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Kathy Strutynski and Computing and NPS

This is an informal conversation with Kathy; recollections and observations.

Harold Evans (et al) put together a book called *They Made America* that has a lot to say about Gary Kildall and other pioneers of computing. As Kathy tells it, he had written a first edition, but discovered that it was full of mistakes – so he came to a conference at Asilomar with the thought particularly in mind that he would look up Kathy and get the straight scoop. Kathy hasn't written her book yet, but in this conversation we will cover a few of the points that, for her, came most readily to mind.

Dan Davis was a close friend of Gary's, had been in the Math and Computer Science departments at NPS. He worked for Gary at Digital Research as well.

Curt Jennings did a lot of work on a diving computer at NPS. Kathy and Gary Kildall worked with him on the project. This was a computer that would tell you what was a safe rate to come back up to the surface, so as not to get the bends. It had to work perfectly; no errors or failure could be accepted. This would have been around 1973.

Before coming to NPS, Kathy worked at McGraw-Hill, and at Bechtel. At Bechtel, she set up a data base which, she realized later when working with Gary, she really hadn't set up properly, but it was good enough to serve Bechtel well for ten years.

Her first work at NPS was assisting faculty and students with problems with jobs they were trying to get running on the mainframe. It helped that she could get in touch with Dwayne Hendricks (at IBM) in her work persuading VM (the IBM mainframe operating system) to work as well as advertised for users.

Setting up the PC lab (mid 1980's) was a step by step process. Early on, there was a network of Xerox workstations. These were, or were based on, the workstations that Steve Jobs saw and said to himself: "There's an opportunity here!" The Xerox workstation systems were beautifully integrated, very visual, very graphical, but not very affordable, and not the sort of thing people would be able to set up in the back bedroom. The PC's of that era ran CP/M-86, the operating system that Gary Kildall created, and that Kathy did so much work with – adapting it to work with a variety of computer systems.

Another of Kathy's projects in those days at NPS was Interp. It was a system running on the mainframe, under VM, which would allow you to simulate systems written for PC's. You could work out the bugs using Interp on the mainframe, and then know it would work on the PC. Getting Interp running well was a challenge; Kathy was grateful to have capable NPS grad students working with her.

Gary had a chance to see the Xerox system, and could see right away that visual computing was the wave of the future.

For Digital Research, Kathy made CP/M (Gary's PC operating system) work on the Apple computer of that time. Credit went to others, but their efforts did not actually work; Kathy got it finally to work.

Radio Shack's core development team left the company; it was clear to them that CP/M should be brought to the Radio Shack computer, but higher management wanted an operating system developed in-house.

Ray, a young man who worked with Kathy at Digital Research, went on to join Microsoft from the early days. He told her he felt terrible doing that, but she told him he needed to, to be able to look after his mom, and she (Kathy) called Paul Allen and put in a good word for Ray.

Pimporn Zelany (now Chavasant) headed the TSS project at NPS. It was eventually determined that the project needed to be ended, and it fell to Gary Kildall to write the letter to IBM saying they would no longer work with IBM on the project. There were just too many complaints about how long it took to get programs running under TSS. In fact, says Kathy, the only place that TSS ever worked was at IBM itself. Other universities tried, as NPS did, and none were able to get it working properly.

You heard it here first: wireless was developed by Hedy Lamar. (Yes, that Hedy Lamar. For you youngsters: think Paris Hilton. Hedy was older than Paris when she did this work, but was not regarded as a techie, to put it mildly.)

Gary's last hours: he had gotten into a time of drinking too much. He wound up in the emergency room with a concussion; he soon died. His son felt he hadn't received adequate care.