Figure 16

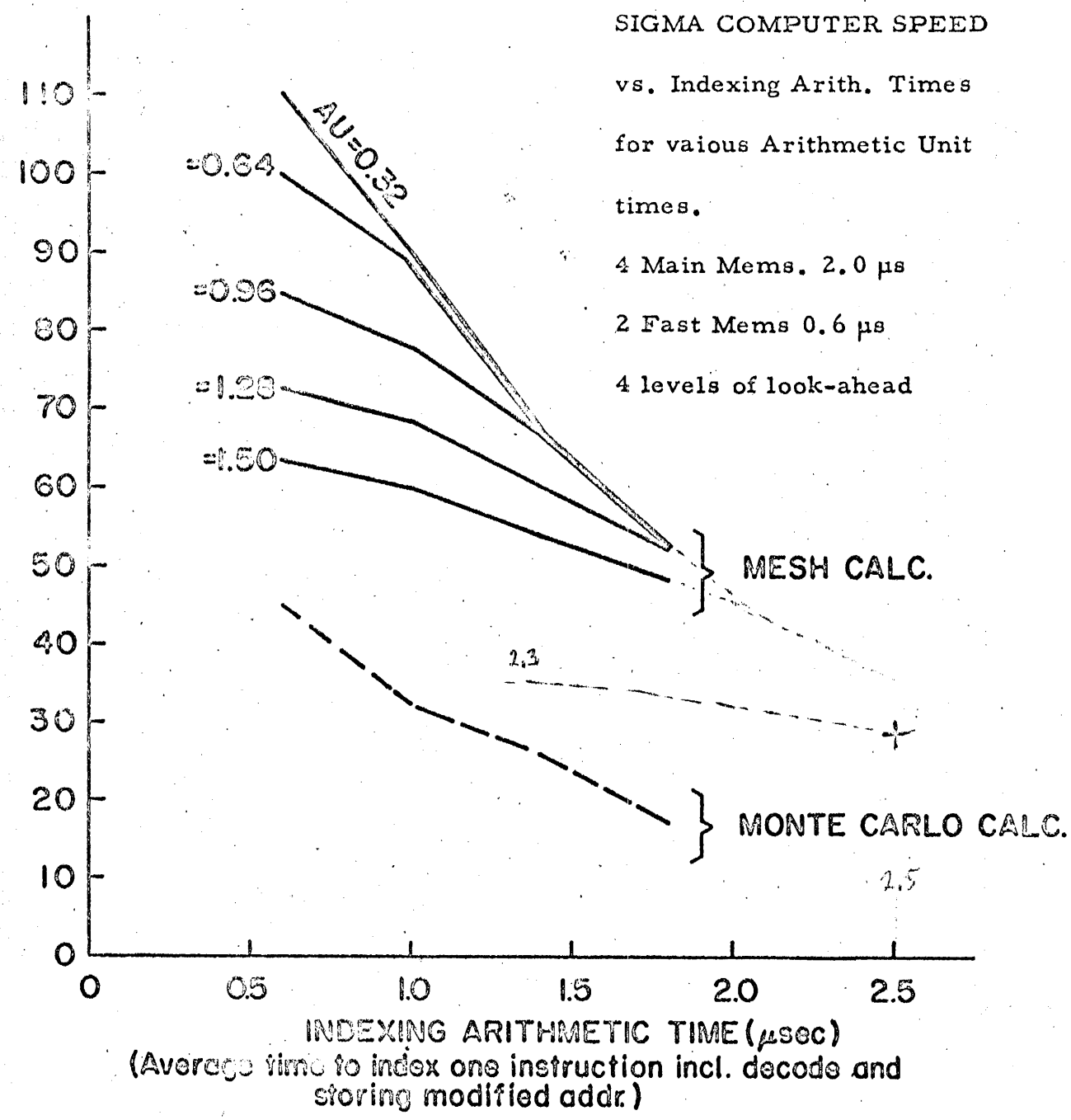
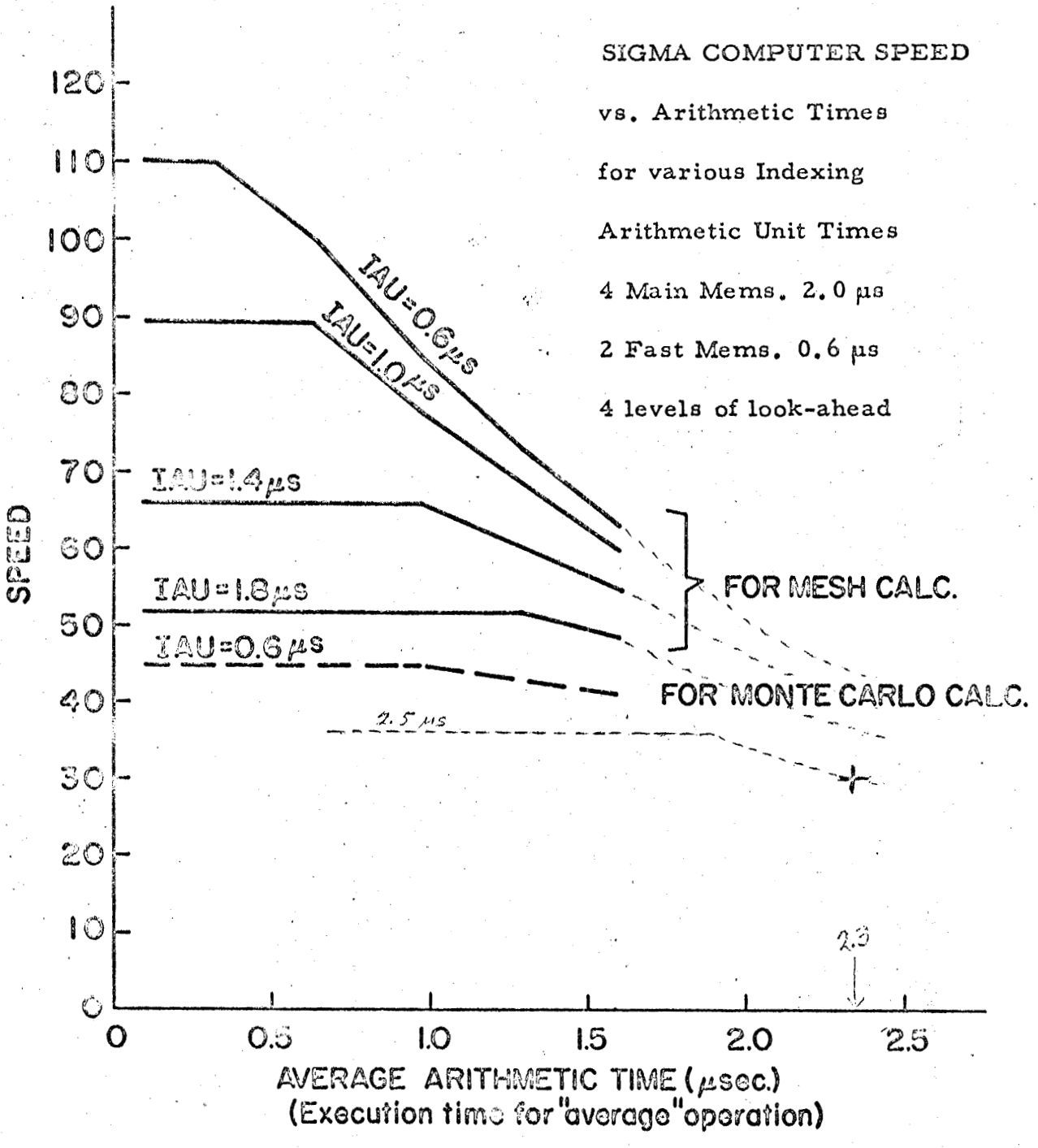

SIGMA COMPUTER SPEED
vs. Indexing Arith. Times
for vaious Arithmetic Unit
times.
4 Main Mems. 2.0 μs
2 Fast Mems 0.6 μs
4 levels of look-ahead
AU=0.32
=0.64
=0.96
=1.28
=1.50
MESH CALC.
MONTE CARLO CALC.
2.3
2.5
110
100
90
80
70
60
50
40
30
20
10
0
0
0.5
1.0
1.5
2.0
2.5
INDEXING ARITHMETIC TIME (μsec)
(Average time to index one instruction incl. decode and storing modified addr.)

Figure 17


SIGMA COMPUTER SPEED
vs. Arithmetic Times
for various Indexing
Arithmetic Unit Times
4 Main Mems. 2.0 μs
2 Fast Mems. 0.6 μs
4 levels of look-ahead
IAU=0.6μs
IAU=1.0μs
IAU=1.4μs
IAU=1.8μs
IAU=0.6μs
FOR MESH CALC.
FOR MONTE CARLO CALC.
2.5 μs
2.3
SPEED
120
110
100
90
80
70
60
50
40
30
20
10
0
0
0.5
1.0
1.5
2.0
2.5
AVERAGE ARITHMETIC TIME (μsec.)
(Execution time for "average" operation)