I have finished creating the software test results for that troublesome robot software, as per your idea of using a simulation rather than the actual software. Attached you will find the modified test document, showing the successful simulation. Should we tell Randy about this?

- Cindy

Johnson's response to Yardley's message suggests that he suspected that electronic mail might not be secure:

In-reply-to: cindy.yardley

From: ray.johnson

Re: samuel's software

I knew I could count on you! I am sure that your devotion to Silicon Techtronics will be repaid in full.

Please use a more secure form of communication in the future when discussing this matter. I assure you that the way we handled this was completely above board, but I have my enemies here at good ol' SiliTech.

- Ray

These communications were exchanged just a few days before the Robbie CX30 robot was shipped out to Cybernetics, Inc. This fact is important because the fake software tests were not part of a cover-up of the killer robot incident. These facts seem to indicate that the purpose of the fake software tests was to make sure that the Robbie CX30 robot was delivered to Cybernetics by a deadline that was negotiated between Silicon Techtronics and Cybernetics.

The electronic mail transcripts reveal repeated messages from Ray Johnson to various people to the effect that the Robotics Division would definitely be closed down if the Robbie CX30 project was not completed on time. In one message, he lectures project leader, Sam Reynolds, on his "Ivory Snow Theory":

To: sam.reynolds From: ray.johnson

Re: don't be a perfectionist!

Sam:

You and I have had our differences, but I must tell you that I like you personally. Please understand that everything I am doing is for the purpose of SAVING YOUR JOB AND THE JOB OF EVERYONE IN THIS DIVISION. I view you and all of the people who work with me in the Robotics Division as my family.

Waterson has made it clear: he wants the robot project completed on time. That's the bottom line. Thus, we have no recourse but "Ivory Snow". You know what I mean by that. It doesn't have to be perfect. The user interface is our fall back if this version of the robot software has some flaws. The robot operator will be safe because the operator will be able to abort any robot motion at any time.

I agree with you that the non-functional requirements are too vague in places. Ideally, if this weren't crunch time, it would be good to quantify the amount of time it would take the operator to stop the robot in case of an accident. However, we cannot renegotiate those now. Nor, do we have time to design new tests for new, more precise non- functional requirements.

I cannot emphasize enough that this is crunch time. It's no sweat off Waterson's back if he lops off the entire Robotics Division. His Wall Street friends will just say, "Congratulations!" You see, to Waterson, we are not a family, we are just corporate fat.

- Ray

In this message, Ray Johnson seems to be less concered with the security of communicating by electronic mail. The Silicon-Observer interviewed Cindy Yardley at her home yesterday evening. Neither Ray Johnson nor Sam Reynolds could be reached for comment.

Ms. Yardley was obviously upset that her private electronic mail messages had been released to the press. "I am relieved in some ways. I felt tremendous guilt when that guy was killed by a robot that I helped to produce. Tremendous guilt."

The Silicon-Observer asked Ms. Yardley whether she felt that she had made an ethical choice in agreeing to fake the software test results. She responded with great emotion: "Nothing, nothing in my experience or background prepared me for something like this. I studied computer science at a major university and they taught me about software testing, but they never told me that someone with power over me might ask me to produce a fake software test!"

"When Johnson asked me to do this, he called me to his office, as if to show me the trappings of power, you see, someday I would like to be in a managerial position. I sat down in his office and he came right out and said, 'I want you to fake the test results on that Samuels software. I don't want Reynolds to know anything about this.""

Yardley fought back tears. "He assured me that no one would probably ever see the test results because the robot was perfectly safe. It was just an internal matter, a matter of cleanliness, in case anyone at Cybernetics or higher up in the corporation got curious about our test results. I asked him whether he was sure about the robot being safe and all that and he said, 'It's safe! The user interface is our line of defense. In about six months we can issue a second version of the robotics software and by then this Samuels problem will be solved."

Yardley leaned forward in her chair as if her next remark needed special emphasis. "He then told me that if I did not fake the software tests, then everyone in the Robotics Division would lose their job. On that basis I decided to fake the test results - I was trying to protect my job and the job of my co-workers."

Ms. Yardley is currently pursuing an MBA degree at night at Silicon Valley University.

The Sentinel-Observer then asked Ms. Yardley whether she still felt that she had made an ethical decision, in view of the death of Bart Matthews. "I think I was misled by Ray Johnson. He told me that the robot was safe."

Another revelation, contained in the released electronic mail transcripts, was the fact that Randy Samuels stole some of the software that he used in the killer robot project. This fact was revealed in a message Samuels sent to Yardley when she