

Tollestrup, A. Kurt

Subject: Remembering My Father Alvin Tollestrup

I am Alvin Kurt Tollestrup, son of Alvin Virgil Tollestrup, but if you ever met me I would say “Hi, I’m Kurt”. You see my parents never intended to call me by my first name - they liked Kurt - but did not want my initials to spell KAT. Regrettably, as a shy child, the first day of school was always filled with angst as the teacher called “Alvin Tollestrup” and I had to ask that I be called by my middle name Kurt. Unfortunately kids were more familiar with the cartoon show “Alvin and the Chipmunks” (which caused great laughter) than they would ever be regarding the impressive science research that a real “Alvin” was doing at Caltech.

From a young age, I loved working side-by-side with my father. Our greatest weekend treat was having our dad take us to the Synchrotron Lab at Caltech where we would work on some project in the machine shop or dis-assemble circuit boards in order to recycle electronic parts. My favorite toy was constructed there. It was a 4x6 inch array of 1/8 inch axles and various brass sheave wheels that could be treated as a sort of transmission for various toys. My father carefully instructed me on how to place brass rods in the lathe and “turn a V groove” of the right width so that a rubber band could be used as a “V-belt”. I remember him commenting how much he enjoyed the “feel” of the tool bit “biting” into brass as opposed cutting into aluminum or steel – there is a difference that I can still remember today.

For years, I would arrange and re-arrange those various sheave wheels and belts which I connected to a miniature electric motors to make cranes and teleferiques. I still have that toy after 60 years – I had hoped that my own children would come to love it in the same way – but it remains in my closet because I feared they would take it apart, lose all the components and scatter the memories that I had so strongly attached to it. Perhaps someday I will gain the courage to gift that special item to a grand-child instead – but it seems few children play that way anymore.

The skills my brothers and I learned at my Father’s side in the machine shops were always associated with stories and comments about the importance of “old world’s craftsmanship”. This valuable concept was one he learned from his dad, Albert Virgil Tollestrup, who was an architect and home-remodeler long before it became a TV series genre. My father always expressed great respect for the skills and talents of people who fabricated things using tools and their hands.

Those same skills were important to me in my twenties as they enabled me to get summer jobs fabricating 10 meter diameter radio telescopes, working in geo-chronology and rock analysis labs and assembling instrumentation on General Atomics’ Doublet III tokamak. Although I have worked as a geologist and geophysicist exploring and producing energy minerals (uranium, coal and oil/gas) for 42 years, I also take great pride that I have measured natural phenomena from the scale of the atomic to the wellbore and from the outcrop to the cratonic. I think my father had that same love of measurement – trying to understand what the numbers are saying about natural processes.

The great joy I shared working with my father never ceased even as we both grew older and my children left for college. Whenever I visited, both of us looked forward to tackling some sort of project and in fact I think he always kept a spare project or two in the back of his mind for such occasions. The projects always seemed to have familiar format of examining the problem, formulating some solutions, hunting for parts and materials at the hardware store, sharing tasks to build something and then trying to finish everything before I had to leave. One of our favorite “code” words to use during these projects was the word “concept” – which could mean either the description of the problem or the description of the solution or just about anything if we were tired. Sharing a cold beer at the end of a long day was often a great “concept”.

Over the years I have met many of my father’s colleagues and I have often heard how much they enjoyed working with him. I know this joy well and it will be one of the things that I and perhaps many others will miss the most. Surely I can say that my dad was a father, a friend and a scientific colleague molded in the tradition of the finest “old world’s craftsmanship”.

Love you dad – be good. Kurt