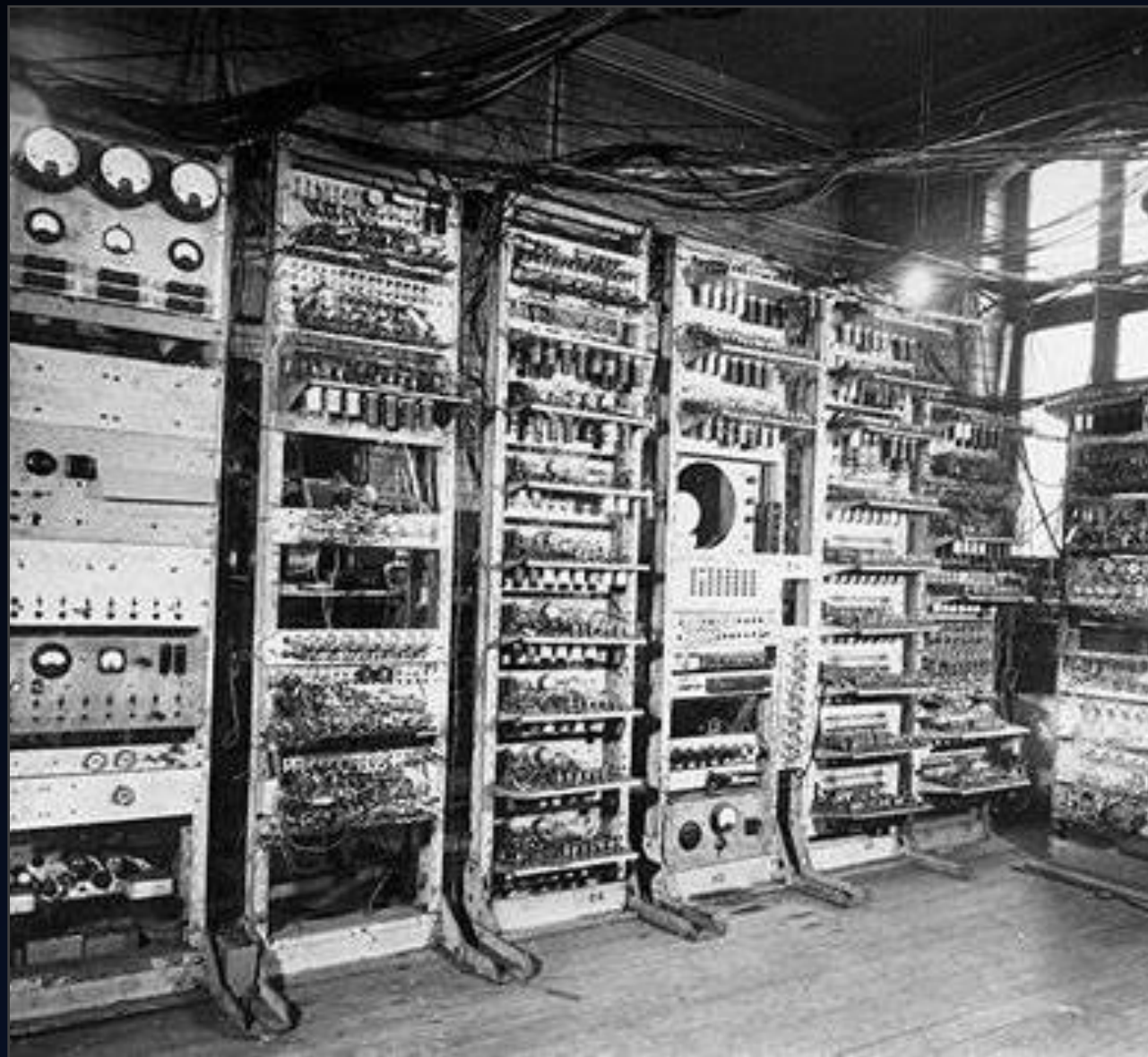


THE SMALL-SCALE
EXPERIMENTAL
MACHINE (SSEM)
"THE BABY"

Joseph Hayes



History

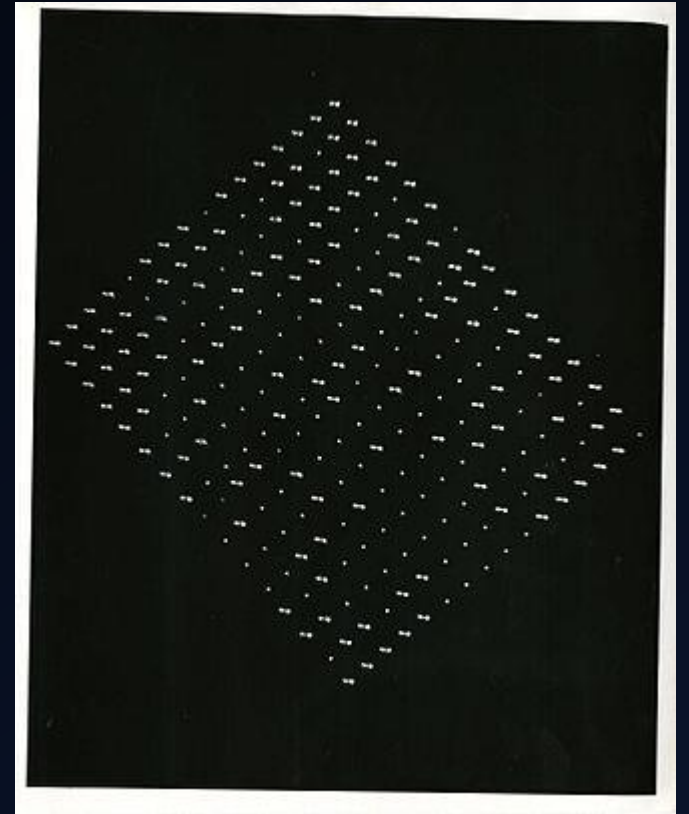
- Built at the University of Manchester in 1948
- Created by Tom Kilburn, Geoff Tootill and Frederic Williams
- Was a prototype for two new technological ideas

Development and design

- Computers always had to be reprogrammed
- The SSEM used William CRT tubes
- The worlds first RAM



William Cathode Ray tube



The information outputted

First program

1948
Billings Highest Factor Routine (continued)

Line	Code	Address	Instruction	Time
1	200	11	200 11 210	
2	210	11	210 11 110	
3	220	11	220 11 110	
4	230	11	230 11 110	
5	240	11	240 11 110	
6	250	11	250 11 110	
7	260	11	260 11 110	
8	270	11	270 11 110	
9	280	11	280 11 110	
10	290	11	290 11 110	
11	300	11	300 11 110	
12	310	11	310 11 110	
13	320	11	320 11 110	
14	330	11	330 11 110	
15	340	11	340 11 110	
16	350	11	350 11 110	
17	360	11	360 11 110	
18	370	11	370 11 110	
19	380	11	380 11 110	
20	390	11	390 11 110	

20	2	100000	23	2	25	2
21	1	100000	24	2	24	2
22	4	100000	25	2	23	2

- 21st June 1948, the first stored program was launched
- First program was to find the highest common factor of a number
- Took 53 minutes to find the correct answer

How it sets the groundwork for modern technology

- Confirmed that computers CAN have a memory
- Modern day RAMs still use “The principle of storing binary information”
- Lead to a more commercial machine in the Mark 1

