

Questionable Software

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via Ray Hand

In early 1979, Librascope's contract to modernize the Australian Oberon Class submarines came to a close. At that time there was an opportunity to use a modified version of the Australian software as part of a Canadian Oberon Class submarine modernization program. At that time, Librascope did a study to see what computer resources were needed to modify the Australian software for Canadian use. At the end of their program, the Australian Navy had left Librascope with a Univac AN/UYK-20 computer and Univac AN/UYK-20 software development tools. Those software development tools were designed to operate on the AN/UYK-20 using special-purpose computer peripherals including a magnetic tape drive, a disk drive, a printer, and a control terminal all of which had been shipped to Australia.

I realized, however, that there were ways to still make use of what we had to modify the Australian software for the Canadians. The Australian program had also left us with several Motorola 6800 Processor based breadboard systems that had NTDS parallel interfaces to the AN/UYK-20 computer and general-purpose parallel ports. Also, a PDP-11 computer in the Librascope Blue Room had a general-purpose parallel port and the computer was not being used at the time.

I wrote some software for the 6800 breadboards to connect the AN/UYK-20 NTDS ports to the PDP-11 parallel port and software that could interpret requests sent thru the 6800's to access general purpose magnetic tape drives, disk drives, printers, and a control terminal that were part of the PDP-11 computer system. In a couple of weeks, I had the Univac software development tools running in the AN/UYK-20 with the PDP-11 providing of the peripherals.

What's surprising is that this development software was used to produce the Canadian Submarine software modifications and sell them to the Canadian Navy without paying Univac any fees for the use of their tools.