

Women in Los Alamos Computing



At Los Alamos and elsewhere, the first computers were humans who did calculations by hand, sometimes with the help of a desktop calculator. Most of these human computers were women. Although not always recognized, their work propelled science and engineering forward for decades.

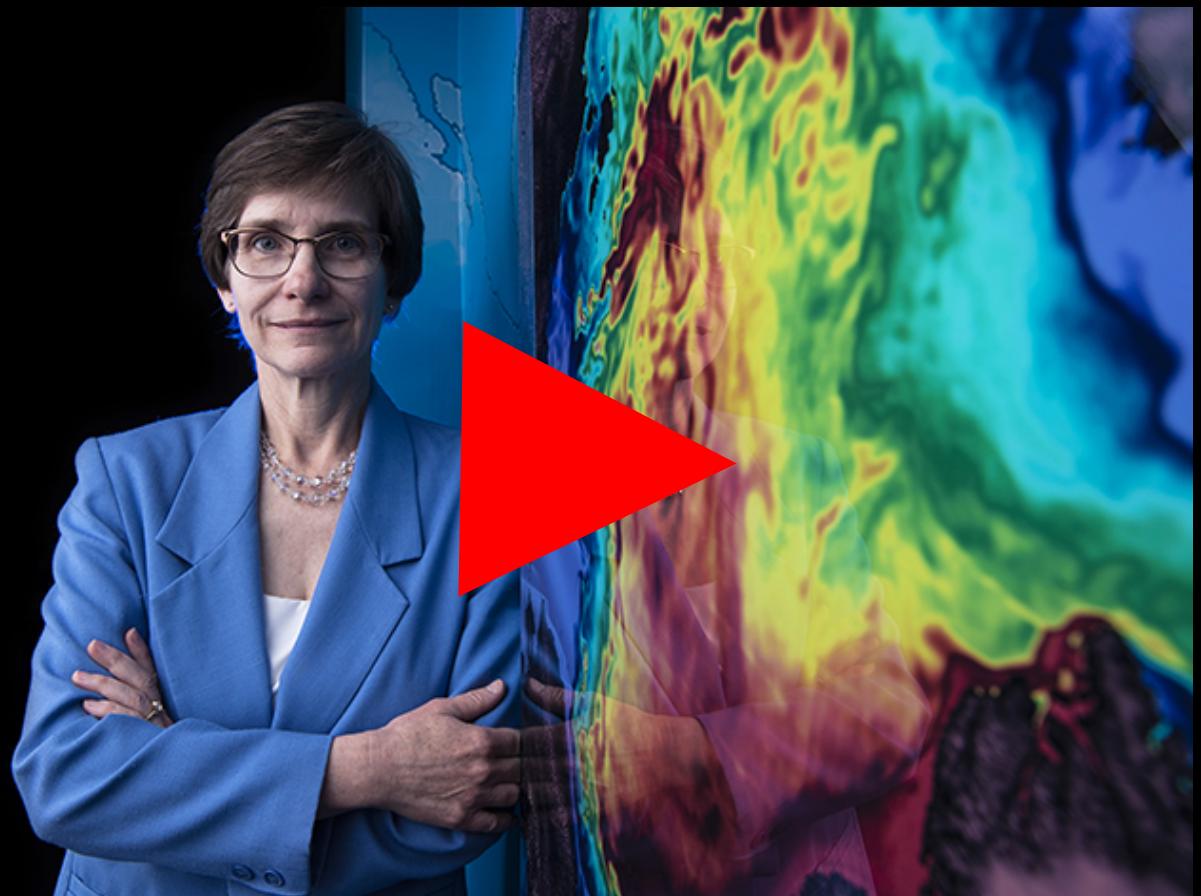
A History of Building the Future

The first computers at Los Alamos were mostly women from the town's civilian community. Professional computers from the Women's Army Corps (WACs) soon grew the ranks of human computers at the Lab to about twenty. Without their skilled and tireless computing work, Los Alamos' wartime mission would not have succeeded.



In Their Own Words

Hear more about the ground-breaking discoveries and contributions women make at Los Alamos, in their own words.



Explore the Continuing Legacy of Women in Los Alamos Computing Through the Interactive Timeline

Control Data Corporation Era
1966 - 1976

Inside the CDC 7600

1973

1974 Lynnda Tiano

1974 Rita Sandoval

1974 Cathy Stallings

1974 Virginia Romero

1978

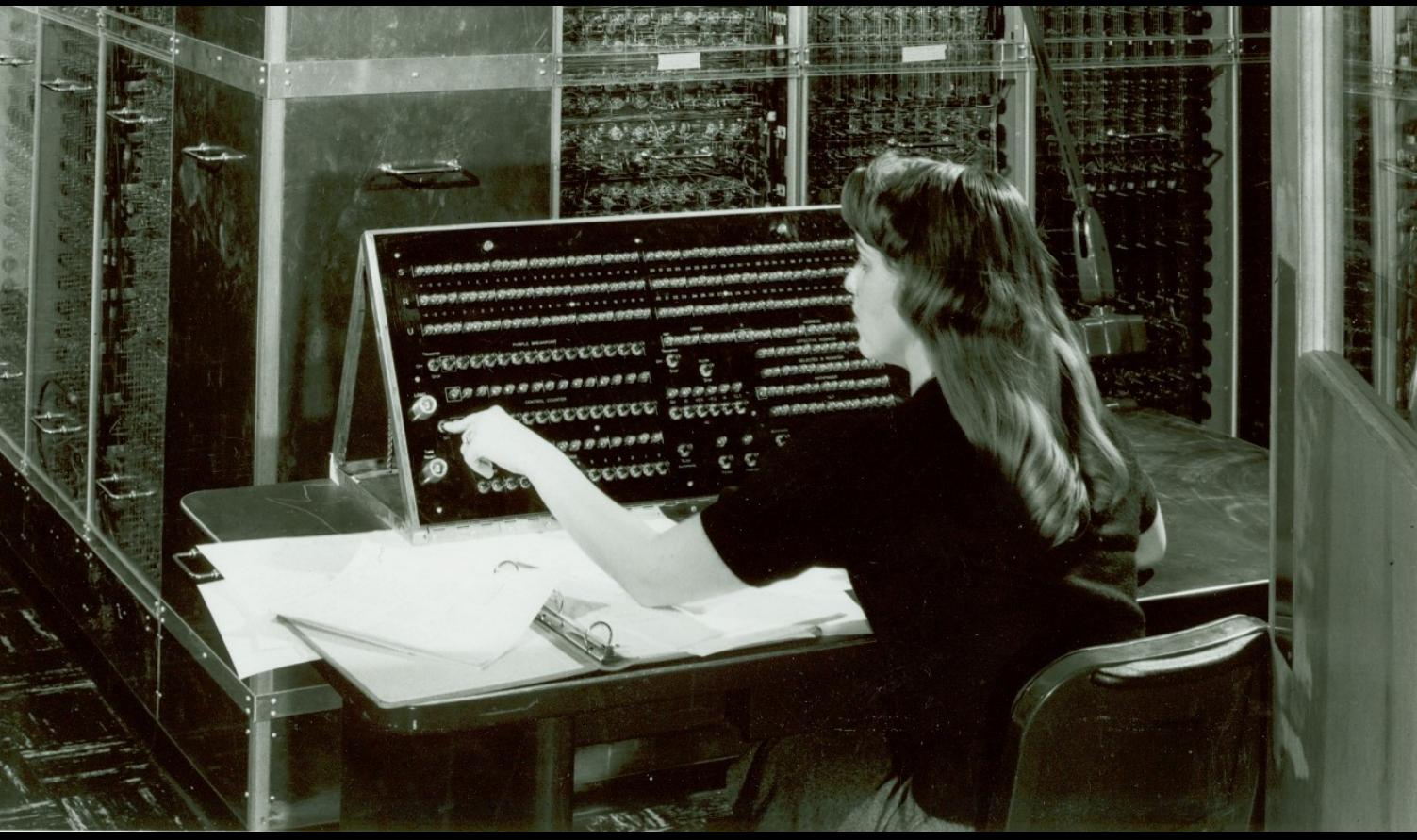
1982

1991

1993

2d

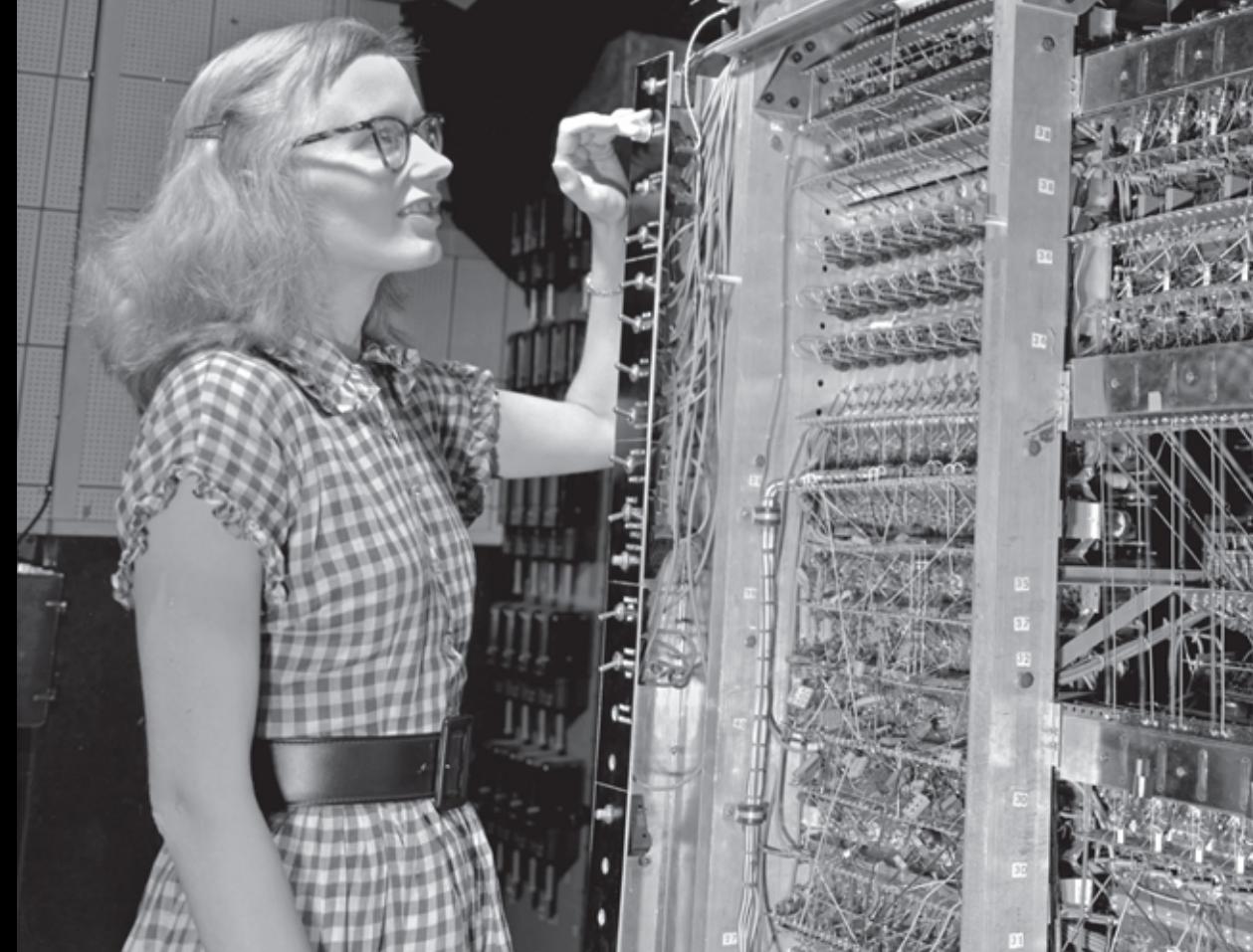
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When electronic computers were introduced, women were often the first programmers and computer operators. Their pioneering application of the new machines to scientific and national-security challenges made possible the rapid technical advances in the years that followed.

A History of Building the Future

After World War II, women from the Lab's hand-computing group became the world's first programmers (then called "coders"). Human computers had the skills needed to translate complex problems into the software "code" that an electronic computer could understand. Women with degrees in science and mathematics came to Los Alamos from all over the United States to meet the Lab's urgent Cold War need for computing expertise.



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Cray Era
1974 - 1996

1976 CRAY X-MP CRAY RESEARCH

1977 NO SMOKING

1978

Images (1)

1977 People Women in LANL Computing

ANN HAYES

From a programmer to a leader in a cutting-edge Los Alamos computer-science research center.

Originally from Buffalo, New York, Ann Hayes earned a BA in mathematics from Syracuse University. Her first job was as a computer programmer with General Electric in Philadelphia, before moving to California to continue programming for GE. She and her family moved to Los Alamos in 1966, and she joined the Lab as an applications programmer in C Division in 1977. Hayes recalled her time as an applications programmer, "Our applications programmers are expected to learn new operating systems, new machines, and do complete programming tasks for people throughout the Laboratory. The people who do all the applications programming are a window to C Division for many people at the

Lynnda Tiano ▶ 12 of 22 stories ▶ Kyle Wheeler

2d

1956 1967 1974 1978 1982 1991 1993

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The legacy of women building the future through computing continues at Los Alamos today.

Discover more about the legacy and ongoing contributions of women in computing at Los Alamos.

A History of Building the Future

The 1970s brought many changes to Los Alamos. The Cray-1 revolutionized supercomputer performance and computer networking made the lab a smaller (and faster) place. Women stepped up to a growing number of roles in computing—from network technicians to group leaders—to make sure Los Alamos continued to set the pace in supercomputer technology and scientific research.



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Stockpile Stewardship gave new importance to supercomputer simulations at Los Alamos in the 1990s. Women played key roles in researching and evaluating new technologies (such as cluster computing) that would guide Los Alamos into the twenty-first century of supercomputing, and without the need for live weapons testing.



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A technical writer and editor who brought greater clarity and a wider understanding of LANL's scientific and technical research.

Kyle Wheeler first came to Los Alamos with her parents as an infant in 1953. Her father, Robert N. Thorn, occupied numerous leadership positions at the Lab from the 1950s, including the deputy directorship under Donald Kerr. Wheeler grew up in the town of Los Alamos, attending the local schools until she went to college at the University of Utah in Salt Lake City, where she majored in psychology and minored in English. After living in California for a few years, she returned to Los Alamos in 1978, where she joined the Lab doing publication layout work until becoming a technical writer/editor. She joined C Division as a writer/editor in 1983, where she edited articles for division personnel and compiled and edited

Ann Hayes ◀ 13 of 22 stories ▶ Debbie Ortiz

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Discover more below about the history and ongoing contributions of women in Los Alamos computing.

A History of Building the Future

Today, women are security experts protecting Los Alamos computer networks; they are computer scientists designing programs to combat climate change; they are systems analysts who keep the lab's supercomputers working to serve the national interest; they are experts who make Los Alamos make a difference. Much has changed at Los Alamos since human computers powered the Manhattan Project, but the legacy of women building the future through computing continues.



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