

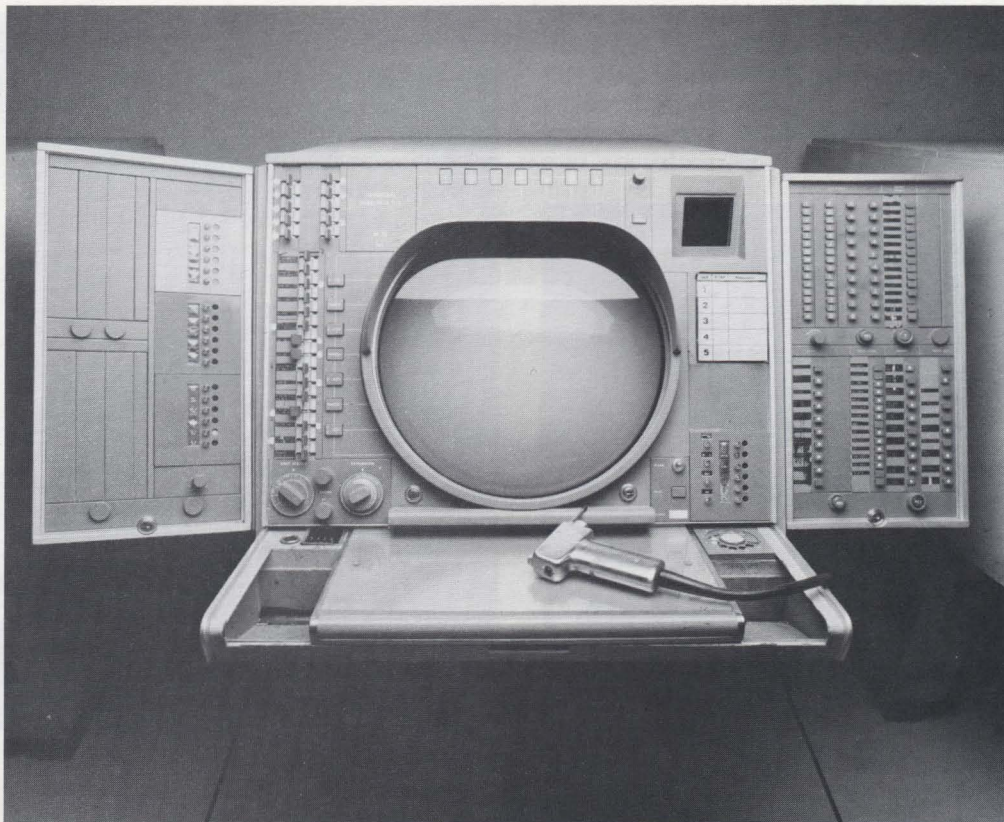
The AN/FSQ-7 and SAGE System

The Q7, a production version of Whirlwind, was probably the largest and longest lived computer in existence. It illustrates the computer components that are now on a single board or micro-chip.

The arithmetic and memory units with their 55,000 vacuum tubes took a very large space. The visitor can walk through the seven foot high banks of vacuum tubes and up to the four foot by four foot by eight foot 32-K core memory stack. The equivalent chips are exhibited and a terminal to the VAX provides a tutorial on how core memory works.

The control consoles were so large that they took up an entire room with several operators. The activities of the other components of the machine were shown in flashing lights on the consoles and the operator had a telephone to communicate with the people on the arithmetic, input-output units, or generator for the power.

The "Blue Room" consoles had large round screens that showed aircraft moving across the airspace. The screens were updated every 15 seconds by the Q7 causing a constant irritating flicker, hence a soft blue light in the room for the purpose of seeing the screen. The consoles display the air situation display and some were especially designed for weapons assignment or interception. The exhibit includes the consoles, chairs with their special drawers on the seats, and ceiling panels to recreate the feeling in the "Blue Room".



A console from the SAGE Blue Room, the control room for the SAGE, the U.S. air defense system from 1958-1983. Here, Computer Museum visitors can see the oversized video display terminals that served as the first computer graphics output devices that used light guns to identify the airplanes shown moving across the screen.



SAGE Blue Room.



Visitors walking through two rows of the AN/FSQ-7 arithmetic unit. Each computer had 55,000 vacuum tubes with 300 changed each week for preventive maintenance, whether they needed it or not.