Feature Report / by Lee Toop

Simlog a leader in low-cost training systems for equipment operators

Founded in 1999 to bring an award-winning forestry machine simulation technology to market, Simlog, a Montreal-based company, has since developed a range of training simulators. These inexpensive systems can be operated on a standard personal computer with just a few attachments, giving companies a true do-it-yourself option in their education programs. They focus specifically on heavy equipment operator training, with simulators available for mobile and tower cranes, forestry harvesters and forwarders, and drill jumbos, all developed in conjunction with equipment manufacturers, distributors, owners and training professionals.

Tower crane operators can gain new skills on Simlog systems, using a simulator that incorporates all the variables of the massive cranes and gives operators and trainers all the feedback they need to ensure a smooth transition to the field.

The company's crane simulators have been praised by people in the industry for improving the training options for operators learning how to run these tricky machines. In 2004, Simlog was recognized by the **Construction Innovation Forum** with its **NOVA Innovation Award**. The CIF stated: "The Personal Mobile Crane Simulator is the world's first software package designed for use on a personal computer with commercial joysticks to provide professional training for operating mobile hydraulic cranes."

The most recent product to hit the market was the first-ever hydraulic excavator simulator released for personal computers. Two years in the development, Simlog's Hydraulic Excavator Personal Simulator is designed to help companies teach new employees, or hone the skills of existing operators, without taking an excavator off the job - or putting the excavator in the hands of someone with little or no experience. It was developed in conjunction with Caterpillar and has formed the basis of that company's Virtual Training Systems line.

Simlog developed new "dynamic terrain modelling" technology to create a virtually perfect simulation of digging that is just like an operator would experience in the cab of a machine. The trainee can work his or her way up from simple operations like how to move the bucket and boom right up to trenching and safely loading a truck.

Along the way, the program gathers results for the trainee that can be reviewed on the spot or kept for later use. Either way, the familiarity gained by the operator on the system can then easily be transferred to the actual machine, making for a safer and faster transition that's easier on the operator and the iron.

Simlog wins CCA award

Simlog's Hydraulic Excavator Personal Simulator system was awarded the **Excellence in Innovation** honours at the 88th Annual Conference of the **Canadian Construction Association** (CCA) in March of this year. The CCA stated in the award presentation that the PC-based simulator "represents a major advance in heavy equipment operator training by finally providing a completely safe, totally realistic and truly cost-effective "virtual" hands-on training experience."

All of the simulators can be paired with standard computer joysticks if desired, or with realistic operator controls that can be purchased from Simlog. Setup can be as simple as installing the Simlog software on a Windows-based computer, attaching standard PC controls, and clicking the icon to start the program. Some users have systems in place to use projectors or larger screens to make the experience more lifelike, and others have created their own operator chairs.

Simlog has no intention of slowing down yet, as more demand is placed on equipment operators. In fact, its work with Caterpillar is continuing, with a number of new simulators expected to be released in 2006 and 2007 to help train operators of other earthmoving equipment such as wheel loaders, dozers, and motor graders.