

CAT® SIMULATORS

Success Story

MACORP, Guyana, South America

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In 2009 Machinery Corporation of Guyana (MACORP), the only authorized Cat® dealership in Guyana, South America, started a customer support initiative program for Excavator operator training. The objective is to provide participants with training and best practices for operating excavators, and ultimately lower operational costs and increase production levels for customers.

The 80-hour program consists of several components: e-Learning, simulator training, a theoretical segment and a practical segment. Students are issued a certificate of competence only after satisfying the criteria of earning an average of 85% on a theoretical and practical evaluation. The Excavator was chosen as the focus of the first machine training because this is the most popular machine model in Guyana. MACORP believes simulator training is the safest, convenient and most cost effective way to train operators. The simulator is used in the foundational level of the operator training program.

Training Officer, Hugh Griffith, says that in order to determine the format and contents of the program when they designed it, a needs assessment survey was conducted with local companies in the heavy equipment industry. MACORP not only set out to create a local program, but one that would also meet global occupational needs

in the heavy equipment industry. Griffith remembers a time before the simulator training program was established. “The risk of trainees damaging company property and injuring themselves is reduced significantly with simulator training. We had an incident where a trainee dug up an underground pipe and damaged it. If this training segment had been conducted on the simulator, we would have saved the company the expense of

\$3,000 (US) to repair the damaged underground pipe.”

MACORP’s 80-hour training program is well rounded and much is covered over the course of six weeks. Trainees attend three sessions per week with Saturday being mandatory because this is the day they are exposed to on-the-machine practical experience.

The program uses a

blended methodology with 12 modules in operational techniques on the simulator. (Two days for 3 hours over the course of six weeks): classroom instructor-led training for 20 hours, including 4 hours with eLearning disks that cover operations on the Hydraulic Excavator; 40 hours of simulator training and finally 20 hours of on-the-iron training. During simulator training, the instructors utilize SimU Campus™ to monitor and manage the progress of class trainees. Instructors also teach each participant individually how to interpret the results being generated on the screen after the execution of each procedure. Griffith then assesses each report and gives feedback to trainees on their strengths and weaknesses with the intent of trainees



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improving their performance in subsequent practice sessions on the simulator. All simulator sessions can be tracked in SimU Campus and saved to a database for comparison.

Griffith says there are several benefits to simulator training. Safety is one example. He recalls a trainee, Mr. Wilson, who began the Excavator operator program as a novice. "Wilson had never operated an excavator before and was very nervous when he first started. Wilson was committed to completing his simulator training segments and did so with a high level of diligence. Through hard work and dedication, Wilson transformed from a fearful novice to a responsible, respected and disciplined operator who is now employed by a local construction contractor," Griffith shares. Another benefit is that production activities don't have to be stopped to free up a machine for training. Next is that the simulator training cannot be affected by adverse weather conditions. Finally, Griffith cites the cost savings of simulator training. He estimates \$100 (US)



A trainee in the Excavator Operator Training Program at MACORP completes the Raking The Green exercise.

per trainee is saved in terms of fuel and 50% in terms of machine training time.

Not only is simulation training beneficial for new operators and training programs in general, it also has benefits for the experienced operator. Griffith says, "I can recall interviewing an experienced operator and he posited that in the field, when he has a difficult assignment, simulator exercises like Over the moon, Raking the green and Bucket Placement training have helped him to develop a special kind of muscle control and improved his judgment in terms of operational procedures."

Griffith says that MACORP doesn't need to do any special advertising to draw trainees into the dealership's operator program. Word of mouth is working just fine. He says, "Participants who have completed the Excavator operator training program go into the heavy equipment industry and promote the program by virtue of their performance and contributions." The Excavator operator training program has been so popular and successful that Griffith says MACORP will be adding two new operator training programs around the Motor Grader and Off-Highway Truck by the end of the year.

Resource

For more information on MACORP's Operator Training Program or Cat Simulators, visit www.macorpgy.com.



A ceremony is held for students that receive certification from the program. Pictured at left is Hugh Griffith presenting a certificate to a student.

