

July 30, 1957

FILE MEMO: Project 7000

SUBJECT: Ultra High Speed Tapes and Disks

It is the consensus of opinion of those in Project 7000 Product Planning group that it is better to operate subject units at twice\* their proposed speeds — using only one unit at a time — than it is to provide simultaneous reading and writing.

Programming is simplified.

In some cases memory can be saved by letting an input area double as the output area. This can also reduce memory references.

When the application does not permit effective overlap of reading with writing, the reading (or writing) will be done at least twice as fast. When the application does permit overlap, input-output will be achieved in the same total time as if simultaneous reading and writing — at half speed — were possible.

This philosophy does not hold with slower units (e. g. 729 I tapes.) Even if the speed of these units were doubled, simultaneous operation of up to 32 units still provides more total input-output.

The two-gap head can be used without requiring an additional set of read circuits.

*Jack C. Gibson*

Jack C. Gibson

JCG/jv

cc: Mr. G. A. Blaauw	Mr. D. E. Holman	Mr. H. K. Wild
Mr. F. P. Brooks	Mr. D. W. Holmes	Mr. W. D. Winger
Mr. W. Buchholz	Mr. P. H. Howard	Mr. W. W. Wolensky
Mr. J. D. Calvert	Mr. J. Lyon	
Mr. E. F. Codd	Mr. D. W. Pendery	
Mr. S. W. Dunwell	Mr. C. B. Poland	
Mr. R. A. Gregory	Mr. D. W. Sweeney	
Mr. J. E. Griffith	Mr. R. P. Ulrich	

\* or faster.