Squad Overmatch Study I/ITSEC

3 December 2013

SGM Higgs

Train As You Fight?

Vision

Optimize squad performance and discourage PTSD and suicide

- ❑ Integrate training for resilience, mental acuity, and advanced situational awareness into warrior skills training
- ❑ Replicate extreme stressors in *existing* live, virtual, constructive, gaming training environments

Study Focus Areas

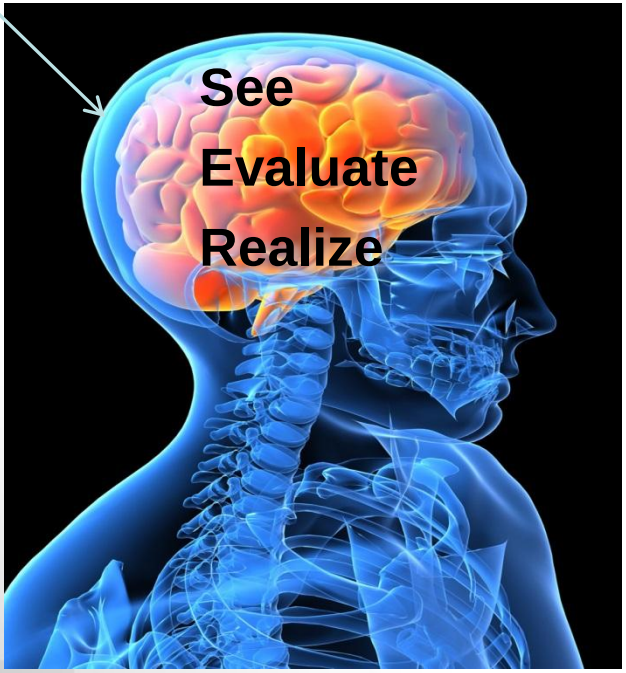
- **Focus on improving Squad level collective training**
- **Focus on developing Squad proficiency in Resilience, Mental Acuity, and Situational Awareness (collectively, the Study referred to these as Cognitive skills)**
- **Analysis focus on combat stressors**
- **Identify gaps in training Cognitive Skills, for the following TADSS**
  - Army Games for Training (AGFT)
  - Combined Arms Collective Training Facility (CACTF)
  - Dismounted Soldier Training System (DSTS)
  - Engagement Skills Trainer (EST)
  - Shoot House (SH)

Current Training Paradigm

Warrior Skills

Post Event Mental State

Accept Reject Adapt



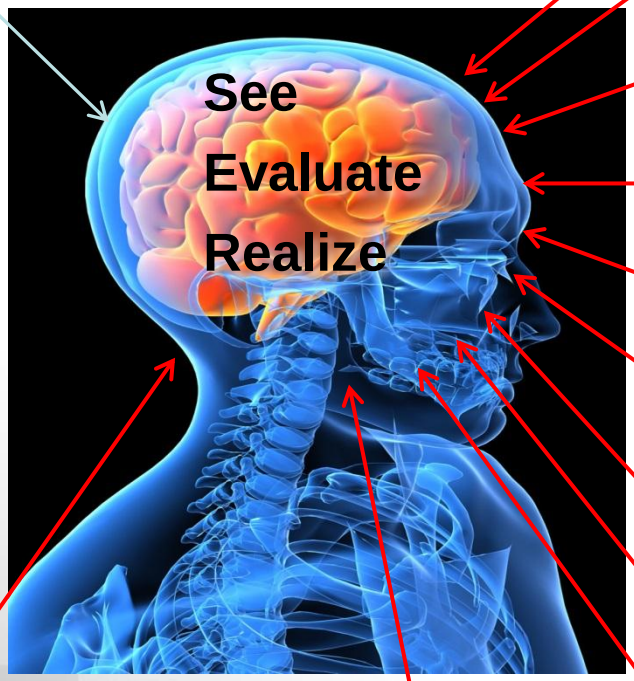
Limited Realistic Stressors

Operational Environment (Combat)

Warrior Skills

Post Event Mental State

Accept Reject Adapt



Had a close call, was shot or hit, but protective gear saved you

Being responsible for the death of an enemy combatant

Exposure to Dead bodies or human remains

Member of Patrol/Unit Killed in Action

Engaging enemy with direct fire or returning fire

Being responsible for the death of a noncombatant

Attack by enemy on Forward Operating base or patrol base Perimeter

Clearing or searching homes or buildings

Seeing ill or injured women or children whom you were unable to help

Wounded in action or have a team member wounded in action

Indirect fire attack from Incoming artillery, rocket, or mortar fire

Stressors defined by Walter Reed Army Institute of Research

Objective Training Model

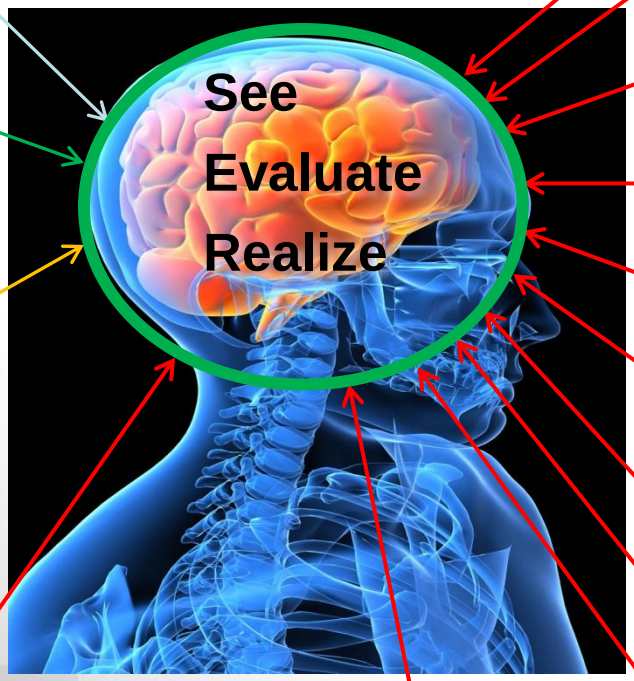
Warrior Skills

Resilience Skills

Situational Awareness Skills

Post Event Mental State

Accept Reject Adapt



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Squad Integrated Training Approach

Resilience and Mental Skills Training[1]

Warrior Skills Training[2]

Situational Awareness Skills Training[3]

Exercise in
-Live and Virtual Environments –
w/ EST, AGFT, DSTS, SH, CACTF

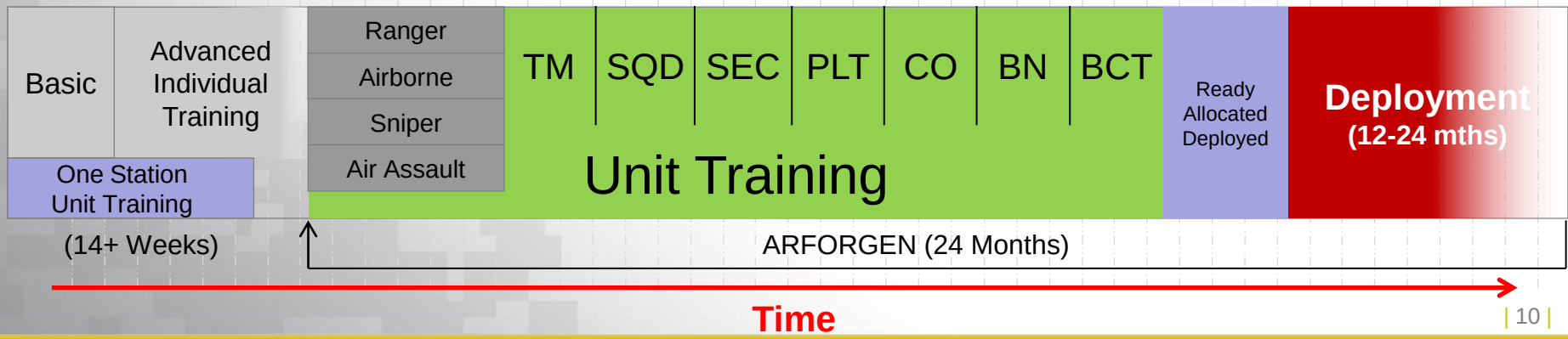
U.S. Army Objective is

1) Mental and Resilience Skills from CSF2 Program
2) Warrior Skills from Battle Drills
3) Situational Awareness Skills from the MCoE ASAT Program

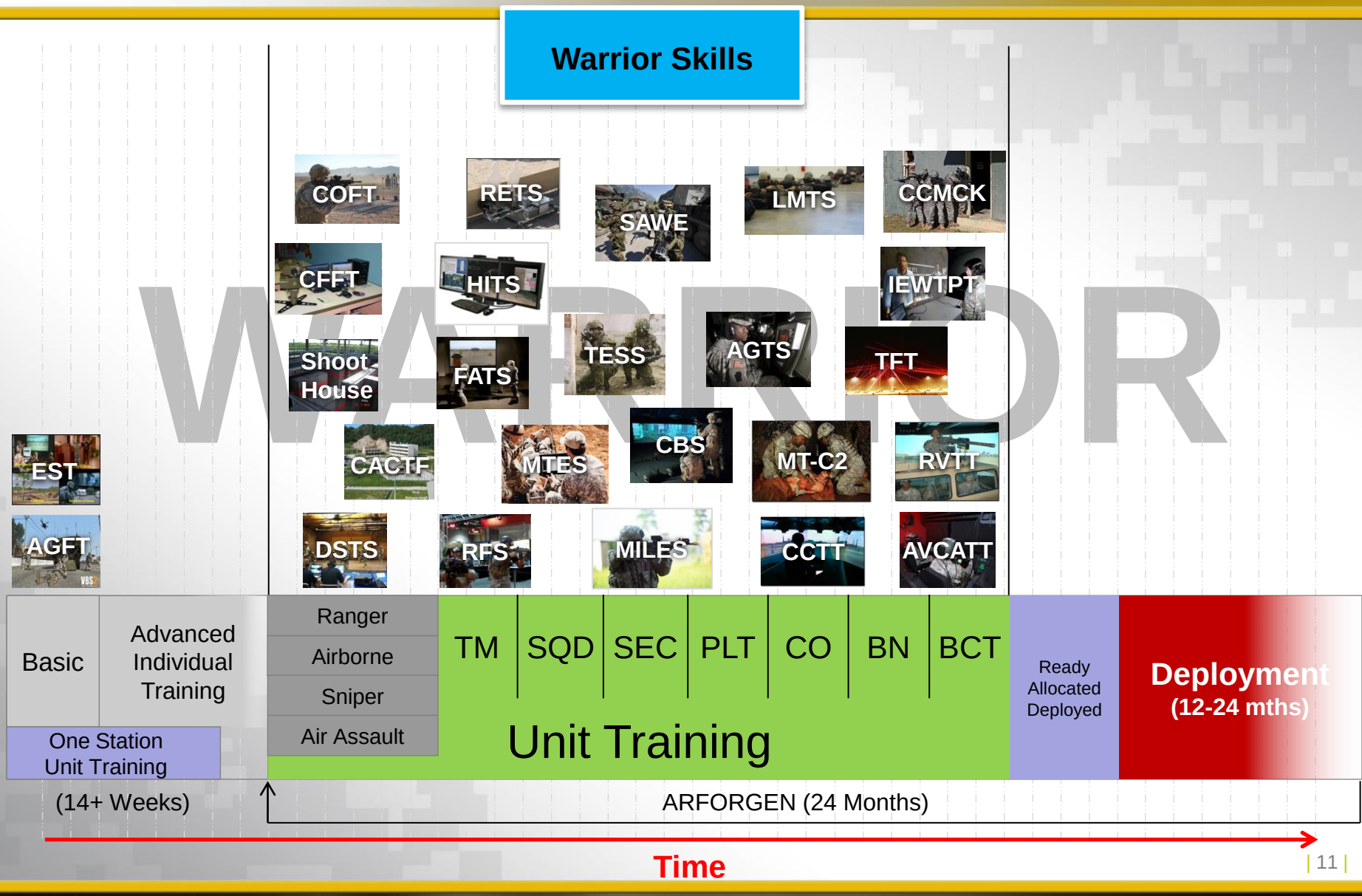
Squad Training Continuum

Squad Training Continuum (1)

Typical Squad Training Cycle (diagram not to scale)



Squad Training Continuum (2)



Existing Training Aids

Shoot House (SH)

Dismounted Soldier Training System (DSTS)

Engagement Skills Trainer (EST)

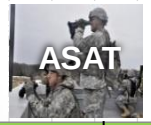
Army Games For Training (AGFT)

Combined Arms Collective Training Facility (CACTF)

Squad Training Continuum (3)

Resilience / Situational Awareness Training (Current)

COGNITIVE



CSF2

CSF2

Basic	Advanced Individual Training	Ranger / Airborne / Sniper / Air Assault	TM	SQD	SEC	PLT	CO	BN	BCT	Ready Allocated Deployed	Deployment (12-24 mths)
One Station Unit Training			Unit Training								

(14+ Weeks)

ARFORGEN (24 Months)

Time

Technology Categories

Virtual Humans

Graphic Realism

Smell

Pain

Ongoing Technology Return On Investment (ROI) Analysis

Goal — **Optimal Human Performance**

Achieve

Proficiencies: Resilience | Mental | Situational Awareness

Develop

Skills: Problem Solving | … | Attention Control | … | Kinesics | …

Stimulate

Stressors: Member of Patrol Killed in Action | Exposure to Dead Bodies | Seeing Injured Women / Children | …

Provide

Technologies

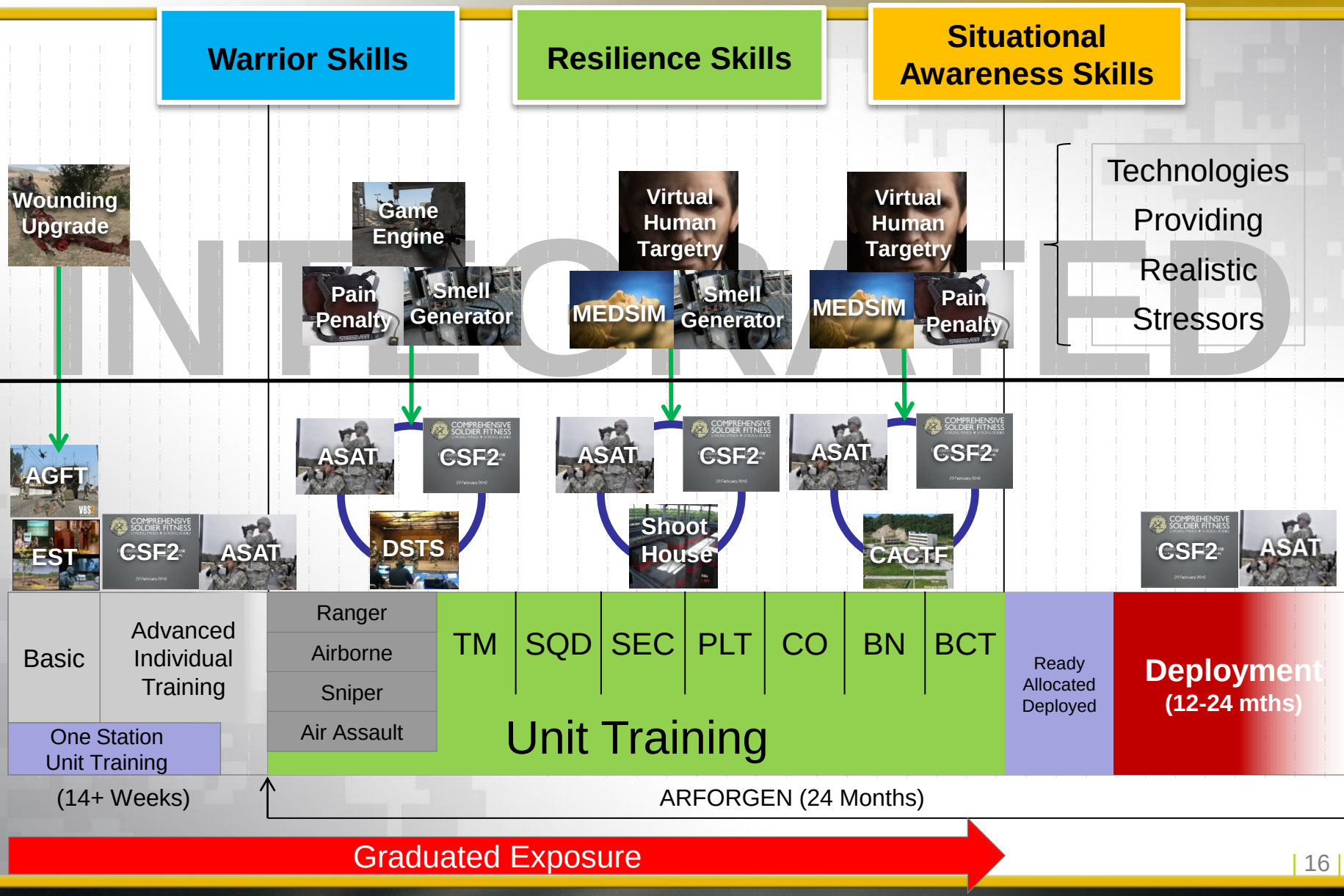
Inject →

ROI

Inject →

ROI

Squad Training Continuum (4) * Notional *



Squad Overmatch Study Team FY13 & FY14

UCF Institute of Simulation and Training &
USC Institute for Creative Technologies

Office of Naval Research

MCoE

MITRE

PEO STRI

ARI

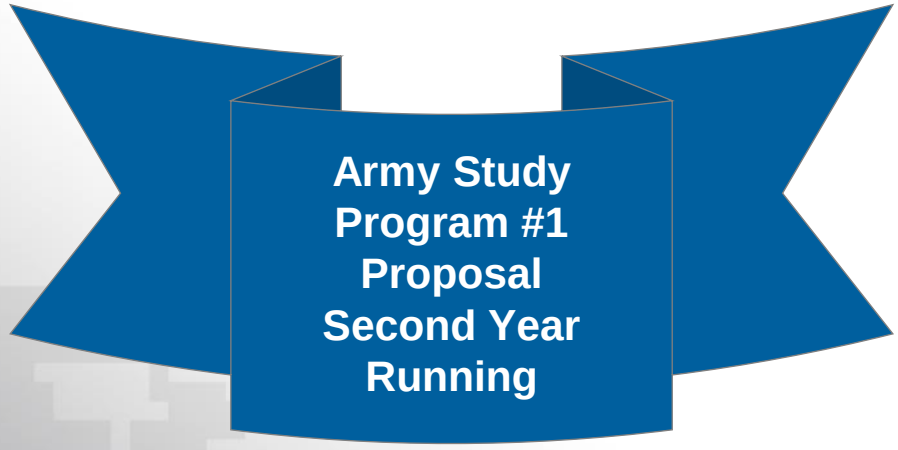
ARL/HRED/STTC

PM TRASYS
(USMC)

Walter Reed
AIR

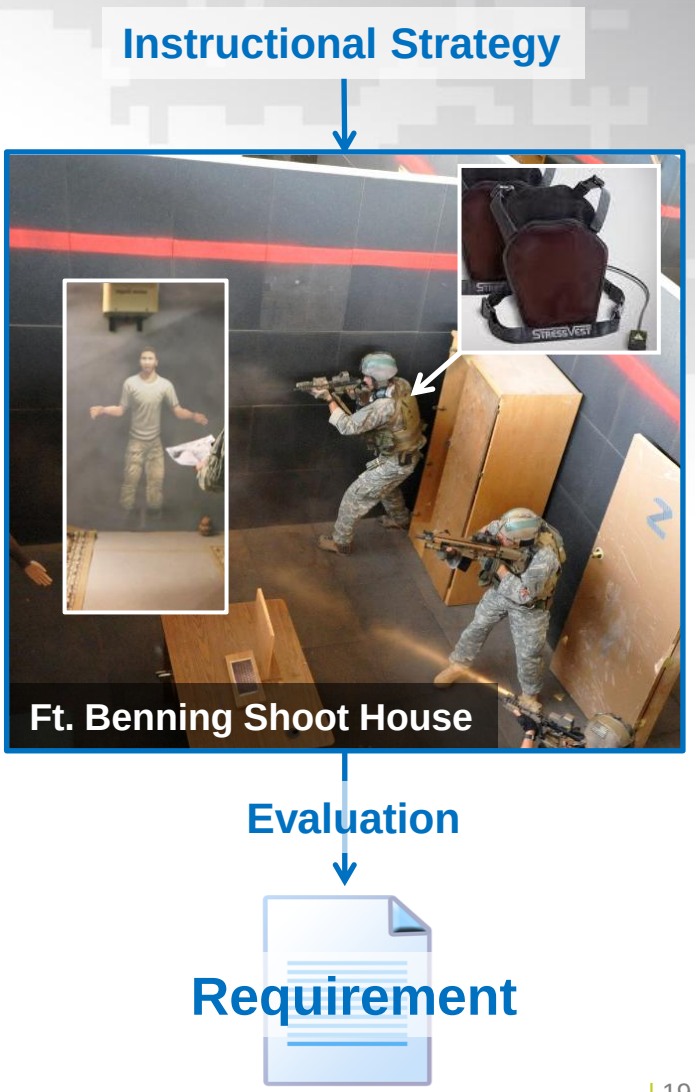
FY13 Accomplishments

- Built the Squad Overmatch Study Team
- Developed Integrated Training Approach
- Identified gaps in current Programs of Record for Integrated Training
- Initial ROI analysis of technologies with respect to their capability to support Integrated Training
- Top priority Army Study Program for FY14



FY14 Way Forward

- ❑ Develop instructional strategy and graduated exposure model
- ❑ Integrate technologies at Ft. Benning
- ❑ Conduct experimentation with squads
- ❑ Conduct effectiveness evaluation



Squad Overmatch Study Contact Info

For comments, questions, suggestions, contact:

Rob Wolf
PM TRADE Strategic Requirements Integrator
TRADE@peostri.army.mil

SGM Higgs

Brian Kemper
Director of Engineering – Live

Rob Parrish
Director of Engineering – Virtual

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