Palo Alto Stanford Heritage (PAST), in cooperation with the Palo Alto Historical Association (PAHA), will host its 28th presentation of Centennial Plaques to owners of circa 1923 buildings in Palo Alto. This event was started in 1994 by the City of Palo Alto’s Historic Resources Board as part of Palo Alto’s Centennial celebration. The Plaques were presented to owners of buildings built in 1894 or earlier. In 1996, PAST decided to carry on the tradition by recognizing buildings built in 1895 and 1896. That year, the organization also presented its first Preservation Awards to recognize preservation projects that renovate, rehabilitate, or restore local historic buildings.

A popular feature of our yearly program is a presentation on a significant part of Palo Alto’s architectural history. This year’s speaker will be Steven Eichler, grandson of developer Joseph Eichler. The topic will be Eichler homes and the 70th anniversary of the National Register of Historic Places recognition of the Greenmeadow Eichler development in south Palo Alto. Designed by the firm of A. Quincy Jones and Frederick Emmons, the 243-house tract featured a central recreation area with a park and swimming pool. Street design allowed for many cul-de-sacs to provide privacy and a family-friendly atmosphere.

This year’s Preservation Award will honor the recent work done at Palo Alto High School. Additionally, two individuals will receive Lifetime Achievement Awards for their contributions to preserving the history of Palo Alto.

The mission of PAST Heritage is to promote the importance of preserving the historic architecture, neighborhoods, and character of greater Palo Alto and Stanford areas. This event is celebrated every May to mark National Trust for Historic Preservation’s Preservation Month. The theme for 2024 is “People Saving Places.”

We invite you to join PAST and PAHA as we celebrate the preservation of Palo Alto’s unique historic character.
Lee de Forest: Father of Radio
by PAHA board member, Bo Crane

A metallic sign once proclaimed the house on Channing Avenue at the corner of Emerson Street, “The Birthplace of Electronics.” The garage at 367 Addison Street, a quarter mile away, is now known as “The Birthplace of Silicon Valley.”

Lee de Forest was born in Council Bluffs, Iowa, in 1873. At Yale University, he became interested in radio waves and got his Ph.D. in physics in 1899. His De Forest Wireless Telegraph Company, formed in 1902, erected a 300-foot tower at the 1904 St. Louis World’s Fair, sending wireless messages as far as Chicago, earning the company contracts with the United States Navy.

In February 1906, at 33, Lee married a woman, age 20. The marriage was annulled by year’s end. Meanwhile, de Forest invented another system of wireless telegraphy, receiving a patent in January 1907 for his glass-tube device, the Audion, which amplified electrical signals.

In February 1908, he married a 25-year-old Cornell graduate who assisted in his lab but separated from him after their daughter was born in 1909.

Always pressed for funds, de Forest sold rights to his patents at a heavily discounted price to AT&T, eventually earning AT&T millions of dollars.

Broke at age 37 in 1910 and needing a job, de Forest contacted an assistant Stanford math professor who, along with others, had invested in Federal Telegraph Company. He joined their team, which was operating a wireless communication lab behind a house at 913 Emerson Street in Palo Alto.

While working at Federal, Lee created a triode vacuum tube that could amplify and oscillate radio waves to enhance voice transmission. De Forest received $50,000 for his invention and left Federal Telegraph and Palo Alto. At the end of 1912, Lee, who was almost 40, married an opera singer, age 21. They had two children.

In 1919, de Forest applied for a patent, contested by another, for a radio wave amplification process. Despite a patent lawsuit in process, he cashed in his radio earnings in 1923 and moved to Hollywood. DeForest PhonoFilms filmed a 1924 speech by Calvin Coolidge with sound. But the major studios blocked de Forest, and orders for the breakthrough went away. The Jazz Singer by Warner Bros. was released in 1927. In 1928, de Forest sold his company, which soon afterwards went bankrupt.

Divorced, he married a Hollywood actress in 1930 in Tijuana. Lee was 57, and his new wife was 29. In 1936, de Forest declared bankruptcy and began consulting. In 1938, the president of RCA called him the “father of radio.” That same year, Bill Hewlett and David Packard created their audio oscillator in the Addison Street garage.

Lee de Forest’s 1957 autobiography is entitled “Father of Radio.” In 1958, at age 83, he visited Palo Alto and was photographed admiring the “father of radio” metal sign. In 1960, Lee received an honorary Academy Award for lifetime achievement. He died in 1961 in Hollywood, leaving a bank account of $1,250.
The Federal Telegraph Company
by PAHA board member, Jon Kinyon

The Federal Telegraph Company, founded in Palo Alto in 1909, was the region’s first major high-technology firm. The synergy that developed between Stanford University, an entrepreneurial-minded graduate, venture capitalists, and, later, the United States military became the blueprint for Silicon Valley, which emerged in the late 1930s.

Federal’s founder, Cyril (Cy) Elwell, was born in Australia in 1884 to an American father and a German mother. In 1902, he emigrated to California to pursue a degree in electrical engineering at Stanford University. After completing his master’s degree, he was hired as an engineer for a power company.

In 1907, two investors in the McCarty Wireless Telephone Company of San Francisco enticed Elwell to evaluate the potential value of Francis J. McCarty's early wireless telephone patents. McCarty, a child prodigy inventor, had recently passed away after a horse-and-buggy accident at 17.

Stanford Trustee Timothy Hopkins permitted Elwell to conduct tests in the engineering lab over summer break. Cy strung antenna wire to the dome of the condemned library building, which was heavily damaged in the 1906 earthquake, and began experimenting. When Hopkins discovered that the equipment being tested wasn’t for wireless telegraph, as he had assumed, but rather for sending speech, he banished Elwell from the campus.

The San Francisco Call newspaper reported on the incident, revealing that Timothy Hopkins was a major stockholder and executive board member of the Pacific States telephone company, which was also attempting to perfect radiotelephony. Hopkins denied the inference.

Cy moved his operation to his Craftsman cottage in Palo Alto, converting the kitchen into a machine shop. He erected two 75-foot wooden masts in his yard at 1451 Cowper Street, near Embarcadero Road, and successfully transmitted signals between a similar installation five miles away in Los Altos. It was the first West Coast wireless telephone connection.

Elwell ultimately concluded that the McCarty system was unviable. But by then he was captivated by the potential of wireless communication and widely recognized as an expert in the field. He gathered investors (including Stanford faculty), purchased the U.S. patent rights to Danish inventor Valdemar Poulsen’s "arc converter" technology, and launched his own company.

Douglas M. Perham, a young self-taught Palo Alto machinist, was Elwell's first technician. His residence at 913 Emerson Street became Federal’s first research lab, where he built the company’s first arc transmitter and receiver in his home machine shop.

In 1910, Elwell publicly demonstrated two-way voice communication spanning 50 miles between Stockton and Sacramento, with stations in San Francisco and Palo Alto listening in. Financier Beach Thompson quickly arranged a buy-out, assuming the CEO role, forming a board of directors, and appointing Elwell as Chief Engineer—who then brought Lee de Forest on board.

Federal produced increasingly powerful arc transmitters and was the first to introduce wireless telegraph service for Pacific Coast businesses, establishing links throughout many western states.

In 1913, Cyril Elwell left the company he founded due to disagreements with Beach Thompson. However, he continued to work as a Poulsen arc-transmitter designer on both sides of the Atlantic, most notably for the French and Italian governments during World War I.

At the start of the war, the Navy Department asked the U.S. Congress for funds to purchase all of Federal Telegraph’s transmitter stations and patents. The request was denied; however, the Navy then found the money needed to make the purchase on its own.

In 1916, a large manufacturing plant was built on two acres of land extending from the railroad tracks to El Camino Real, just south of University Avenue. By the war’s end, Poulsen arc transmitters had been installed on countless warships, and 33 radio stations for trans-oceanic communications had been built in the United States, France, Panama, Hawaii, and the Philippines.

Federal was eventually acquired by the International Telegraph and Telephone Company (ITT) and continued as a subsidiary conducting research and manufacturing through World War II and into at least the 1950s.
**Spring Jaunts**

Be sure to visit NUMU—The New Museum Los Gatos—to view this years’ exhibit of art by local high school artists. The juried exhibition titled “Art Now 2024: In Transition,” is on display through June 30. The theme was developed by NUMU’s teen council, who publicized the 13th annual competition and encouraged their peers to participate. NUMU describes its mission: “...to engage community at the intersection of art, history, and education through innovative, locally connected and globally relevant exhibits, programs, and experiences.” More than 800 enthusiastic young artists submitted their work for judgment. NUMU is located 106 E. Main St, Los Gatos. It is open Fri – Sun, 10 am—4 pm. For more details and information, call 408-354-2646, or visit https://www.numulosgatos.org/artnow.

Bluff Trail was mentioned in a Punch Magazine article on “Hidden Gems”, featuring Fitzgerald Marine Reserve, part of an impressive array of parks in San Mateo County. The Reserve is a “beloved getaway” in Moss Beach teaming with, of course, marine life. In 2010, access was made available via the “bluff to beach” staircase. As this is pupping season for harbor seals, some beaches may be blocked off, so be sure to watch for signs before heading to the beaches. The reserve is located at 200 Nevada St, Moss Beach. For maps, information on trails, a brochure, self-guided tours, call 650-728-3584 or visit the website https://www.smcgov.org/parks/fitzgerald-marine-reserve.

A four-acre parcel of land in the larger Martial Cottle Park Demonstration Garden and Community Education Center showcases the agricultural heritage of Santa Clara County, including native plants vegetables, fruit trees, and much more. The Garden is free and open to the public Wed and Sat, 9 am – noon. It is located at 5283 Snell Ave, San Jose; there is a $6 parking fee. Ample educational signage throughout the parcel makes it easy to take yourself on a self-guided tour. Master Gardener volunteers are usually on hand to answer questions.

Visit the website https://mgsantaclara.ucanr.edu/demonstration-gardens/martial-cottle-park/ to learn about field trips, Garden Fairs, the “Seed Swap: Soil, Sow & Sip, sales, and other scheduled events.

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**In Memoriam**

Mel Froli
Patty McEwen

**Upcoming Program**

Wed. June 5–5pm-7pm
1940s "Victory Party"
El Palo Alto Room, Mitchell Park
Community Center

Unless otherwise noted, programs are held in person on the first Sunday of the months we present programs. Check our website at www.pahistory.org for program information.

**Previous PAHA Programs**

If you missed the March 10th program, Remarkable Histories: Women Who Changed Palo Alto, you can find it and other recent PAHA program videos on Vimeo by following this link: https://vimeo.com/932695533

**The Heritage Program**

You can also watch the most recent PAHA program on local TV. Visit https://midpenmedia.org/local-tv/ and enter the word “Heritage” in the search box to find the broadcast schedule for PAHA programs.

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