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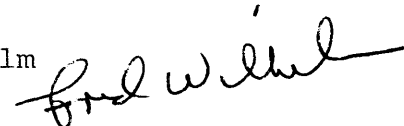
SUBJECT: COMPUTER INSTEAD OF CONSOLE FOR PDP-1Ø

DATE: August 14, 197Ø

TO: Gordan Bell

FROM: Fred Wilhelm

cc: Ken Olsen
Win Hindle
Bob Savell
Alan Kotok

DEPARTMENT: PDP-1Ø Engineering

    I read with great interest your recent memo. The computer idea has been around for some time, but has always been only an idea because of cost considerations. With the advent of the PDP-8E, this obstacle appears to evaporate. Some quick calculations show that the switches, switch buffer, lights, light drivers, flex cables, etc. cost about $7ØØ. Even if this rough number is doubled, the resulting $1.4k is about the same as the cost of a PDP-8E (I would guess).

    You mentioned numerous advantages to which I would like to add the inherent capability of this approach to solve the console problem associated with multi-processors.

    The main disadvantage appears to be the inability of Field Service or checkout to look at light patterns. This could be solved by adding a scope (at additional cost) to the small computer.

    Let's discuss this the next time you are here. Until then, I will have to continue to disappoint you in the aspiration department by plodding ahead on trying to meet the present approved objectives for the new processor. By the way, I would like to see this "almost" solid plan to get a factor of 1Ø over the PDP-1Ø. Believe me Gordan, Schottky TTL and Cache memories aren't the panacea for that kind of undertaking. We could certainly build such a machine at a higher cost, but it doesn't fit in with our present marketing plan or time schedule. It does sound like the kind of thing

we plan to do on the next go around.

It also seems possible that with the right kind
of additions to our team, we could also produce such
a Super-10 in a year. You have a standing invitation
to join us and head such an effort.

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