City of Philadelphia

Legislation Text

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Declaring February 15 as "Electronic Numerical Integrator And Computer (ENIAC) Day" in Philadelphia and honoring the University of Pennsylvania School of Engineering and Applied Sciences.

WHEREAS, In 1941, John Mauchly, a physics professor at Ursinus College, came to the University of Pennsylvania to learn about the latest electronic devices and techniques through a course sponsored by the War Department and offered at the Moore School; and

WHEREAS, In 1941, Mauchly was hired by the University of Pennsylvania Moore School as a professor where he met J. Presper Eckert, Jr. who was also teaching there; and

WHEREAS, Discussions between Mauchly and Eckert on Mauchly's ideas about electronic computation lead to Mauchly's memo "*The Use of Vacuum Tube Devices in Calculating*," which became the basis of a memo submitted to the U.S. Army's Ballistic Research Laboratory detailing an innovative approach for producing artillery firing tables with electronic speed and digital accuracy; and

WHEREAS, At the time, ballistic computation for artillery trajectory was performed by desktop calculators, taking numerous days to complete a single artillery firing table; and

WHEREAS, Mauchly's memo argued that electronic computers could compute firing calculations within a second and thus, complete a set firing table within 30 minutes rather than a month-long process using desktop calculators; and

WHEREAS, Mauchly's memo was turned into a proposal and submitted to the U.S. Army Ordnance Corps during World War II; and

WHEREAS, On June 5, 1943, the U.S. Army financed the design and construction of the Electronic Numerical Integrator And Computer or "ENIAC" by Penn's Moore School of Electrical Engineering, with Mauchly as the project's principal consultant and Eckert as chief engineer; and

WHEREAS, The ENIAC was constructed by a team of engineers during wartime to serve the ballistic needs of the Army; however, the war ended before completion of ENIAC; and

WHEREAS, Upon its completion, ENIAC weighed 30 tons, employed over 18,000 vacuum tubes, and could add 5,000 numbers or do 350 ten-digit multiplications in a second, while other mechanical relay computers then in operation could do no more than 15-50 additions per second; and

WHEREAS, While many military projects were terminated at the end of the war, the high-speed computing and general programming capabilities of ENIAC survived and continued to solve scientific and engineering problems for ten years, including the computation of nuclear physics calculations associated with

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thermonuclear chain reactions for the nuclear bomb; and

WHEREAS, Even though it had to be manually wired to execute a particular program, ENIAC was revolutionary in being the first large scale general purpose electronic digital computer ever built and lead the evolution toward modern computer technology by developing the stored-program architecture that is the fundamental architecture of all computers today; and

WHEREAS, The City of Philadelphia gave birth to modern computing when ENIAC was designed and constructed at Penn's Moore School of Engineering, and formally dedicated in Philadelphia on February 15, 1946; now, therefore be it

RESOLVED, BY THE COUNCIL OF THE CITY OF PHILADELPHIA, That it declares February 15, ENIAC Day in Philadelphia, a day on which the City shall celebrate the use of computers and advances in digital technology, and seek to bridge the digital divide throughout Philadelphia, the Commonwealth of Pennsylvania, and the nation.

FURTHER RESOLVED, That an Engrossed copy of this resolution be presented to representatives of the University of Pennsylvania School of Engineering and Applied Science as a sincere expression of City Council's gratitude and appreciation for its innovation and outstanding contribution to the birth of the computer.