*