

## The Ed Tilford Coincidence X 2 or 3 or 4

Back in the late-80s, I was returning from somewhere – Blue Bell or Boston. I was walking down the aisle of the crowded plane when someone called my name. There on an aisle seat was Bill Kylander. For the academic year of 1969-70, he and I team-taught eighth grade math at Highland Junior High in St. Paul. He and I saw each other last in June, 1970. What a surprise! We found a place to talk and found out more surprising things.

Way back in the spring of 1970, Bill came to me one day and said he had something he wanted to tell me. He had just got engaged to be married in the summer. Surprisingly, I had not had an opportunity to tell him that I too would be getting married in July. So that was the first of twist of fate.

I can't remember where Bill went to be married. I believe Barb and I went to a party for him, but I do not remember his wedding.

Now about fifteen years later, Bill had called out to me and presented me with another coincidence. Consider first that I was flying back from out east (probably from Intermetrics in Boston) as I finished a week of teaching software for my employer Sperry. Further I had had no contact with Kylander after early summer of 1970. To my surprise, Bill had left teaching in the mid-1970s to work for Sperry! I had done so in 1979. That period of the 70s was a fantastic period of the explosion of the computer industry. As I recall, my classes for Sperry trained adults who were enthusiastically changing careers. One notable example was a stockbroker who became a highly-respected member of our operating system group.

Bill was flying home from his most recent assignment in Canada where he was working on the Canadian Frigate Project. Sperry's defense branch centered in Eagan did a lot of work in the development of ruggedized shipboard computers – known as the AN/UYK-20 or "Yuck 20." Bill was in transition from being 2<sup>nd</sup> in command in the Canadian group to the head man. His boss was being "kicked upstairs" to become a director, if not **the** director, of Sperry Defense in Eagan. Bill said his boss's name was Ed Tilford.

Well, I believe I was currently involved in the commercial side of the Ada Project. The defense side and the commercial side of Sperry had come together in a rather shaky union to build an Ada compiler for the U.S. Dept. of Defense (DoD). The defense side of Sperry held the strings and connection with the DoD; but the commercial side had the computer expertise for Sperry's commercial commuters (Sperry 1100 machines). When the Ada compiler was complete, Sperry would get a huge Air Force contract for machines that would run the compiler and Sperry's commercial side would productize the compiler for their commercial clients. (This Ada compiler was on the cusp of a change in the computer industry. Software was no longer going to be locked into company specific mainframes. The PC had arrived. For a short period, all mainframe companies had their own PCs, but soon PCs got fairly standardized. Bye, bye mainframe. Bye, bye proprietary software.)

My work for Sperry's commercial side of Ada came along with a weekly meeting in Eagan. Jerry Brown and I – and eventually just I -- would attend a round-table with probably 6 or so defense side persons.

Names I remember are a woman manager named Pat Eddy, Dr. Joe Cross, a lawyer(?), and Bill Tighes. Paul Wood was the director in command. He ran the meetings.

Shortly after the Bill Kylander reunion, a situation arose where I represented our Sperry commercial side in a meeting run by Ed Tilford in the big Sperry Defense plant in Eagan. I don't remember the content of the meeting, but I was able to introduce myself to Ed after the meeting. I told him of my relationship with Bill Kylander. We were on friendly terms from then on.

I believe I met with Ed at least once after that in the early 90s before Ada was completed. Sperry – now called Unisys – got that huge Air Force contract. Sales of Ada never took off. In the early 90s, compilers like C and C++ became cheaper, smaller, and still acceptable by the DoD for military purposes.

Mahlon Randall who had my director all the way through the Ada work also became acquainted with Mr. Tilford. Ed retired from Unisys and started his only consulting company specializing in project planning. Mahlon had even left Unisys for Medtronics but returned in about 6 months thanks to VP Dick Ulmer who saved a directorship for him. Fortunate for me, too. I was without a project and looking for a new slot. Voila, Mahlon showed up in my office and offer to take me on as a program manager. I jumped at it even though I knew that one should never be a direct-report to a director. The program manager proved to be easy to eliminate in a company reorganization. [In fact, I had the job of making myself a “line-item” in a budget later near 1994.]

It was a great one to two years working for Mahlon. Project planning was an important feature of our jobs. As program managers, we drew together all the managers of groups whose software affected an area like Security. So a delivery of Security software required the coordinating of several different departments in order to get their pieces done and tested by some date. Mahlon and I used Ed Tilford as a resource as we explored our new capacity. I remember attending one of Ed's evening presentations in a library off of Como Ave. in St. Paul. Eventually, Mahlon signed himself and I up for a course of three or four days taught by Ed. It was a very meaty course – much more than what I had expected. Planning I feared was going to be something like education type material. But to my surprise, there were parameters and other numerical events that would be trackable. Progress could be tracked.

More important, back in our Roseville offices, we had a new software tool for project planning running on our PCs. In the evenings of the course, I studied that software tool's manual and found those same parameters which Ed was discussing in class!! (Ed was not acquainted with our tool. We had been very fortunate to have chosen it. It was not a Microsoft product.) Even by the end of class, I was beginning to design how the software could be used with our departments. (After it was used for several months, the system I designed was actually adopted as a Unisys standard – for what that was worth. I don't know what became of it after I left Unisys. A new software tool by Microsoft probably supplanted it.)

So on the last day, we were anxious to get Ed aware of our interest and possible continued affiliation. Mahlon invited Ed to join us for a beer and Ed accepted. This was quite a unique occasion. Socializing in that way. But we settled down for our one beer and I suppose the conversation centered on our future use of Ed's method for tracking progress. Eventually, Ed made an offhand comment about one of his teachers in graduate school. That prof would come in, write down and explain some axioms or

theorems and then assign some exercises. He put his students on their honor to make use of no text book. Hum. That sounded like my Dr. Younglove at Missouri. Younglove was a student of Dr. Moore of the University of Texas. So I brought that up. “Ed, that sounds like your prof was following the lead of Dr. Moore from the University of Texas. Where did you go to school?” He answered that he had gone to the University of Missouri. “Missouri!! What years?” Ed replied, “1960 to 1962”.

How does the brain work? At that instant, dots that I didn’t even conceive of got connected. I almost shouted in recognition, “Ed Tilford!!!” I had begun Missouri in 1961 and shared an office over with the second year grad students. Next to my office was the home base for **Ed Tilford** and Jim England. Unbelievable! We did not take any classes together, but we were both all good friends. We both had the good fortune to be students of Dr. Younglove in topology in different years. [Younglove was the chairman of my orals committee. The orals were on a very stormy morning. Just as the first question was asked – prove the Bolzano-Weierstass theorem – an easy one, there was a flash of lighting followed immediately with a booming clap of thunder. Younglove looked up and out the window and said, “I guess He did not like that question.” That was the perfect thing to relax me.] However, in those several years from the time of hearing Ed’s name on that plane until that moment, my former experience with Ed was completely forgotten. Maybe my coincidental meeting with Bill Kylander who now worked for Unisys dulled me to the possibility that any other connections might occur. Granted this was at least 25 years.

So since this occasion, when people tell their Its-a-small-world tales, I sit back and feel like they haven’t heard the best one.



This is where I knew Ed in 1961-62.

It is Switzler Hall, the oldest building on the campus of the University of Missouri.

See the windows on the second floor. Count 5 windows to the right. Behind the tree are those last two windows. Ed and Jim had the corner window and Steve and I had that 5<sup>th</sup> window. There were no screens when it got hot so mud-dabbers could fly in and make nests under your desk.



During the warm spring weather of 1962, I could sit on the big concrete window sill and study differential geometry for my class from L. M. Blumenthal.

Let's not forget the evening when I entered the office and flipped on the light. There was a flash and I watched the main light globe fall from the high ceiling and explode into a million pieces on the floor. That office had real class.

In the back of this old building was a wooden spiral staircase. It is gone now. The entire building was completely gutted for a recent renovation. No more squeaky hardwood floors.

Now some department chairman occupies the corner of the second floor. Only pictures hanging on the walls will show what would be remembered. Pictures that would be taken down and lost eventually. One shot that I saw was a picture from inside Switzler that showed the bare

inside walls of the floorless building illuminated by light from the empty window openings. Pictures on the wall of that spiral staircase seemed to be paintings from a contest painted by people that didn't know what the spiral staircase looked like. However, maybe I don't remember myself. I am adding my poor photo so that at least we can remember there was a curvy staircase -- however curvy it was.