U.S. Army Simulation, Training and Instrumentation Command

Operational Testing and Training Mission Support for the Objective Force

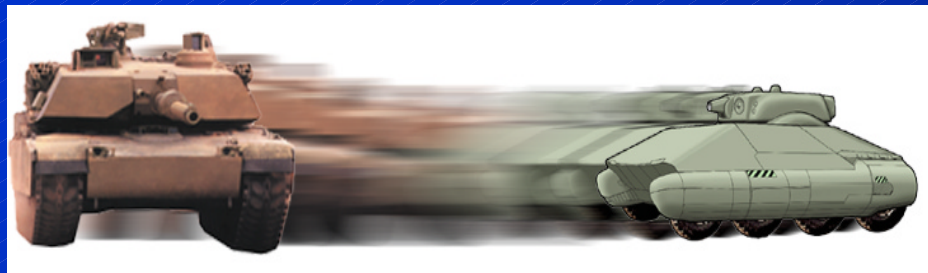Jerome Sirmans
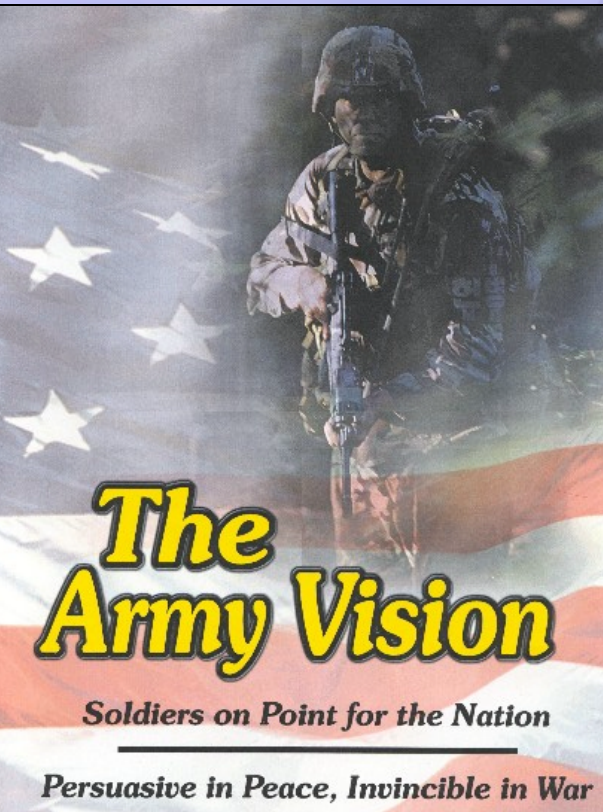Deputy Project Manager for
Instrumentation, Target and Threat Simulators

The Transforming Army

Testing the Objective Force

Training the Objective Force

STRICOM unifying test and training investment
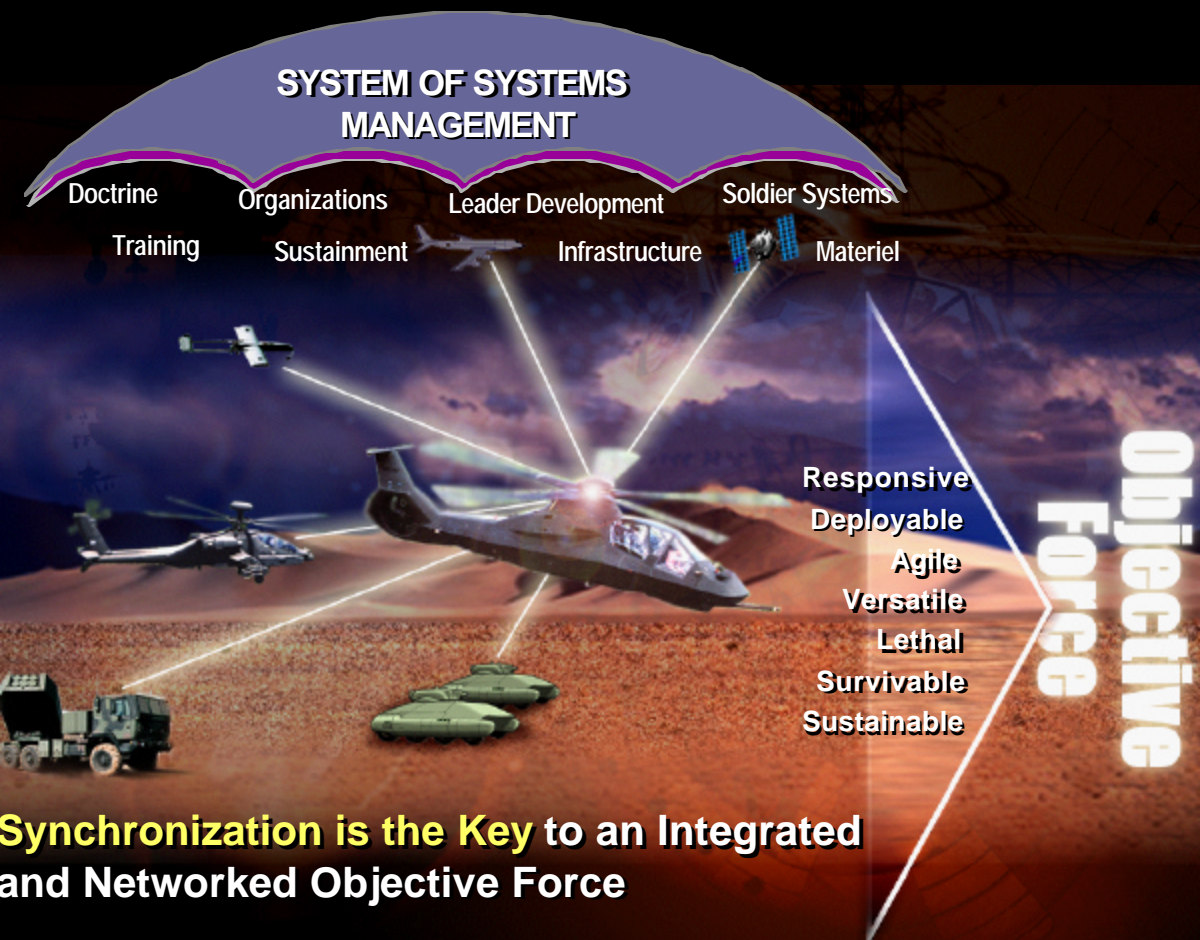
A Possible Future

The Army Vision

Soldiers on Point for the Nation

Persuasive in Peace, Invincible in War

- **Responsive**
- **Deployable**
- **Agile**
- **Versatile**
- **Lethal**
- **Survivable**
- **Sustainable**

SYSTEM OF SYSTEMS MANAGEMENT

Doctrine   Organizations   Leader Development   Soldier Systems

Training   Sustainment   Infrastructure   Materiel

Responsive
Deployable
Agile
Versatile
Lethal
Survivable
Sustainable

Objective Force

Synchronization is the Key to an Integrated and Networked Objective Force

Distributed Weapons Platforms

- **Objective Force is Distributed and Network Centric**

- **Current test and training infrastructure not designed to suit**

- **Changes occurring throughout the entire Army to adapt to the Objective Force**

Testing the Objective Force

- **Must immerse weapon system into distributed force**

  - **WHICH MAY NOT BE FULLY AVAILABLE!**

- **Simulation will take on substantial importance to testing**

- **Distributed systems require standardized approaches**

Training the Objective Force

- **End of Self-Reliance**
  - One system targets
  - One system protects
  - Another system shoots
- Unit Set Fielding
  - Each Army element a unique fighting force
- Training must adapt
  - EW major threat to crucial C4I Systems
  - Simulation allows reconfigurable training
  - New mission and deployment possibilities

FIT
LOGO

- **Sharing Existing Assets**
  - **Targets**
  - **Threat Simulators**
- **Bringing Customers Together**
  - **ATTIC**
  - **HLA Interfaces**
  - **Common Data Links**
- **Proposing New Mutual Technologies**

Army Test and Training Investment Conference

Connecting
ARMY
Testing
& Training
Communities

New Mutual Technologies

Army Test and Training Investment Conference
Connecting ARMY Testing & Training Communities

PM STI
SIMULATION TECHNOLOGY INTEGRATION

Florida Simulation Center

- **STRICOM does NOT develop requirements**

- **But . . . We research our customers' requirements**

- **And . . . We look to industry and academia for solutions**
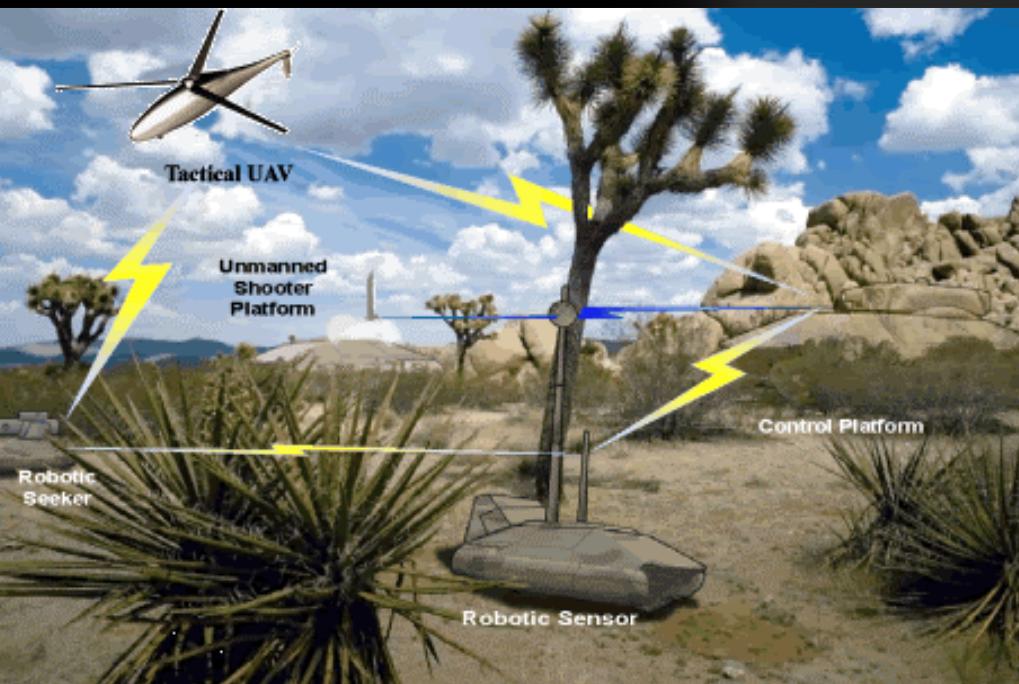
- **And . . . We encourage commonality**

Stamdard

Army

TSPI

- **Uniform data stream**

- **Plug-and-play compatibility**

- **Commonality to operations, testing and training**

- **Common Vehicle Interface:**

  - **Systems currently require multiple interfaces for testing and training (MAIS, MILES, TWGSS, PGSS, etc.)**

  - **Standardized interface across the fleet enables plug and play testing, training, and diagnostics**
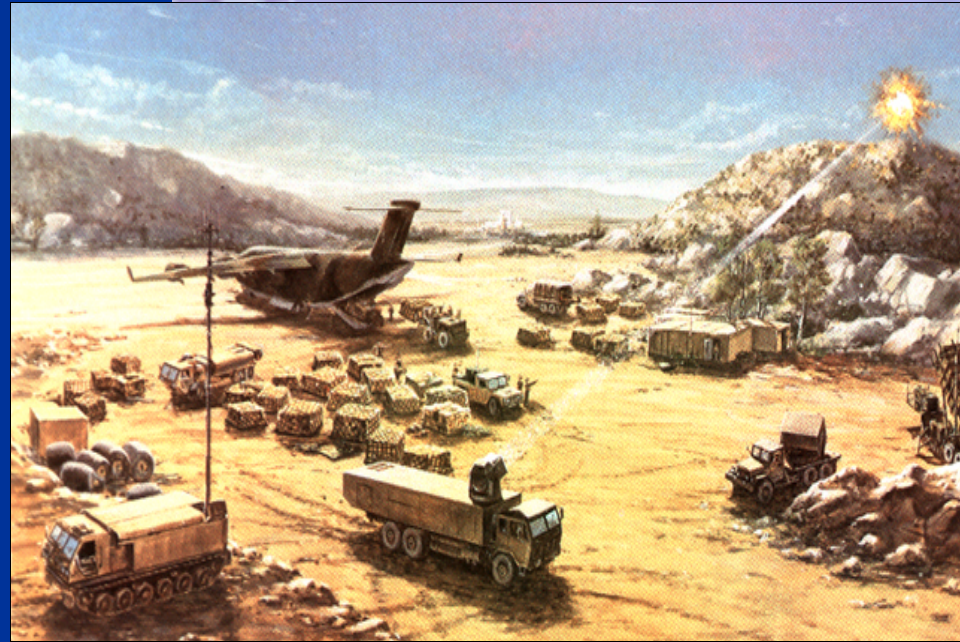
Embedded Testing and Training:

- Permits deployed forces to maintain readiness

  - Immediate ability to train

  - Immediate access to vehicle diagnostics

- Builds on Common Vehicle Interface protocols

Standard Army Dismounted Troop Instrumentation

Dismounted Troop Instrum:

- **Ties troop data standards to vehicle data standards for testing and training purposes**

- **Combines Land Warrior, Air Warrior, Test, and Training investment in Dismounted Troop instrumentation**

  (One vest, one laser, one fuel source, one antenna, etc.)
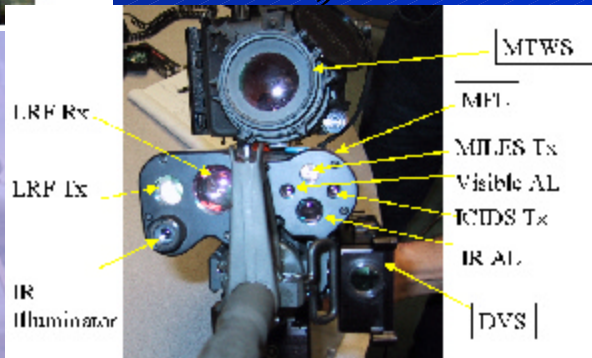
- **Army buys more for less**

Common Laser for Simulated Area Weapons Effects (SAWE)

Combines MAIS, MILES, and Land Warrior test and training laser systems

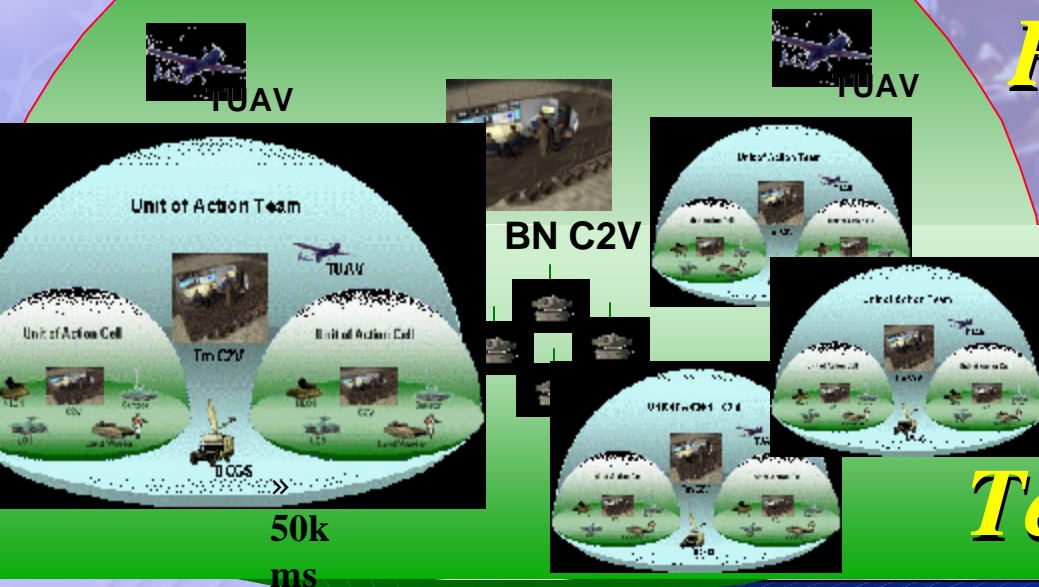**MAIS, MILES, and Land Warrior Share:**

Labels on image: LRF Rx, LRF Tx, IR Illuminator, MTWS, MFL, MILES Tx, Visible AL, ICIDS Tx, IR AL, DVS

- One laser
- One power supply
- One fuel
- One antenna
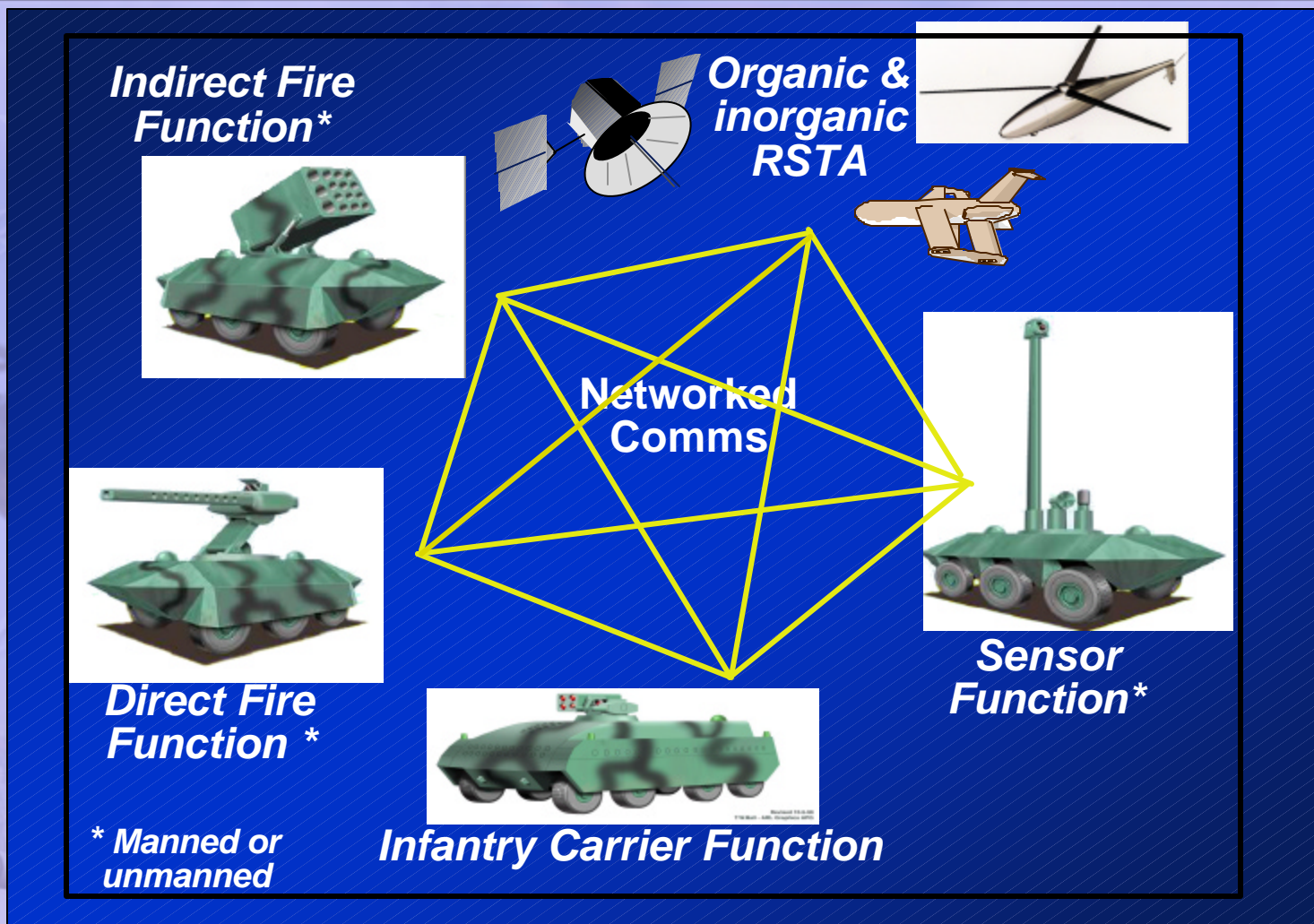
Unit of Action Battalion

TUAV

TUAV

BN C2V

50k ms

Pursuing Common Networking Standards for Testing and Training

- **STRICOM Integrating Testing and Training Systems to High Level Architecture (HLA)**
  - Testing: FI2010, VISION, OASIS
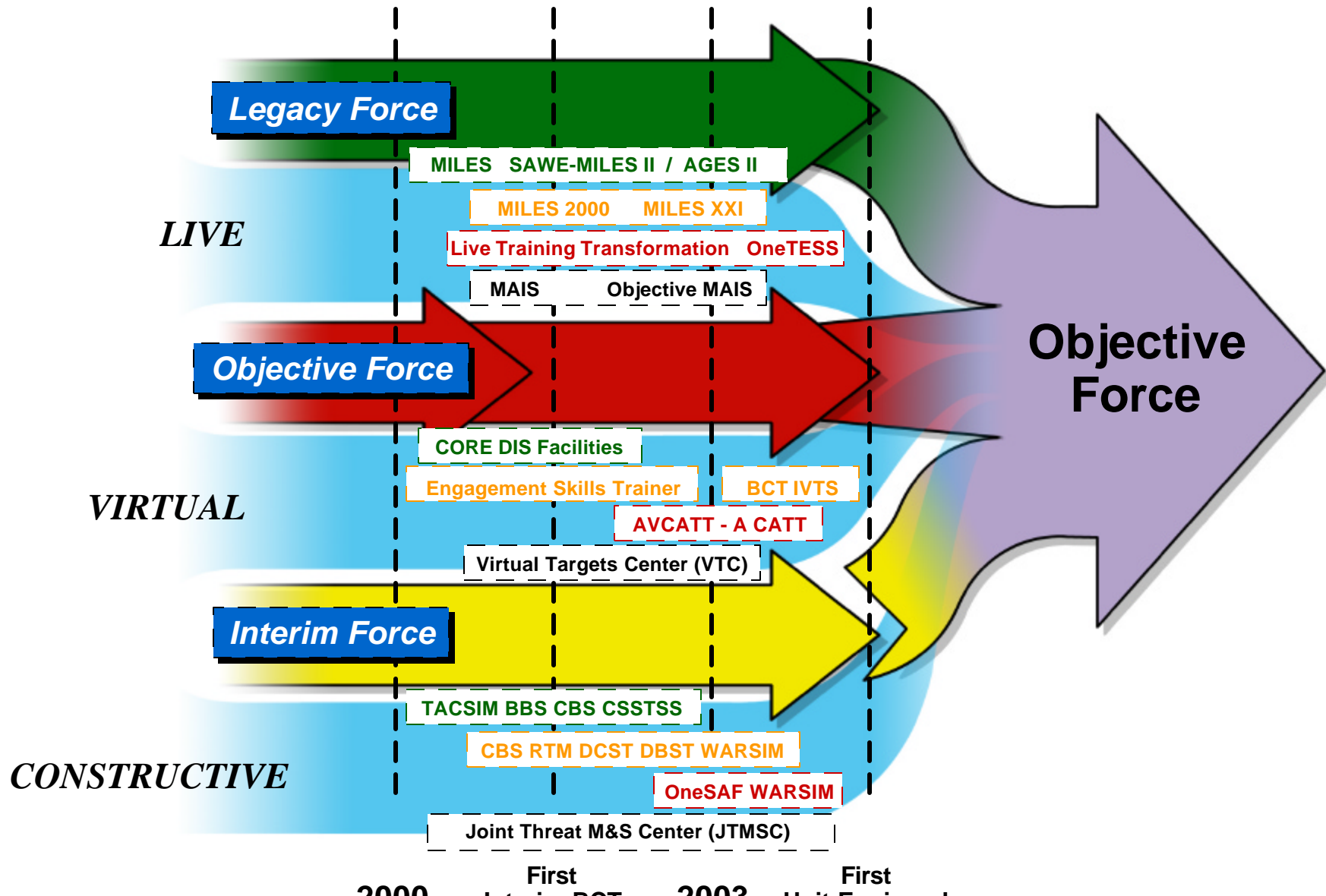 - Training: CTIA, CTC-OIS, ONETESS, ONESAF

A Possible Future

Indirect Fire Function*

Organic & inorganic RSTA

Networked Comms

Direct Fire Function *

Infantry Carrier Function

Sensor Function*

* Manned or unmanned

Uniform Instrumentation which enables Shared Operational Testing and Training Operations

Legacy Force

LIVE

MILES   SAWE-MILES II / AGES II

MILES 2000   MILES XXI

Live Training Transformation   OneTESS

MAIS   Objective MAIS

Objective Force

CORE DIS Facilities

VIRTUAL

Engagement Skills Trainer   BCT IVTS

AVCATT - A CATT

Virtual Targets Center (VTC)

Interim Force

TACSIM BBS CBS CSSTSS

CONSTRUCTIVE

CBS RTM DCST DBST WARSIM

OneSAF WARSIM

Joint Threat M&S Center (JTMSC)

Objective Force

First

2000   Interim BCT   2003   Unit Equipped
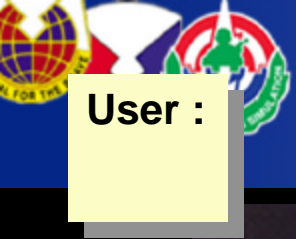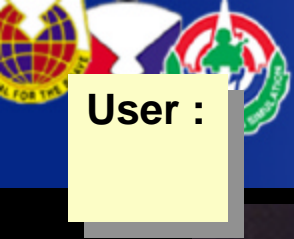
On Point for the Army in Interoperable Training, Testing, Instrumentation, and Simulation Solutions for the Army's Transformation to the Objective Force!

User :

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