# Tektronix Honors Connie Wilson

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## Tektronix Celebrates International Women in Engineering Day By Recognizing Former Engineer Connie Wilson

Fueled by Curiosity and Determination, Self-taught Woman Engineer Led CRT Engineering Group – Tektronix Establishes Award Program in Her Honor

Tektronix is recognizing the accomplishments of former Tektronix engineer, Connie Wilson, who led the development of the cathode-ray tubes (CRT)\* used in early oscilloscopes in the 1960s during her time at the company from 1957 to 1974. The company is establishing the annual "Connie Wilson Award" to recognize those within Tektronix who raise the bar in engineering.

### by Aliza Scott — Connie's work involvement

Connie truly embodied the values of women in engineering. But she had a big hill to climb in that she came to the field with no engineering degree, not even a bachelor's degree in any subject. But in 1964 she helped build the oscilloscopes that became industry standards, and were critically important pieces of technology for Tektronix at the time; for Tektronix was doing battle for market share with Hewlett-Packard and its then-marquee product.



Connie left her mark at Tektronix as the former head of the CRT engineering group.

How Connie Wilson got to that point is a testament to her will and resolve. Connie, who grew up in Portland, had planned to get a biology degree at Portland State College (now PSU) and work as a laboratory technician. This was in the early 1950s. She lived at home and worked nights and weekends to pay for her education. But just as she was about to finish up, her parents moved to Missouri. With no place to live, she quit school and went to work. After working other jobs for a couple of years, in 1957 she landed a job at Tektronix' CRT Production's Gun Fabrication group.

Here was a woman who had studied human physiology, not physics and electrical systems. But she saw an opportunity and took it. She was a fast learner and within six months, she was transferred to what became CRT Engineering as a technician. Not long after, her supervisor promoted

her to project leader of the group that designed CRTs. Reporting to her were three engineers and two technicians.



Figure 4.56 Tektronix TS4 and electron guns (1966). (Couriesy of Tektronic, Inc.) Example of an electron gun used in the CRTs which Connie helped design

Her passion for learning served her well. The article said engineering was a specialized field, but "designing cathode-ray tubes (critical components of oscilloscopes) is even more specialized: no colleges graduate students as tube engineers. It has to be learned through curiosity, and experience on the job."

Connie Wilson had curiosity in abundance. She studied CRTs – how they work, what they could be used for and how to make them better and better.

Relaxing at the end of the day wasn't in her make-up, it seems. After work (her spare time) she was the manufacturer for Medical Instruments, Inc., which makes Shipps Automatic Injector for X-ray equipment. She built the electronic parts for the Injector.

#### **Amazing Athlete, Strong Community Connections**

She did find time to leave the lab and swim laps. And there, too, she was a winner. She helped build the Oregon Masters Swimming organization,

including serving on the Oregon LMSC (Local Masters Swimming Committee) and National-level committees. She won a silver medal in the 50-meter backstroke after cancer surgery in 1985 and was part of a winning Oregon relay team. She was preparing for nationals in Portland when she died of cancer in 1986.

She left Tektronix in 1974 to coach volleyball at Clackamas Community College and run the trailer park she had bought.

\*The **cathode ray tube** (**CRT**) is a <u>vacuum tube</u> that contains one or more <u>electron guns</u> and a <u>phosphorescent</u> screen, and is used to display images. It modulates, accelerates, and deflects electron beam(s) onto the screen to create the images. The images may represent electrical <u>waveforms</u> (<u>oscilloscope</u>), pictures (television, <u>computer monitor</u>), <u>radar</u> targets, or other phenomena. CRTs have also been <u>used as memory devices</u>, in which case the visible light emitted from the fluorescent material (if any) is not intended to have significant meaning to a visual observer (though the visible pattern on the tube face may cryptically represent the stored data).

#### by Sandi Rousseau — Connie's athletic involvement

I knew Connie for several years, for she was one of the two people who basically founded Oregon Masters Swimming. She was at the first organizational meeting in 1981 which I attended. Connie and Earl Walter ran what eventually became Oregon Masters Swimming before our formal organization formed. They wrote newsletters, organized Masters meets, and did all of the communication from their living rooms. I became the secretary of Oregon Masters Swimming at that organizational meeting, so I continued to work with Connie.

Oregon Masters hosted our first U.S. Masters Swimming National championship at Mt. Hood Community College in 1982 and Connie was involved in hosting that event, plus she swam in it. She attended the U.S. Aquatics Sports convention every year and was my mentor at my first convention in 1985. We roomed together there and it was at that convention that Connie told me she was having some abdominal discomfort. I am a nurse practitioner and advised her that she should get some evaluation when she returned home. That was when she was diagnosed with ovarian cancer. She continued to assist with

the organization of the 1986 National championships which we were again hosting at Mt. Hood Community College, but she died from that cancer the month prior to the event. So we dedicated that meet in her honor.

Connie was an intelligent lady. She was an engineer which was more unusual for a female in the 1970-1980s. My husband, Tom Rousseau, worked at Tektronix for 30 years from 1969-1999 as an electronics engineer, and also knew Connie, but never worked with her directly. He recalls that she was very well regarded by others.

I have attached a scanned article from our Aqua Master, the newsletter of Oregon Masters Swimming, dated August 1986. It has a tribute written by Earl Walter about Connie after she died. Oregon Masters established an award in Connie's honor named the Connie Wilson Memorial Award. It is awarded annually to a person who has demonstrated long time commitment and dedication to Oregon Masters Swimming. Earl Walter was the first recipient when awarded in 1987.

#### by Earl Walter — Tribute to Connie

It is a time to remember a great and fine person, whose happy smile plus infectious laugh made each and every day that much better, that much the greater, for Oregon Masters, and for everyone.

Connie Wilson, the founder and Chairman Emeritus of Oregon Masters Swimming, died on July 22<sup>nd</sup>,1986. She was in swimming and athletics from almost the day she was born. She was also a fine volleyball player and coach at Portland State, (PSU was then a powerhouse in women's volleyball), a gold medalist and National Champion in Masters Track and Field, a National Champion and Oregon's first All-American in Masters Swimming.

1986 was a difficult year for Connie. She was ill on and off, but still was willing and able to assist with the planning for the up-coming Long Course Championships at MHCC. In the water she was almost her old self, winning a silver medal in the backstroke at Nationals and swimming a leg on our Gold-medal women's medley relay team, also at Ft. Pierce.

Yes, a time to remember. When things were darkest for Oregon Masters Swimming, with only two or three dozen swimmers and all in disarray, she stepped into the breach. Connie's leadership was immediately evident. Masters Swimming in Oregon became alive and well.

I first met Connie in 1974 at the Association Championships in Beaverton. Masters Swimming was going well and growing by leaps and bounds. Connie single-handedly was building one of the finest Masters organizations in the country. I am happy to say that she asked me to join the team. She continued with unmatched energy to build Oregon Masters Swimming as well as Masters Swimming in the Northwest and across the country.

Connie went to almost every National U.S. Masters Convention, was selected by three national presidents to serve as a delegate at large. She turned over the reins in Oregon after building OMS into the sixth largest organization in the USA. As we all know, she did not stop there, but kept right on working, going to conventions, helping us get the Nationals in 1982, helping in all ways, including registration for a couple of years.

From the little girl who swam a mean backstroke for the MAC, to the fine person who helped us all in so many ways, yes, we will remember Connie Wilson, and we will miss her in so many, many ways.