

# Jim Pollock, Part Two

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Benita Albert concludes yet another interesting story of an alumni of Oak Ridge Schools, Jim Pollock. Enjoy his adventures after leaving Oak Ridge.

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Jim Pollock left Oak Ridge in the fall of 1973 for university studies then on to amazing adventures in entrepreneurial engineering. Though he now claims to be in semi-retirement, his curiosity, inventiveness, and excitement for new challenges are still at full candle power. His university and professional careers are the subject of this second part of his story.

Jim applied to several university engineering programs and was accepted at most. However, his overnight fraternity visit to the Massachusetts Institute of Technology (MIT) sealed his decision. He had found a group of smart students of similar interests who have later proved to be lifelong friends. Enrolling in the electrical engineering program, Jim loved his classes in digital electronics, logic design, control theory, and signal systems, observing that, "Fourier Transforms became my academic and professional life."

It was his studies in control theory that Jim believes helped to secure his first job with Hewlett Packard in Atlanta. This four-year job tenure involved work in low frequency spectrum analysis via Fast Fourier Transforms.

Eight years after leaving Oak Ridge, Jim moved to Silicon Valley where he expanded his job resume to include mechanical dynamics and structural analysis. In the first of two start-up companies he wrote code, did hardware design, and developed marketing plans. In the second company Jim worked with a team developing computer applications to aid the design and simulation of flight control, missile guidance, and anti-lock brakes.

Eventually, Jim established his own start-up company in Dallas, Texas. This new venture was in online learning. He said, "My engineering training and Erma Neff's (9<sup>th</sup> grade JJHS teacher) writing foundation have allowed me to never be intimidated by change." Certainly, Jim has seen significant changes which he briefly cited as, "From Floppies, to CDs, to online streaming and having 500,000 times more storage in my pocket today than the Volkswagen-size IBM 1620 (at ORHS) in the early 1970s." Jim further opined that his journey through innumerable changes and growth models reflects a current necessity, namely that, "Society must embrace constant incremental learning."

Choosing the mountains of Colorado as his most recent home, Jim has created another online learning start-up enterprise as well as managed start-up accelerator programs for early stage companies via the Colorado Technical Engineering Incubator (CTEK). CTEK helps early stage companies develop their business and financial plans as well as pitch for financial support.

His Colorado homestead has brought out the farmer in Jim. He has grown a few acres of hemp, and he has become interested in agricultural technology. A CTEK spin-off, aWHERE, provides a high-resolution weather data base to farmers in the USA, Africa, and South Asia. Further provisions of this new technology include customized advice on such as: crop modeling, planting guidelines, pest control measures, and predictive recommendations. A website summary of aWHERE's continued missions reads, "...helping feed the world one insight at a time."

Recently, Jim has been advising several start-ups one of which he describes as: "A company that is using blockchain to track agricultural sequestration and allow corporations and individuals to buy carbon offsets to reduce their personal carbon footprint." He is delighted to report, "They successfully 'sold' 100,000 tons of carbon pulled out of the atmosphere by regenerative farm practices on farms in Maryland this summer." This was accomplished through a collaboration between the TechStars Start-up Accelerator Program and The Nature Conservancy.

His work includes mentoring, the latest with a young man from Nigeria who is working at the Watson Institute in Boulder, CO. The intern is involved in a three-month program which supports start-ups globally, namely project proposals of important societal impact. His mentee, Joshua, is working on a start-up that Jim describes as, "A partnership with Nigerian and global companies to supply backpacks, with solar panels Joshua designed, to Nigerian school children so that they have a way to carry books to and from school while charging an integrated battery to power an LED lamp for studying at night."

As if all of the above would not consume the twenty-four hours of his day, Jim enthused over his assignment to a 10-person team at the University of Colorado Tech Transfer Office that is reviewing patent-sets for commercial viability. He

said, “The goal is for several of us to take a few (of the proposals) and create start-ups to exploit them. The cool ones—in my book—include a passive microwave sensor (looks like a puck) that can measure core temperature of the body to 0.1 degree Kelvin (no way to do this now), a ‘SickStick’ that you spit on and will show if you might get sick several days before you feel any symptom (important for military and special ops teams), a method for wirelessly charging electric vehicles and factory robots while they drive down the road or warehouse, and a LiDAR (Laser Radar) ranging sensor that is the size of your thumb and costs less than \$100 compared to ones costing \$15,000 to \$75,000 used on autonomous vehicle prototypes today.”

Jim claims to be in semi-retirement, but his creative mind is obviously still spinning and contributing. He has organized a Colorado MIT alumni group. As a part of his participation in Big Brothers Big Sisters of America, Jim is currently enjoying the time he spends with his fifth “Little Brother.” He values and supports the legal accomplishments of his wife, Laura Lichter, who is the past president of the 14,000 member American Immigration Law Association. Jim proudly asserts, “Laura is one of THE top immigration lawyers in the country.”

In a recent email, Jim wrote, “Life is too short. Too many ideas! Too little time.” I have no doubt that Jim will continue to think, dream, and influence future scientific advancements. His mind is wide open, his heart prioritizes societal welfare solutions and advocacy, and his spirit thrives on new challenges. Oak Ridgers should be very proud of Jim Pollock, our native son.

Conversely, Jim treasures his memories of his “secret city” roots and the influences that shaped his life.

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Wow, “Life is too short. Too many ideas! Too little time,” what an amazing outlook! Thank you, Benita Albert for yet another truly amazing look at a most successful product of Oak Ridge Schools!



Jim Pollock when he was a Freshman at MIT



Jim Pollock skating with his 5<sup>th</sup> "little brother," Jeff



Jim and his wife, Laura with his lovely wife Laura Lichter, whom he says is, "one of THE top immigration lawyers in the country"





Jim Pollock



Jim sitting on a 1948 Ford Tractor... "THE most fun you can have at 4 mph"