MEDICAL TREATMENT SIMULATOR, MTS – IMPROVING TRAINING REALISM

The Medical Treatment Simulator (MTS) is a program from the WinExcon® family that augments the basic wound simulation capabilities in Saab's Personnel Detection Devices (PDDs). MTS software is used in a handheld computer in the field for simulated examination and treatment of soldiers. The simulator can be used both in instrumented and non-instrumented training systems.

The MTS is based on a medical treatment database that lets the software determine the seriousness of a soldier's wound from the hit location and ammunition type. There is also a version that takes into consideration the time from being wounded to examination.

Support for treatment prioritization
A combat medic can, for example, choose to check the blood pressure of several soldiers and then treat the one who is most seriously injured. Based on the examination results, the medic then chooses one or more treatments. Correct treatment slows or halts the rate at which a soldier's health declines. Incorrect treatment can quicken the rate.

Retrieving and sending data
The time required for both examinations and treatments is retrieved from the database. Data from each examination and treatment is sent to the soldier's vest (PDD) and stored on an electronic patient card (EPC), which can later be read by other medical personnel.

Keeping track of inventory
MTS even keeps track of medics' inventories and prevents treatment from being given when the necessary medical material is lacking. There are five different levels, which based on the medic's knowledge level, determine the available examinations and treatments.

Reliable communications
The MTS uses infrared communications to send data to and from soldiers' vests. All necessary data (medical database, inventory list, etc.) are in the MTS, which makes operation independent of peripheral systems. When the MTS is used in a GAMER-instrumented exercise, the vests forward examination and treatment data via RF to the ExPERT C2 node.

Specifications:
- Platforms – MS Pocket PC/Windows Mobile
- Transmission via IrDA
- XML-based database
- Medical treatments
- Ammunition categories
- Medical inventory list
- Five level-based settings in determining available treatment, dependent on user category
- Language adaptation