A Very Brief History of My Life H. Tracy Hall

Some of my pioneer progenitors were polygamous members of the Church of Jesus Christ of Latter Day Saints, which included my grandfather and grandmother. They came across the plains with the great western movement of these pioneers.

My father, Howard Hall, was a non-member of the church but was converted by my mother, Florence Tracy Hall. Early on my parents began to call me Tracy and I have used my formal name as H Tracy Hall. My Grandfather, Henry C. Hall began working on the railroad at an early age and the tradition carried on for a long time for three generations.

I was born on October 20, 1919, in Ogden Utah. I have four brothers, Eugene, Wendell, Donald and Delbert. Mother never had any daughters. My brothers and I all had an interest in becoming educated persons. Eugene became a respected Pharmacist. Wendell became a university professor specializing in languages. Delbert joined the Air Force and became an important officer in his career. All of us took part in World War II. Wendell had the most combat on the German lines but came through alive. I was interested in science and technology at a very early age.

While in the fourth grade in the Marriott School, our teacher asked each member of the class what they wanted to do when they grew up. I told her that I wanted to be a scientist at the General Electric Company. I was only able to say that because I had read about Thomas Edison and other Scientists at the Carnegie Public Library.

My early life from seven to 12 was in the small farming community of Marriott. I had to walk five miles along the Southern Pacific Railroad to get to the library. My father and I or my mother and I would pull a little red wagon to Ogden City to buy groceries once a week. In the winter we pulled a sleigh. While they did that, I picked out the books concerning scientific things when we arrived home.

I am very grateful that my goal of becoming a scientist came at such an early age.

There was a lot of work on the farm, particularly picking beans and other vegetables. We had fun on the farm. The old swimming hole was located in Mill Creek at the north end of the farm. Boys always swam naked and no girls were allowed to be around.

At the farm, I built electric motors, crystal radios, magnets, and telephones, and made microphones and other things electrical and mechanical.

My mother recognized my interest in machines and would even let me take her sewing machine apart and put it back together. I appreciated mechanical instruments and managed to earn enough money to buy soldering irons, wrenches and other tools.

A great source of "goodies" was the slot machines and other gambling devices that the sheriffs would dump off at the bottom of 12^{th} Street and bust everything up with sledge hammers.

A new period in my life began when my parents moved from Marriott to Ogden, Utah. It was depression time at the farm and my parents were unable to make the payments on the farm and lost it all. It is hard for people of this day to even begin to know the tragedies that were occurring at this time. Our family did not have enough to eat. That's hard to believe but it is true. In particular, we did not have oranges and other foods that growing young boys should have had.

We moved to 664 30th Street in Ogden into a very dilapidated house that cost eight dollars a month for rent.

I graduated from Ogden High School in 1937 and was in the ROTC. I chose to do this because it gave me something free to wear. We did not have to buy any other clothes. I always took the difficult subjects, math through calculus, chemistry and physics. I also liked the subject of drafting and studied that for one year. I took this to help me learn how to picture things in my mind.

I did not do well in English, but in later life overcame the problem.

After high school, I took advantage of going to Weber College. There I continued my favorite subjects of math, chemistry, physics and geology. I did not like biology and cutting up dead frogs.

I need to back track a little before I get ahead of my story. We had a piano in our first home located at 16th Street and Jefferson Avenue. A neighbor lady named June taught me how to play a little. My first piece was "Skaters Waltz."

Later on a professional musician named Glen Salter game me piano lessons without charge. As time went on, he helped us form a dance band. Dancing was popular at that time. Eventually, I became the director of the band that was named the Hi-Hatters. We played at LDS-MIA dances all over Ogden Valley. Dances would usually last from nine PM to midnight but often much later. Now at the same time that I was working in the band, I had a janitorial job at Weber College. My job started at four AM and lasted until seven AM.

This was more than I could handle and I almost had a nervous breakdown for the lack of sleep. So I reluctantly turned the band over to our trumpet player, Prentice Agee.

Another thing that I was doing was developing pictures for my friends. I had a long time interest in the subject and finally got a job with a professional photographer. I held this job for a couple of years making 12 dollars per week.

By now, it was time to go to Salt Lake City at the University of Utah to continue my education. About this time, I was falling in love with a very choice girl named Ida-Rose Langford.

I had a very good friend named Frank Davis. He had a job at the Sperry Flour Mills located at the foot of 30th Street in Ogden. By now I was quite knowledgeable in chemistry and he relinquished his job to me. Then he got a better job at the US Bureau of Mines in Salt Lake City, Utah.

Ida-Rose and I were married on September 24, 1941 in the Salt Lake Temple. Our first apartment was in a small, private living space in a heated area, but the sleeping space was in an outdoor screened-in area. We had to take a hot water bottle to bed to get some warmth. We shared the kitchen with all the other dwellers in this place where we enjoyed the company of many fine friends. Later, we had an apartment of our own nearby and had our first child, a girl, and named her Sherlene.

I continued my studies in chemistry and physics at the University of Utah where I obtained a Masters Degree. My friend, Frank Davis, was now at the U.S. Bureau of Mines and had obtained a job for me there.

It was here that we first parted. The U.S. Navy was responsible for that and I was sent to the Great Lakes Naval Training School. At first, I was Seaman First Class but later was commissioned as an Ensign.

Later on, I took an exam that qualified me to begin training in Radar and Electronics. I spent about six months at Bowdoin College and later six months of intensive training in more advanced studies at MIT and Harvard. Then, I had a ship but never was in combat. When the war was over, I went back to my studies and obtained a doctorate degree in Chemistry and Physics.

Then it was time to start looking for a job. I interviewed at several places including Kodak, National Carbon, Dupont and GE. I chose GE and they accepted me.

My boyhood hero, Thomas Edison, had his first machine shop on the banks of the Mohawk River and now I was working in that very area! I first worked on problems of creating better insulating materials for coating wires. Later, I had an opportunity to work on a project to make diamond from graphite. To make a long story short, I invented a device that would create pressures never before created by man. It also, at the same time, would heat the inside of this device to a temperature that would melt iron. I named this device "The Belt."

On December 16, 1954, I succeeded in transforming ordinary graphite into diamond. Many scientists over a period of 140 years had attempted to accomplish this.

General Electric now produces hundreds of tons of diamond in my machine.

GE did not live up to my expectations of this accomplishment. I thought that they should have pushed ahead to get the Nobel Prize for me. So I quit them and took a job at Brigham Young University where I held the positions of Professor of Chemistry and Director of Scientific Research and Creative Endeavor.

I am now retired. We have seven wonderful children: two sons and five daughters. We also have 36 grand children and 9 great grand children. I still keep my hand in science and, for recreation I have created a tree farm that is located in Payson, Utah. That gives me plenty of exercise to stay in shape.

I love my wife dearly and pray that we may have the opportunity to live the rest of our lives to the fullest.