



The Army Test and Training Investment Process: Breaking Down the Walls

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Building On The ATTIC Process

ATTIC: Army Test and Training Investment
Conference

- Army: Wins Wars
- Testers: Test Equipment
- Trainers: Train Troops
- Instrumentation: Used By Both
- Conference: A way to bring them together

The Bricks in the Wall

Ricebowls

Management Structures

Operational Terminology

Technical Approaches

Requirements Origin

Fidelity Levels

Colors of Money

Operational Schedules

Technology Focuses

Operating Environments

The Bricks in the Wall

Ricebowls



Operating Environments

ATTIC Steps

- Investigate Technology
- Bring testers and trainers together
- Recommend common solutions
- Support mutual investment and mutual participation
- Other Services welcome to participate

RESULTS:

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Mutual Technology Opportunities
Identified

Standardized TSPI Systems

- Identified Need
 - low cost,
 - disposable,
 - 3-Dimensional, standardized TSPI system
- Discussed and Investigated
- Concept exploration with DoE on:
 - 3-D TSPI capability internal navigation system,
 - Disposable \$10/unit



Common Vehicle Interface

- Need for a standard for vehicular Interface
- ATEC OTC took the ball and ran with it
- The Common Vehicle Interface Initiative is a key part of Embedded Testing for the Army's Future Combat System



Embedded Testing and Training

- Desire for a shared system for embedded testing and training
- ATTIC established the links between TRADOC's embedded training IPT and the embedded testing efforts at ATEC
- Both sides working on a common platform for the FCS



Sensor (x2)



Land Warrior (x2)



LOS (x2)



NLOS (x2)



C2V

Shared HLA Interface

- Leveraging HLA to deliver simulations
- ATTIC united both under the OSD FI2010 and TENA programs
- Trainers are now a stakeholder in the FI2010 and TENA developments





OPFOR BMP-2

Threat, OPFOR, and Target Unification



Target (Actual) BMP-2

- Testers and Trainers Maintain Threat Systems
 - Trainers: Opposing Force Systems
 - Testers: Targets and Threat Simulators
- ATTIC now maintains database of these assets with contact info
- ATTIC continues to pursue shared investment opportunities



OPFOR T-80 Tank



Target (Actual) T-80 Tank



OPFOR HIND Helo



Threat (Actual) HIND Helo

Target and OPFOR Control

- Testers have aerial target program
- Trainers proposing OPFOR Aviation program
- ATTIC has brought together the key aerial target control systems
- OPFOR Aviation considering use



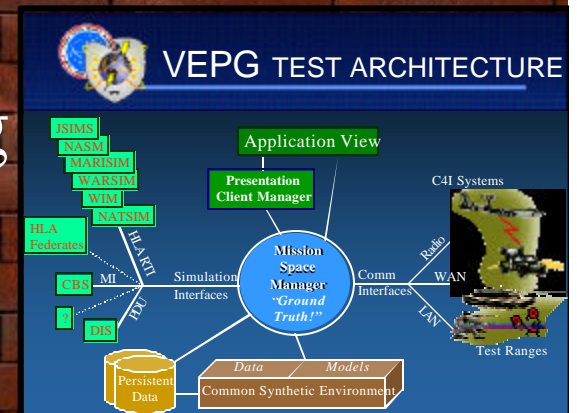
Semi Automated Forces

- Training community leads OneSAF development for Army
- Testers reviewed OneSAF for application
- Embedded Testing and Training IPT advised to examine OneSAF for utility with embedded capabilities



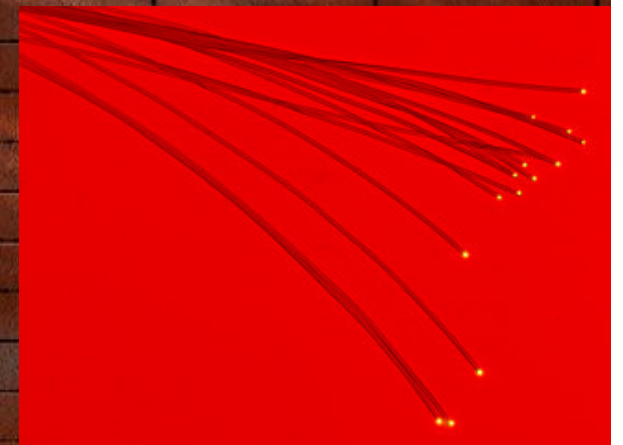
Multiple Standards Integration

- Testers STARSHIP program, enables control functions to cross system bus architectures
- Trainers seeking single architecture solution
- Advocated STARSHIP
- STARSHIP now a component of the embedded testing efforts
- Implications for embedded training



Fiber Optic Networking

- Testers upgrading ranges to Fiber Optic Cable for years
- Trainers encouraged to leverage that knowledge base
- NTC coordinating with Test Community



Long Haul Communications

- Testers established long-haul high bandwidth leases
- Encouraging trainers to share in leases
- Encouraging trainers to integrate standards with testers for fiber optic data streams



MAIS/MILES/Land Warrior

- ATTIC brought Land Warrior to discuss technologies and instrumentation
- Result: MAIS and MILES programs worked with Land Warrior
 - Common laser,
 - Power supply,
 - Antenna,
 - GPS,
 - Computer
- ATTIC entertaining Civilian Law Enforcement interest and delivering technologies to Homeland Defense



Unexploded Ordnance Detection and Cleanup

- Shared issue--ATTIC researched effort
- Discovered existence of the DoD
Unexploded Ordnance Center of Excellence
- Introduced interested parties to the UXO
COE for follow up



Standard Dismounted Troop Instrumentation

- Testers and Trainers recognize benefit of standardizing Dismounted Troop Instrumentation
- Integration taking place through MAIS/MILES/LW integration, embedded testing and training integration, and new TSPI development
- ATTIC continuing to monitor Objective Force Warrior technologies to keep testers and trainers ahead of the future developments



MOUT Instrumentation

- Testers increased interest in establishing MOUT testing capabilities
- ATTIC connected them with their training counterparts
- Mutual test and training ATTIC instrumentation efforts currently initiating



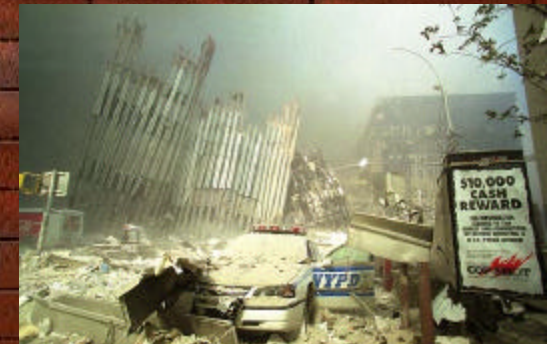
RF Tags

- Examining options to use RF tags to track forces in operational environments
- Working through TSPI initiative to include tags in the disposable 3-D TSPI architecture



Shared Training with Law Enforcement

- Working test case in Southern MD to establish shared usage and operations between Army and Law Enforcement
- ATTIC worked with Prince Frederick National Guard, St. Mary's County Sheriff, and Calvert County Sheriff to prepare new policy for mutual training as test case
- Letter passed both Counties' and NGB's management, awaiting approval by Governor Glendening



Shared Less-Than-Lethal Munitions Operations

- Testers and Trainers endorsed taking shared approach to inventory and facilities for Less-Than-Lethal operations
- Law Enforcement indicating similar desires
- Planning to pursue in future years after Land Warrior connection to Law Enforcement and mutual training in Maryland completed



Shared Simulations and Stimulations

- Testers and Trainers sought to unify sim/stim capabilities and inventory
- Embedded testing and training incorporating this effort at present



EW Testing and Training

- Testers have substantial EW background
- Trainers seeking to implement EW
- Initiated cross-fertilization through ATTIC to enable Trainers to leverage Testing technologies in EW



Conclusions

- ATTIC sets the foundation for mutual programs
- Army Testers and Trainers build on that foundation
- Thinking ahead is saving Army resources to better our Soldiers

**Through ATTIC, the Army is breaking
down the walls, and executing
tomorrow's shared technologies today!**