Research Objective

- Establish Return on Investment for Simulation Based Training Systems for Infantry Soldier Skills
- Very little is known about the impact on infantry soldier skills performance for individual and teams when trained using virtual means
- Establish “Applicability Continuum” where performance, funding, and time can be estimated for usage of Simulation Based Training for any given infantry training activity

Challenges

- Establishing correct and applicable tasks for simulation based skills training; Not a Boolean decision
- Simulator interfaces present a significant challenge to the immersion and presence maintenance in the training systems

ARL Facilities and Capabilities Available to Support Collaborative Research

- ARL Simulation and Training Technology Center, Orlando Florida
- In-house developed Open Source simulation based trainer, MOSES (Military Open Simulator Enterprise Strategy)
- Access to large pools of soldiers, relevant leadership classes and curriculum
- Data collected only from correct soldier demographics

Significant Early Findings:

- Current assessment methods inadequate to determine ROI/Need new Rubric with scale.
- Dramatic increases in performance happen when SBT is combined with kinesthesia & feedback.
- Need more data to make any conclusions for team training conditions.
- Time in simulator a critical factor.

Selected Publications:


Complementary Expertise / Facilities / Capabilities Sought in Collaboration

- Advanced Human – Computer Interface Expertise
- Distributed Simulation Based Training Expertise

MOSES Prototype in Use