Sharpen up your computer

Sawyer trainees will soon be learning how to saw logs efficiently - without wasting logs, breathing in sawdust or being slowly deafened by noise.

The Manufacturing Technology Centre (MTC) at the University of New Brunswick, in a contract with the Maritime Forest Ranger School (MFRS), has designed a computer simulation program which allows trainees to practise sawing logs in unlimited numbers, sizes and shapes.

"I can give the sawyer trainee all the options he would have if he were sitting in the booth in the mill and operating the equipement," said Campbell Gregg, the MTC engineer who designed the computer graphics program for his master's thesis. Merely by pushing buttons, logs can be created (deformities and all), loaded onto the carriage, and cut to the trainee's specifications. Once the log is cut, the computer will tell the trainee how well he did; for example, the yield in two-by-fours.

Sawyers must learn to cut logs without creating piles of sawdust and woodchips, Mr. Gregg said. "If the sawyer does his job properly, the maximum yield can be obtained from saw logs. If he messes up, no one else in the mill can get back what he's lost. In other words, the sawyer determines the potential productivity of the sawmill."

The MFRS hopes this computer simulation system and a second one on overall sawmill operation will help Maritime sawmills be more productive and therefore competitive, said Ernie Strickland, manager of the school's training sawmill. The ranger school will also benefit because it is less expensive and much safer to introduce the basic concepts of log sawing to sawyer trainees on a computer terminal. "You can use up a lot of wood and damage expensive equipment learning how to operate a sawmill," Mr. Strickland said.

The MTC at UNB and MFRS are also collaborating on the development of computer graphics program which sawmill managers can use to design and/or evaluate mills. Managers will be able to "operate" their mills for hours, days or weeks, and evaluate many different operations in a short time.

Working on this project for MTC are Rejean Hall, a UNB PhD student and an industrial engineering professor at the Universite de Moncton, and David Jewett and Dan McKeage, two UNB master's students in mechanical engineering.

The Maritime Forest Ranger School received funding for the three-year project from the Canada Employment and Immigration Commission through its Innovations programs. The Manufacturing Technology Centre at UNB was subcontracted to design the computer graphics program.

The Student Union Building Office, room 105, is now accepting applications for S.U.B. staff. Employment will commence in May of 1988 and the deadline for submitting applications is Friday, February 19th.