

## 戰場心理抗壓模擬系統

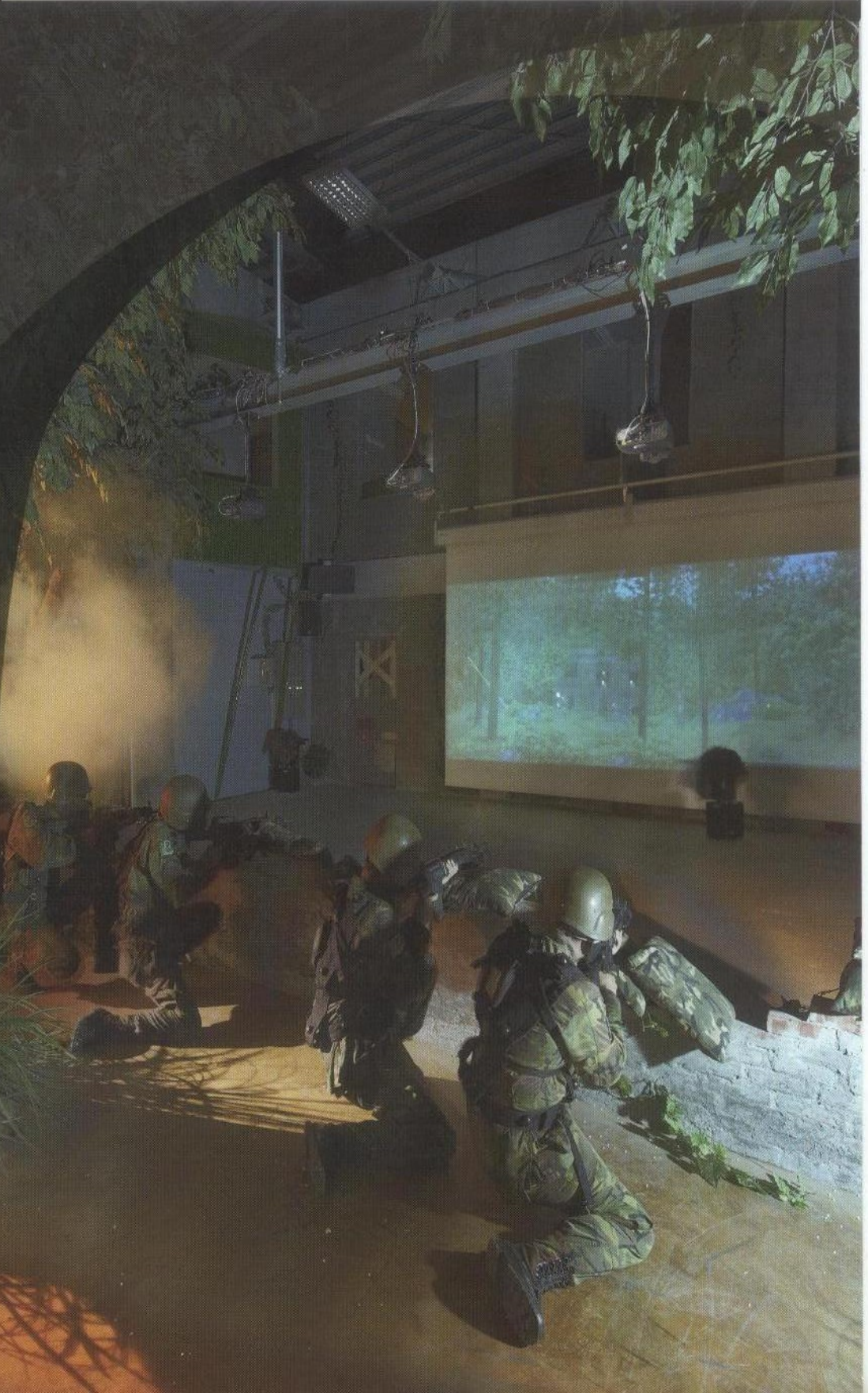
### *Conquering Combat-stress Training System*

#### 主要特色

- 互動式戰場環境模擬。
- 壓力源導向系統設計。
- 戰場視、聽、嗅、觸四種感覺情境模擬。
- 單鍵啟動系統開/關機介面。
- 全訓區監控暨燈光控制。
- 問卷調查系統。
- 任務後歸詢系統。
- 訓員生理訊號即時偵測。
- 訓員位置即時偵測。
- 自動化場景流程控制。
- 單兵無線攜行武器。
- 紅外線彈著感測。
- 人員攜行裝備自動登錄。
- BB彈自動攻擊訓員。
- 電擊警告模式。
- 爆炸閃光與震動特效。
- 採開放式系統架構，利於系統擴充或升級。
- 採標準商規件，裝備維持與零備件籌補無虞。
- 系統操作自動化，十分鐘完成系統開/關機。

#### Key Features

- Interactive battlefield simulation.
- Stress-oriented concept design.
- Present the vision, hearing, nose, feel in the battlefield.
- One-Touch system On/Off interface.
- Whole area monitor and illumination control.
- Questionnaire system.
- Mission debriefing system.
- Physiological information retrieve system
- Real-time locating system.
- Scenario control automatically.
- Wireless simulated armament.
- Infrared point of impact detection.
- Carried armament parameter auto-logging system.
- Shooting pellets threatening system.
- Electric shock threatening system.
- Explosion and ground vibration simulation.
- Open architecture, designed for growth and upgrade with minimal effort and cost.
- Maximum use of Commercial Off-The-Shelf (COTS) hardware and software.
- The system can be brought up/shut down in 10 minutes automatically.



## 戰場心理抗壓模擬系統

## Conquering Combat-stress Training System

**主計算機分系統**

- 演訓課程管理與流程控制。
- 智慧型目標物動態模擬。
- 人員裝備配賦管理。
- 彈道計算動態模擬。
- Linux開放式作業系統，設計具可擴充性。

**視效分系統**

- 即時虛擬戰場景況。
- 人體運動影像。
- 其他影像特效(如曳光、尾煙、爆炸、煙霧、車輛損毀、砲擊)。
- 大尺寸投影系統。

**音效通訊分系統**

- 提供戰場環境、武器、城鎮環境、人員等音效。
- 震波平台提高模擬的逼真度與真實感。
- 提供班長與教官間之無線通話功能。
- 廠房廣播系統。

**HOST Computer System**

- Training course management and flow control.
- Dynamic simulation in intelligent target.
- Personnel equipment management.
- Dynamic simulation in bullet trajectory.
- Linux open operation system, upgradable for the future.

**Visual Effect System**

- Real-time view of virtual battle field.
- Human motion simulation.
- Special effects including tracers, smoke, trail, explosions, smog, vehicle damage, cannon shot etc.
- Large-scale projection system.

**Sound/Communication System**

- Provides the sound of battlefield, such as weapons, human vocal and so on.
- The vibration platform enhances fidelity and reality.
- Provides communication for squad leader and operators.
- Broadcast system.

**教官台分系統**

- 訓練課程/環境設定。
- 演訓參數即時顯示。
- 任務歸詢資料顯控。
- 生理訊號即時顯示。
- 系統開/關機控制。
- 人機親和性介面機櫃。
- 狀況引導影帶與播放系統。

**Operator Control System**

- System operating/setting.
- Drill observation.
- Debriefing station
- Physiological signal display.
- System start/shutdown control.
- Human factor interface control cabin.
- Media player control system for situation briefing.

**戰場環境**

- 戰場環境場景佈置。
- 活動人形靶。
- 燈光、閘門等自動控制。
- 煙霧產生及爆炸特效。

**感受與刺激**

- 煙硝味、屍臭味、大蒜味及催淚瓦斯。
- 心跳、體溫、呼吸頻率等生理訊號。
- 人員位置感測器。
- BB彈射擊攻擊。
- 紅外線中彈識別。
- 模擬槍線偵測。
- 數位/類比輸出入。

**模擬槍枝**

- AK47戰鬥模擬步槍。
- T91戰鬥模擬步槍。
- 雷射槍戰場無線環境。

**Battlefield Simulation**

- Battlefield scenes layout.
- Interactive silhouette target.
- Automatic controls of lights and gates.
- Fog producing and special effect of explosion simulation.

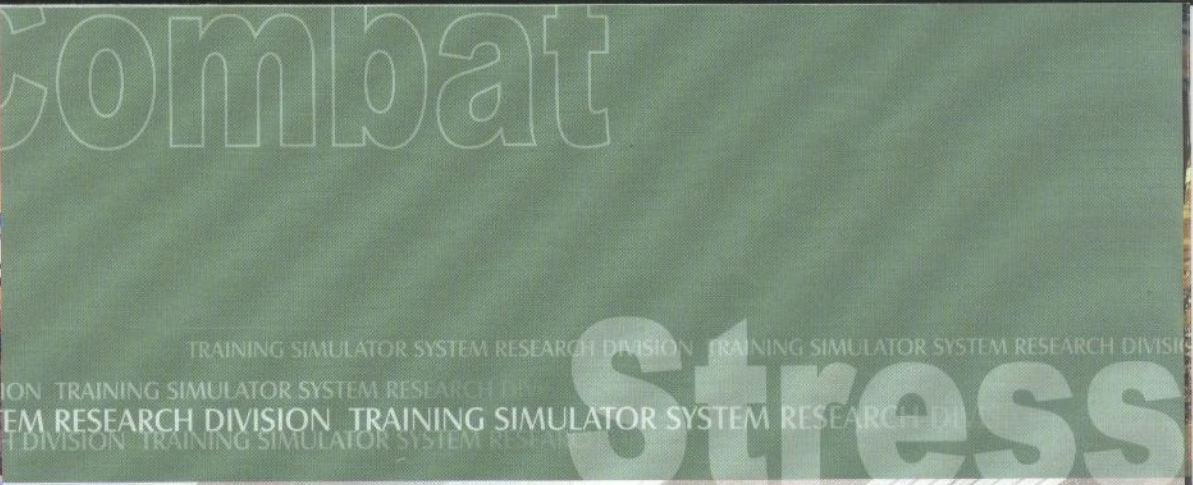
**Stimulus & Reception System**

- Simulating the smell of gunpowder, dead bodies, mustard and tear gas.
- Physiological signal - heart rate, body temperature, and respiration rate.
- Smart Antenna-based Indoor Locating System.
- The plastic pellets attack automatically.
- The got shot identified by infrared-sensitive.
- The aiming detection system for rifle mocks.
- Analog/Digital Input/Output operation system.

**Weapon System**

- Full-function T91 rifle mock.
- Full-function AK-47 rifle mock.
- Laser engagement environment with radio control weapons.





### 廠房設施

- 換裝區。
- 待命集結/任務歸詢區。
- 毒氣感受區、夜間戰場區、反擊作戰區、城鎮戰場區。
- 教官監控室。
- 壕溝區。

### System layout

- Dressing room.
- Assembly area / Mission debriefing room.
- Gas attack, night battle, anti-landing defense, urban warfare exercise area.
- Operation control station.
- Obstacle zone.



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