



SCHOOL OF MEDICINE  
DEPARTMENT OF PSYCHIATRY

SAN FRANCISCO, CALIFORNIA 94143

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ATARI INSTITUTE

Dr. Ted Kahn  
Atari Institute  
1196 Boregas Ave.  
P.O. Box 427  
Sunnyvale, CA 94086

Dear Ted:

This will give you some of the history of how PILOT got started. I started playing with the idea of a simplified interactive aid in about 1960 and I called my first attempts COMPUTEST. The design philosophy grew out of experimentation with an IBM 1620 computer that arrived on the UC San Francisco campus in 1961. Somewhere I have a 5-minute 16mm film showing what it looked like at about that time. In 1965 I obtained a grant from the U.S. Office of Education that supported further development and application of PILOT's predecessor, COMPUTEST, in a nearby elementary school district. I will enclose a copy of a 1966 issue of an early EDUCOM bulletin that describes something about this program (see page 3 in the bulletin).

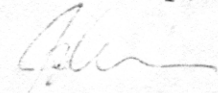
My first publication of a description of the language was in 1969 (1,2). Since then many people have implemented it on a variety of machines. In 1973 a group of people in the San Francisco bay area interested in computer-based instruction worked with me to define a standard "core" to the language and specify the manner in which extensions should be made. This is called the PILOT '73 standard, referred to in the Kamp and Starkweather article that I will enclose (3).

In the initial design of PILOT, we were trying to make it work on a number of time-sharing systems. The continuing problems that users had with remote communication made me keep looking for a way to return to a single-user machine. The micros were not yet here, but the Datapoint desktop computer seemed a possibility. Although it was expensive (\$12,000 for a 12K machine with two cassettes), a grant, this time from the National Library of Medicine, allowed the experiment to be made. As it turned out, Datapoint had been in a joint venture with Intel in the design of the 8008 processor, so what I developed was a program in 8008 code, later converted to the

8080. Datapoint PILOT is still in use at UCSF.

I have just completed a greatly extended version of PILOT that runs on 8080 and Z80 microcomputers under the CP/M operating system. It has advantages over other extended versions I have seen, since it remains compatible with the PILOT '73 standards but adds many useful items to the toolkit. The creation of CP/M data files is an obvious example, as is the much improved ability to manipulate string, numeric, and logical variables. It has a lot of similarity to ATARI PILOT in some of its functions, and it still maintains the basic simplicity of the language. An integrated screen editor makes PILOT program development an easy interactive process.

Sincerely,



John A. Starkweather, Ph.D.  
Professor of Medical Psychology

1. PILOT: A system for programmed inquiry, learning or teaching. In G. Gerbner et al (Eds.) The Analysis of Communication Content, New York: John Wiley & Sons, 1969, 501-514.
2. A common language for a variety of conversational programming needs. In H.A. Wilson & R.C. Atkinson (Eds.) Computer-Assisted Instruction, New York: Academic Press, 1969, 269-304.
3. Kamp, M. & Starkweather, J.A. A return to a dedicated machine for computer-assisted instruction. Comput. Biol. Med., 1973, 3, 293-298.