

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Department of Mechanical Science and Engineering
Mechanical Engineering Building
1206 West Green Street
Urbana, IL 61801-2906



James W. Phillips
Professor emeritus

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A biography of Robert Earl Miller

It is only fitting that a biography of Robert Earl “Bob” Miller, one of the most beloved professors in the history of the College of Engineering at the University of Illinois at Urbana-Champaign, be undertaken. The author’s hope is that this brief account of Bob’s life and achievements will serve as a suitable introduction.

Early childhood

Bob was born October 4, 1932, to Leslie D. Miller and Marcia Vivian (Jones) Miller in Rockford, Illinois.

Father

Bob’s father, Leslie D. Miller (September 1897–February 1935), was a grandson of Paul Miller III (b. May 1833 in England), a bookkeeper, and his wife Silvia A. Miller (b. January 1839 in Michigan). Paul became a naturalized U.S. citizen in 1850. Paul and Sylvia were married in 1864. In 1875 Paul and Sylvia resided in Greenfield, Minnesota, and were raising three children—Ada Mary (b. November 1866), Paul Allen (b. 1868), and William Myron (b. January 1873).¹ In 1880, they resided in Wabasha, Minnesota, where their last child, Alfred Roy (b. October 1878) was born.² By 1900, Paul and Sylvia had moved the family to St. Paul, Minnesota, and were raising, in addition, two grandsons—Myron Frank Miller (b. February 1896) and Leslie D. Miller (b. September 1897).³

It is likely that William Myron Miller was the father to both Myron Frank Miller and Leslie D. Miller, and was therefore Robert Earl Miller’s paternal grandfather.⁴ In 1894 William Myron Miller married Lillian Daily in Minneapolis.⁵ By that time he had moved to Fargo, North Dakota, where he was listed in the city directories from 1893 to 1896 as a telegraph operator for

¹ *Minnesota, Territorial and State Censuses, 1849–1905* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2007.

² U.S. Census, 1880: Wabasha, Wabasha, Minnesota; Roll: 636; Page: 441B; Enumeration District: 178.

³ U.S. Census, 1900: St Paul Ward 6, Ramsey, Minnesota; Roll: 784; Page: 13A; Enumeration District: 0110; FHL microfilm: 1240784.

In this 1900 census, there is no mention of Paul and Sylvia’s second child, Paul Allen Miller.

⁴ Myron W. Miller’s younger brother A. Roy Miller would have been only 19 years old at the time of Leslie D. Miller’s birth in 1897. Furthermore, A. Roy Miller was listed as single in the 1900 U.S. census.

⁵ *Minnesota, Marriages Index, 1849-1950* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2011.

Western Union.⁶ However, by 1900, he was a widower and had moved back with his parents and his sister Ada Mary in St. Paul to help raise his two sons, both of whom had been born in North Dakota.

The year 1903 was a tragic one for the family—it saw the deaths not only of William Myron Miller (age 30) and his brother Alfred Roy (age 25), but also William Myron's first son Myron Frank (age 7).⁷

By 1905, at age 7, Leslie D. Miller was being raised by his aunt, Ada Mary Miller, a public school teacher, in St. Paul, Minnesota.^{8,9} At age 22, Leslie still resided with his aunt and had become a livestock salesman.¹⁰ He later became a clerk¹¹ and bookkeeper.¹² In June 1925, at age 27, he married Marcia Vivian Jones at the Emerald Avenue Presbyterian Church in Chicago,¹³ and he and Marcia moved to Rockford, Illinois, where he had become an insurance adjuster for Travelers Insurance Co.^{14,15} Leslie and Marcia's only child, Robert Earl Miller, was born in 1932 after 7 years of marriage.

⁶ See, for example, the 1896 Fargo, N.D., city directory in *U.S. City Directories, 1822-1995* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2011.

⁷ See Minnesota death card for Myron F. Miller, Reel 31, Frame 1202, available through the Iron Range Resource Library, Chisholm, Minn.

⁸ Minnesota Historical Society. *Minnesota State Population Census Schedules, 1865–1905*. St. Paul, MN, USA: Minnesota Historical Society, 1977. Microfilm. Reels 1–47 and 107–164. Accessed through Ancestry.com. *Minnesota, Territorial and State Censuses, 1849–1905* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc., 2007.

Also living in the home with Ada Mary Miller in 1905 were her parents, Paul and Sylvia Miller, age 72 and 66, respectively, and another school teacher, Laura D. Parkinson, age 31. Ada Mary Miller's age was entered as 35, but according to the 1900 U.S. census she would have been 39. The address was 114 Colorado, St. Paul, Minnesota.

⁹ U.S. Census, 1910: St Paul Ward 11, Ramsey, Minnesota; Roll: T624_720; Page: 5A; Enumeration District: 0145; FHL microfilm: 1374733.

This census makes no mention of Paul and Sylvia Miller. Ada Mary Miller had apparently moved to 1789 Iglehart Avenue, St. Paul, Minnesota, between 1905 and 1910. Laura D. Parkinson still lived with Ada and Ada's nephew Leslie D. Miller. This house is still in good condition today (2018).

¹⁰ U.S. Census, 1920: St Paul Ward 11, Ramsey, Minnesota; Roll: T625_855; Page: 6A; Enumeration District: 129.

At this time, Laura D. Parkinson was still residing with Ada Mary Miller and Leslie D. Miller at 1789 Iglehart Avenue, St. Paul Minnesota. *Note:* There is some discrepancy among the 1900, 1905, 1910, and 1920 censuses regarding the ages of Ada Mary Miller and Laura D. Parkinson. However, the ages given for Leslie D. Miller are consistent throughout.

¹¹ See the St. Paul, Minnesota, city directory, 1921. *U.S. City Directories, 1822-1995* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2011.

¹² See the St. Paul, Minnesota, city directory, 1922. *U.S. City Directories, 1822-1995* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2011.

¹³ Presbyterian Historical Society; Philadelphia, Pennsylvania; Church Registers; Book Title: Session/Register 1891–1941; Accession Number: Vault BX 9211 .I30621 E42 v.2.

¹⁴ See the Rockford, Illinois, city directories, 1925–1934. *U.S. City Directories, 1822-1995* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2011.

At first, Leslie and Marcia lived at 911 Rockton Avenue, Rockford, Illinois. In 1930, they had moved to a duplex at 1922 Douglas St. In 1934, they resided at 2118 Princeton Avenue.

Mother

Bob's mother, Marcia Vivian Jones (July 1899–May 1980), was born and raised in Chicago.¹⁶ Both her father John Jay Jones (June 1859–January 1911), a slate company manager of Welsh descent,¹⁷ and mother Carrie M. (Michielsen) Jones (March 1869–April 1969) of Dutch descent,¹⁸ a seamstress for Carson Pirie Scott, were originally from upstate New York and had moved to Chicago. Marcia had a younger brother, Earl Graham Jones (March 1907–September

¹⁵U.S. Census, 1930: Rockford, Winnebago, Illinois; Roll: 572; Page: 13B; Enumeration District: 0031; FHL microfilm: 2340307.

¹⁶U.S. Census, 1900: Chicago Ward 12, Cook, Illinois; Roll: 258; Page: 13B; Enumeration District: 0341; FHL microfilm: 1240258

¹⁷John Jay Jones came from a large family. His father, John R. Jones (b. July 1834), a slate quarryman, and mother Ann had at least 9 children: William J., John J., Richard, Hannah, Thomas, Liza Ann (Elizabeth A.), Eleazer, Samuel, and Fredrick (Fred A.). In 1880, John Jay (age 20) and his older brother William J. (age 22) were living at home and working as stone cutters. (See U.S. Census, 1880: Granville, Washington, New York; Roll: 942; Page: 219A; Enumeration District: 141.) By 1900, John Jay (age 40) had married and moved to Chicago. His older brother William J. (age 42) was still single and residing in Granville, New York, with his parents (both age 65) and younger siblings Elizabeth (age 29) and Fred (age 20). (See U.S. Census 1900: Granville, Washington, New York; Page: 6; Enumeration District: 0125.) By 1905, John R. had apparently died, but otherwise the family remained the same. (See New York State Archives, Albany, New York; State Population Census Schedules, 1905; Election District: E.D. 04; City: Granville; County: Washington; Page 10.) William J. Jones died in 1907. (See New York Department of Health; Albany, NY; NY State Death Index; Certificate Number: 18319.)

The name of John Jay Jones's father, John R. Jones, is given in John Jay Jones's death certificate, which was signed by Carrie M. (Michielsen) Jones.

¹⁸Even though Carrie lived with her grandson Bob for many years after leaving Chicago, she would never tell Bob much about her family. According to Carrie's death certificate, which was signed by her daughter Marcia Vivian (Jones) Wilson, Carrie's father was Anthony Michielsen (?–?) and her mother was Mary Longrod (1840–1928), both of whom had been born in Holland. Carrie was born in New York.

It seems that Carrie had at least one younger brother, James Michielsen, born June 17, 1870, in Holland. (See *U.S. Social Security Applications and Claims Index, 1936-2007* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2015.) That birthdate would be about 11 months after Carrie's birthdate of May 20, 1869. In 1900, a construction worker named James Michielsen and his wife Nora O'Brien were living in Chicago and were raising four children—John (b. September 1891), James (b. January 1893), May (b. February 1896), and Norah (b. June 1897). (See U.S. Census, 1900: Chicago Ward 30, Cook, Illinois; Page: 9; Enumeration District: 0916. Note: Michielsen is spelled *Michielson*.) By 1910, James and Nora had a fifth child, Harry (b. 1902), and were still raising James, May, and Nora in Chicago. (See U.S. Census, 1910: Chicago Ward 31, Cook, Illinois; Roll: T624 278; Page: 3A; Enumeration District: 1360; FHL microfilm: 1374291. This census lists the birthplace of James's father as England, not Holland, in apparent contradiction with other documents.) The younger James (b. 1893), who was a bookbinder in 1910, may have married in 1913, but died in 1916 in Chicago. (See *Cook County, Illinois, Marriages Index, 1871-1920* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2011, and *Cook County, Illinois, Deaths Index, 1878-1922* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2011. The death notice gives the elder James's wife's name as Nora O'Brien, born in Wales, England. Note: Michielsen is spelled as such in the marriage record, but as *Michielson* in the death notice.) In 1930, James Michielsen and his wife Nora, both age 59, still lived in Chicago. (See U.S. Census, 1930: Chicago, Cook, Illinois; Page: 54A; Enumeration District: 2578. At this time, James was a greenhouse worker.) James may have still been living in 1941.

However, there is also a record of an older male, Peter Michielsen, born October 18, 1868, in Holland, just 7 months prior to Carrie's birth, with the same father's name and a variant of Carrie's mother's name. Peter Michielsen was a janitor in Chicago. He died June 24, 1947.

See also *Illinois, Deaths and Stillbirths Index, 1916-1947* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2011.

1986),^{19,20,21} who later married and moved to Oroville, California,²² with his wife Genevieve (“Jen”) (March 1914–September 1986)²³ but had no children. Bob’s middle name is derived from that of his uncle.



Robert E. Miller at about 2½ (ca. 1935), Rockford, Illinois

In January 1911,²⁴ John J. Jones died in a roofing accident, leaving his wife Carrie to raise her two children—Marcia and Earl. Marcia worked as a stenographer at a drug company after finishing high school, and Carrie took on two boarders to help make ends meet.²⁵

¹⁹See *Cook County, Illinois, Birth Certificates Index, 1871-1922* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2011.

²⁰U.S. Census, 1910: Chicago Ward 32, Cook, Illinois; Roll: T624_279; Page: 17B; Enumeration District: 1401; FHL microfilm: 1374292.

²¹See *California, Death Index, 1940-1997* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc., 2000.

²²See *U.S. Public Records Index, 1950-1993, Volume 2* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2010.

²³See *U.S., Social Security Death Index, 1935-2014* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2014.

²⁴See <https://www.findagrave.com/memorial/107252424>, Find A Grave memorial by Greg Kimberley, March 24, 2013.

²⁵U.S. Census, 1920: Chicago Ward 32, Cook (Chicago), Illinois; Roll: T625_349; Page: 8B; Enumeration District: 1972.

The boarders were sisters from Iowa, Fegan and Alma Florence, who were about the same age as Marcia. They were a clerk and typist, respectively, at a wholesale grocery.

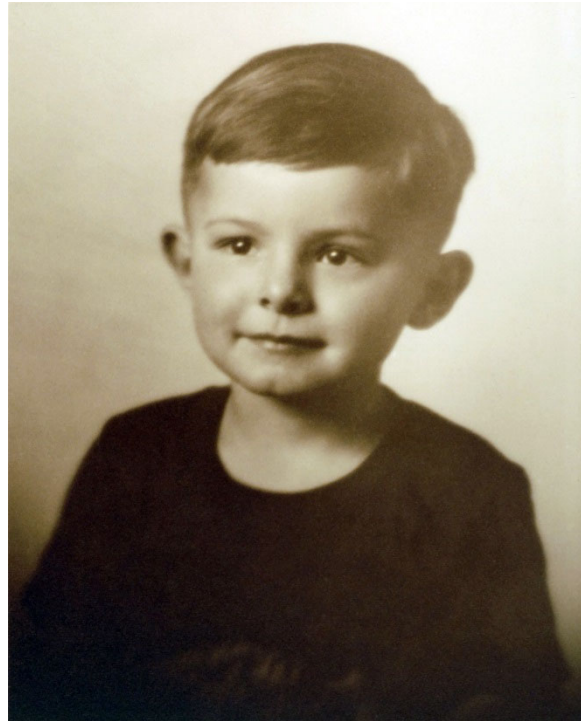
Step-father

In February 1935,²⁶ when Bob was 2 years old, his father Leslie committed suicide. Marcia never revealed to Bob how or why her husband died, except to say that it had nothing to do with Bob. In all likelihood, the beginning of the Great Depression played a role in this tragic event.

Marcia and Leslie were members of the First Presbyterian Church of Rockford. Through church they had met Calvert Emmet Wilson and his wife Bernice Eliza (Stitt) Wilson. Calvert had served in World War I right up to the 1918 armistice, and was a mortgage and farm loan appraiser for Prudential Life in Rockford. As it happened, Bernice died of pneumonia in 1934, leaving Calvert to care for their daughter, Marjorie Jane Wilson, who like Bob had been born in 1932.



Marjorie Jane Wilson



Robert Earl Miller

Portrait photos of Marcia Vivian (Jones) Wilson's step-daughter and son, ca. 1937

Calvert Emmet Wilson and Marcia Vivian (Jones) Miller married about 1936, with First Presbyterian Church minister Dr. William Holmes Fulton officiating, and raised Marge and Bob together in their Rockford home.²⁷ Although he never formally adopted Bob, Calvert was a kind man who raised Bob as if he were his own son. Calvert often took Bob on his field trips to farms in northern Illinois and southern Wisconsin. Calvert died August 14, 1951.^{28,29}

²⁶Date information courtesy of Ms. Andrea Mattson, office manager at Willwood Burial Park, Rockford, Illinois. Personal communication, April 11, 2018.

²⁷U.S. Census, 1940: Rockford, Winnebago, Illinois; Roll: m-t0627-00915; Page: 2B; Enumeration District: 101-70. The address was 2006 Harvard Avenue, Rockford. To the east lived the Fords, and to the west, the Wahlborgs.

²⁸Calvert Emmet Wilson was the oldest of four children of Emmet Frederick Wilson (1871–1928) and Dora Ellen Calvert (1870–1946). Calvert's siblings were Ruth Ellen (1897–1970), Paul Nathan (1903–1966), and Wendell Samuel (1905–1990).

Step-sister

Bob's step-sister Marjorie Jane Wilson was one year ahead of Bob in school because she had been born earlier in the year 1932. Marge attended the University of Illinois at Urbana-Champaign for one semester in Fall 1949. She later became a member of the First Church of Christ, Scientist, and took nurses training at the church's center in Boston, Massachusetts.

In 1956, Marge married Glenn Wesley Tellison (1918–2007), and together they had two children—Michael Calvert Tellison (b. 1958) and Kristine Ellen Tellison (b. 1960). About 1963, however, Marge and Glenn were divorced, and in 1976, Marge married William Gene Hays (1930–1984), who had three children by his first wife Joan (Spitz) Hays (d. 1975)—Scott Douglas, Bradley Gene, and Brigit Lyn. Marge died in 1990.³⁰



ca. 1962



January 2018

Marjorie Jane (Wilson) Tellison's children Michael Calvert and Kristine Ellen, with "Uncle Bob"
At rear in the 1962 photo is Michael and Kristine's dad Glenn Wesley Tellison.

Extended family

Bob was an only child. He never married and had no children. His father had only one sibling, who died as a child. His mother had only one sibling, who married but had no children.

²⁹U.S., *Find A Grave Index, 1600s-Current* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2012.

³⁰Marge's son Michael Calvert Tellison became night auditor/night manager at the Marriott Residence Inn Midway Airport, Chicago. In July 2001, he married Jondralyn "Jonji" Farrow at Alsip, Illinois. Today (2019), Jonji teaches kindergarten at Bennett Elementary School in south Chicago. She had earlier taught at Gillespie Technology Magnet Cluster School in Chicago. Michael and Jonji have no children.

Marge's daughter Kristine Ellen Tellison married Bradley Gene Hays (a son of her step-father) in 1976 and together they had three children—Michelle Joan (b. 1977), Andrea Jane (1979–2015), and Jennifer Jean (b. 1982). Kristine and Bradley later divorced, and in 1995 Kristine married James Connors. They had a son, Sean Patrick Connors (b. 1997). Kristine and James are now divorced. Today (2019), Kristine lives in Sycamore, Illinois, and is raising Andrea's teenage daughters Jorie Elizabeth Beeh (b. 2001) and Reese Madison Beeh (b. 2003), while working at Land of Learning daycare center for infants and children. Until recently, she operated a daycare center in her own home.

Therefore, besides having no spouse or children, Bob had no brothers, sisters, or even first cousins. On his father's side, he had great-aunts and great-uncles, but the ones who married had no children. On his mother's side, little information is available about the family.

Fortunately for Bob, his mother remarried into a very extended family that included Bob's step-sister Marge. Bob's step-father Calvert Wilson had a younger sister Ruth who married Henry Ambrose "Brose" Riedesel and had six surviving children—some of them twins—most of whom raised families. Calvert also had two younger brothers, Paul³¹ and Wendell,³² both of whom married and had children.

Education

Bob taught himself to read beginning at about age 6, "because I had to in order to read the instructions that came with my model airplane kits." He was always fascinated with airplanes and, later, model trains—hobbies that he would enjoy the rest of his life. Kindergarten was not available in public schools, but Bob's mother enrolled both Marge and Bob at a part-time neighborhood preschool.

Bob and his step-sister Marge attended Highland Elementary School,³³ then Lincoln Junior High School, then—for a short time—East Rockford High School, all in Rockford.

Throughout his grade-school years, Bob caught all the UCDs—usual childhood diseases—and developed slowly in physique. In third grade at Highland Elementary School in particular, he missed so much school he was almost held back but tested well enough to continue. "I always liked my second-grade teacher, Miss Pyle, because she gave up trying to teach me (and some other kids) how to write in cursive, and instead taught us how to print." To this day, Bob still prints.

³¹Paul Nathan Wilson (1903–1966) was for many years clerk of the Rockford, Illinois, County Circuit Court. Bob remembers that Uncle Paul would take his wife Lucile to the First Presbyterian Church on Sundays, but would duck across the street to the club to play billiards while his wife was at church. Bob would sometimes join him.

³²Wendell Samuel Wilson (1905–1990) was at one time the athletic director at UIUC, serving at the time that head football coach Robert Carl "Bob" Zuppke "resigned" after serving as coach from 1913 to 1941. Wendell was a member of the National Association of Collegiate Directors of Athletics (NACDA) Hall of Fame. In 1939 he founded Teton Valley Ranch Camp in Kelly, Wyoming. The camp was reestablished at Dubois, Wyoming, in 2005.

³³The Highland Elementary School that Bob and his step-sister attended in Rockford is now an office building. Today, there is a Highland Elementary School in Stillman Valley, south of Rockford, but that is a different school.



Bob Miller and his step-cousin Joan Preston “Joanne” Riedesel at Highland Place, Rockford, Illinois, May 2018. Bob attended Highland Elementary School in this building from 1938 to 1944.

Bob weighed less than 4 pounds at birth and never seemed to catch up. “I was by far the smallest kid in class, even compared with the girls, all the way through grade school and junior high school,” he recalls. “At one point later on my parents inquired about having me skip a grade to be in the same class as my step-sister, but they were advised against it, in part because I was so small.”

Complicating Bob’s development was the fact that he was born with a ventricular septal defect (VSD). At the time, no surgical procedure was available to fix this heart defect in infants or children, so the only advice that the family pediatrician, Dr. Krause, could give was to avoid overexertion, and to make sure he maintained a healthy weight. Bob always liked Dr. Krause because, on one occasion, Marcia had asked the doctor how she could get Bobby to drink his milk at mealtime. Bob hated milk. The doctor said, “He doesn’t have to drink milk. Kids don’t need milk. They just have to get their nutrition some other way.” “Yay!” Bob shouted. And Marcia was happy, too, because she didn’t have to bug Bobby anymore.

In 1948, when Bob was in the middle of grade 10 at East Rockford, Prudential Life promoted Calvert Wilson to a new position in Chicago, and the family moved to Aurora, Illinois, where Calvert could catch the Chicago Burlington & Quincy train instead of driving into the city. Marge and Bob finished at West Aurora High School, 1949 for Marge and 1950 for Bob.



Eight Three

Bob Aarhus, Bruce Anderson, Colene Anderson, Virginia Carlyle, Kenneth Ekedahl, Karl Gustafson, Ruth Ann Haen, Mary Ann Hall, Janet Holm, Bradley Howe

Janet Johnson, Lester Johnson, Lenore Langley, David Lemke, David McConnell, Charlene Marshall, Miriam Nelson, William Nelson, Jack Nielsen

Carolyn Norman, Jean Nyquist, Dolores Oberg, John Olson, Curtis Ostrom, Richard Pixler, Martha Ramsey, Mildred Reynolds, Donald Ritchie

Fred Rust, Mary Ann Salivar, Lois Sjolin, Ellerd Solfest, LeRoy Stenberg, Norman Strubing, Shirley Sutherland, Arlene Swanson, Rodney Swanson, Mabel Walker

Eight Four

Janet Anderson, Robert Anderson, John Blades, Jack Blankfeld, Clifford Brees, Donald Buell, Beverly Carlson, Jack Dahlberg, Charles Erickson, Mary Erwin

Dick Ferro, Janice Flood, Joan Frang, Norma Gilmour, Beatrice Grenberg, Carol Louise Gustafson, Bill Isbell, Dale Johnson, Patricia Johnson

Ruth Johnson, Gene King, Carol Linde, Edgar Maitzen, Bob Miller, Erick Nelson, Marjorie Olson, Burdette Peterson, Carol Peterson

Roger Peterson, Bill Spickerman, Marilyn Sandquist, Joyce Swanson, Carolyn Theden, Ingrid Varvayn, Carolyn Warner, Dawn Wilmer, Jerry Wisner, June Wolfe



<p>Nine Three 213 Miss Ballard</p>						<p>Carol Anderson Jim Bailey Jack Beckstrom</p>
<p>Chuck Bergquist Loretta Bryan</p>						<p>Lillian Carlson Robert Carlson Roger Carlson</p>
<p>Charles Carter Audrey Clair</p>						<p>Ruby Cosgrove Mary DiTullio Lois Doxey</p>
<p>Marvin Drought Cornelius Edson</p>						<p>Joanne Emott Jacqueline Erb</p>
<p>Dale Hallberg Jeannine Lewis</p>						<p>Ronald Lindstrom Norma Jean McDonald</p>
<p>Charles McDonnell Bob Miller</p>						<p>Donna Olson Robert Pearson</p>
<p>Robert Pedersen Donna Pixler</p>						<p>Roger Rudeen Tom Sheetz Coralie Shields</p>
<p>Jeanne Stang Jerry Stockwell</p>						<p>Marian Swenson Carolyn Wallin</p>



TOP ROW: Karin Ericson, Donald LaPier, Pauline Anderson, Val Krukonis, Everett Nelson, Martin Nelson, John Ericson, Ronald Anderson, Miss Joy FraiPont. THIRD ROW: Jerry Carlson, Jack Anderson, Pat Rutz, Lillian Carlson, Jacqueline Erb, Judy Hockstad, Kenneth Carlson, Robert Thoren. SECOND ROW: Annabelle LaRose, Eloise Anderson, Gwendolyn Nelson, John Evans, Pat Ryberg, Kathryn Krause, Marian Nelson. BOTTOM ROW: Jane Hoskins, Lila Carlson, Lorraine Hoover, Louise Ryckemen.

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Vice President . . Lillian Carlson
Secretary Annabelle LaRose
Treasurer John Ericson
Adviser Miss Joy FraiPont

sophomores

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Mary Huston
Shirley Helfers
Ronald Hutchison
Ellen Hershey
Paul Ivemeyer

Wayne Halling
Hugh Hollister
Janice Jordan
John Hargis
Bill Hope
Marcel Joy
Gordon Hausman
Delores Hughes
Geraldine Killian

Marjorie Greene
Bill Hewitt
Don Jameson
Don Kipp
Ruth Ann Gronquist
Gretchen Hill
Sue Jericho
Bill Koester
Don Gustafson
Betty Hogle
Tom Johnson
Peter Krentz

Juniors


Beverly Kuhn
Ruth Ann Little
Sue Myers
Colin Munro
Bob Landgraf
Ann Livingston
Donna Miller
Jean Nance
Herbert Leonard
Arlene Loeber
Bob Miller
Virginia Nehring

Ray Lidecka
Pat Lyon
Winona Morony
Dean Lirot
Glen Martin
Dick Morris
June Little
Ann Martyn
Barbara Masley


Gerald Long
Charles Mitchler
Elvin Luke
Dick Morgan
Martha Luman
Paul Morlock



DONNA MILLER
 "A merry heart doeth good like medicine"
 Drama Club: 2, 3. Freshman Girls' Glee Club: 1. G.A.A.: 1, 3. Girls' Club Representative: 2. Jr. A Cappella Choir: 2. Jr. Red Cross Representative: 4. Spanish Club: 1, 4.




ROBERT MILLER
 "Small but mighty"
 East Rockford High: 1, 2. Electricians' Club: 2. Football Manager: 3. Science Club: 4. Track Manager: 2, 3.




CHARLES MITCHLER
 "I light my candle from their torches"
 Basketball: 1, 2, 4. Gym Club: 1, 2. Intramurals: 1, 2, 3. Rifle Club: 1, 2. Track: 4.



HAROLD MOBERLY
 "Be wise worldly, not worldly wise"
 Peoria Central High: 1, 2, 3. Science Club: 4.




DICK MORGAN
 "Disappointment is the parent of despair"
 Basketball: 4. Intramurals: 1, 2, 3, 4. Jr. Red Cross Representative: 2. Rifle Club: 1, 2. Student Council: 4. Vocational Club: 3. President 4.




seniors


PAUL MORLOCK
 "Tomorrow is another day"
 A Cappella Choir: 3. Vice-President 4. "A" Club: 2, 3, 4. Class Vice-President: 2, 4. Football: 1, 2, 3, 4. Gym Club: 3. Intramurals: 1, 2, 3, 4. Jr. A Cappella Choir: Vice-President 2. Student Council: 1, 4. Track: 3.




WINONA MORONEY
 "Let thy speech be better than silence, or be silent"
 Commercial Club: 4. Drama Club: 2. Eos: Distribution Manager 4. Paint Pot Club: 3. Student Council: 4.




DICK MORRIS
 "Who lives without folly is not so wise as he thinks"
 Debate: 1. Drama Club: 2, 3, 4. Intramurals: 1, 2, 3, 4. Jr. Red Cross Representative: 1. Library Club: 3. Student Council: 2.



BARBARA MOSLEY
 "An exception to the rule about red hair"
 Commercial Club: 4. G.A.A.: 1, 2. Home Economics Club: 2. Vice-President 3. Intramurals: 2, 3. Yorkville High School: 4.





Scrawny Gives A "Command Performance."

During his high school days in Aurora, Bob found that his VSD didn't prevent him from delivering telegrams after school and on weekends. He and other neighborhood boys would ride their bikes to the Western Union office downtown near the Fox River and pick up a pile of telegrams that the office workers had divided into various sectors of Aurora. They would then race their bikes through their part of town, delivering the telegrams. The work paid well—25¢ an hour, plus an occasional 5¢ tip from a customer. Weekends were better because of deliveries to businesses, especially liquor stores and bars.

It was at West Aurora High School that Bob did well in mathematics and took all the required shop classes—woodworking, metalworking, printshop, for example. He had no trouble learning how to read blueprints, and he developed a flair for drafting. It was his drafting skills that landed him a job during the summers and after high school with American Well Works in Aurora. There he would either look up or make drawings for parts to fix pumps or other pieces of equipment that were brought in for repair. Bob quickly figured he could probably make a living at this kind of work. But one day the operations manager told him, “You know, Bob, you really should go to college. You could do a lot.”

Aerospace Engineering at UIUC

Things were different in those days. Not many kids went to college. In order to be admitted to the University of Illinois at Urbana-Champaign, all a student needed was a diploma from an Illinois high school and an approved place to live on or near the campus. There were no entrance exams or essays to write. Thus it was in September 1950, a week before the fall classes were about to start, that Calvert Wilson drove his step-son Bob Miller to Urbana to talk with an assistant dean in the College of Engineering and fill out the paperwork to enroll. In what field? Aerospace, of course. Bob had built from scratch and flown many airplanes by then and had figured out what he wanted to study.

During his undergraduate years, Bob lived in the PGUs—parade ground units—on the north side of Memorial Stadium.³⁴ These units had been erected as temporary housing primarily for GIs and their families returning from World War II. There were 16 boys in each of the men's dorms. “My roommate for the first year was John Hoem, an ex-GI, a very nice guy.”

He was a gifted student and did well in his courses. To help put himself through college, Bob took up drafting work in his sophomore year for professors and their graduate students who were writing technical reports and theses. A professor named George M. Sinclair in another department—Theoretical and Applied Mechanics (TAM)—was one of the first faculty members to take advantage of Bob's drafting skills. Another TAM professor was Henry Louis Langhaar (1909–1992),³⁵ who had joined the faculty in 1946 after working in the aerospace industry for several years and who was destined to play a major role in developing TAM's graduate program for the next four decades. At the time, Langhaar was



Bob Miller ca. 1952

³⁴The parade ground units were demolished about 1960 to make way for the “six pack” dormitories of later generations of students. Today, even these dorms are being systematically replaced by new dorms in the Stanley O. Ikenberry Commons. The radio station WPGU derives its name from the parade ground units.

³⁵See https://en.wikipedia.org/wiki/Henry_L._Langhaar.

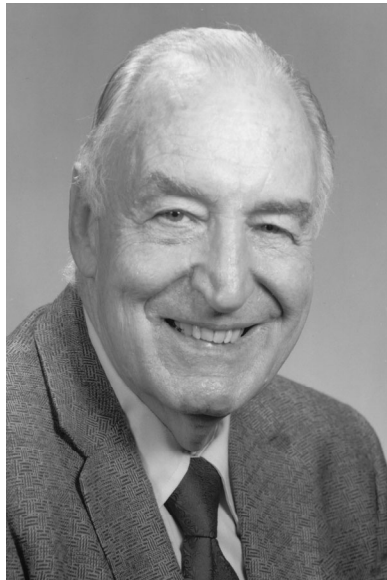
advising a doctoral student named Arthur Peter Boresi,³⁶ who needed figures drawn for his thesis. Bob landed the job and was thereby introduced to what would become his graduate field of study—mechanics.

Theoretical and Applied Mechanics at UIUC

By the time Bob finished the requirements for his Bachelor of Science degree in Aerospace Engineering in 1954, he knew he wanted to pursue graduate studies. However, because he had come to learn and appreciate many of the research interests of faculty in Theoretical and Applied Mechanics, he applied to TAM and not Aerospace Engineering. He was accepted immediately.

A circumstance that could have derailed Bob's plan to continue his studies, however, was the draft. The Korean conflict had not yet ended, and immediately upon earning his bachelor's degree in 1954 Bob received his notice—"a committee comprised of your friends and neighbors has selected you"—to appear for a physical. He dutifully boarded a train for Chicago and appeared for his exam. After some simple tests, the recruits were lined up in rows and the first examining physician "just touched" his stethoscope to Bob's heart. "Go over there and sit on that bench," the doctor said. And by the end of the day, after an electrocardiogram, Bob was back on the train to campus, having been excused from military service.

Bob made rapid progress on his master's thesis, completing the work in just one calendar year while holding down half-time research and teaching assistantships during the academic year and finishing his thesis the following summer. It was perhaps during this time that Bob earned a nickname that was to stick with him for many years to come: Rapid Robert. The thesis was entitled "Buckling of axially compressed plates reinforced by bulkheads," and was completed under the legendary Prof. Henry L. Langhaar in 1955.



**Bob's M.S. and Ph.D. advisor,
Henry Louis Langhaar, ca. 1979**

By the end of his master's work, Bob realized he wanted to continue for a doctorate in TAM. This decision led to other developments in his life as well. His step-father Calvert had died of a heart attack in August 1951, just as Bob was entering his sophomore year at Illinois. After her husband's death, Bob's mother Marcia kept her house at 119 Le Grande Boulevard in Aurora for about 2 years, then sold the house and rented an apartment on Lancaster Avenue near downtown Aurora, closer to bus routes. Even though she had driven a car in her youth, Marcia did not wish to learn again how to drive. Meanwhile, Bob had moved from the parade ground units to a rooming house on Springfield Avenue in Champaign. After learning that Bob would be continuing his education at Illinois

for the next few years, Marcia suggested that she and Bob purchase a house together somewhere in Champaign-Urbana, and she would keep house for both of them. In 1955, they found a small 2-bedroom house at 209 S. Fair Street in Champaign. It was to be Bob's home for the next 7 years.

³⁶Boresi (b. 1924) served on the TAM faculty from 1953 to 1979, when he resigned at age 55 to become a professor of civil engineering at the University of Wyoming, Laramie. Soon after his arrival there, he was named head of the department. Boresi is the author or coauthor of several books in engineering mechanics, advanced mechanics of materials, and elasticity.



Bob points to his attic bedroom at 209 S. Fair Street, Champaign, Illinois, in March 2018. From 1955 to 1962, Bob shared this house with his mother Marcia and grandmother Carrie.

Bob extended the heating ducts into the tiny side porch to give them a little more living space. Marcia had one of the two bedrooms on the first floor and Bob slept in the attic with his model airplane collection. About 1959, Bob's grandmother Carrie Jones moved from her apartment in Chicago into the second bedroom. Carrie had been caring for a childhood friend of hers in the friend's apartment that the son owned, and had to find a place to stay after her friend passed away. For Carrie, it was a rather momentous change, since she had lived in Chicago her first 90 years.

Bob began his doctoral studies with Langhaar in 1955 while on a half-time teaching assistantship. To continue his studies, he was anticipating a renewal of his assistantship when TAM department head Thomas J. Dolan³⁷ called him into his office. Tom had been informed of the exemplary teaching credentials Bob had earned after just one semester in the classroom. Tom was also under great pressure to staff undergraduate mechanics classes for a rapidly growing number of engineering students, including



The dogleg stairway from the kitchen to the attic is still very narrow.

³⁷Thomas James Dolan (1906–1996) served on the TAM faculty from 1929 to 1973. He was head of the department from 1952 to 1970. He was best known for his work in fatigue and fracture of metals.

those in electrical engineering. “Here’s an offer you can’t refuse,” Tom said. “If you go full-time—teaching twice as much—I’ll pay you three times the salary.” Thus it was that Bob was promoted from teaching assistant to instructor, the position he was to hold for the next four years (1955–59).

The heavy teaching load may have slowed Bob’s progress on his doctoral dissertation somewhat, but Rapid Robert completed and defended his thesis in 1959, just five years after finishing his baccalaureate. In the meantime he completed all his course work with straight As, and studied French and German “well enough” to pass the foreign language requirements. His doctoral thesis was entitled “Theory of nonhomogeneous anisotropic elastic shells subjected to arbitrary temperature distribution,” directed again by Langhaar. It was during his doctoral research that he began using the newly emerging programming language Fortran to perform the necessary calculations on mainframe computers. That interest in computational mechanics was to play a major role in his subsequent teaching and research.

Teaching

Upon completion of his doctoral studies in Theoretical and Applied Mechanics in 1959, Bob joined the department as an assistant professor. He was subsequently promoted to associate professor in 1961 and to professor in 1968, the position he held until his retirement in 1994. Even after retirement, he continued to offer summer courses through 1997.

His course portfolio eventually included statics; elementary and advanced courses in dynamics, strength of materials, and fluid mechanics; vibrations; applied mathematics; elasticity; energy methods; and numerical methods.

The year 1961 was to be a transitional year for Bob, his mother, and his grandmother. Prior to that time, Bob was teaching but did not have tenure, so the small house at 209 S. Fair Street in Champaign had to meet their needs. The three of them shared one bathroom. Bob was still sleeping in the attic. Once Bob learned that he would be promoted to associate professor with tenure, the search was on for a new house in the Champaign-Urbana area that had more than one bathroom and was also near a bus route—not for Bob but for Marcia. They found a brick tri-level with $2\frac{3}{4}$ baths that was being built at 408 E. Mumford Drive in Urbana, near the new Yankee Ridge Elementary School, and in 1962 they moved in. Bob has lived there ever since. Carrie lived to be 100, and received a congratulatory letter from President Richard M. Nixon. She died June 24, 1969, soon after reaching that milestone. In 1974, Bob’s mother Marcia celebrated her 75th birthday with family at the Wagon Wheel Lodge in Rockton, Illinois. Bob’s mother died May 8, 1980, at age 80.



**Marcia Vivian (Jones) Wilson on her
75th birthday, July 1974**



**Marcia Vivian (Jones) Wilson
(Bob's mother)**



**Marjorie Jane (Wilson) Tellison
(Bob's step-sister)**



Margy (Anderson) Riedesel, Paul Keith Riedesel, Michael Calvert Tellison



**Kristine Ellen and Michael Calvert Tellison, Marcia Wilson
Heidi Lynn Riedesel**



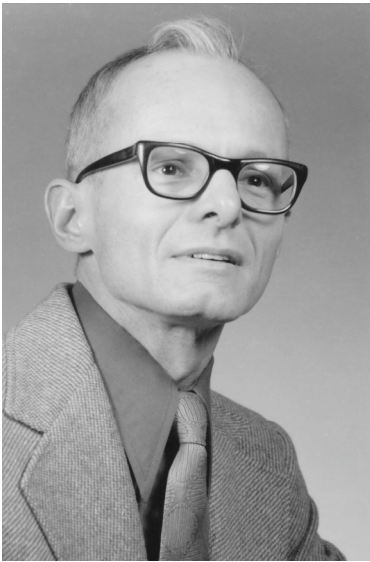
John Keith Riedesel, Robert Earl Miller

Pictures from Marcia Vivian (Jones) Wilson's 75th birthday party at Wagon Wheel Lodge, Rockton, Illinois, July 27, 1974.

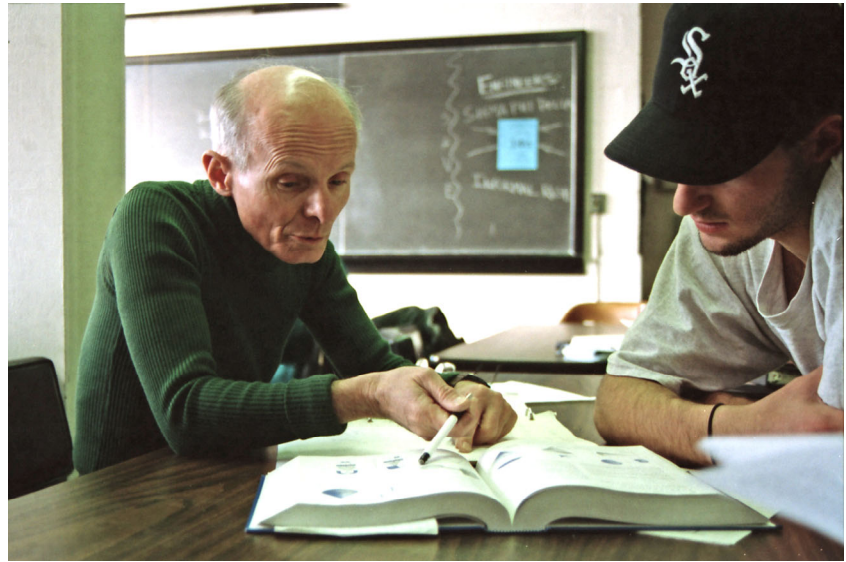
Actually, about 1966, Bob considered leaving Illinois. Another UIUC professor, Eugene “Gene” Chesson³⁸ in civil engineering, had accepted a position that year as department head in civil engineering at the University of Delaware and asked Bob if he would be interested in heading up the mechanics instruction at that school. The temptation was strong, but in 1968 Bob was promoted to full professor at Illinois, so he declined the invitation.

Teaching awards

Bob was a popular instructor from day one, having seemingly inexhaustible energy in the classroom and a dedication to helping students in his office. His unusually patient and helpful



Everitt Award, 1976



Advising students, 1994

interaction with students always belied his nickname Rapid Robert. He received the College of Engineering’s prestigious William L. Everitt Award in 1976 for outstanding teaching, and, for his interest in student affairs, he was recognized by the engineering students in 1988 by his selection as the College of Engineering’s Honorary Knight of St. Pat.

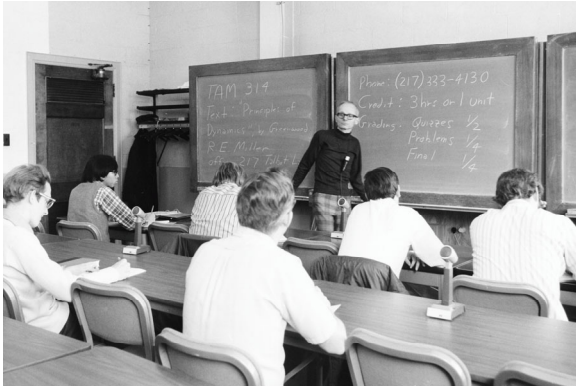
In 1991 he received the American Society of Engineering Education (ASEE) Distinguished Educator Award in Mechanics, having been nominated by the head of another department. And in 2010 he received the College of Engineering’s Alumni Award for Distinguished Service, “in recognition of his distinguished contributions to the teaching of mechanics, and for the inspiration and guidance he gave undergraduate and graduate students for more than four decades.”

“Professor Miller is certainly the most beloved teacher in the living memory of the Department of Theoretical and Applied



**Honorary Knight of St. Pat, 1988,
presented by associate dean
Howard L. Wakeland**

³⁸ See <https://www.dcourier.com/news/2017/jan/21/obituary-dr-eugene-gene-chesson/>.



Bob giving lectures on advanced dynamics using “electronic blackboards,” ca. 1980

Mechanics,” TAM department head Hassan Aref³⁹ and Bob’s colleague Donald E. Carlson⁴⁰ wrote in 1998. “Due to his contact with large numbers of students in the service courses of the department over a span of 40 years, he has engendered more good will for the University than any faculty member in the College of Engineering. Associate dean Roscoe L. Pershing,⁴¹ a former student, likely reflects the thoughts of many of Professor Miller’s protégés in saying, ‘Without a doubt, Professor Miller was the best teacher I experienced in 20 years of school!’”



Bob lecturing in 100 Mining and Metallurgy Building (now MSEB), 1994

Besides teaching on campus, Bob offered graduate extension courses that required driving or flying regularly to Peoria, Chicago, Rockford, and Rock Island. Later, beginning about 1980, extension courses were offered on “electronic blackboards,” and Bob quickly adapted to the new

³⁹See https://en.wikipedia.org/wiki/Hassan_Aref. Aref was head of TAM from 1992 to 2003. He was best known for his work in chaotic advection in fluids. He later taught and served as dean of engineering at Virginia Polytechnic Institute.

⁴⁰See article by James W. Phillips and Russell E. Todres, “Donald E. Carlson—A diminutive giant,” *Journal of Elasticity* **104**(7), <https://link.springer.com/article/10.1007/s10659-011-9344-3>.

⁴¹Pershing was associate dean for undergraduate programs in the College of Engineering from 1993 to 2004. In 1966, he had received the first doctorate awarded by the UIUC Department of Agricultural Engineering. He had a lengthy career at John Deere’s corporate center in Moline, Illinois, before returning to his alma mater to teach.

technology. And on campus, Bob became a master at the large-section lectures that were destined to replace the 25–30 student lecture sections of earlier times.

Graduate advising

He also advised many graduate students on various topics in solids mechanics—particularly plates and shells—and in finite-element analysis, such as specialized elements for composite laminates. “I had many good students,” Bob says. Computational methods played a major role in much of his work. On occasion, he also collaborated with George A. Costello⁴² on the mechanics of wire rope. He advised more than 40 TAM master’s students and more than 30 TAM doctoral students:

<i>Year</i>	<i>Doctoral student</i>	<i>Thesis title</i>
1965	Stevens, Karl Kent (with James O. Smith)	Parametric excitation of a viscoelastic column
1966	Brittain, Frank Hayes (with James O. Smith)	A more exact theory of flexural wave propagation in elastic beams
1967	Keith, Harold Dean (with James O. Smith)	Minimum weight design of axially symmetric shells of revolution
1967	Reuter Jr., Robert Carl (with Herbert T. Corten)	Dispersion of flexural waves in circular bi-material cylinders
1968	Fraser Jr., Harvey Reed (with James O. Smith)	Bifurcation type buckling of generally orthotropic plates
1968	Gallagher, Joseph Patrick (with George M. Sinclair)	Environmentally assisted fatigue crack growth rates in SAE 4340 steel
1968	Lehnhoff, Terry Franklin	The influence of transverse shear on the small displacement theory of circular plates
1969	Carter, Willie James	Parametric response of nonlinear orthotropic plates
1969	Kennedy, James Melville	Parametric response of an elastic column with rotary inertia and shear deformation
1969	Strunk, Richard Dean	Longitudinal wave propagation in liquid lines of finite length including the effect of nonlinear boundary conditions
1970	Janzen, Peter	On the effect of initial imperfections of the behavior of thin-walled axially compressed circular cylinders
1970	Nitzsche, Ray Norman (with James O. Smith)	Stress and deformation of curved beams on thin-walled cross-section subjected to torsion and flexure
1971	Critchfield, Milton Orlo (with Jack C. Wiley)	Large flexural oscillations of thin beams
1971	Danhof, Richard Henry	Sector finite elements in the theory of plane elasticity
1971	Homan, Gary Gene (with Frederick G. Bauling)	Effects of surface irregularities on rolling contact stress problems

⁴²Costello (1933–2003) was best known for his theoretical work on the mechanics of wire rope. He wrote a popular monograph on this subject. See <http://www.springer.com/us/book/9780387982021>.

1972	Kiger, Sammy Aaron	A field method for the numerical integration of two-point boundary value problems
1973	Plummer, Frederick Boyd	Cyclic plasticity and structural energy dissipation
1974	Nelson, Clayton Charles	The nonlinear behavior of a centrifugal pendulum
1975	Nack, Wayne Nance	A finite difference technique applicable to structural mechanics problems of arbitrary shape using isoparametric mapping
1977	Lau, John Hon-Shing	Stress and vibration analysis of orthotropic shells of revolution
1977	Rudolphi, Thomas Joseph (with Noel E. Ashbaugh)	An integral equation solution for a bounded, plane elastic body containing a crack: In-plane deformations
1981	Mak, Wah-Chiu	Curved element analysis of a deformable race structure roller bearing
1985	Chou, Wen-Ben	Numerical analysis of a generalized three-dimensional elastica
1986	Perfect, Scott A. (with Harry R. Wetenkamp)	Stress changes in railroad car wheels due to axially symmetric thermal loads
1988	Coulter, Brett A.	Numerical analysis of a generalized plane plastica
1990	Whitehouse, Stephen Robert	Dynamic analysis of composite beams using shear-deformable finite elements
1991	Thiel, George Henry	Linear and nonlinear analyses of thick composite circular plates using the finite element method
1992	Alcoe, David James	Improvement of parametric finite element models using experimental modal data
1993	Baylot, James T.	Loads on structures buried in low-shear-strength soils subjected to localized blast effects
1994	Aggour, Hanni	An axisymmetric cubic finite element for laminated anisotropic cylindrical shells
1994	White, Howard Gratham	Development of a large-diameter gas gun for gage validation and dynamic materials properties studies

Bob also consulted for several companies, including Libby-Owens-Ford, Procter & Gamble, USI Chemicals, the Marley Co., and the Allison Division of GM (now Rolls Royce), as well as the U.S. Army.

University service and recognition

Besides his teaching, research, and consulting, Bob has always stepped up to the plate for departmental and college activities.

For many years in TAM, for example, he was the graduate program coordinator. This position entailed recruiting and selecting the best graduate applicants and looking after them after they joined the program. He was always a regular at the welcoming reception for new graduate students—a longstanding tradition in the TAM Department, and he served on their preliminary and final examinations and wrote countless letters of recommendation for them as they were finishing up.



New graduate student reception, September 1994. Bob is at center left, talking with Jean Costello (wife of George Costello). In the foreground, standing with back to camera, is department head Hassan Aref. His wife Susanne is chatting with Petros Sofronis, a former TAM Ph.D. student who is now on the faculty.



Bob Miller with (l-r) TAM alumnus Edward M. Caulfield (Ph.D. 1979), Prof. Donald E. Carlson, and Prof. James W. Phillips, September 2007. The date and location of this photograph are particularly significant for these former TAM colleagues, because TAM had been merged with Mechanical and Industrial Engineering exactly one year earlier.



Bob at his retirement luncheon, October 1994, with longtime friends (l-r) Alva L. “Tad” Addy, Charles E. “Chuck” Taylor, (Bob), George A. Costello, Donald E. Carlson, and Clyde E. Kesler



Retirement gifts, October 1994—a Rapid Robert sweatshirt from James W. Phillips and a new golf club from Richard C. Coddington



Robert E. Miller, recipient of the College of Engineering Alumni Award for Distinguished Service, April 2010
Pictured (l-r) are James W. Phillips, Donald E. Carlson, Edward M. Caulfield, MechSE department head Placid M. Ferriera, (Bob), Carl S. Larson, Richard C. Coddington, and Chip S. Jorstad



Happy 83rd birthday, October 2015, with friends (l-r) James W. Phillips, Helen and Richard C. Coddington, (Bob), Richard D. Keane, and Harry H. Hilton, in the Illini Union Colonial Room. Bob took classes from Harry as an undergraduate. Bob is still the “secretary general” of the TAM old-timers luncheon group.

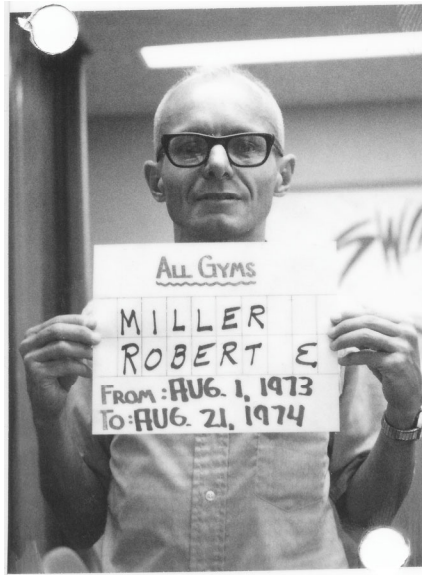
A particularly challenging time for the TAM Department came in 2006—long after Bob had officially retired—when the College of Engineering faculty voted to merge TAM with the mechanical engineering part of Mechanical and Industrial Engineering (MIE) to form what is today the Department of Mechanical Science and Engineering (MechSE). The merger was a thorny and contentious issue from TAM’s perspective, and led to an exodus of many key TAM faculty. TAM alumni who spoke up were also vocal in their opposition. A strategic alliance was needed to merge the alumni groups in TAM and MIE, and Bob was preeminently qualified to serve on a cross-departmental committee to meet this goal. He also later served on the MechSE Alumni Advisory Board.

Bob has been honored also with the establishment of endowed departmental funds in his name:

- The Robert E. Miller scholarship fund, which supports scholarships to outstanding undergraduates in Engineering Mechanics and in Mechanical Engineering
- The Robert E. Miller endowment fund, which supports an annual teaching award to a mechanics instructor or faculty member in MechSE or closely related discipline

Activities

In his personal life, Bob has always taken the advice that Dr. Krause gave him when he was a child—exercise and maintain a healthy lifestyle. Eschewing caffeine and alcohol, he relies instead on fruit punch for a snack. He regularly rises about 4 a.m. and begins his daily workout on his exercise bike at home. Then he heads to one of the gyms in town for weightlifting and other exercises. Beginning about 1960, he also jogged around Urbana in the early morning, usually for about 5 miles, but sometimes as many as 10. He had to give up jogging about 2010 when he injured his knee.



One morning in 1978, he “was out jogging about 6 a.m. when he found [\$480.08 in] cash rolled into a bank envelope lying near Cureton Drive in Urbana,” Champaign-Urbana *News-Gazette* staff writer Jim Dey wrote in the July 7, 1978, edition of the paper. “Denying any thought of keeping the money, the 42-year-old Miller said he merely altered his daily jogging route and dropped the cash off at the Urbana Police Department. Later at about 9 a.m., Janice Kelly and Frank Phelan, both students in California, reported to police that they had lost the money the night before while walking

in southeast Urbana. After Kelly and Phelan produced a bank withdrawal statement and identified the envelope containing the money, police gladly returned their bounty. ‘I think most people would have done the same thing,’ Miller said modestly. His effort was rewarded by a cake, vase of flowers and thank-you card by the grateful beneficiaries of his benevolence.”

Another local jogger, Joe O’Shea of Urbana, followed up Dey’s article with a letter to the editor. “Those of us who have had the privilege of knowing and running with Bob Miller,” he wrote, “were not surprised by his behavior when he found \$480.08 lying near Cureton Drive in Urbana. Bob Miller has run every street in Champaign and Urbana and is most at home in the values of the humanistic athlete: wonder, honesty, growth, brotherhood and play. The major purpose of his running is to fulfill his human potential and produce playful enjoyment and a sense of achievement that comes from running.”



**Bob with his foursome, August 1994, at Stone Creek Golf Club, Urbana, Illinois
With him (l-r) are Richard C. Coddington, Harold S. French, and Roscoe L. Pershing.**

Golf has always been another favorite sport for Bob. When he was in grade school in Rockford, he and Fred O'Donnell, who lived across the street, used to cut through Bob's backyard at 2006 Harvard Avenue and the neighbor's yard behind that, putting them at a corner of Sinnissippi Golf Course, which was maintained by the Rockford park district. "It was a great deal for kids," Bob explains. "The city wanted to see the park and golf course used by young people, so they had annual passes for kids at \$1 per year." Some restrictions applied, but on weekdays in the summer Bob and Fred could play all morning for essentially nothing.



Bob points to the back yard of his former home at 2006 Harvard Ave., Rockford, Illinois, May 2018. The back yard led to a shortcut to Guilford Road and the Sinnissippi Golf Course.



A visit to the Sinnissippi Golf Course, Rockford, Illinois, May 2018. Bob played this course 70 years earlier with his neighborhood friend Fred O'Donnell.

Bob didn't play much golf in high school, but resumed the sport as an undergraduate on the University's course just south of Florida Avenue, where the Bielfeldt Athletic Administration Building and other sports fields now sit.

Later, he played with townspeople and faculty colleagues including Harold S. French,⁴³ Richard C. Coddington,⁴⁴ Roscoe L. Pershing, and Loren E. Bode,⁴⁵ at different courses in the Urbana-Champaign area, including the University's Orange and Blue courses near the airport in Savoy, the course at Lake of the Woods in Mahomet, a pair of courses in Rantoul, and—most recently—Stone Creek Golf Club in east Urbana.

Canoeing and fishing were also favorite pastimes with Bob. He was introduced to both activities as a child during vacation trips to lakes in Wisconsin with his step-dad, mother, and step-sister. As an adult, he owned as many as 2 canoes at one time and regularly went fishing with fellow TAM professor Charles E. “Chuck” Taylor⁴⁶ and civil engineering professor Clyde E. Kesler.⁴⁷ A story that Clyde liked to tell about one of their favorite fishing spots—the rock quarry at Fairmount, about 15 miles east of Urbana—was that, prior to 1950, the quarry had trouble selling its gravel to contractors because the grade of gravel tested marginally unacceptable for highway construction. About that time, the interstate highway system was being developed and a high demand arose for gravel to construct I-74 that went practically right by the Fairmount quarry. A much larger company “with political connections” bought the struggling quarry. “Somehow, overnight,” Clyde explained, “the quality of the gravel improved dramatically.”

And biking—this has always been a favorite form of exercise for Bob. At one time he owned 5 bikes and would rotate among them while riding all over Urbana in the early morning. At age 86 (2019), he no longer bikes outdoors but rides his stationary bike indoors every morning.

⁴³French (1921–2014) was a U.S. Navy pilot in World War II. He completed a bachelor's degree in engineering at UIUC in 1949 and worked for Universal Bleacher Co. in Champaign, Illinois, before TAM department head Thomas J. Dolan hired him as an administrative assistant. He retired from UIUC in 1985.

⁴⁴Coddington completed dual degrees in Engineering Mechanics and in Mathematics at UIUC in 1962. As an undergraduate, he took an intermediate fluid mechanics course from Miller. “Bob was the best teacher I ever had. That course I took from Bob set me up to excel in my graduate work where I majored in fluid mechanics at Kansas University.” After finishing his doctorate in 1966, Coddington taught at New Mexico State University and at Rose-Hulman. After working briefly at Beloit Corporation, he joined John Deere in Dubuque, Iowa, in 1975 as a design engineer. In 1985, he began a teaching career in Agricultural and Biological Engineering at UIUC, during which time he sat in on Bob's courses in intermediate dynamics and energy methods. “Bob was still the dynamic teacher that I had remembered from past years.” Later Coddington served as director of the College of Engineering Placement Office (1995–2005). Although he retired in 2005, he continues to tutor undergraduates in calculus, differential equations, statics, dynamics, solid mechanics, and fluid mechanics.

⁴⁵Bode (1943–2014) was a professor in Agricultural and Biological Engineering, serving as department head from 1993 to 2004. He was an international authority on the design and use of equipment for applying agricultural chemicals.

⁴⁶Taylor (1924–2017), a member of the National Academy of Engineering, was best known for his work in experimental mechanics, particularly optical methods. He retired from UIUC in 1984 and continued his teaching and research at the University of Florida, Gainesville.

⁴⁷Kesler (1922–2011), also a member of the National Academy of Engineering, was an expert in concrete and had a long career in both TAM and civil engineering at UIUC. He is credited with starting the popular intercollegiate concrete canoe race by assigning a project in one of his concrete courses at UIUC in 1970. Purdue learned of this initiative and challenged the UIUC team the following year, but UIUC won. The competition is now an annual one organized formally by the American Society of Civil Engineers (ASCE).



Bob on his racing bike, Lake of the Woods, Mahomet, Illinois, September 2004.



The Champaign County Radio Control Club, January 1, 2018. The temperature outside the clubhouse was -14°F that morning, but many members flew their planes anyway.



Bob with part of his radio-controlled model airplane collection, February 2018. Most of Bob's planes are canard gliders that appear to fly "backwards," with the small wing in front.

But his longest-lived favorite hobby has been model airplanes. Eighty years after beginning to make his own gliders, he was still flying them at least once a month in 2017. For a while, he

flew gasoline-engine-powered models, but most of his planes have been hand-built, seemingly weightless, radio-controlled gliders. They are launched in an open field with a long rubber band and string. About 1970 he joined the Champaign County Radio Control Club (CCRCC),⁴⁸ which has its field on Illinois Route 150 between Champaign and Mahomet and is still active today.

A singular person

It is a pleasure and honor to write about my good friend, Robert E. Miller, whom I've known since 1968 when I interviewed for an assistant professor position in Bob's department. During that period of 50 years I have come to appreciate and admire Bob's many outstanding qualities.

He was labeled "small but mighty" in his 1950 high-school yearbook, and those words have certainly continued to describe him ever since. An only child, born with a heart defect and always the smallest kid in his class, he not only became the first in either his father's or mother's family to attend college, but also continued on for an engineering doctorate and eventually advised more than 30 doctoral students of his own in theoretical and applied mechanics, setting the highest standard for teaching in the process.

We will always be indebted to that operations manager at American Well Works in Aurora, who suggested to Bob after he finished high school, "You know, Bob, you really should go to college. You could do a lot."

His last days

Bob was diagnosed very late in life with Alzheimer's disease, but he always remembered details from the past and enjoyed having lunch with his colleagues every week.

He died July 24, 2019, peacefully at home at age 86. The cause of death was cancer. An obituary derived from this biography appeared in the July 28, 2019, edition of the Champaign-Urbana *News-Gazette*. In the obituary, appreciation was extended to Michael Rast of Champaign for the professional and compassionate care he provided to Bob for more than a year preceding Bob's death.

Per Bob's wishes, there were no services. Also at his request, his body was cremated and his ashes were placed in an urn to be interred above his mother's resting place at Greenwood Cemetery and Chapel, Rockford, Illinois.

⁴⁸See <http://www.ccrcc.info/>.

Acknowledgments

I would like to acknowledge with thanks the correspondence and contributions from Bob's step-nephew Michael C. Tellison and step-niece Kristine E. (Tellison) Hays, and also J. Keith Riedesel,⁴⁹ a nephew of Bob's step-father Calvert E. Wilson. Keith Riedesel provided much of the background on the Wilson–Riedesel family tree that appears in Appendix B.

Joan Preston “Joanne” Riedesel,⁵⁰ a niece of Calvert E. Wilson; Joel Jerome Jarvis,⁵¹ step-son of Calvert's nephew Wilson Riedesel; and Julianne Marie (Jarvis) Youngren,⁵² step-daughter of Wilson Riedesel, also added valuable information.

And I will always remember fondly my many conversations with Bob Miller.

Sincerely yours,



James W. Phillips, Ph.D., P.E.

⁴⁹John Keith Riedesel earned his bachelor's in business from Michigan State in 1955. He was a bank auditor for 40 years in Rockford, Illinois, starting with Third National Bank, which was acquired by First National Bank and later by Bank One. Drafted in 1956, Keith served as a postal auditor in the U.S. Army from 1956 to 1958 in Frankfurt, Germany, during the Cold War. In 1959 he married Margaret “Margy” Anderson; they have two children. He retired from Bank One in 1995 and moved with Margy from their log cabin home in Rockford to a log cabin home in Estes Park, Colorado.

⁵⁰Joan Preston “Joanne” Riedesel taught second grade in the Rockford, Illinois, school system, beginning in 1964 at Nashold Elementary School and finishing at Riverdahl Elementary School in 2002. She earned her bachelor's degree at Rockford College in 1973 while working, and completed master's work at Beloit College. Today she lives with her longtime friend Joyce McCandless at 2742 Horton St., Rockford, Illinois.

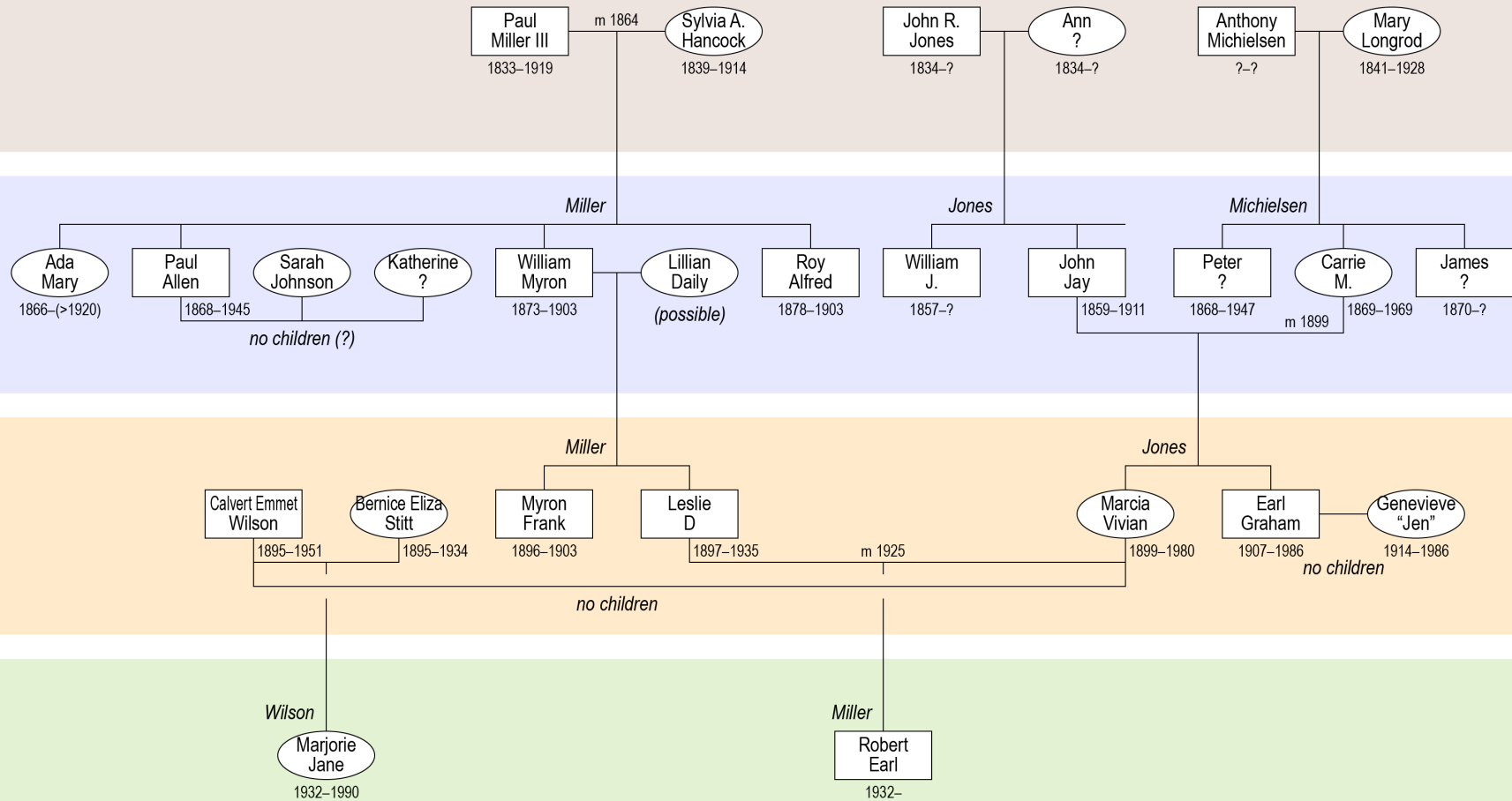
⁵¹Joel Jerome Jarvis (B.S. Computer Science, Trinity Christian College, 1985; M.S. Computer Science, UIUC, 1988) is architect and chief technical officer at Nammu21, Inc., a legal and financial technology startup. Joel was adopted by his step-father Wilson Ambrose Riedesel and given the name Joel David Riedesel at about age 7. However, he later changed his name legally back to the one given him at birth. He resides in Minneapolis, Minnesota, with his wife Tăm and sons Kiên and Minh.

⁵²Julianne Marie (Jarvis) Youngren and her husband Thomas Russell Youngren, M.D., reside in St. Paul, Minnesota. They are both retired—she from a commercial embroidery business that she owned and operated, and he from a family and orthopedic practice.

Appendix A

Ancestral family tree for Robert E. Miller

Robert Earl Miller



Appendix B
Family tree for the Wilson–Riedesel family (5 pp.)

