INTERDEPARTMENTAL

MASSACHUSETTS INSTITUTE OF TECHNOLOGY CAMBRIDGE, MASS. 02139

from the office of

April 2, 1971

Mr. Morton Berlan Telecommunications Office E19-207

Dear Mort;

Thank you for the Technical Specification on the 113B Data Station. I understand from your telephone call that I may keep it now. I passed it to Stan Dunten, who made two observations:

- 1. There is no problem with the absence of a "space-on-dis-connect" feature. This feature can be simulated by Multics by a program change to transmit space directly using the "send data" lead. Thus, the 113B dataset appears to be completely compatible with the Multics installation.
- 2. The absence of a "mark-hold/space-hold" option on disconnect would make the 113B dataset unusable on CTSS, since that system depends on the "space-hold" option to detect that the caller has disconnected. A shortage of interface leads to the 7750 computer makes this a difficult problem to bypass.

As I read the specification the 113B comes in quantities of 20, 60, and 120; a most unusual set of sizes. As the performance of and load on Multics grows, there will certainly be need for more datasets in the future. Whether the quantities and prices of the 113B will make them more or less preferable than Tuck 1033AA's will have to be seen when the time comes.

On the subject of the Tuck datasets, I have received one complaint from the programmers charged with working with them: the absence of monitor lights on the interface leads to the datasets makes it very difficult to diagnose trouble reports. The 103E cabinet included a set of six indicator lamps which could be switched to monitor

Mr. M. Berlan Page 2

any one dataset interface. It might be appropriate to inquire of Tuck the cost of providing such a feature. I notice that the 113B specification includes this feature as an extra-cost option. If any 113B's are acquired, I would definitely recommend that they include the option, since the only effective way to learn whether or not the program is driving a dataset properly is to observe the interface leads.

Sincerely yours,

Jerome H. Saltzer Associate Professor of Electrical Engineering

JHS/mw

xc: F.J. Corbató

R.H. Scott

R. Conrod

L.J. Ryan

T.H. VanVleck

W.J. Burner