

Interoffice Memorandum
CALIFORNIA INSTITUTE OF TECHNOLOGY

To: VLBA Design Group (Computers) Date: 08 OCT 1982
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MSE
Subject: Antenna Control Computer Option

I would like to expand slightly on the question of what computer to provide for the VLBA antennas. We may be able to provide fully redundant capability at a much lower price than was originally thought.

Take, for example, the newly announced DEC "Professional 350" personal computer, which is a PDP-11 with the following characteristics:

- Instruction Processor: PDP-11/23 (more or less)
- Memory: 256 KB (standard)
- Storage: Dual diskette (2 x 400 KB)
- Printer Port: RS232
- Communications Port: Async/sync, 9600 bps, modem control
- Display: Bit Map B/W, comparable to VT1xx CRT.
- Operating System: P/OS, similar to RSX-11/M-PLUS

Options:

- Winchester Disk: 5 MB
- Communications S/W: File transfer, etc.
- Floating Point Proc: 32-bit and 64-bit
- Software: UCSD p (Fortran/Pascal), Basic, etc.

A Professional 350 system, with Winchester, Floating Point Processor, Communications Software, UCSD P Software, and a small printer, would cost approximately \$10,000.

I feel that such a system would be entirely adequate for the telescope control functions. It is comparable to the system we specified in the Red report at \$30,000. (The primary differences lie in the disk capacity and in the lack of full DECnet software.)

Thus we should easily be able to provide full redundancy of telescope computers.

(For further information on the DEC personal computers, you may call 1-800-344-4825.)