

“Silicon Prairie” and the World’s First Computers

Today, many people associate the history and production of computers with Silicon Valley. California was important in the development of the personal computer, but Minnesota had a hand in the design of the very first digital computers.

A computer by its definition is a programmable machine; it can be changed to undertake different tasks. In the 1940s these machines were only first being developed. Until this point, there were calculating machines: built to undertake one task.



Above: The ERA research lab in 1952. Many of the engineers hired by the company were graduates of the University of Minnesota.

Image courtesy of the Charles Babbage Institute.



Left: Engineer Earl Joseph programming ERA's first true computer: the 1101. Only two units were ever built. Because ATLAS was the 13th item on ERA's first Navy contract, the commercial version was named 1101 which is binary for 13. Its successor, the 1103, was an immediate commercial success upon completion in 1953; 20 units were sold in the following years.

There are several claims to the title “first computer” including ATLAS, built by ERA in St. Paul. Completed in 1950 for the predecessor of the National Security Agency (NSA), ATLAS was a top secret project designed to break Soviet codes. The Federal Government later allowed the production of a commercial version of the computer named the ERA 1101.

For the next several years ERA continued to be in the forefront of the computing industry. In the mid-1950s, Remington Rand bought the company and combined it with the Eckert-Mauchly Computer Company to form its UNIVAC division. Picking up right where ERA left off, UNIVAC would prove to be plenty successful itself.

You could change the machine to do many problems - just write new software for it.

**Don Weidenbach,
Original ERA
employee**

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Below from left: Jack Hill, Dr. Arnold Cohen and other ERA engineers standing around a number of magnetic drum memory units. These “hard drives” were used for some of the world’s first computers.

