

COMPANY CONFIDENTIAL

PROJECT STRETCH

FILE MEMORANDUM #23

SUBJECT: High Performance Tape Specifications
BY: W. Wolensky
DATE: February 9, 1956

A meeting was held February 7, 1956 to determine the specifications for a High Performance Tape Handling System, which could possibly be developed within three and one-half years.

Persons in attendance:

Mr. J. W. Backus	Mr. L. S. Snyder
Mr. L. Blenderman	Mr. H. K. Wild
Mr. W. S. Buslik	Mr. V. R. Witt
Mr. S. W. Dunwell	Mr. W. Wolensky
Dr. W. A. Hunt	

Specifications for High Performance Tapes:

- a) Ready in three and one-half years maximum (preferably two and one half-years).
- b) Reel capacity 1200 feet, 3 inches wide tape
- c) Start-Stop time 10 ms, 3 inches gap between records
- d) Backup time 40 ms
- e) Bi-directional tape drive and tape read
- f) Automatic tape loading
- g) Tape to contain 40-45 tracks (probably 30-36 information tracks).
- h) Velocity 300"/sec.
- i) Bit density 1200/1000 bits/inch; 500 words/inch; 150K words/sec; $6.7 \mu\text{s}/\text{word}$; 7.2×10^6 words/reel; block size for 80% tape utilization = 6000 words/block.

July 59
2, 18

W. Wolensky

WW/mms