TACOM

Mobility and Firepower
for America's Army

Embedded Simulation Overview

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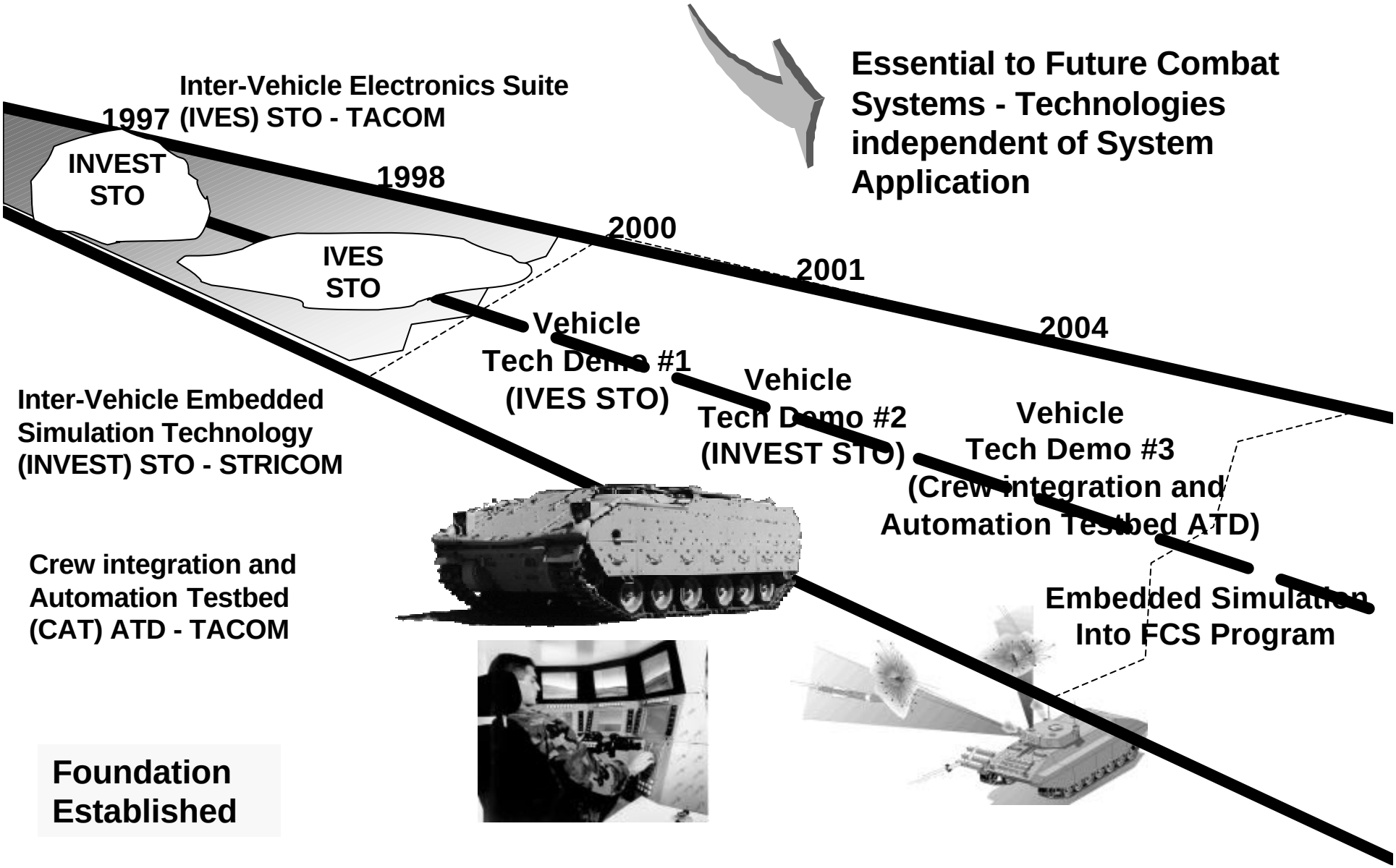
UNCLASSIFIED

Embedded Simulation Overview

- Science & Technologies Initiatives
- Embedded Simulation Definition
- Embedded Simulation Functional Description
- Embedded Simulation Reference Architecture
- RDEC Federation
- Objective Force
- RDEC Members Locations

US ARMY EMBEDDED SIMULATION SCIENCE & TECHNOLOGY OBJECTIVES



Definitions

- Embedded Simulation B-Kit - Generic system which will provide the vehicle ability to perform Embedded Training, Mission Rehearsal, Operational Enhancements, Simulation Based Acquisition, Virtual Test & Evaluation and Terrain Registration.

- Vehicle A-Kit - Hardware and Software necessary to use generic B-Kit on that vehicle platform.

Embedded Simulation Functional Description

SIMULATED LRU

Simulated Turret
Virtual Lethality
Virtual Sensors
Simulated ATR
Simulated ATT
Simulated C2

VEHICLE SIMULATIONS

Mobility
Survivability
Virtual OPFOR
Virtual Friendlies
Terrain Registration

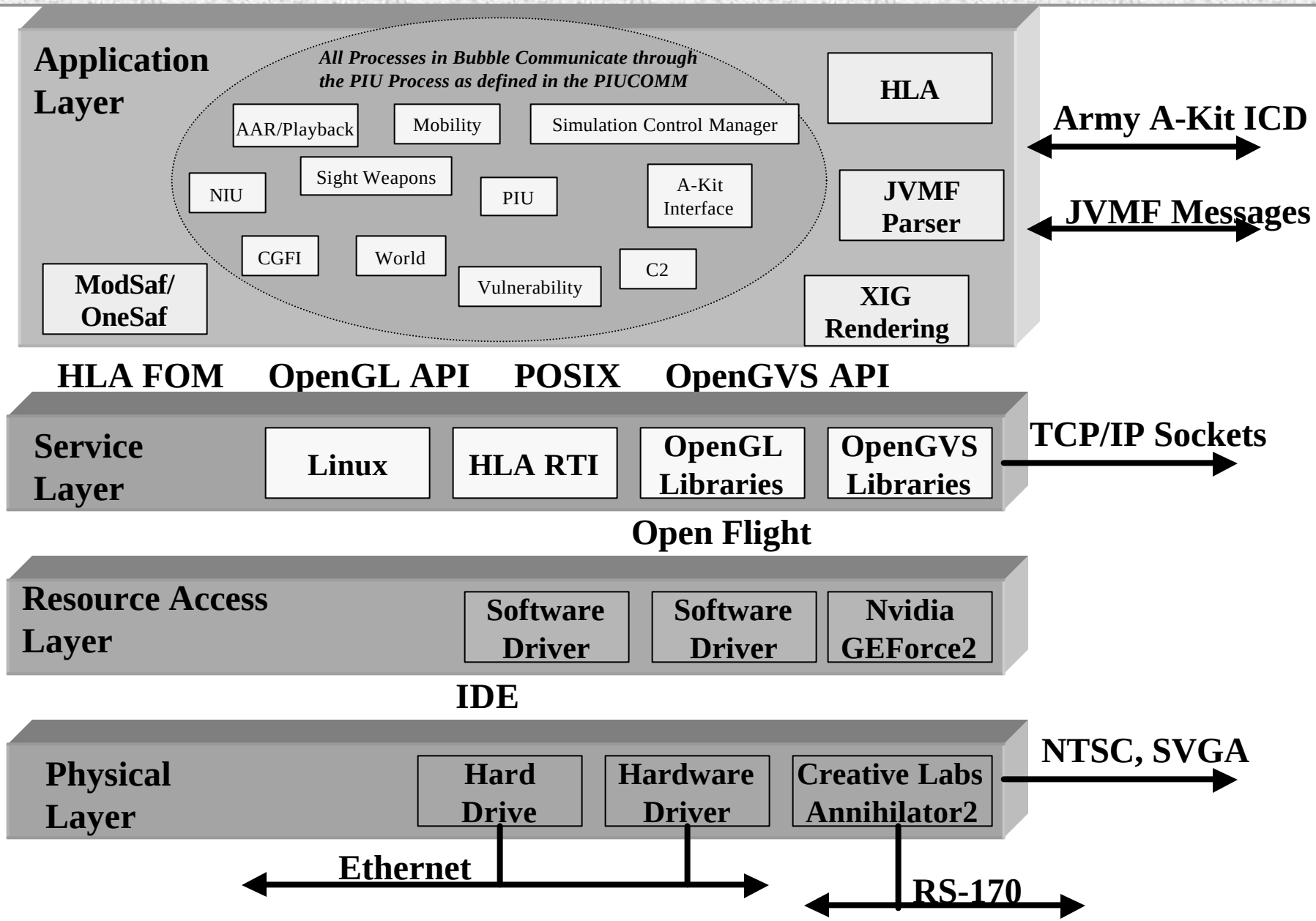
OPERATIONAL APPLICATIONS

Battlefield Visualization
Robotic Toolkit
Virtual Sensor Coverage
Virtual Lethality Coverage

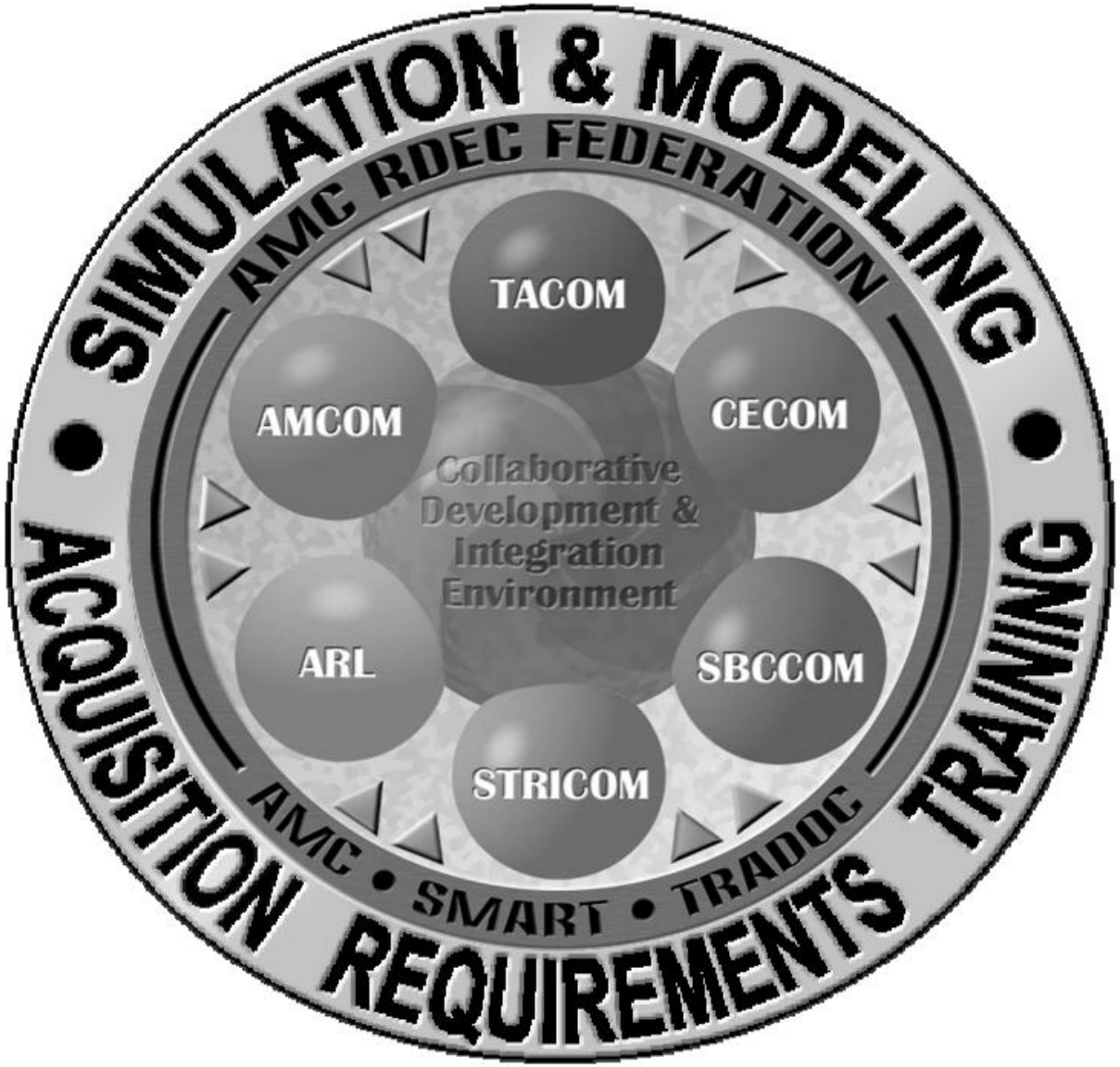
MISSION APPLICATIONS

Embedded Training
Mission Rehearsal
Mission Planning

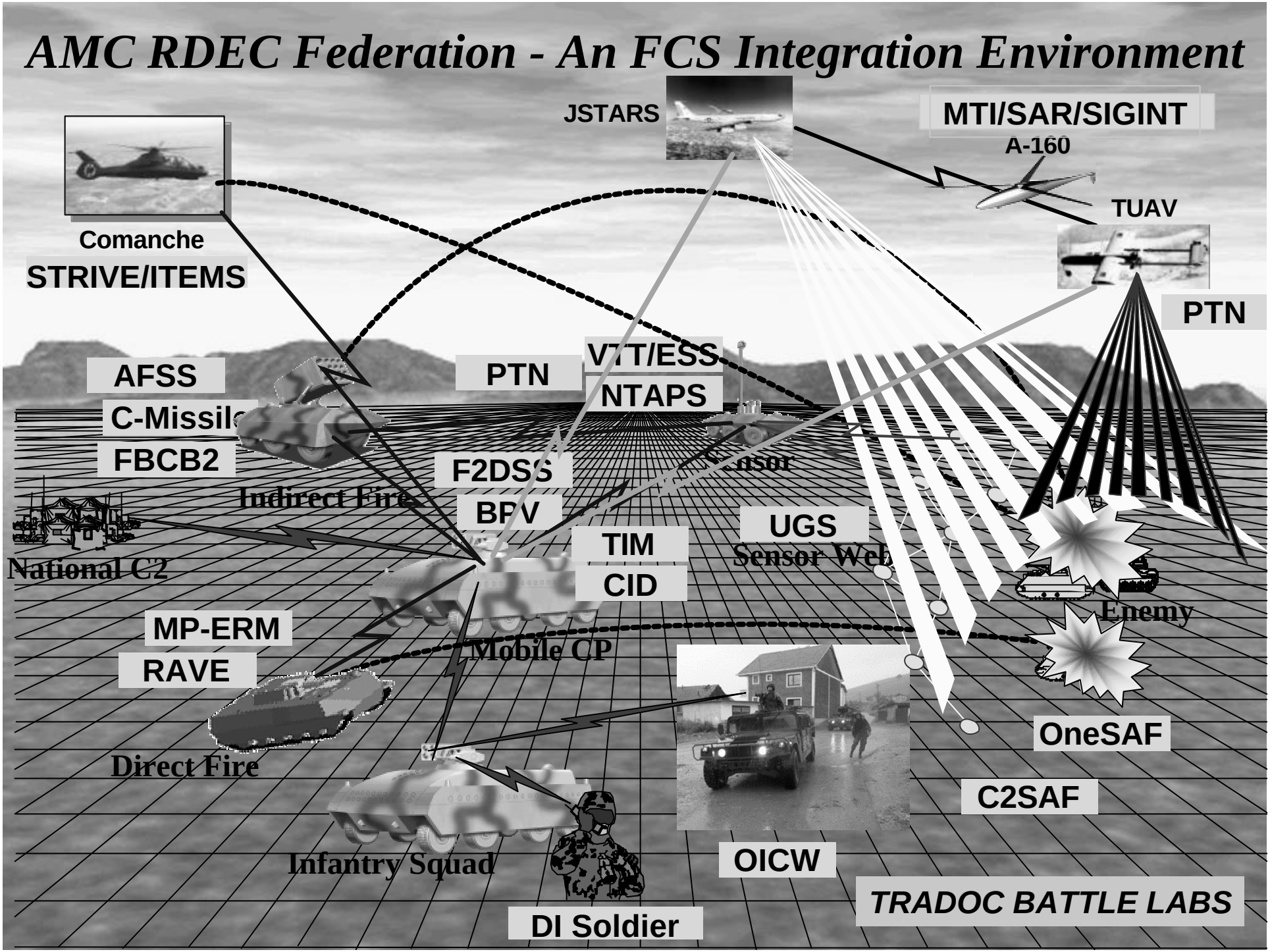
Embedded Simulation "B-Kit" Initial Baseline



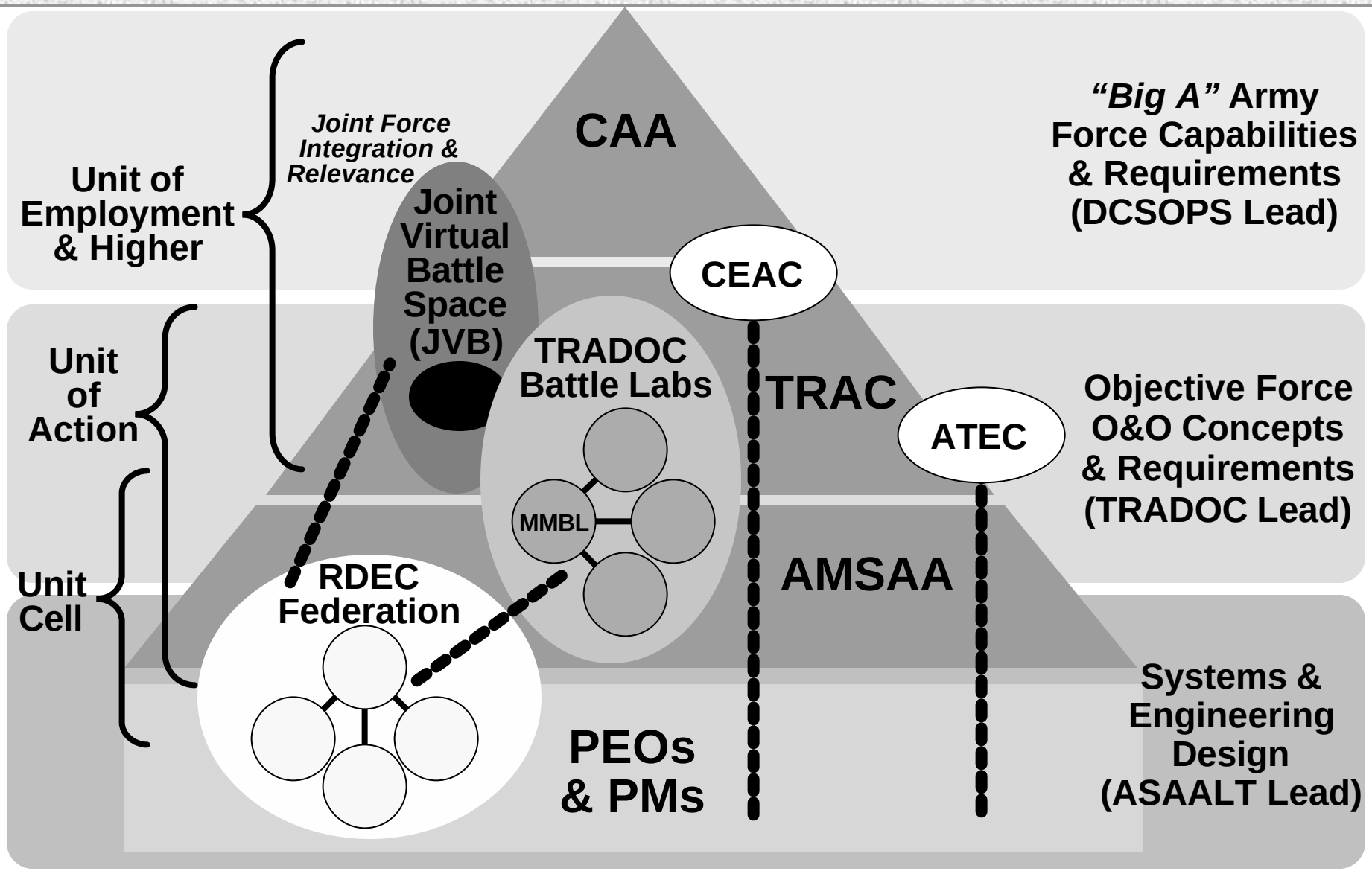
RDEC Federation



AMC RDEC Federation - An FCS Integration Environment



Objective Force M&S: Initial Core Capability



Initial Distributed Sites involved in RDEC Federation

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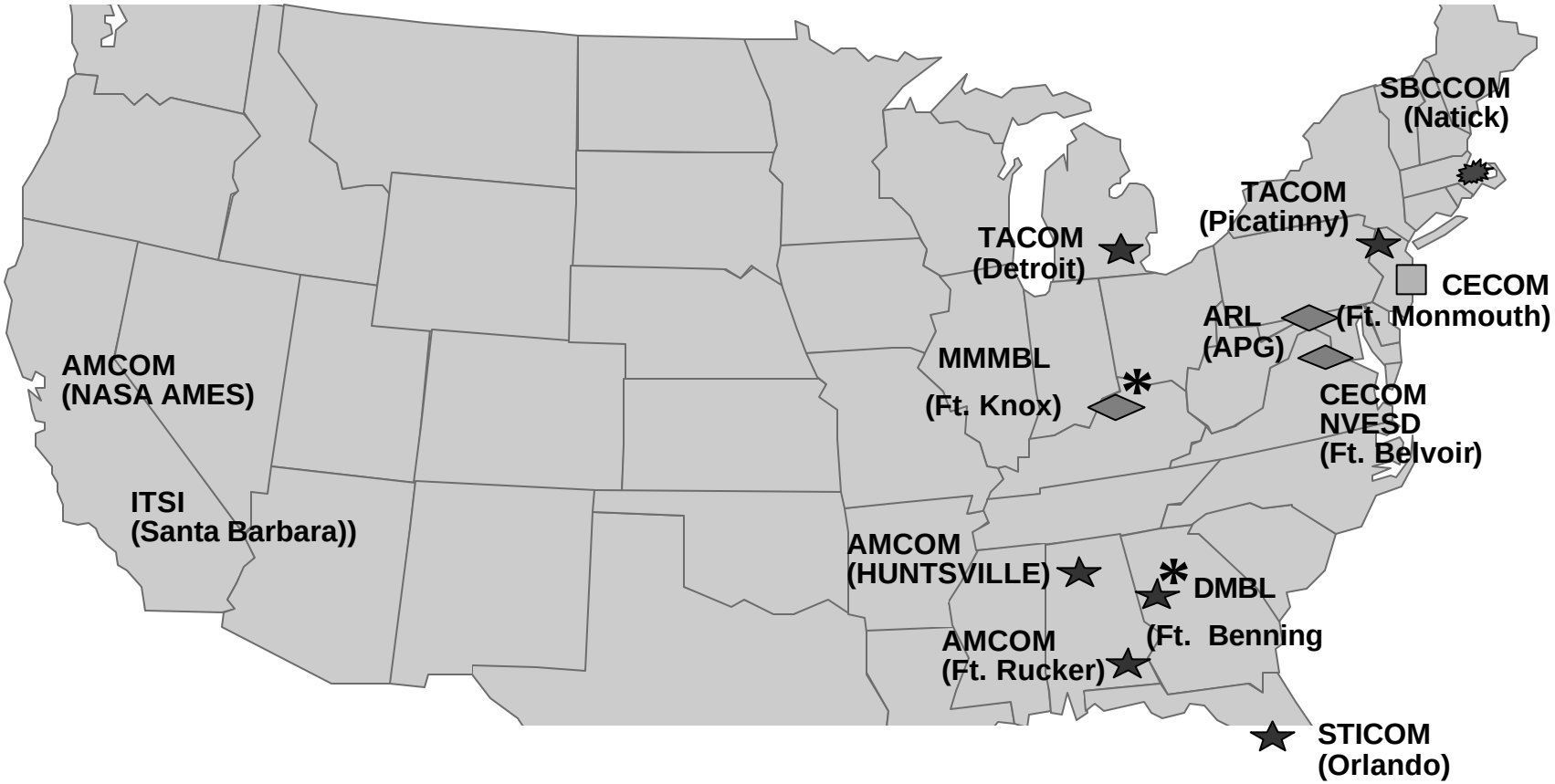
ATM OC-12

ATM OC-3

ATM DS-3

IP Ethernet DS-3

* TRADOC Battle Lab Connections to be exercised in future experiments