

MEMORIAL RESOLUTIONS

Paul M. Anderson

John A. Bath

Walter Raymond Bortz

Harrington Brearley

Harold (Santee) McNabb

Loran E. Mohr

Arnold A. Paulsen

Hylke van de Wetering

Geitel Winakor

IOWA STATE UNIVERSITY

Department of Electrical and Computer Engineering



Paul M. Anderson 1926-2011

The reason we have a reliable source of electricity when you turn on the light switch is due in no small part to Paul M. Anderson, who passed away on Tuesday, April 26, 2011, at the age of 85, at his home in San Ramon, California.

Anderson was born on January 22, 1926, in Des Moines, and grew up near Winterset, Iowa. After high school, he enlisted in the Army Air Corps, serving until WWII ended in 1945. Anderson then enrolled in Iowa State College and earned his bachelor's degree in electrical engineering in 1949. While attending Iowa State, he met Virginia Worswick, and they were married in 1950.

Following graduation, Anderson worked as an electrical engineer for Iowa Public Service Company for several years. In 1955, he returned to his alma mater, where he began his teaching career as an instructor during his time as a graduate student. Anderson received his master's and PhD degrees from Iowa State University in 1958 and 1961, respectively.

From 1961 to 1975, Anderson served as a faculty member in the Department of Electrical Engineering at Iowa State University—being promoted to full professor in 1968. During his time at Iowa State, Anderson helped establish the Power Affiliate Research Program (now called the Electric Power Research Center), created power engineering as a specialty area of graduate study, and started the Midwest Power Symposium.

Following his time at Iowa State University, Anderson served as program manager at the Electric Power Research Institute, Palo Alto, California (1975-1978); Chair in Electric Power Systems, Arizona State University (1980-1984); and Schweitzer Visiting Professor, Washington State University (1996-1997). In addition, he was president and principle engineer of Power Math Associates, Inc., San Diego, California, from 1978 to 1998.

Anderson is most well known for the seven books he authored on topics related to electric power and energy systems engineering. Each of Anderson's books was published at a time when industry was in great need for texts on a particular subject. His book *Series Compensation of Power Systems* (1996) is a complete theoretical and practical guide for the application of series capacitors in power systems. His book *Analysis of Faulted Power Systems* (1973) is the most comprehensive book on the subjects of symmetrical components, changes in symmetry, and simultaneous faults. And *Power System Control and Stability* (1977), which he coauthored with Abdel-Aziz Fouad (PhDEE '56), significantly advanced the knowledge base on power system stability.

Over the years, Anderson was honored with several awards for his accomplishments, including being awarded as a National Science Foundation Science Faculty Fellow, a Faculty Citation from the Iowa State University Alumni Association, and a Professional Achievement Citation in Engineering from Iowa State University. He was recognized as a Fellow of Institute of Electrical and Electronics Engineers (IEEE) in 1981. In 2009, Anderson was elected to the National Academy of Engineering, among the highest professional distinctions accorded to an engineer, for his contributions that have advanced the analysis and control of electric power systems worldwide. Anderson will be remembered for his remarkable contributions to the field of electrical engineering as a researcher, professor, and author, as well as being a loving father and family man.



John A. Bath (Sept. 28, 1910-May 23, 2011)

Emeritus Professor of Psychology and Emeritus Professor of Curriculum and Instruction.

A.B., 1932, Peru State; M.A., 1933, Ph.D., 1942, Nebraska.

John A. Bath, 100, of Ames, died May 23, 2011, at Israel Family Hospice House, surrounded by his loving family.

Dr. Bath joined the faculty at ISU in 1946. John was well-liked by faculty, students, and staff. He greeted everyone with a warm smile. He was a big fan of Cyclone Athletics, attending football games for many years and attending basketball games throughout his retirement.

He was an ardent supporter of education at all levels. He equipped the Student Resource Center at Peru College with a room for students who need extra academic support, funded an endowment for graduate students in educational psychology at the University of Nebraska and the Dr. John A. Bath Graduate Fellowship for graduate psychology students at ISU. In his 100th year, he attended the awards ceremony at which the fellowship was awarded to an outstanding graduate student in the field of counseling psychology.

He was born on the family farm near Brownville, Neb., on Sept. 28, 1910, and was raised there by his parents, Minnie and John, along with eight brothers and sisters. Many great stories of those growing-up years have become family lore, including his experience of attending a rural, one-room school. He graduated from nearby Peru High School and Peru State College in Peru, Neb. His education continued at the University of Nebraska in Lincoln, where he earned both a master's degree in school administration and a doctorate in educational psychology. He entered the U.S. Army in 1942, and served in various locations, including the Aleutian Islands. In 1944, he married Virginia (Ginger) Barnard, of Lincoln, and they moved to Ames in 1946, when John joined the faculty of Iowa State University. He retired as a professor of psychology in 1981.

John's 100th year was one big celebration, including a World War II veterans trip to Washington, D.C., a family reunion weekend in southeast Nebraska, and many 100th parties hosted by his family, church, colleagues and friends. He was an inspiration to all who knew him for his love of life, family, friends, nature, education and his unfailing faith. One of his favorite places on earth was the YMCA Camp in Estes Park, Colo., where he first served as a college delegate in 1929 and returned there again and again for many trips with his family. The hiking trails in Rocky Mountain National Park are stamped with his footprints.

Walter Raymond Bortz

Oct. 29, 1932-Oct. 10, 2011

Walter Raymond Bortz was born in Napoleon, Ohio, on Oct. 29, 1932, son of Raymond A. and Martha Moehrman Bortz. He received a bachelor's degree from Bowling Green State University, a master's degree from Ball State University, and his doctorate from The Ohio State University, all in industrial education and technology. He was a U.S. Navy Veteran and served during the Korean Conflict.

Dr. Bortz was an assistant professor in Industrial Education and Technology at Iowa State University from 1971 until 1995 when he retired. He taught classes in the areas of materials and processes, fluid power, and drafting. Walt ran a summer construction workshop several times and built a couple of houses as part of that workshop.

The last several years in Industrial Education and Technology he was the advisor for undergraduate students. He received the ISU Advisor of the Year Award in 1995.

Dr. Bortz was very active in his community. He was a member of First United Methodist Church where he was a member of the choir, the Methodist Men, served on the Board of Trustees and shared the responsibility of the renovation of the front entrance. He was also a member of American Legion Post No. 37, where he served several years on the Honor Guard for veteran's services, and Voiture 40/8 post No. 285, where he served as chairman of their Nurses' Scholarship Program. He was a member of the Golden Kiwanis, honorary member of Epsilon Tau Pi, Ohio Teachers Association, Iowa Industrial Arts Association, and Iowa Vocational Association for 25 years. Walt had so many interests and activities he enjoyed in earlier years. He enjoyed playing fast- and slow-pitch softball, building boats and boating, building a banjo, tractors, planes and soloing one time, radio-controlled airplanes, black powder hunting, gardening, bowling and music of many kinds were a big part of his life. He will be remembered for his wonderful smile and great sense of humor by those whose lives he touched, his continual desire to always be offering advice to old and young, and having great conversations with anyone on almost any topic.

Dr. Bortz is survived by his wife of 48 years, Jan, of Ames; three daughters, Elaine (David) Moldvay, of Maryland, Diane Bortz, of Scottsdale, Ariz., and Cheryl (Jason) Close, of Seattle, Wash.; three grandchildren, Savannah and Jacob Moldvay, and Julian Close; and one sister, Arlene (Larry) Agler, of Holgate, Ohio.





IOWA STATE UNIVERSITY

Department of Computer Science

Dr. Harrington Brearley, 1926-2011

Dr. Harry Brearley, one of the founding faculty members of the Computer Science department, passed away August 26, 2011 at age 85 in Ames, Iowa. Brearley joined ISU in 1965 as a member of the electrical engineering faculty, and helped to found the Computer Science department in 1968. An active member of the CS faculty, Brearley taught many courses, in particular programming, and data structures. He served as advisor for many graduate students. Brearley was an active member of IEEE and the IEEE Computer Society. He retired from the university in 1995.

A "Welcome Home" reception was held on October 30, 2003, in conjunction with the [2003 International Symposium on Modern Computing](#) in honor of Dr. John Vincent Atanasoff's 100th Birthday. Faculty and staff took this opportunity to honor our retired and emeritus faculty who helped build the Department of Computer Science at ISU, and Dr. Brearley was one of those founding faculty. Deans of the College of Liberal Arts and Sciences also participated in this heartfelt, warm occasion. Below is a photo taken outside Atanasoff Hall for this memorable event.



Front row from left: Robert Stewart (Founding Chair and Professor Emeritus), Arthur Oldehoeft (Past Chair and Professor Emeritus), Michael Whiteford (Dean), Wayne Ostendorf (Retired Associate Professor and Emeritus Director) Back row from left: Carl Chang (Chair), Dale Grosvenor (Retired Associate Professor), **Harry Brearley** (Professor Emeritus), Douglas Epperson (Associate Dean), David Oliver (Associate Dean), George Strawn (Retired Associate Professor and former Director), Zora Zimmerman (Associate Dean).

Ames Tribune Obituary: Harrington Cooper Brearley Jr., 85, died Aug. 26, 2011, in Ames. A memorial service will be at 10 a.m. Friday, Sept. 2, at Collegiate Presbyterian Church in Ames.

He was born Jan. 17, 1926, in Greenville, S.C., to Harrington Cooper Brearley, a sociology professor, and Margaret Douglas Marion Brearley, an English teacher. He spent his early years in Clemson, S.C., where his father was on the

Clemson College faculty. In 1937, his father won a fellowship at the London School of Economics, and the young family spent an academic year in London. On their return to the United States, they settled in Nashville, Tenn., where his father was on the faculty at Peabody College.

Harrington graduated from the Peabody Demonstration School and briefly studied engineering at Vanderbilt University before enrolling in the J-9 program, a forerunner of ROTC, at the Georgia Institute of Technology in Atlanta. There he earned a B.E.E. in electrical engineering in three years with a perfect 4.0 GPA. From 1946-47 he served as a communications officer in the U.S. Navy on board the U.S.S. Taconic.

After leaving the Navy, Harry spent two years in Burlington, N.C., as an engineer for Bell Telephone Laboratories. He returned to school supported by a U.S. Atomic Energy Commission fellowship, earning master's and Ph.D. degrees in electrical engineering from the University of Illinois Urbana-Champaign in 1950 and 1954. He then moved to General Electric in Syracuse, N.Y., where he worked on the guidance system for Polaris submarine missiles. He met Mary Jo Bradford at a YWCA gathering there and they were married in December 1957.

In 1959, he joined the University of Illinois electrical engineering faculty where he worked on the Illiac II, an early computer. In 1965, he moved to the electrical engineering faculty at Iowa State University in Ames. He was one of the founding faculty members of the ISU Computer Science Department. He taught courses in switching theory, logic design, computer organization, programming and data structures, wrote one of the early textbooks on assembler language, and supervised many master's degree students. He was promoted to full professor in 1977 and retired in 1995. In addition to university committee service, he was an active member of many professional societies. He served as chair of the Institute for Electrical and Electronic Engineers (IEEE) Central Iowa Section (1976-77) and he initiated and edited the newsletter of the IEEE Computation Society's Educational Activities Board from 1980 to 1988. He taught short courses for several organizations and frequently served as a reader for Advanced Placement exams for the College Board.

He was also very active in civic life. In Syracuse, he was a charter member of the New York State Canal Society. In Ames, he was an elder at Collegiate Presbyterian Church and served as vice-chair of the church's Sanctuary Remodeling Committee. He served on the boards of the Octagon Center for the Arts, the Ames Visiting Nurses (now Homeward) and the Friends of the Ames Public Library. He was an active member of the Story County Democratic Central Committee, serving as treasurer (1973-79) and vice-chairman (1980-92), and as delegate to county and state conventions. He served as the treasurer for the successful legislative campaigns of Cecile Burnett and Jane Greimann.

He is survived by his wife, Mary Jo; his sister, Margaret Grimes, of Lexington, Ky.; three children, Ann (Chris Hagen), William (Katie Sanger), and Caroline (Steven Meyer); and five grandchildren, Rachel and Hannah Hagen, Russell Brearley, and Anastasia and Katarina Meyer.

IOWA STATE UNIVERSITY

Department of Electrical and Computer Engineering



Harrington C. "Harry" Brearley, Jr. 1926-2011

Harrington C. "Harry" Brearley, Jr. was born on January 17, 1926, in Greenville, S.C. He briefly studied engineering at Vanderbilt University before enrolling in the J-9 program, a forerunner of ROTC, at the Georgia Institute of Technology in Atlanta, where he received a bachelor's degree in electrical engineering in three years with a perfect 4.0 GPA. From 1946 to 1947, Brearley served as a communications officer in the U.S. Navy on board the U.S.S. Taconic, followed by two years in Burlington, N.C., as an engineer for Bell Telephone Laboratories.

Supported by a U.S. Atomic Energy Commission fellowship, Brearley then returned to school, where he received master's and PhD degrees in electrical engineering from the University of Illinois, Urbana-Champaign in 1950 and 1954, respectively. He then moved to General Electric in Syracuse, N.Y., where he worked on the guidance system for Polaris submarine missiles. He met Mary Jo Bradford at a YWCA gathering there, and they were married in December 1957. In 1959, he joined the University of Illinois as an electrical engineering faculty member where he worked on the Iliac II, an early computer.

Brearley joined Iowa State University as an electrical engineering faculty member in 1965. He retired in 1995 after serving 30 years as a professor in the Department of Electrical and Computer Engineering and later in the Department of Computer Science, which he helped found in 1968.

Brearley enjoyed his time with undergraduates in electrical and computer engineering and computer science as an academic adviser and classroom professor. His classes in digital logic were the early foundation for digital computer architecture design, and his classes in assembler programming provided a foundation to integrate digital computer design and programming required to create user-friendly languages.

His textbook *Introduction to Assembler Programming for the IBM System/360/370'* (1974) provided a foundation for developing new programming languages and applications that continue to increase.

Brearley was described by many as being gentle, unassuming, loyal, kind, and helpful. He also had a wry sense of humor and ever-present smile. He kept a low profile, but always cared about the right way to do things. Brearley never hesitated to voice his concerns and opinions if he believed things were not done right, and he sincerely supported diversity and equal rights.

Brearley's interests extended beyond the Iowa State academic community to the Story County Democratic Central Committee, Collegiate Presbyterian Church, Octagon Center for the Arts, Homeward, and Friends of the Ames Public Library, where he served each in many capacities.

Brearley was devoted to his family, his wife Mary Jo, their children William and Caroline, and five grandchildren. Professor Emeritus Harrington C. "Harry" Brearley, Jr., of Ames, died Friday, August 26, 2011.



Dr. Harold Sanderson "Sande" McNabb
November 20, 1927 – May 12, 2011

Sande McNabb was born on November 20, 1927 in Lincoln, Nebraska. After his birth, his father said to his wife, "Erma, Sande is here." As a boy, inspired by George Washington Carver, Sande bred irises. Inspired by his uncle Don Nelson he also formed an interest in forestry. After unsuccessfully breeding irises for several years, Sande turned away from horticulture and moved toward forestry, while never losing the inspiration he drew from George Washington Carver.

Sande met his future wife Margo as juniors at Lincoln High School in Lincoln, Nebraska in first year Spanish class during the Fall of 1943. They did not date until the end of their senior year in high school. Margo and Sande went steady during their four years at the University of Nebraska and were married the day after graduation on June 7, 1949.

Their honeymoon summer was spent in northern Idaho where Sande spent his sixth summer with the US Forest Service in forest district administration and fire control activities.

In early September, Sande and Margo moved to New Haven, Connecticut and Yale University where Sande began graduate studies in Forest Pathology and Plant Physiology in the Botany Department and the Forestry School.

During the spring of 1952, Dr. Wendell Bragonier, Head of the Botany and Plant Pathology Department at Iowa State College, interviewed another graduate student at Yale for a faculty position. Professor John S. Boyce, Sande's major professor at Yale, suggested that Sande also interview for practice. Surprisingly, within two months, Sande was offered the position with the condition that Iowa State would wait until his research was completed at Yale the following year.

Sande joined the department of Botany and Plant Pathology in 1953 and became an Emeritus University Professor at the end of January 2000, after 47 years to the day as an active faculty member of Iowa State University.

Probably a few, if any, staff members took graduate and undergraduate students, under their wing as much as Sande did – he had many loyal students. Active in university affairs, he represented the department in the Faculty Senate for many years. He was an active forest pathologist and received the Faculty Citation in 1992 for his "long, outstanding, and inspiring service to the university faculty." In the summer of 2000, although officially retired, Sande began to mentor high school interns in the Agriculture Minority Internship Program.

Sande passed away Thursday, May 12, 2011, at Israel Family Hospice House in Ames. Burial was in the Iowa State University Cemetery.

He was a devoted husband, father and mentor to many. He is survived by his wife, Marguerite "Margo" McNabb; sister, Margery McNabb, of Lincoln, Neb.; son, Peter J. (Jeanette Slaybaugh) McNabb, of Des Moines; and daughter, Genene (Reid Gagle) McNabb, of St. Paul, Minn.



Professor Emeritus Loran E. Mohr
Industrial and Manufacturing Systems Engineering
December 22, 1929-September 17, 2011

Loran E. Mohr graduated from the University of Northern Iowa with a degree in math and physical education. He enlisted in the U.S. Army and after his honorable discharge in 1954, returned to college. Loran graduated from Iowa State University in 1956 with a bachelor's degree in industrial engineering and went to work for Viking Pump Company in Cedar Falls, IA. In 1963, he returned to ISU where he earned a master's degree in industrial engineering and taught until his retirement in 1989. During his tenure at ISU he led the departmental cooperative education program, was the faculty sponsor for the student chapter of AIIE/IEE, and was also in charge of the industrial engineering senior design course.

Loran's professional career was an outstanding demonstration of a successful combination of teaching and working with industry and he had great respect from his colleagues in industry. His honesty, integrity, and passion for teaching also earned him the respect of the students he worked closely with in the program.

From two of his former students:

- (Written 9/21/2011) "Loran, as much as my parents, contributed to my successful education." – David Kading, Manager of Strategic Planning & Marketing, Iowa Health System (BSIE 1982, MSIE 1985)
- (Written 10/18/2011) "Professor Mohr was my instructor for several industrial engineering courses in the mid-1970s. With his great breadth of knowledge, his true gift was simplifying complex topics. That straight forward, practical approach to our field was greatly appreciated by his students. He was a big influence on my success as a young process engineer." – James Grabenbauer, Director, Process Improvement, Union Pacific Railroad (BSEOp 1979)

The Engineering Council named Professor Mohr Outstanding Engineering Professor in Engineering in 1983-4 and the College of Engineering named him Superior Engineering Teacher in 1984.

He was named Outstanding Academic Advisor in 1979 by the Student Alumni Association and was recognized for his commitment to the student chapter of AIIE in 1979 and to the student chapter of IIE in 1989. But perhaps most important to him, he was voted Student's Choice for Outstanding IE Professor in 1984-85, 1985-86, and 1988-89.

Professor Loran E. Mohr is greatly missed by his wife of 60 years, Thelma; their two sons, Jeff and Dan (both graduates of the Industrial Engineering department at Iowa State University), their families; his colleagues and friends.



Arnold A. Paulsen

October 28, 1928 – July 11, 2011

Arnold Paulsen, known widely and affectionately as “Arne,” served for 36 years as a member of the faculty in the Department of Economics at Iowa State University. He died on July 11, 2011, at the age of 82 at the home he shared with his wife, Mary Louise.

Dr. Paulsen was born on October 28, 1928, in Lyons, Nebraska. He attended Dana College in Blair, Nebraska, Luther College in Decorah and Iowa State College, graduating in 1951. He received the Ph.D. in 1959 from Iowa State University. Arne served on the Staff Economist Group in the United States Department of Agriculture, Office of the Secretary, in 1965-66, and was economist for the Office of Planning and Programming in the Office of the Governor in Des Moines in 1968. However, his overarching professional interest was in international work with assignments in Korea, China, the Philippines, Indonesia, Syria, Afghanistan, Iran, Pakistan, Egypt and Jordan. He served as assistant director in Iowa State’s Center for International Agricultural Finance in 1990 through 1993, working in Ukraine, Estonia, Latvia, Lithuania and Russia. At the time of his death, Dr. Paulsen was involved with a project for small farmers in Shigatini, Tanzania.

Dr. Paulsen is survived by his wife, Mary Louise, three sons, Chris (Jean) of Ames, Larry (Jeanne) of Seattle, Washington, Rick (Roberta) of Seattle, Washington, and two daughters, Lisa Paulsen of Atlanta, Georgia, and Karin (Les) Paulsen of Seattle, Washington. In addition, he is survived by eight grandchildren and nine great grandchildren.

Funeral services were held on July 30, 2011, at Bethesda Lutheran Church in Ames.



Hylke van de Wetering

June 20, 1936 – June 24, 2011

Hylke van de Wetering, Emeritus Professor of Economics, died of cancer June 24, 2011, while vacationing in Miami Beach, Florida, at the age of 75 years. He was buried in the Ames Public Cemetery.

Hylke (Ike) van de Wetering was born June 20, 1936, in Hemelum, Netherlands. He earned the BS (1959) and the MS (1961) degrees from McGill University and the Ph.D. (1964) degree in Economics from Iowa State University. Ike joined the ISU faculty as an Assistant Professor of Economics in 1964. He was promoted to Associate Professor in 1968 and to Professor in 1973. He retired in 2005.

Ike's major area of professional interest was economic development. He was not only a scholar of economic development -- he was also a practitioner. During the first dozen years or so of his employment as an ISU faculty member, he was completely occupied with the Iowa Universities economic development project in Peru -- a project funded by the U.S. Agency for Economic Development (USAID). Ike was in residence in Peru during many of these years. He served as advisor to the Agricultural Sector Planning Office of the Peruvian Ministry of Agriculture and helped design the various Peruvian Agricultural Development Plans of that era. He also worked with economists from the Ministry of Agriculture, the Peruvian Agricultural University and the Central Bank of Peru on a wide range of agricultural development issues and policies in Peru. During 1973-75, he was the Chief of Party for the Iowa Universities mission in Peru.

In the late 1970s and early 1980s, Ike was involved in economic development efforts in Indonesia and with the Inter-American Institute of Agricultural Sciences of the Organization of American States. He also undertook a number of short-term assignments in several developing countries, including countries

in Francophone Africa. In the mid-1980s, he was the key person in ISU's successful effort to obtain a new USAID-funded economic development project in Peru, and he served as Chief of Party in Peru for this project during 1984-85. Ike maintained a keen interest in Peru and kept in close contact with Peruvian economists -- many of them Iowa State graduates -- throughout his career.

During the last twenty years or so of his tenure at ISU, Ike was heavily involved in on-campus teaching, both at the graduate and undergraduate levels. He taught a wide range of different courses and served as mentor for a large number of graduate students, particularly of graduate students from lesser developed countries. He made important contributions to high-enrollment Principles of Macroeconomics and Intermediate Macroeconomics courses, introducing innovative online student exercises and testing for these courses.

Ike was a willing contributor to departmental and university programs and he served on a number of important committees. He was known as a genial colleague and teacher. His many students found him easy to approach.

Ike is survived by his wife, Gloria; sons Gerrit, Chris and Marco; two daughters-in-law; and three grandchildren.

Respectfully submitted by Lehman B. Fletcher and Dennis R. Starleaf



Geitel Winakor

Dr. (Thora) Geitel Winakor died on August 15, 2011. Geitel was born August 29, 1929. She received an A.B. in Home Economics in 1950 from the University of Illinois and was Phi Beta Kappa. She received an M.S. in Home Economics from Drexel Institute of Technology (now Drexel University) in 1951 and her doctorate in 1960 at Iowa State University in Consumption Economics, with minors in Statistics and Textiles and Clothing. Geitel remained at ISU to teach in Textiles and Clothing. She became a full professor in 1966 and Mary B. Welch Distinguished Professor in Home Economics in 1973. She retired as Professor Emerita in 1992.

Dr. Winakor became a leading scholar in her field and an important advisor to graduate students. She was co-author of *The History of Costume* 2nd edition. She conducted research on clothing consumption, secondhand and gift clothing, perceived comfort, and fashion risk. Dr. Winakor served as the first editor of the *Home Economics Research Journal*, from 1971 through 1975. She was named Fellow in the International Textile and Apparel Association in 1989, the first year that honor was given.

Geitel was a veritable Renaissance woman, with accomplishments in jewelry making, weaving, photography, and painting. She was an avid watcher of birds and financial markets. We miss her lively mind and love of thinking.