



Views of magnetic storage products and production techniques are featured in a 4-foot high by 6-foot long mural recently mounted in the office of William C. Norris, director of ERA's St. Paul operation. Another picture on page 2.

A July 1953 Engineering Research Associates (ERA) newsletter article [left] documented the hanging of a Drum Products and Production Collage on the office wall of William C. Norris, then director of ERA's St. Paul Operations. As one of the 1946 ERA founders, William 'Bill' Norris, is better known for leaving UNIVAC to start Control Data Corporation in 1957. As the '57 janitorial staff cleaned out Mr. Norris' ERA/UNIVAC office, they decided that the mural should be offered to the guy squatting in the center, Don Weidenbach¹. Don accepted, then framed and mounted this collage on his home office wall until 2010 when he moved to a 'downsize' condo. At that time collage custody was given to Lowell² Benson, chair of the VIP Club Legacy Committee.

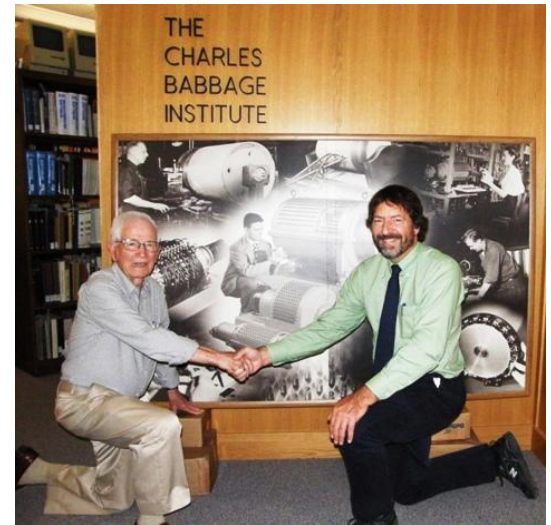
The collage center shows Don as a young engineer holding an experimental airborne drum alongside several other drum products. The periphery of the collage shows many of the drum manufacturing phases. ERA and its engineers had received patents for creation of magnetic drum memories, re-writeable devices which are the

'grandfather' of today's computer hard drives. The drum prototype had glued 3-M magnetic tape onto the surface of a rotating cylinder. Subsequent drum models deposited 3-M magnetic material directly onto machined cylindrical structures. Don worked at Engineering Research Associates and its corporate successors from 1946 until retiring in 1976.

On October 5th, 2011, Don Weidenbach presented the 4'x6' collage of magnetic drum memory photos to the Charles Babbage Institute (CBI). Accepting on behalf of CBI was Dr. Tom Misa, then Director of CBI at the University of Minnesota. Dr. Misa held the Engineering Research Associates Land Grant Chair for History of Technology at the U of MN. Unisys Fellow Quint Heckert stored the collage for a year before the CBI delivery.

The rest of the story? CBI founder Erwin Tomash was an ERA engineer in the late 40s and early 50's designing computers and computer systems using drum memories. Erwin and wife Adelle are credited with the founding of the Charles Babbage Institute in 1978. In 1980, CBI was located at the University of Minnesota as Mr. Tomash led the funding drive to create and name the ERA land-grant chair for the history of technology to support a CBI directorship. The VIP Club's first

Legacy Committee meeting³ was in January 2006 with CBI's first Director Dr. Arthur Norberg. CBI's 2nd Director, Dr. Misa, was an advisor to the VIP Club's legacy committee from 2007 to 2018.



¹ Don's ERA story/legacy is at <https://vipclubmn.org/People7.html#Weidenbach> and https://vipclubmn.org/Articles/75-Years_Ago.pdf.

² CBI photo by LABenson, BEE '66 U of MN; UNIVAC, 1960 => Unisys 1994, <https://vipclubmn.org/PeopleDocImg/Vol1Book01.pdf>

³ Richard 'Dick' Lundren documented the meeting, <https://vipclubmn.org/Articles/FirstVisitToCBI.pdf>