IT Legacy Project Paper

FRANK LAPINSKI

By Harry Goldbacher [UNIVAC 1965 -> LMCO 2007]

Frank was demanding, impatient, intellectually restless, and creative. He grew up in a working-class neighborhood of North Philly, went to Simon Gratz High School, and graduated from Penn's Moore School of Engineering with a double major – electrical and mechanical engineering; I think he graduated first in his class. He was also a PE and knew Grace Hopper personally. He was my mentor.

Although he talked frequently about his education and professional career, he avoided his larger accomplishments; he preferred a more humble image, but his intelligence and professional provess, though he tried, were difficult to conceal.

Frank was not very much my senior, only eleven years, but by his mid-thirties he had achieved Sperry's highest non-management professional grade, *Senior Professional Consultant*. He resisted going into management because he preferred doing "useful" things, instead of "pushing papers, babysitting, and going to meetings." (Group belches, he called them.)

His foresight was astonishing. In the early 1970's, before PC and internet technologies began to emerge, he lectured, with no small amount of passion, "Harry, the future is in small machines. These big old fat-ass things are going to die soon. Everyone is going to have their own computer on their desk at work and on their kitchen table at home. They will all be connected – you will see. You have to learn about this. It is the future. Small machines, Harry; small machines are the future."

I confess I did not understand the profundity of his advice; I could not imagine that those awesome mainframes like our lab's flashing 418-III, its huge humming FASTRAND, its wall of whirling tapes, and dogmatic 30 wpm TTY would ever perish. I knew nothing of terabyte storage devices, servers and clients, or wireless computers, most small enough to put under one arm or even in your pocket. Few of us did, but Frank anticipated these years before they became realities.

From my work on the plated wire memory, I had already known Frank for a couple of years when I joined AMT, *Advanced Manufacturing Technology*, later to become *Advanced Test and Manufacturing Technology*. He was the lead for most activities in this group of about fifteen and left management details to George [Fedde]. This freed him for *"useful work*." Frank delegated my tasks.

The first thing he assigned me was a design verification routine, a software tool intended to confirm that a hardware device was operating as designed; in lay terms of the period, by fooling it (?) into thinking (??) it was running in a real environment when it was actually being tested.



I understood what he wanted but did not have a clue how to do it. He knew this but he also knew that if I spent some time figuring out what I already knew, what I did not know, and what I actually needed to do, I would probably be ok. I struggled a bit but managed to achieve what he expected.

Frank knew my capabilities better than I did and each subsequent assignment was just a little beyond my scope at the time, but doable if I pushed my personal envelope hard enough. That was his objective: to push me a little past my ability; make me stand on my tiptoes to stretch for a goal still an inch out of reach. He was a master of this mentoring technique.

Though demanding, impatient, and critical, Frank was always available. He spent hours a week wringing out of me knowledge that I did not realize I had; he was teaching me self-awareness through self-teaching. He insisted that if I could understand the requirements of a task and separate what I knew from what I did not, I would have done most of the work. "Don't get intellectually humiliated," he would encourage. "Be patient with things you don't understand or you'll never understand them. Most of our knowledge in this business is by trial and error anyway, so do not dwell on mistakes; use them as learning tools then let them go. Mistakes are throwaway tools."

He let me struggle most of the time but I knew that he was always there to pull me out if I started to fail too badly. He insisted that I did not have to know everything or even a lot - only <u>how</u> to learn.

I had the good fortune in my early Univac career to have worked for, or around, some of the brightest folks I have ever known: Herman Lukoff [whom everyone knows], who had an office down the E-8 hall in Blue Bell; Joe Mathias, who hired me; Tom Sharp to whom I directly reported for about two years; Bill Doyle, Norm Goldberg, Bill Flannery, and their staffs who also, because of her terrible shyness, incessantly teased their secretary, my future wife, Diane.

There were a number of others; even Pres Eckert once visited the lab to see the first manufacturing prototype wire plater. Their backgrounds and achievements humbled me; I was a junior member of this group, in age, experience, and knowledge, and they all played a role in my learning experience, but none spent the thousands of hours with me that Frank did. I worked directly for him for eight years.

Frank made me aware of what I knew and what I did not; what I had the ability to do; and what was beyond my capability. In short, he helped me achieve professional self-realization, and I think my personal assessment is correct: I am aware of my knowledge base and performance potentials; and their limitations. I am neither ashamed nor intimidated by things I cannot do or do not understand, but I do not think I am over-confident or pretentious. I do not find the need to ask a question embarrassing.



I am not in the upper portion of any curve I know of but I am ok with that. I have learned to be satisfied with my accomplishments and accepting of my failures, and Frank was the cultivator of this attitude, teaching me something difficult to teach and difficult to achieve – <u>honest</u> self-realization.

In 2007 I retired from Lockheed Martin's Air Traffic Management Program (LMTSS), concluding a rewarding forty-two years at Univac and its heritage. I also had a short, two year, re-hired career at The Children's Hospital Of Philadelphia on their Biostatistics and Data Management team. Like everyone else, I made my share of mistakes and bad decisions, but can say in all candor that most of my successes, especially the larger ones, were a direct result of Frank's mentoring. My gratitude to him is incalculable.

On meetings: "If you can't bring something useful to the table or leave with something you didn't have when you came in, you don't belong in there."

On deadlines: "Slow down and you'll get done sooner."

On the future: "Small machines. The future is in small machines."

- F. A. Lapinski (04/08/31 – 11/26/07)

