

Professor Walt Hancock



Walt speaking with a student at the CHEPS Symposium.

Walt Hancock was a dedicated friend of CHEPS and a consistent presence at our seminars and symposia. He shared his pioneering work in healthcare engineering as a speaker in our 2018 seminar series.

The following text is from an article written by Professor Don Chaffin in memory of Walt Hancock.

As one of Walt's PhD students while he was chair of the Department of Industrial and Operations Engineering (IOE) at the University of Michigan, and as a colleague and friend for over 50 years, I can say with some confidence that Walt always strived to have a very real and positive engineering impact.

He believed that the best way to accomplish this was to thoroughly study a problem of interest by gathering a great deal of data and personally conversing with highly informed people. In this latter regard, he was a wonderful conversationalist, often asking very critical questions as he strove to fully understand why a particular situation existed.

Serving and teaching in the Air Force

Walt began his academic career by teaching statistical quality control at the Air Force Institute of Technology after earning his Doctorate of Industrial Engineering from the Johns Hopkins University in 1954. He then moved to Baltimore to join the Lord Baltimore Press Company as the director of Industrial Engineering and Quality Control. In 1959, he and his wife Charlene moved to Ann Arbor where Walt joined the Department of Industrial Engineering at the University of Michigan.

Joining the University of Michigan and forming the Center for Ergonomics

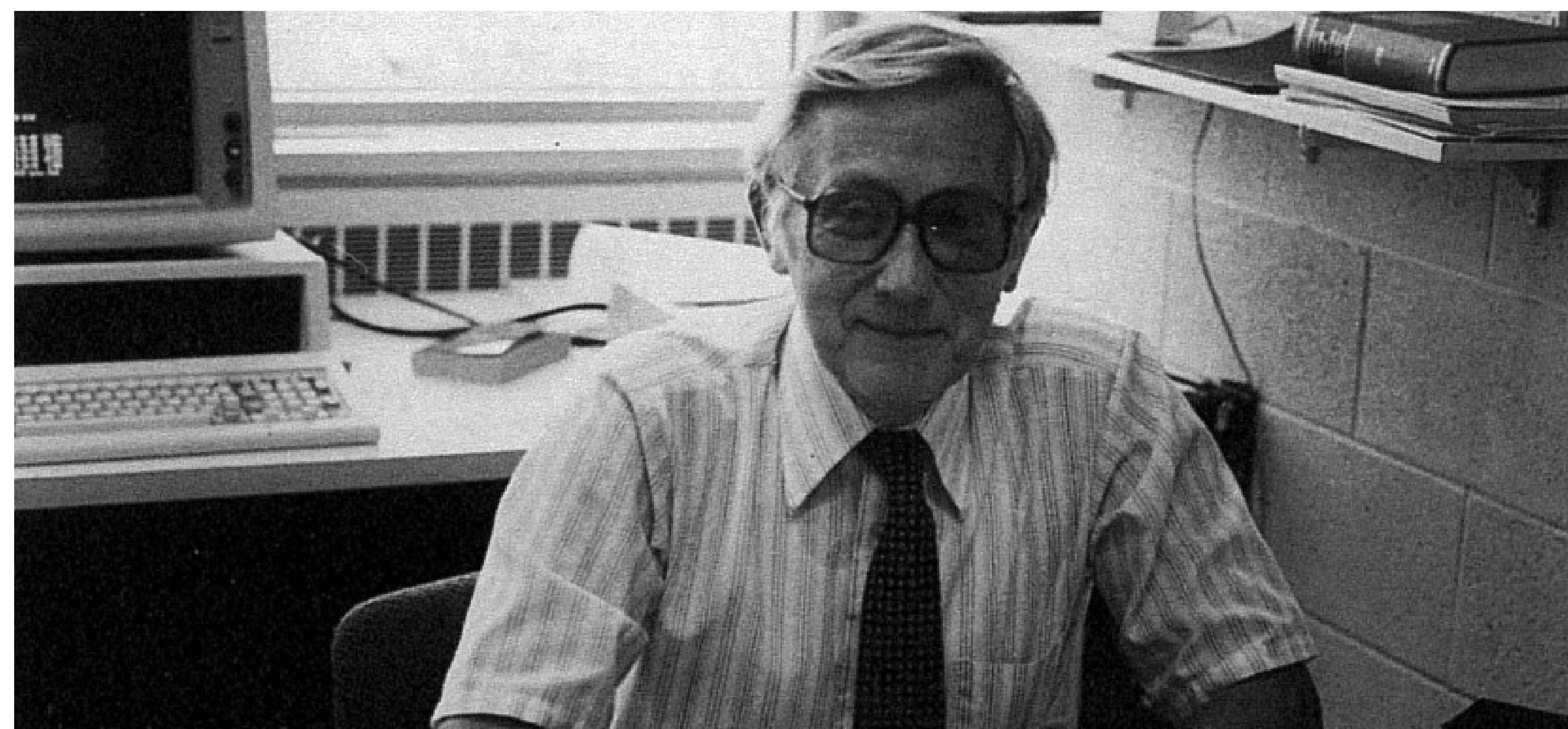
At the University of Michigan, Walt quickly rose to professor and chair of the Department of Industrial Engineering (IE) in 1963. It was during his six years as chair that the Department became highly ranked by other IE department chairs; with 17 faculty members,

granting approximately 70 undergraduate degrees and 60 graduate degrees annually.

He also served during this time as the director of research for the International Motion Time Measurement Association, which provided major funding for his PhD students. This research concentration resulted in him forming the Human Performance Research Laboratory, which 10 years later, in 1980, became the current Center for Ergonomics.

Consulting for the manufacturing industry

Walt also was well known for his industrial consultation services. In one such activity, he reported directly to the vice president of Manufacturing at the Chrysler Corporation. His intimate knowledge of how manufacturing companies could improve their operations led to his being appointed as associate dean for Manufacturing Initiatives in the College from 1984 to 1989. He held the William Clay Ford Professorship from 1989 up until 1997 when he retired.



Walt at his desk in IOE in 1985.

Improving operational conditions for workers

Walt specialized in using contemporary statistical methods to understand and improve the efficiency and quality of operations that relied on people's abilities. One of his many original contributions was the "learning curve," a statistical method for forecasting how quickly workers could be expected to learn new skills. More specifically, he chose to focus on improving operations that under some circumstances could cause costly and tragic results.

In 1971, shortly after the National Institute of Occupational Safety and Health was created as part of the new Occupation Safety and Health Act, Walt led the writing of the first Training Grant Proposal in the U.S. to support engineering graduate students who were interested in learning how to design safer jobs. This initial proposal was not only funded, but it has been continually funded for nearly 50 years and has supported over 350 graduate students.

Improving healthcare services

Walt also became quite convinced in the late 1960's that the cost of healthcare services needed to be reduced. To pursue this end, he received a joint appointment in the Department of Health Services, Management and Policy in the School of Public Health. There he directed a number of studies that were documented in a series of publications and books. These described how hospital costs could be reduced by improved scheduling of both the physical space and personnel within various hospitals. Walt's focus on healthcare has left a lasting legacy in IOE with the department now recognized as a center of excellence for healthcare research.

Honors and publications

During his 40 years on the faculty at U-M, Walt published over 90 journal articles, and was honored with the prestigious Stephen S. Attwood Award from the College of Engineering — the award recognizes a faculty member who has extraordinary achievement in teaching, research, service, and other activities that have brought distinction to the College and the University. He also received the distinguished Lillian Gilbreth Award from the Society of Advanced Management and advised or co-advised 38 PhD students.

Beyond academia

Walt was not only a great academic. He and his wife Charlene raised three wonderful children; Betsy Hancock, Amy Boyd and Rob Hancock, and they have five grandchildren. He built and flew model aircraft, sometimes losing them in spectacular crashes. He was an active member of the Ann Arbor Rotary Club. He was well known as a great mechanic and helped many friends fix cars, snow-blowers, lawn mowers, and even the bus used by his church. He was an accomplished trumpet and euphonium player in the 70 piece Washtenaw Community Concert Band, and even participated in a concert rehearsal just four weeks before his death. He also founded a book club a few years ago to allow him and his friends to more deeply understand historical events that affect us all today.

Walt's life was well lived, and in such a way that contributed to the joy and success of many others. May we all remember him, and continue to gain from his time amongst us.



Walt giving a talk for the CHEPS Seminar Series.