

found Colorado Springs and a whole new bunch of eager people out there that don't know anything about computers, but will probably bring some new ideas. This is real risk taking now with our company. This is an opportunity to have another go at it with another group of people. Now, what I thought paced the work in Chippewa Falls was a lack of depth of production and engineering skills. We have not tried in the past to assemble a computer in a completely automated way and we didn't have to, but now we do. The reason is the CRAY-3 modules have to be very, very small in order to match up with the higher speeds. Module dimensions have to drop proportional to speed. The modules have to be smaller by a factor of 3 linearly, which means the volume has to go down as the cube of 3. As you know, that's a big number like 27. That's quite dramatic. That means you can't see the parts anymore that you're putting into the modules. Therefore, automation of the assembly process seems mandatory. We have been assembling modules with microscopes and tweezers, but it's very, very slow work and it's not an attractive work environment for most people. There's a need for highly automated production using micron type spacings which means that we have to have mechanisms, robots in effect, operating in three dimensions, with 3 micron precision. Well, if you look in the robot catalogue, you can find a lot of robots that say they're good to 1 mil or 2 mils, but you don't find any that say they're accurate to 3 microns. This means robot development. This means lots of engineering skills in an area we didn't happen to have in Chippewa Falls. I think you see how several things all pointed here. I discovered in doing a little spinning of the globe and pointing, that Colorado Springs had a recession the past 3 years. There's a lot of high tech companies there. In fact almost all the majors are there: Digital Equipment is the biggest, Honeywell is there, Hewlett Packard is there--it reads like the Who's Who of Electronics. But they all had cutbacks and there were approximately 5,000 technical people laid off in the past 2 years, along with empty facilities including lots of clean rooms. It seemed like it was crying for some new blood and I thought I'd make a contribution. It seems to be working well. We didn't have to put an ad in the paper. It turns out most of these people really like Colorado Springs. I mean it's hard because it's dry and who would want to move to a dry place?, but they have the mountains there and there's good skiing, and so whatever it is, most of the people who had worked there stayed and they pumped gas or they worked in the grocery store or whatever, waiting for somebody new to come to town. When the