April 17, 1958

MEMO TO:

Mr. H. R. Wild

SUBJECT:

DWS/jcv

CC:

Exchange and Swift Tape

Because of the possibility that Swift tapes may have a 250 KC rate and be used as communication tapes between Stretch and other systems, I feel that it would be well to review our present position with respect to the 24 bit channels proposed for the Exchange.

The 24 bit channel would have a maximum rate of 200 KC and communicate with Swift only in the ECC mode. The present 10 usec exchange-memory cycle allows four Swifts to operate simultaneously.

I think we might very well consider a 32 bit channel which will allow us a maximum rate of 250 KC and permit reading tapes without ECC in the information bits. This would force a cut back to three tapes operating simultaneously rather than four but the actual data transmission would be 12% faster. (Three tapes at 250 KC, 32 bit channels, would read 9 words in or out in 96 usec whereas four tapes at 200 KC, 24 bit channels, would read 8 words in or out in 96 usec.)

Would you please let me know your thoughts on this matter?

D. W. Sweeney

v Product Planning Coordinator
Dr. W. Buchholz Project 7000

Mr. D. W. Holmes

Mr. C. B. Poland

Mr. S. W. Dunwell

Stretch Product Planning