

5DT <Fifth Dimension Technologies>

## PRESS RELEASE

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# 5DT releases a Virtual Reality Training Simulator for Fiber Guided Video Missile Operators

5DT <Fifth Dimension Technologies> today released a Virtual Reality Training Simulator for Fiber Guided Video Missile Operators.

Fiber Optic Guided Video Missiles are currently developed and manufactured in several countries. These missiles are fitted with video cameras, and the video signal is transmitted back to the control station via an optical fiber that tethers behind the missile when it has been fired. The control signals from the control station are transmitted along the same optical fiber from the control station to the missile. A human operator controls the missile with a joystick. The human operator watches a video monitor during the missile's flight. Since this is a so called man-in-the-loop system, operator training is very important.

Reality based training is expensive. The missiles are costly. The organization of a training session is anything but trivial.

With the 5DT Training Simulator operators can now be trained in virtual reality first, before moving on to reality based training. "This training simulator is not intended to replace reality based training. Instead, it is intended to enhance reality based training. We want to ensure that every missile, fired during reality based training, counts." This is the vision of Paul Olckers, Managing Director of 5DT. "The trainee should graduate to reality based training only when he has reached a sufficient proficiency level on the simulator."

With the 5DT system the trainee controls a virtual missile through several complete missions, flying over a virtual landscape, towards virtual targets. The virtual missile looks like the real missile and it handles like the real missile. The virtual landscape resembles a specific real landscape. The virtual targets look like real targets and they also act like real targets. This combination of real terrain data, real missile performance data and realistic targets, provides the user with an extraordinary visualization and learning experience.

The trainee learns how to control the missile and how to select the optimum targets (one of the advantages of fiber guided video missiles is that it is a precision missile,

and that indiscriminate damage and killing can be avoided). The trainee also learns how to recognize specific features within a landscape. A data base of trainee proficiency is maintained, e.g. the number of missiles fired together with the number of hits and the distance from the target in the case of misses. The quality of the hits (e.g. tank destroyed, or tank slightly damaged) may also be measured for specific targets.

A key feature of the training simulator is its price tag. "Our landscape rendering technology makes it possible to run a state-of-the-art simulator like this on a Pentium II computer with a low-cost graphics accelerator card", says Johan Hammes, Senior Development Engineer at 5DT.

5DT is a world leader in the field of Virtual Reality. Based in the Persequor Technopark in Pretoria, South Africa, 5DT develops, produces and distributes virtual reality hardware and software systems. 5DT also develops turnkey projects for clients.

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***Virtual Reality is a technology that needs to be experienced. We would therefore like to invite you to stand 8-C-11 (Hall 8, Aisle C, Number 11) to come and experience this exciting technology for yourself.***