

In Memoriam – Thomas E. Corbin, Ph.D
1940 – 2023



Dr. Thomas Elbert Corbin, a career astronomer with the U.S. Naval Observatory, passed away on January 16, 2023. He was born on September 6, 1940 in Orange, New Jersey. He completed his B.A. in astronomy from Harvard University in 1962 and joined the scientific staff of the United States Naval Observatory (USNO) in 1964.

Under the USNO's Professional Development Program he completed his M.A. in astronomy at Georgetown University in 1969 and his Ph. D. at the University of Virginia in 1977.

Tom knew from the age of 7 that he wanted to be an astronomer and never veered from that path. He was in a piano recital in New York City and, as a treat afterward, his father took him to the Hayden Planetarium where he was impressed by the large Copernican orrery. He received his first telescope (a 3-inch) when he was 11, and by the time he was in Fifth Grade he was helping to teach the astronomy unit of the science curriculum in his elementary school.

After enrolling at Harvard he hoped to follow an interest in astrophysics, but part of his studies involved a course in Positional Astronomy. "I developed a little bit of interest in the course..., but the presentation was deadly dull," he recalled in his Oral History.

After graduation he and a friend bought an old hearse and took a slow trip across the country to California. As there were few jobs in astronomy at that time, he decided to fulfill his military obligation and joined the National Guard, doing basic training at Ft. Devens, MA. After basic training was completed in the fall of 1963 he began substitute teaching.

Tom came to Washington, D.C. in early 1964 after accepting a position at the U.S. Naval Observatory, putting his brief exposure to Positional Astronomy to good use. He worked as an astronomer at USNO from 1964-1999, specializing in the production of star catalogs for use in navigation and astronomical research. From the beginning he was also an observational astronomer, mainly using the 6-inch and 7-inch transit circles, specialized telescopes for determining accurate star positions. From 1969 to 1971 he observed at the Yale-Columbia station

at El Leoncito, Argentina as part of the Observatory's commitment to observe the entire southern hemisphere sky. This was part of a worldwide project that ran from 1961 to 1973 to provide a catalog of 20,500 Southern Reference Stars. Between 1989 and 1991 he led the effort to combine over 150 meridian and photographic star catalogs to produce a reference system for the Astrographic Catalogue, a catalog that contained 320,000 positions and proper motions of stars. He worked on many other programs, including the Observatory's pole-to-pole observing effort. Overall, his work with his colleagues was important to determining the fundamental reference frame for astronomy, against which all celestial positions are measured.

His career at the USNO spanned 35 years, during which he became one of the leading experts in astrometric star catalogs and celestial reference frames. His expertise was pivotal in the translation of a dynamic celestial reference frame based on observations of bright stars to the current fixed extragalactic reference frame that is now the world standard.

After his retirement he continued to advise USNO astronomers on star catalogs and fundamental astrometry, but he was finally able to pursue his life-long interests in Civil War history, watching movies, and viewing the sky from his backyard observatory.

His professional affiliations included membership in the American Astronomical Society, Sigma Xi, and the International Astronomical Union (IAU). He was a member of IAU Division A, Fundamental Astrometry, where he was active in Commission 24 (Photographic Astrometry) and Commission 8 (Astrometry). He was the president of Commission 8 from 1995 through 1997.

Tom is survived by his wife of 56 years, Brenda, who served as USNO's Librarian from 1973 until 2005, and son James Elbert Corbin, daughter-in-law Carmen, and two granddaughters, Camille (11) and Sonia (8).

Asteroid (4008) Corbin, discovered at El Leoncito in 1977, was named in honor of Tom and Brenda by the IAU in February 1998.