



Dr. Edward Leo Cochran, Jr.—scientist, public servant, and devoted husband, father, and grandfather—died peacefully in his sleep on Sunday, November 16, 2025, in Ellicott City. He was 96. A faithful servant of Christ and longtime member of St. Louis Catholic Church in Clarksville, Ed's life traced a distinctly American arc: a barefoot farm boy who walked miles on a dirt road to a one-room schoolhouse. His curiosity and keen mind drove him to solve vexing challenges in physical chemistry and public policy, where he worked on behalf of public education, ethics, and good government.

Early Years and Education

Ed was born on the cusp of the Great Depression on March 18, 1929, in Jarrettsville, Maryland. He was the first son of Edward L. Cochran, Sr., a farmer, and Mary Elizabeth Roach of Baltimore City. Like many farming families of that era, amenities were limited. Outhouses, wood stoves for cooking and heating, hand-me-downs, and bare feet were part of daily life.

Ed and his brother Don walked daily to the little Taylor one-room schoolhouse. With more than 40 first cousins living on the surrounding farms, they were related to nearly every student. With only one teacher instructing all grades, chores like assisting the younger children, gathering wood and stoking the stove were often left to the older students. School books, notebooks and pencils were rare commodities. But it was here, and despite the humble surroundings, that Ed developed a lifelong passion for learning.



After graduating from the one room schoolhouse early, Ed attended Bel Air High School and then Loyola College, where he graduated in 1949 at the age of 20. He continued his education by achieving a master's degree in chemistry from Duquesne University in 1951, before earning his PhD from the University of Notre Dame.

At Notre Dame, he met Catherine Joan Flanagan, a theology graduate student at nearby St. Mary's College on a blind date. They married in her hometown of Milton Massachusetts in 1953, and, after a brief stay in New Haven, Connecticut, they moved to Howard County in 1956 when Ed accepted a research position with the Johns Hopkins University Applied Physics Laboratory in Laurel. Together, Ed and Joan made their home at "Holly Hill," an 1880s farmhouse on ten acres in Clarksville that became the joyful hub of a growing family.

Drawn by nature to fundamental discovery, Dr. Cochran's research focused on chemical kinetics, and in particular on free radicals—transient, highly reactive molecules central to many chemical and biological reactions. He joined a small team using a new technique of electron spin resonance (ESR) to stabilize and observe free radicals directly. By successfully trapping hydrogen radicals in inert material at near absolute-zero temperatures, the team achieved an early breakthrough—and then later achieved dozens more. With colleagues, Ed published more than 30 scientific papers, and traveled to speak at universities in the U.S. and Europe, including Cambridge, Uppsala, and even Russia, for talks in Moscow and Novosibirsk during the Cold War.



Public Engagement

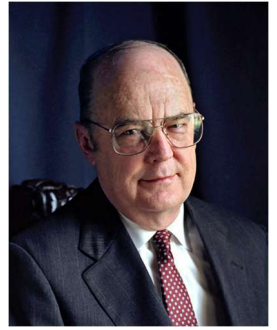
While his vigorous scientific research continued for nearly 18 years, Ed saw a new challenge emerging for his family of school-aged children. The rapidly growing Howard County population filled local schools and stretched the education system. Ed brought his curiosity and analytical approach to studying how this rural school system might be improved.

After he became active in PTA and School Board meetings and joined a School Board Nominating Federation advising the Governor, Ed was appointed to the Howard County Board of Education and served from 1964 to 1968. When asked why a research chemist wanted a seat on the local school board, he replied, "I have six excellent reasons," naming his six children.

In 1964, ten years after *Brown v. Board of Education*, Ed got to work with local civil rights leaders to immediately integrate the public schools. Then-NAACP education chair Robert Kittleman captured the moment in a letter to Ed sent later: "When you were appointed, Ed, I knew the fight for integration was over." While on the School Board, Ed also helped found Howard Community College, later serving on its Board of Trustees from 1985 to 1991.

Embracing broader policy solutions available under the county's new charter government, Ed was elected to the Howard County Council in 1968 and reelected in 1970, where he modernized county laws, sponsoring the act creating a Human Relations Commission to extend equality beyond education to accommodations, facilities, licenses, contracts, employment, and advancement. He championed financial disclosure for officials, strengthened consumer affairs, created a Zoning Board, and sponsored the county's first no-smoking and sign laws.

In 1974, Ed went on to tackle ever-bigger challenges when voters elected him as the county's second County Executive, a role he served until December 1978. To deliver solutions for necessary public services, his administration formed the Department of Citizen Services and the Office on Aging; established subsidized housing for seniors; created the Office of Consumer Affairs; introduced program budgeting for fiscal accountability; and secured the county's first AA bond ratings from major agencies. Most enduringly, he introduced an act establishing the Office of Human Rights and making discrimination illegal across housing, employment, law enforcement, public accommodations, financing, and more—a comprehensive statement of local values that still guides county practice.



After his term, Ed returned full-time to the Applied Physics Lab as Director of External Relations (1979–1994). He continued his public service through the Howard Community College Board, the Columbia Foundation Board, the Board of Appeals, and the Howard County Park Board; as President of the Rotary Club of Columbia Town Center; and as a weekly volunteer driver for Meals on Wheels.

Holly Hill

Throughout these years, Ed's homestead, "Holly Hill," provided yet another outlet for an active and curious mind. Ed rebuilt and maintained the old farmhouse and its outbuildings across six decades—converting a smokehouse into a tool shed, a chicken coop into a garage, and, after a spectacular barn fire on Halloween 1968, turning the old barn foundation into new stalls and a hayloft. Horses and ponies were a constant presence, beginning with a Shetland foal named Jingles brought home in the back seat of a sedan.

He may have been happiest solving problems with a tool in his hands: setting cattle guards, digging out stumps by hand at night, encircling his well-mown lawn with a white three-panel fence, building multiple tree houses and sandboxes, and limbing the many large trees until the hilltop became a gracious park clearing for family games and holiday gatherings. In later years, he was pleased to share the property with families of wild turkeys, foxes, raccoons and deer, in addition to a catalog of woodpeckers, blue birds and other songbirds.



Flying

Flying offered Ed a different set of physics experiments and a new kind of horizon. At Haysfield Airport, he earned both his instrument rating and commercial certificate, logging 1,500+ hours as pilot-in-command. He flew modest Cessnas with quiet joy to Oshkosh, Buffalo, Nantucket, the Outer Banks, and once to Eleuthera Island in the Bahamas. His children remember his dry sense of humor and the cadence of his voice as a kind of pre-flight checklist for life. When they set out on any project, he'd offer a gentle admonition that became a family proverb: "Do a good job, now."

Family, faith, and legacy

Ed and Joan were married for more than 62 years until her passing in 2015. He deeply loved her; together they shared a marriage of compassion and public purpose and raised a family that multiplied the blessings they had received. He never missed a Christmas, Easter, or a birthday; he adored his grandchildren and great-grandchildren and, with his beloved wife, delighted in hosting Easter egg hunts and Thanksgiving dinners at Holly Hill. To them, he was "Pop-pop"—steady, principled, affectionate, and fun.



As his children and grandchildren grew, Ed often remarked on the difference between his childhood, where generations stayed rooted in place, and current times, where children and grandchildren spread like milkweed across the nation in search of new opportunities. He found comfort in opening his FindMyFriends app each evening to check on our locations before including his children and grandchildren, one by one, in his evening prayers.

Ed was dedicated to the hard work of solving the problems he found, and the ones that found him. His deeply held Catholic faith and belief in scientific methods were complementary comforts that informed his life's work. In laboratories and council chambers, around kitchen tables and in small airplanes over the Chesapeake, he kept the faith, and spread the faith to his family, friends, and co-workers, that we can indeed make things better.

Ed is survived by his brother, Donald; his six children: Edward L. Cochran III (Andrea), William Cochran (Teresa), Mark Cochran (Deirdre), Mary Catherine Cochran, Courtney Watson (Richard), and Christopher Cochran (Laura), his 23 grandchildren and 13 great-grandchildren.