

INTER - OFFICE MEMORANDUM

DATE 2/14/72

TO: W C Norris
FROM: S R Cray
SUBJ: Emotional Problems

RECEIVED
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W. C. NORRIS

This memo is on a different subject than my normal correspondence with you, but because of the recent developments in Control Data technical direction I believe it is important and urgent that I present as clearly as possible my emotional attitude toward the company and the implications it has on our continuing relationship. I have not experienced any recent traumatic emotional event that alters my attitude toward Control Data. Rather, the gradual erosion of emotional involvement in the Corporation's activities has brought me to a point of possible action. This is a matter of special concern in light of the apparent failure of PL to provide the major corporate technical base for future growth and a resulting return to reliance on my work as an alternate for the next considerable period of time. I am not prepared to assume this responsibility.

Let me review briefly the fifteen years of Control Data history from the standpoint of my emotional involvement. When the company was initially formed I was eager to get away from the large corporation environment and work in a small group with simple straightforward relationships. This turned out to be everything I expected of it in early Control Data history. I need not dwell on this point, because I am sure you understand my feelings at this point in time. The picture became an unsatisfactory one for me during the period of rapid growth and increasing depth of management in the early 1960s. The solution for me was to move to Chippewa and establish a small relatively isolated group which I could emotionally handle. Again you understood the situation and supported this rather unusual move, for which I am most grateful. This solution has worked for a decade, which is remarkable when one thinks about it.

Traumatic events in the later 1960s caused me to resign from the Board of Directors and further withdraw from overall corporate affairs. This period was traumatic for me because several of my personal friends found their own limits of tolerance, and I was emotionally involved with them. Clearly I would not have been with Control Data at this period had it not been for the Chippewa arrangement. The games grown men play in corporate life I find revolting, and I cannot personally participate. At this point in time I would have liked to leave and form (or join) a small company, but I felt a real obligation to continue working for Control Data as a result of your support in establishing the Chippewa Laboratory; and I rejected such thoughts categorically.

Ten years have now passed since moving to Chippewa, and two major products were developed and delivered to customers and to larger corporate development. The obligation which I felt in the 1960s has slowly been amortized, and I now feel a residual of zero. My remaining with Control Data in recent years has been the result of technical interest in continuing the evolution of my own ideas, which I nevertheless consider to be Control Data property. This evolution may be nearing an end. The 8000 development work is aimed at substantial improvement in speed of computation for very large number crunching problems. Many radical departures are being made in module construction techniques, and there are serious problems not yet solved. In the past few months some unexpected basic problems have appeared in the metallurgy of the low temperature solders which we were relying on for module assembly. The significance of these problems has been realized only recently, and the solution may require prolonged work. There is little question that an 8600 of the type I have described can be built. The question is one of range of application if more exotic techniques are required, resulting in less competitive performance. I think these matters will reach a decision point before the end of 1972. If further work in this direction seems to me to be slow and difficult, I do not think that I want to personally pursue it. In this case I am emotionally at the point where completely new work, quite possibly not directly involving computers, is of considerable appeal to me. I think I part ways with Control Data in this case.

What then do I suggest for Control Data? Whether the 8000 work continues or not, I think some other course for the major technical base of the Corporation is desirable. It should be supervised by an individual who has a good technical background but not the personality tolerance problems that I have. The obvious choice for this job is Jim Thornton. STAR performance has been disappointing to date. It also has been educational for Jim. He should be in an excellent position to evaluate the integrated circuit technology vs discrete components and plot an evolutionary course from CYBER hardware to newer technology for future years. I think this should be done.

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