

Notes from John Wolfgang

The first IBM 1800 delivery was my machine at NASA Goddard. We used the computer for close loop control of source simulation and test data collection for the early Explorer spacecraft missions investigating fields and particle in the Earth Moon vicinity (i.e. Van Allen Belts environments.) We were able to take the first machine because we were DOD A classified because we were investigation the areas that the Apollo Astronauts were flying in. We later expanded this system with 10 CRT/Key board terminals for engineer use along with floating point hardware, etc. NASA Goddard much later bought another 1800 which the science community used to test and process data from planetary instruments on spacecraft.

The second 1800 was installed at the Union Camp paper pulp plant at Savannah, Georgia. This was an interesting machine as it would not pass IBM's final check since each box was painted a different color (they did this so that when management came they could say the red box is the cpu, the blue box the control I/O, etc.)

These two machines were the second and third off the line (The first machine went to the IBM software development center in San Jose.) The early machine users were given time on IBM 1130's to develop software programs and we started on a card system assembler, compiler and loader/linker , even on the 1800 when it was initially delivered. At that time the TSX system was neither T, S or X'ed. The manuals were printed on boxes of printer paper as they were being written as we went along. Each week a couple of IBM System Engineers (remember when this service was free) would fly out to NASA with the latest binary version of TSX and we would debug it with our applications writing down the error messages and our best guess of their meaning as we went along. (WE were often also visited by IBM brass to see the first customer installation.) Input from these first users had a lot to do with the development of the MPX operating system.

(A great story about these first SE trips was when one of them asked his partner if they had remembered to bring the new BOM at the airport and was arrested for attempted high jacking by airport security.)

The majority of the IBM 1800 users were in the following applications

- power generation and grid control
- steel mill operations control
- chemical plants
- oil cracking plants particularly MOBIL and EXXON
- Manufacturing testing and control

Several universities used 1800's for student computational need after installing the RS232 multiplexor (a third party product) which permitted multiple I/O terminals simultaneous access under the MPX operating system

Most software for the 1800 was fairly efficiently programmed since the memory and disk storage size was very limited compared to today's machines.

I believe that the longevity of the 1800's also goes to IBM excellent service support and the fact that the core circuit boards were also used in the 360/370 line.