

ENCORE COMPUTER CORPORATION

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Dear Mr. Carpenter:

I don't have any more real information on Packard-Bell. I don't know either Packard or Bell. I believe the design group included Robert Beck, who was later responsible for the SDS machines. PB went on to design and build a few 440's which were completely unrelated to the 250. You might also ask Dave Evans, E&S, who was a designer for Bendix at the time.

One of the 250 users, Claude Kagan of Western Electric in Princeton tried to use it for real time, but due to the latency predictability, it was hopeless. We are getting a 250 for the Museum, and you should be able to find a manual somewhere. It used Ferranti, magnetostrictive delay lines and I believe had a 1 or 2 Mhz clock with a 22 (or 24?) bit word length. One could clearly trace its ancestry. Harry Huskey's comments that with core memory, this whole "line" died.

As a Fulbright Scholar at the University of New South Wales, I and a fellow student wrote a program, SODA, which converted DEUCE into a true 3-address computer which resembled the IBM SOAP system. It optimized delay line positions and automatically converted the two level memory (delay line/drum) into a one level memory. Thus it was another early attempt at a "virtual memory." Brian Randell was also another DEUCE alumni as was Donald Davies, now just retiring from NPL. I also helped Hamming with George a Polish post fix interpreter for DEUCE. It was the basis for the English Electric KDF9. Overall, DEUCE certainly influenced my thinking--some of it was negative because I was determined not to design a computer that was so difficult and tricky to program. In this regard, you might recall a quote from Turing to Wilkes in which he stated that EDSAC used hardware for ease of programming and was quite unlike ACE. When I visited NPL in 1959 and discussed SODA with Wilkinson, he too wondered why anyone would bother with SODA or a program like FORTRAN. If I find a manual or more information, I'll send it.

Sincerely,



Gordon Bell
Chief Technical Officer

V.MU.CA