

World-class new training will prepare Canadian soldiers for Afghanistan

By Bob Bergen

It's not every day that you can use the words "state of the art" and "Canada's forces" in the same sentence, but remarkable new computerized army training equipment used for the first time at CFB Wainwright, Alberta, allows just that.

Known as Weapons Effects Simulation or by its acronym WES, the complex array of lasers, sensors, global positioning systems, radio transmitters and computers gives the Canadian military among the world's most sophisticated training capability.

The Canadian Forces demonstrated how the system works to a group of four Calgary-area academics during a trip last week to the new Canadian Manoeuvre Training Centre at Wainwright.

The \$132-million WES system has been in trials for two years. This was the first time it has been used on exercise.

Here is how it works.

Each soldier wears an array of 10 detectors on his or her body and another four on his or her helmet that registers laser simulated fire emitted from rifles, machine guns, tank cannons, mines, artillery, grenades, improvised explosive devices and chemical contaminants.

If a detector is struck by a laser, the system's computer in each soldier's tactical vest assesses whether he or she has been killed, mortally injured or slightly wounded.

It tells wounded individuals where they have been injured, their comrades the emergency first aid required and how long the wounded will live unless they get medical treatment.

The WES system also shows commanders monitoring giant screens where each and every soldier, vehicle or weapon is on the entire 640-square kilometer Wainwright training area.

It monitors their movements and reveals in near-real time every shot fired, who fired it, who has been hit and who is a "friendly" force or not.

As a result, commanders can look a soldier straight in the eye and say: "You fired five rounds and, on the third round, you killed a villager."

The thinking behind such precise training is that it is better to get it wrong in Wainwright and learn from it, than to get it wrong in Afghanistan.

Moreover, the actions of an engagement – or for an entire battle if need be – can be played back so commanders can assess the strengths and weaknesses of every action with unprecedented clarity.

In addition, individual unit actions like a raid on a building are recorded with video cameras which allow ever-more precise after-action reviews of the soldiers' performance.

That precision is what the WES system brought to commanders and 80 Nova Scotia reservists on exercise at the manoeuvre training centre since late June.

Later this fall, the same group of reservists will return to Wainwright and join up with the 2nd Royal Canadian Regiment Battle Group to train for a deployment to Afghanistan in early 2007.

When they do, each and every member of the 2RCR battle group of about 1,200 that will include a 300-member provincial reconstruction team, a Royal Canadian Dragoon armoured squadron, assorted engineers, artillerymen, command and support elements will be equipped with the new WES training equipment.

Altogether, there will be 2,300 individual "player units" which will enable the tracking of soldiers, vehicles, weapons, weapons systems and personnel.

Other countries have similar systems: the Americans were the first, followed by the British and the Australians.

But, Canada's system is the most modern and the best in the world.

On top of that, it was absolutely amazing for a long-time visitor to Camp Wainwright to see what the Forces have done with the training centre in an effort to replicate the environment Canadian troops will find in Afghanistan thanks to Canadians who have already been there.

In the past, when soldiers training to fight in built up areas they had only one cinder-block building to either assault or defend, they now have near exact replicas of Afghan villages, markets, farm complexes, towns, and caves.

And, they will have 150 people dressed and acting like locals to deal with.

In the replicated abandoned town of Spin Boldak in the south that borders on Pakistan, the soldiers must

learn to deal with insurgents moving back and forth across the border just like they would in theatre. They will have to deal with refugees and Imams and a police chief who cannot speak English. This will force the soldiers to deal with translators, because there is an art to carrying on business with a translator.

To make the training even more life like, the Forces will bring in college journalism students from Calgary and Edmonton who will receive course credits for spending extended periods covering the training and reporting on what went right and what went wrong.

This is great news for the next rotation of troops into Afghanistan because the next time the government trots out the old argument that Canadian troops are well equipped and well-trained for their mission, it will actually mean it.

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