

PREVIEW

THE OBJECT CODE

a computer program file -- usually a fragment --
that must be linked to the rest of the program to be under-
stood

March 9, 1990

I was shivering up there on the roof, wedged between Don and Lee Roy in the space allotted to the non-performing members of the Laboratory for Industrial Technology staff. We were all a little nervous, all very chilly. That ass Delamain kept mumbling about how nice and brisk it was.

Our group was situated on the near left of the stairs coming up. The Members of the Subcommittee stood toward the far left, joined by the Subcommittee staff and the Department of Trade and Industry's Congressional liaison. The NASA brass and the DoTI dignitaries were at the far right. I glanced over at the Subcommittee. Congressman Jaeklin seemed impervious to the chill. Good. I sneaked a peak at the Department's delegation. The Secretary looked frozen and murderous. Not good.

In the no-man's land between the Congress and the Executive, Hump was peering over his belly at the stack of 3x5 crib cards we had prepared for him.

Don nudged me. "If the wind blows those cards out of his hands, we're dead."

Lee Roy leaned over. "Whad'd you say, Clyde?"

Me. "Shhhh."

Hump was standing within a cut-away mockup of a space vehicle. DoTI's graphics department had done a superb job. The controls looked realistic, the 'hull' was heavy enough to withstand the occasional windy blasts, and the scale was big enough to comfortably hold Hump. I had the feeling that a real spacecraft cabin would have fit him like a sausage casing. As it was, he looked impressive -- framed nicely by the open door, the Washington Monument at a distance behind him.

At the near left of the roof, Alex was checking the cables to his micro. One last check. One last prayer. At the other end of the cables, in the center of the roof, were the robot arms; next to them was a table laden with various objects; at the far center left, a stool.

Hump cleared his throat loudly and began his speech. "I would like to thank you all for coming here when I know there are warmer, more comfortable places you would like to be. But we thought that you would -- well, never mind that". He turned to the next card.

Steve winced.

"Robot arms are essential to the performance of many tasks, uh, many tasks performed by our astronauts, who, uh, perform many tasks at a distance and require robot arms. So far, these arms have been single arms, each programmed to, uh, perform individual tasks. Devising a way to get two or more arms to work together has been a very stubborn problem -- a problem that NASA had been unable to solve -- at least until they came to my lab."

I looked over at the gaggle of Executive dignitaries. Now the NASA Administrator looked murderous.

Hump grinned. "When the two-armed robots go up in a spacecraft, they will be driven by much more sophisticated software than what we have here. And there won't be all these cables around for the astronauts to trip over. But the hard work has been done, and the rest is up to NASA. Turn it on, Alex." Hump put the unread cards in his jacket pocket and folded his arms across his paunch.

Alex typed the robot's name, 'Tarzan', onto the keyboard. The micro whirred, the cables transmitted the commands and the robot arms swung toward the table. One arm picked up a glass jar. The other arm moved in and deftly untwisted the cap. The arms set the jar and cap gently down on the table. Congressman Jaeklin applauded.

Unnoticed by the multitude, Alex made an 'aw, it was nuthin' gesture. He really was cute.

Now the arms swung toward their next task – the stool. Abruptly, they paused, changed direction, and accelerated toward the figure standing at the edge of the roof.

I closed my eyes. Opened them again. *Oh, my God, no! Stop!*