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Quicksilver, a Shadowbox Story

My name is Leroy Larson. I was employed at Univac/Sperry/Unisys from 1971 until my retirement in 2015. My career started as a Test Engineer following graduation from the University of Minnesota and culminated as an Engineering Director. I was involved in many of the projects highlighted in the Shadowboxes that cover the period from 1955 to 1996. These projects include the 1110, 1100/80, System 11/Mapper 10, 2200/900, 2200/500, IX4x00, IX5x00, and IX6x00. Throughout my whole career I was fortunate to have worked with a very talented set of people who made each of these and succeeding projects very successful. There are many stories leading to these successes. I will briefly highlight one of them associated with the 2200/500 code named Quicksilver.

The development of the Unisys Hardware Products consisted of the following phases: 1) Definition, 2) Design, 3) Verify, 4) Build, and 5) Test. For each of these phases, very detailed metrics are kept for design process improvement, to increase quality, and to reduce the overall time to delivery. Some focus areas for improvement include (but not limited to) diagnostics, simulation, timing analysis, and physical design. Continuous improvements are being made throughout the development cycle and then at completion, a post mortem is done to identify what worked well and what did not in all phases. Improvements are then fed into the next development cycle.

The 2200/500 was a logic copy of the 2200/900 code named Mercury, thus getting its code name of Quicksilver. Its purpose was to provide a lower cost OS2200 Mainframe System for the midrange of the Unisys' clients. Having to purchase the high end 2200/900 for these clients would have been very costly, possibly forcing them to look to other vendors. Therefore, it was very important to deliver the 2200/500 product as soon as possible following the delivery of the 2200/900.



Figure 1. 2200/500 shadowbox.





The 2200/500 was a prime example of how much the development cycle improved when comparing similar product developments. The 2200/500 was similar to the 2200/600 in that that product was a logic copy of the 1100/90 much like the 2200/500 was a logic copy of the 2200/900. The total development cycle for the 2200/600 was just a little more than 37 months while the total development cycle time for the 2200/500 was 24 months.

At the time of delivery, this was the fastest development cycle that had ever been achieved for a complete OS2200 Mainframe System. The product was delivered on time and met all the client's expectations, a truly outstanding accomplishment for the 2200/500 development team.



Figure 2. 2200/900 Shadowbox

Figure 3. 2200/600 Shadowbox

Document <u>http://vipclubmn.org/Articles/ERA2unisysWeb.pdf</u> has details about the three shadowboxes shown herein as well as the entire 1100/2200 series shadowboxes. A paper by Richard Petschauer tells the development story - <u>http://vipclubmn.org/Articles/HISTORY1100series.pdf</u>.



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LABenson, editor.