Attention!!

Not so great expectations

I rolled over and stared at the clock again.

"Two forty-five. Great."

I shouldn't have been this nervous. Tomorrow was a day just like any other day.

"Go to sleep, you bonehead," I said to no one in particular.

Well, OK. Tomorrow was the day I started my co-op job, but still. I mean, I'd climbed into bed four and a half hours ago. Now, after three trips to the bathroom, dozens of push-ups and even a late night "Gilligan's Island" festival on the tube, I still couldn't seem to keep my eyes closed for more than a minute.

"OK, why are you so nervous?" I asked myself.

Why was I nervous? I reminded myself that I had made an A in each of my computer science classes, and I had been on the Dean's Honor Roll a couple of times. In fact, I noted, common sense not withstanding, I was an above-average-intelligence type of guy. So why was I so nervous?

Because tomorrow was THE DAY. The one I'd worked for since I'd been in college. The day that had infatuated me since I'd learned about co-oping at freshman orientation. Before this I had only dreamed about the prestige that came with working for a company like IBM. I could only imagine the honor of having the words "Co-op Student" marked on my transcript. I had only fantasized about the massive quantities of cash that I would greedily be hoarding. And tomorrow it all came together.

But were these the reasons that I couldn't sleep?

No.

The real reason I couldn't sleep was because I was scared to death. Oh sure, I had my good grades, and I could program as well as the next computer science major, and I even had most of the answers memorized to the "Sports" portion of Trivial Pursuit, but in one area I felt woefully inadequate: knowledge of computers themselves.

I could see going to work tomorrow and having my boss say, "Well, Kevin, since you're new here we'll start you out slowly. We've been having trouble with our latest version of BIOS, so I need you to write a new BIOS, burn it into an EPROM, and have it on my desk in thirty-five minutes. Oh, and bring me some doughnuts."

Right.

What the Hell is BIOS? And how do I burn it into an EPROM? For that matter, what's an EPROM? And where am I supposed to find doughnuts?

So there it was, I realized, as I drifted back to reality. I was afraid that they would want me to do something that I didn't know anything about. I was nervous because they might expect me to know something about which I was totally ignorant. And I was scared because my technical knowledge was close to zilch.

"But wait, you idiot. Isn't that why you're here in the first place?"

I lay in the dark for a while, pondering the question I had asked myself.

And, of course, the answer was "yes." That was why I was here. That was why the other co-ops were here. That was why the permanent workers were here. To learn. To challenge ourselves. To think.

I rolled over and stared at the clock again.

"Three fifteen. Great."

I finally dozed off, only to dream about not being able to sleep.

First Day Blues

"So that's it? That's all I have to do?"

My questions were directed to one Randy C. Hack, an electrical engineering co-op who had worked in this department the summer before.

"Yeah," he replied. "At least for the first week or so."

I was incredulous. I had spent the whole night tossing and turning for this?

"So wait; you're saying that all I have to do is sit in my office and read an IBM PC Disk Operating System manual? I don't have to create new memory chips or design a new microprocessor or get Mr. Davis doughnuts or anything?"

Randy looked at me as if he thought I was a complete bonehead.

"No."

"Oh."

As we walked in silence back to our offices, I thought about the meeting that we had just had with our manager, Mr. Ben Davis.

What had Mr. Davis said again?

". . . And what we mainly deal with in this department are two Personal Computer (PC) to Host communication packages. The first package, Entry Emulator, known also as EE, can handle one PC session and one host session. The other product, Workstation Program (WSP), is a little more complex . . ."

Mr. Davis continued on for a while longer, but I must admit that I had trouble concentrating on what he was saying. My brain was still reeling from the information he had given us during the first thirty seconds of the meeting. For instance, what in the world was a "session?" A "host?" Even the term "resident memory" was a bit murky, although at least I had heard the phrase before. Fortunately, the meeting wasn't a total loss; I mean, I did learn the names of the other co-ops, and, more importantly, that we got paid every Monday. Outside that, however . . .

Randy's voice interrupted my thoughts. I looked up to see him wheeling a cart loaded with computers toward my desk.

"The guy who had this computer before you re-formatted the hard drive," he said as he put the system on my desk. "So feel free to modify the config dot sys and the autoexec dot bat in any way you want, OK?"

"Oh, sure. No problem."

Uh-huh. Right. Config dot sys? Autoexec dot bat? This had the potential to be a really long day.

I started thumbing through the Disk Operating System (DOS) manual, looking for the aforementioned config dot sys and autoexec dot bat. Unfortunately, this led to more questions about such unknown entities as batch files, buffers and resident programs.

Jeez, what had started as an incredibly easy day had progressed into a nightmare in a matter of minutes.

Would this Monday never end?

My mother, the investigative reporter

Perhaps the hardest thing about this job was explaining exactly what we did. Even more difficult was explaining what our products did. During the fourth week of the semester, I found myself explaining (or at least trying to explain) both to my mother.

"Well, Honey, what do you do at work?"

"Well, Mom, we have these software packages —"

"What's software?" she interrupted.

Visions of a conversation from Hell flittered across my mind.

"Um, it's programs and stuff, OK? Anyway, we test these two programs with other existing and forthcoming IBM products to make sure that they all work well together with no problems, see?"

Gosh, that was easy enough. Until she asked the question that I feared the most:

"Well, um, what do your programs do?"

This had always been the toughest thing to describe to people who had asked me questions about my job. I thought about giving her the "Top secret — can't talk about it" line, but I decided to go for a different approach.

"Well, Mom, we have this one package called Workstation Program, and it can have up to six PC sessions and four host sessions. Our other package, Entry Emulator, has only one PC session and one host session. See?"

It was my hope to intimidate my mother with terms that she knew nothing about. Living away from home had obviously made me forget my mom's persistence.

"Now just slow down, Kevin. One thing at a time. Now, what is a host?"

"A host is a mainframe, Mom. It's a big computer that does all the work. Let's say you're a travel agent and you want to find out if a flight is available. The computer that keeps track of flights and prices and stuff is the mainframe, or host. You would be entering your request from what is called a terminal, which is just a communicator to the mainframe. It's not the terminal that does the work, it's the host. That help?"

"Sort of. What's a session?"

Jeez, had she written these terms down?

"Let me try to explain this in non-technical terms, Mom. Imagine that you have two windows, OK? Now, through one of the windows you can talk to the host. Every time you use that window you're communicating to the host and to the host exclusively. Through the other window you can talk to your personal computer and tell it to run a program or whatever. Now, imagine that you can only see and use one window at a time, and that by pressing a key you can change the active window. If you call each window a session, then you basically have Entry Emulator. See?"

"Kind of. If it's called an emulator, what is it emulating?"

She was definitely writing this down.

"When you run EE, your computer acts like an IBM 3278 terminal."

"Oh. Well, what does that Workstation thingy do?"

"What are you doing, writing this down?"

"Yes."

"Oh. Well, that Workstation 'thingy' acts in much the same way that Entry Emulator does, but it can have up to six PC sessions and four host sessions. You can also shrink the windows so that you see more than one session at a time, but you can still only interact with a single session. Anything else, Mrs. Pulitzer?"

"As a matter of fact, yes. If you can have up to ten sessions going at once, does that mean that you can run ten programs at once?"

"Not with our current standard operating system, but there's a new operating system that will let you. Is it OK if we talk about multi-tasking next week, Mom? I'm getting kind of tired."

"That's fine, Dear."

It wasn't until I got off the phone that it occurred to me that I had just answered for my mom some of the exact same questions that I had had during the first week. It also occurred to me that I would never stop asking those questions, because that was the type of job this was. The answer to one question opened the door to two or three realizations and a least that many more questions.

The scariest part was that I was really beginning to enjoy this.

This week's *Attention!!* article was written by Kevin McCabe, a junior computer science major.