

Mayer Schwartz: 'Not enough time'

By KEN CUSHMAN

(Editor's note: This interview is one of a series with Tek's chief engineers and scientists. The Chief Engineer/Scientist designation represents the highest level in Tek's six-step career path for engineers and scientists.)

Mayer Schwartz needs more time in the day. "There just isn't enough time to do all the things I'd like to accomplish," he says.

Like what, for instance?

"Aside from my job in Tek Labs, which I enjoy very much, I would like to run at least an hour a day, rain or shine. I also enjoy cooking, listening to classical music, camping and traveling. And then I've had this craving to make a model ship of museum quality, a desire I've had since I was about ten years old."

So Mayer the runner has become Mayer the model shipbuilder. This happened about two and a half years ago when he decided it's now or never to build a model of a World War II destroyer, the U.S.S. Hazelwood. It's a project that started from absolute scratch, and has required the use of copies of the original blueprints for exact measurements. The scale is 16 feet to the inch, so the finished ship, with hull of basswood, will be about 23½ inches long.

Mayer thinks the ship will be finished by the end of the year, but he won't mind if it isn't.

Mayer came to Tek in 1977, after earning his Ph.D. degree in computer science at Purdue University. "I chose Tek because it had (and still has) a reputation for quality, and I wanted to live in the Pacific Northwest."

His role at Tek is basically applied research. His specialties are programming environments and software development; in other words, developing tools for other software engineers. He looks on his function as bridging the gap between basic research and product development.

"That's what makes my job exciting. Not only do I have to keep up my contacts in the research community, but I also must be aware of what Tek's technology needs are, ranging from basic research (although not many of us do that) to more advanced product development."

Mayer sees his role as looking, watching, "seeing what technologies are out there." He needs to be aware of them, to see which ones could have the most use, and then develop those technologies so they can be transferred.

"My emphasis is on technology that can be turned into products, although there is a secondary emphasis on technology that can be used by Tektronix to develop its own products. At the moment, my work is with the Computer Aided Software (CASE) Division."

Mayer's childhood was hardly that of an average American kid. As the son of a professor of theoretical physics at the University of Arkansas, he was removed from the peaceful city of Fayetteville at the age of 10 when his father accepted a year-long teaching assignment in Israel.

At least it was supposed to have been a year.

The time was 1956, and they arrived in Haifa just a month before the start of the Suez War. Obviously, this was no place for an American couple with a ten-year-old boy and his five-year-old brother; so the Schwartz family was evacuated by the U.S. Navy and they went to Switzerland until they received permission to return.

"If nothing else, this period of my life was intense as a language-learning experience. My parents had tutored me in Hebrew before leaving the U.S., so I was prepared for schooling in Israel. But in the Swiss schools, German was the main language. Fortunately, my parents made a deal with the Swiss school authorities to teach me at home."

In the following spring, the Schwartz family returned to Israel to fulfill his father's teaching contract at the Technion, and Mayer attended classes in an elementary school.

"My best friend in Israel was from the Belgian Congo, and he spoke French. So, you see, I had a lot of exposure to languages."

Returning to Arkansas in 1958, Mayer resumed his elementary and secondary education in Fayetteville. Here's where computers entered his life.

"When I was a junior in high school, one of my father's graduate students saw my interest in math, and he introduced me to programming. We worked on the university's IBM 650, the earliest commercial machine that IBM made. It really filled the room, it was so big."

After Mayer completed high school, the family headed for California, his father to be on sabbatical at Stanford and Mayer to enroll at the University of California, Berkeley.

"That was the 1964-65 academic year, the onset



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of the campus turmoil at Berkeley."

Mayer completed his freshman year at Cal, winning an Edward Frank Kraft Prize for a high scholastic record in the first semester, then returned to Fayetteville and the University of Arkansas to complete his undergraduate studies.

"Berkeley living expenses were high, and I moved home to save money."

"My one mistake at Berkeley was to register for the draft; I should have waited until I had returned to Arkansas. I found the draft board in Berkeley very aggressive in filling its quotas, and several times I had to convince them of my student status."

The University of Arkansas awarded Mayer the bachelor of arts degree in mathematics with high honors in 1968. With the draft board still breathing down his neck, Mayer chose to join the Navy. After officer candidate school and completing the meteorology program at the naval Postgraduate School in Monterey, California, he shipped out to Guam, where he spent the next two years as a

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weather programmer, followed by a year and a half back in Monterey.

"My Navy experience wasn't all that bad. I got married in Monterey before going to Guam, and we were fortunate to be able to spend time in Japan, Malaysia, Taiwan and Thailand. Once we took the train from Bangkok to Singapore and back."

Upon discharge from the Navy, Mayer took up graduate studies at Purdue, earning the Ph.D. in computer science in 1977. In choosing a career, he looked at jobs in teaching and industry. That quandary was settled when he came to Tek for an interview, received a job offer, and accepted.

"Tek was the only purely industrial company that I interviewed with. It was a hard choice. I came here because I was impressed with the Pacific Northwest, and with the attitude at Tektronix. Even as a math major in my undergraduate days, I had heard of Tek scopes. I knew that Tek had a good reputation for building high quality equipment."

That doesn't mean he gave up on teaching. In his nine years at Tek, Mayer has taught computer classes at the Oregon Graduate Center and Oregon State University, and has spoken at many univer-

sities and government agencies on such topics as programming environments, hypertext, and software development environments.

As a matter of fact, OGC honored Mayer two years ago by awarding him the Distinguished Teaching Award for adjunct faculty.

"I enjoy working for Tek for a variety of reasons. First, I enjoy the freedom that I have. Obviously, with that comes the responsibility. It's the freedom to do the research that I think is best. You're judged on what you do."

"What counts is the results, not your background, who you know, or what your life style is. Tek not only says that, but as far as I'm concerned, they live up to it."

Mayer described Tek as a "fairly democratic bottom-up kind of company. We don't have edicts from above that say you will do this or you won't do that."

There is a downside to this enthusiasm, however. "As in any democracy, people feel like they have a lot to say, they feel good about it, and they feel like they're being listened to, but decisions sometimes take a little long."

"So sometimes Tek is criticized for taking its time. You could argue that quite a bit of this is because of the company's size and bureaucracy. I'm glad to say, however, that Tek has done a lot to eliminate the bureaucracy."

But doesn't it take time to reach a consensus?

"Of course, and I think that's healthy. That means people feel good about the company, and they feel that their input will be heard."

"The continued support that the company gives to the research labs, even in tough times, indicates long term commitment. Tek is not just interested in the short term, as many companies are. As an employee, that makes you feel good."

Mayer admits to being his own worst critic. "I know my failures better than anybody else does, and I'm harshest on myself. In the same way, from within the company things look pretty bad sometimes, but you know that this goes on everywhere."

"In my type of work you have to have an open environment, one in which you can ask questions, have an intellectual debate or discussion, and in which you are given a large amount of freedom. The time span in which you will know whether or not what you did has long term impact sometimes is fairly lengthy."

"I've been here a little over nine years, and I still have yet to see ultimately what will happen to the stuff I started early on."

"But, that's OK, it gives me a little incentive to stay around." □