

2006 Combat Vehicles Conference

Current to Future...Future to Current

The HBCT
"Back for the Future"

24 October 2006

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Colonel, Infantry
Project Manager



Make A Difference Everyday!



Purpose

How we Know we're Back

PM HBCT Priorities and Fleet Strategy

Modularity

Supporting the Fight

Army Forces Generation Model

The Future



Mission

Deliver, Sustain and Modernize Combat Power for the Army's Heavy Brigade Combat Team Formations

Army's Life Cycle Manager for the **Abrams, M88, Bradley, M113, M109, and Knight** family of vehicles. Our responsibilities include the **design, development, production, fielding** and **sustainment** of **safe, reliable, and lethal** ground combat systems

*Our current focus supports **Deployed Forces, HBCT ARFORGEN Cycles, Modularity, Sustainment of Leave Behind & Theater Provided Equipment (LBE & TPE), RESET, Recapitalization and Spin-Out Technology** for each platform fleet both today and the future*

Support the Fight ** Sustain the Fleet ** Build the Future



Heavy Brigade Combat Team



Systems We Manage

8,325
Abrams FoV



3,962
Fire Support
Platforms



13,943 M113
6,452 Bradley





Additions To The Formation





Heavy Brigade Combat Team

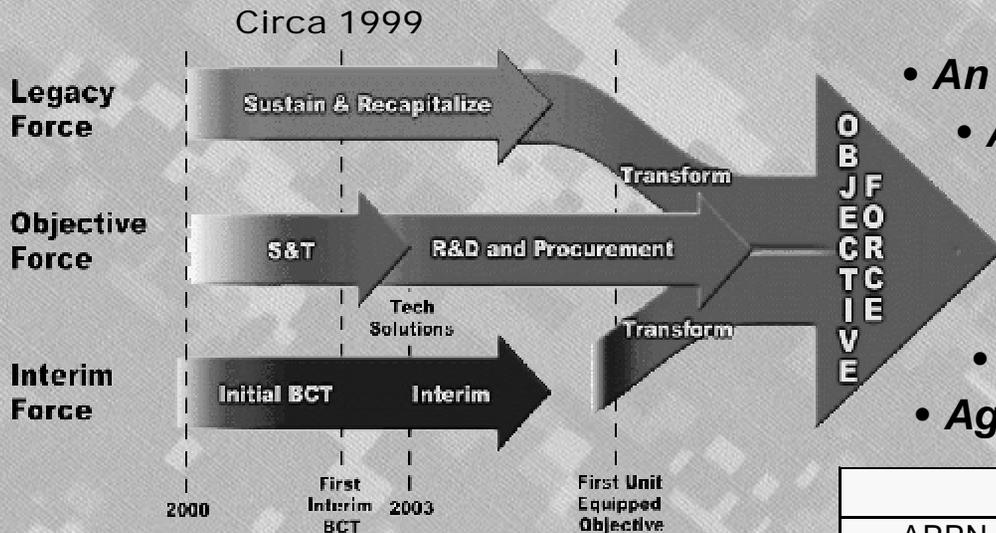


Current Priorities

- Support HBCTs in the Fight, and those preparing to Deploy**
- Execute 4ID/1CD Swap & associated Mission Essential Tasks**
- Execute the Condition Based Maintenance Demonstration (COBRA) Develop Vehicle Health Management Strategy**
- Posture to support the EBCT and Future Combat System**
- Pursue Process Improvement**
- Execute PM HBCT ARFORGEN Support Cycle**



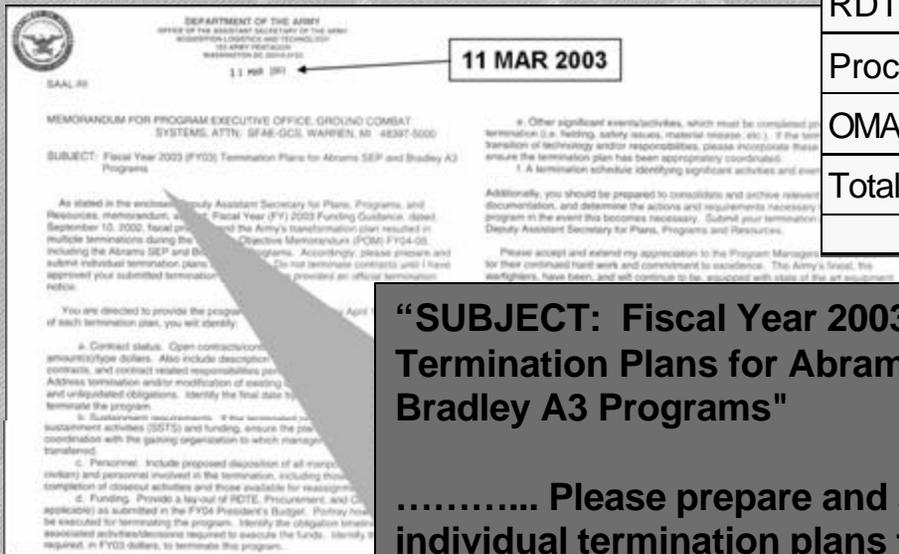
Where We Were...



- *An Army at Peace*
- *Assumed Risk with Current force*
- *Sustain versus Modernize*
- *Deliver FCS in 2008*
- *Centered on Divisions versus BCTs*
- *Divest versus Invest*
- *Aging Fleet*

PM Combat Systems Funding						
APPN	FY07	FY08	FY09	FY10	FY11	Total
RDTE	13.1	8.7	6.6	0	0	28.4
Procurement	477.2	441.7	337.3	110	103	1469.2
OMA	116	56				172
Total	606.3	506.4	343.9	110	103	1669.6

FY05 President's Budget, dtd., Jan 04 \$M



"SUBJECT: Fiscal Year 2003 (FY03) Termination Plans for Abrams SEP and Bradley A3 Programs"

..... Please prepare and submit individual termination plans for approval.

"Legacy versus Current"



Heavy Brigade Combat Team



Where We Are...

Vision: Relevant and Ready Landpower in Service to the Nation

Mission: Provide necessary forces and capabilities to the Combatant Commanders in support of the National Security and Defense Strategies

Four Overarching, Interrelated Strategies



THIS ARMY THIS DECADE

A Campaign Quality Army with Joint and Capabilities

Support Global Operations
Adapt and Improve Total Army Capabilities
Optimize Reserve Component Contributions
Sustain All Volunteer Force
Adjust Global Footprint
Build the Future Force
Adapt Institutional Army
Develop Joint, Interdependent Logistics Structure

- More Relevant & Ready
- More Capable & Modern
- More Stable & Predictable

Army Campaign Plan DP 41
JCIDs Process
Modularity (BCT Structure)
National Level RESET
FCS Synchronization
BCT Modernization
TRADOC Guidance

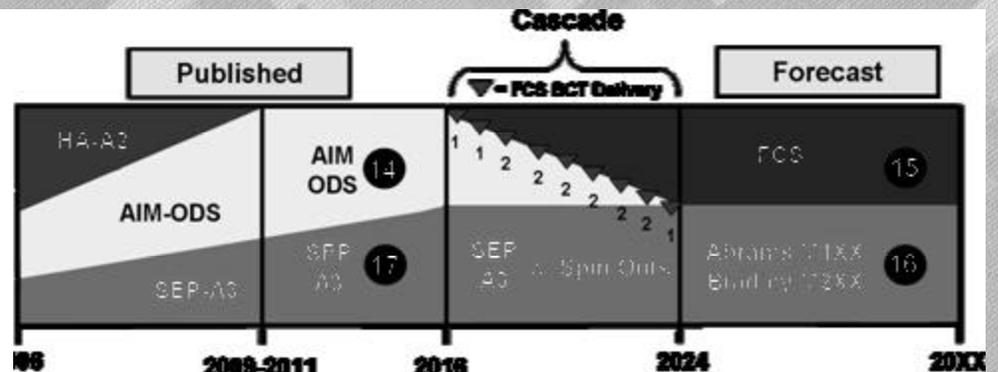
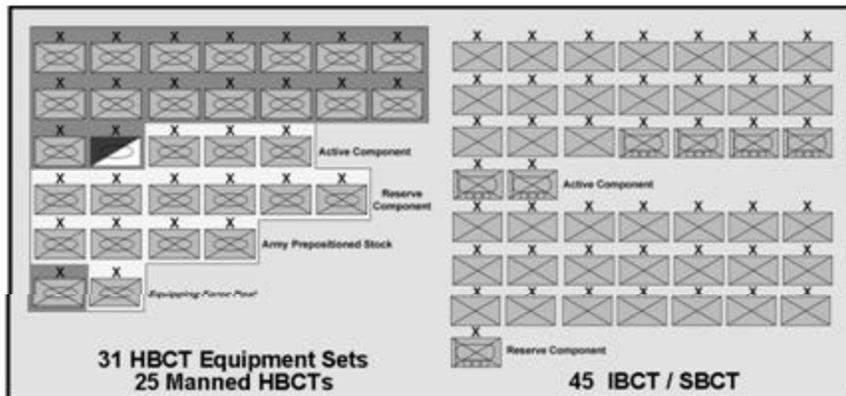
Doctrine
Hunter Killer
Complimentary Capability
Enemy Overmatch
Leverages HBCT and Perform Capabilities

Winning NOW to Increase Combat Power

CSA's Priorities
Win the Long War while sustaining the All-Volunteer Force
Accelerate the Future Combat Force Strategy
Celebrate Business Transformation and Process Improvements

PM Heavy Brigade Combat Team									
APPN	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
RDTE	Total Program Funding: 28.7 Billion								
Procurement									
OMA									
Total	3054	2712	6911	2532	3240	2871	3032	2461	2741

PM HBCT is the Life Cycle Manager for about 40% of the Army's BCT Combat Power



"HBCTs are Part of our Future"



HBCT Fleet Strategy



Commonality
 Power Management
 Tiger Engine
 Bradley Transmission
 Digital Fire Control
 Lethality
 FCS Spin Outs

Army Transformation

ARMY CAMPAIGN PLAN							
	FY04	FY05	FY06	FY07	FY08	FY09	FY10
Div	□ □	□ □ □	□ □ □ □	□ □ □ □			
BCT	□ □ □	□ □ □ □	□ □ □ □ □	□ □ □ □ □			
Div							
AMMO BCTs							
RESERVE							
SPAREPKR	□	□	□	□	□	□	□
Aviation	□ □ □	□ □ □	□ □ □	□ □ □	□ □ □	□ □ □	□ □ □
FCS					Spin Out		Spin Out

Modernize

Modularize



OPTEMPO

ARFORGEN



Sustain

Support the Fight

RESET
 Lessons Learned
 RECAP
 Leave Behind Equip
 Stay Behind Maintenance
 Combat Vehicle Evaluation

FLEET AGE





Modularity

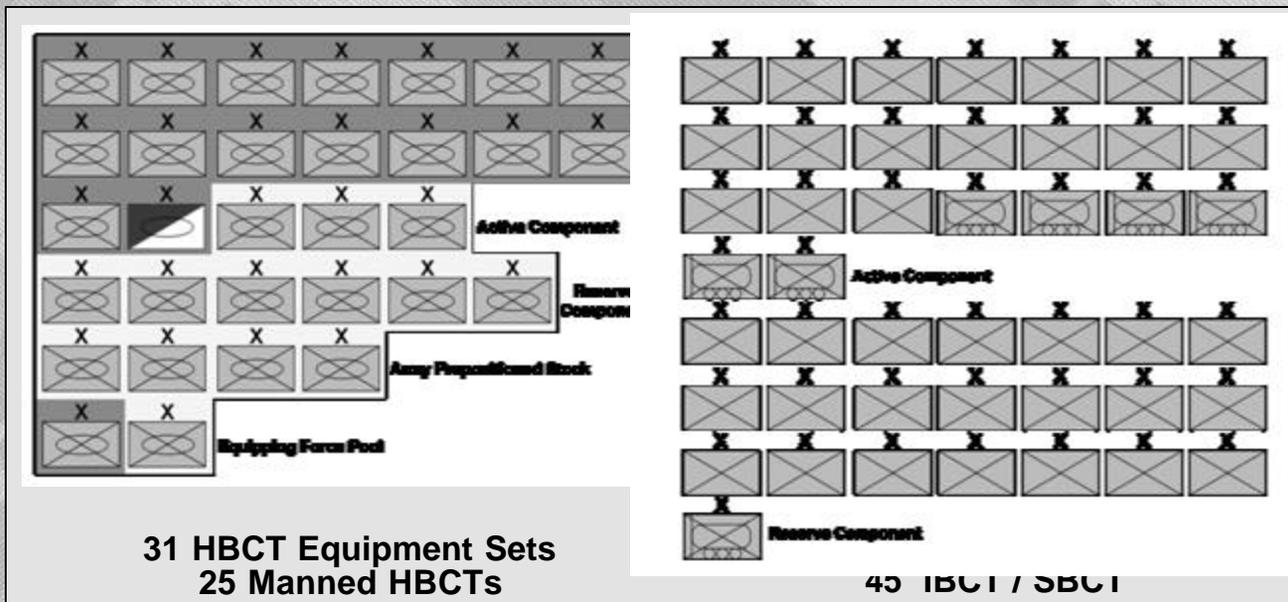




Bottom line...

PM HBCT is the Life Cycle Manager for about 40% of the Army's BCT Combat Power

17 SEP-A3
+
14 AIM-ODS
=
31 HBCT's



Responsibilities Include:

- Deliver Combat Overmatch through Lethal Survivable Systems
- Modernize HBCTs
- Sustain:

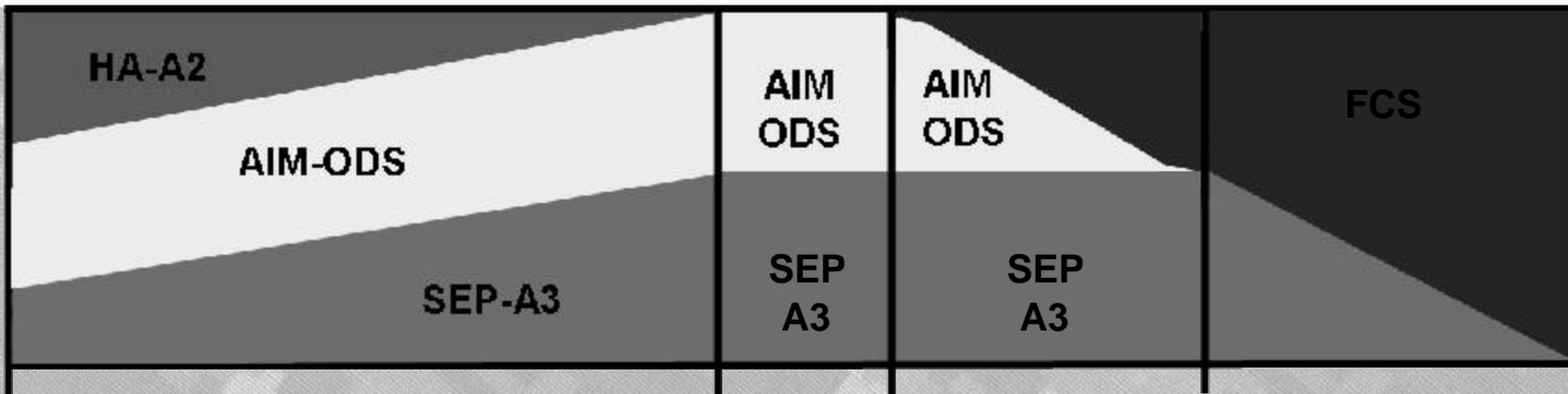
Reconstitution	RESET
Recapitalization	Modify
Remanufacture	Upgrade
- Modernize
- Maintain Operator and Maintenance Training Devices
- Maintain Interoperability between Systems and with FCS BCT



Heavy Brigade Combat Team



-- A Year Ago



2006

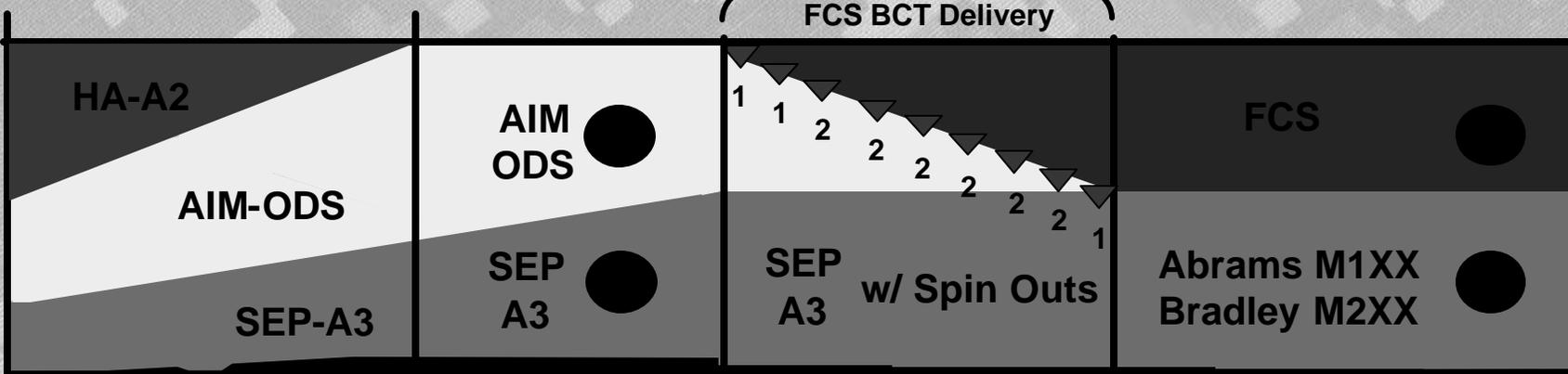
2009-2011

2016

2024

20XX

Today



Linking the Current Force to the Future Force



Heavy Brigade Combat Team

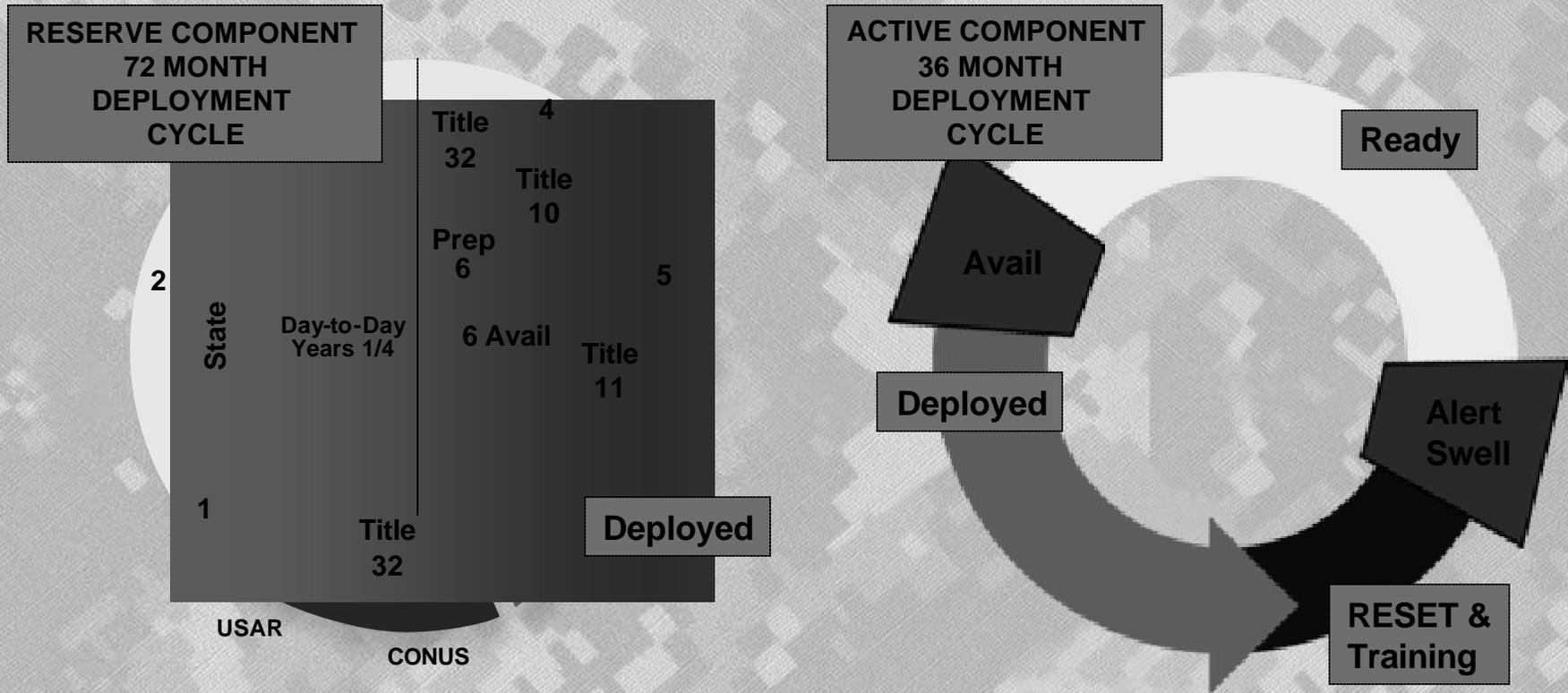


Support the Fight





Army Forces Generation Model ARFORGEN

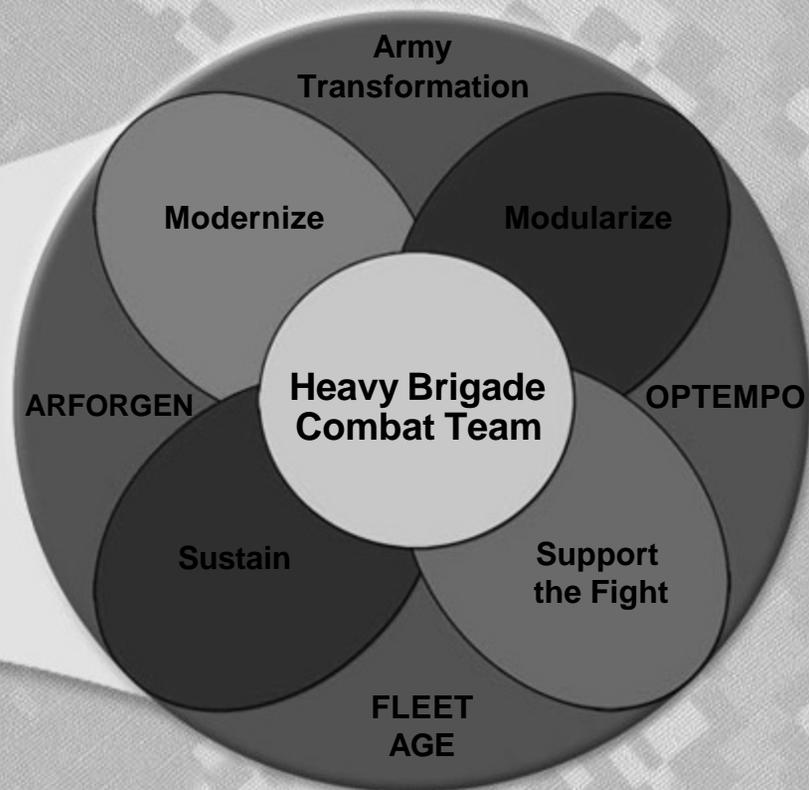
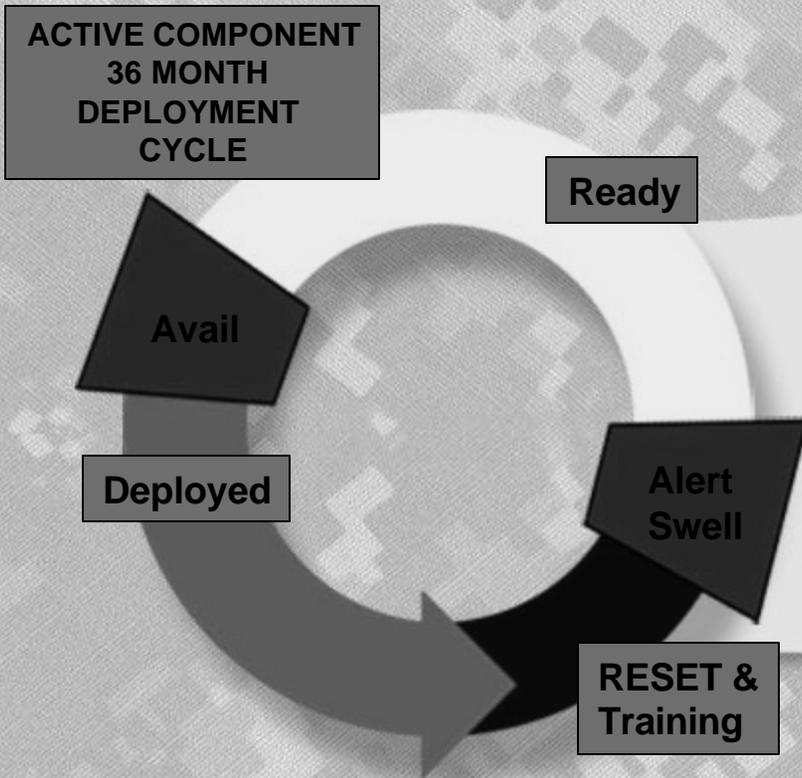


**Synchronizes the Right Force Mix with the Right Equipment Mix
at the Right Time**
PM Objective is to "ONLY TOUCH THE UNIT ONCE"



ARFORGEN

HBCT Fleet Strategy

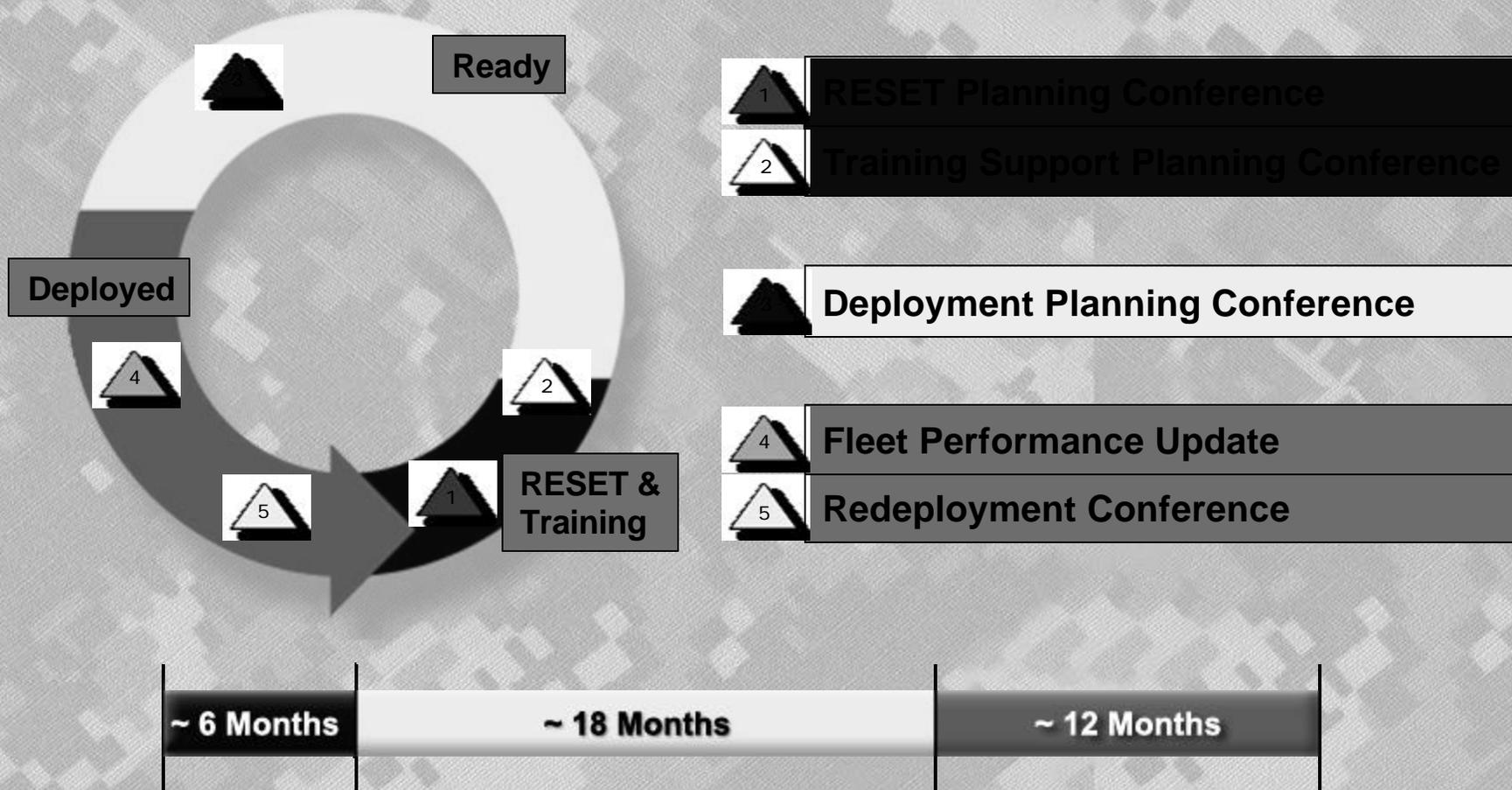


Notional Unit Cycle
 Active Army one Deployment in three year cycle
 Reserve Component one Deployment in six year cycle



ARFORGEN Support Cycle

Touch Points Overview



Five Critical Interactions between PM HBCT, Divisions and HBCTs



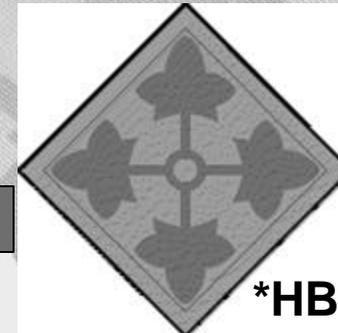
Heavy Brigade Combat Team



ARFORGEN is a BCT Planning Tool (31 HBCT)

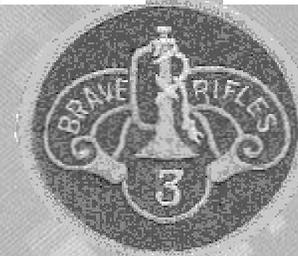


EBCT x 4



Ready

*HBCT x 9



HBCT x 2

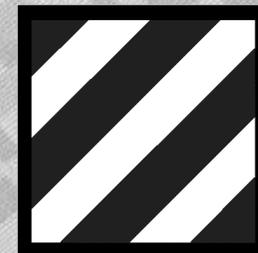


Deployed

Alert Swell

RESET & Training

RC = HBCT x 6
(notional Units)



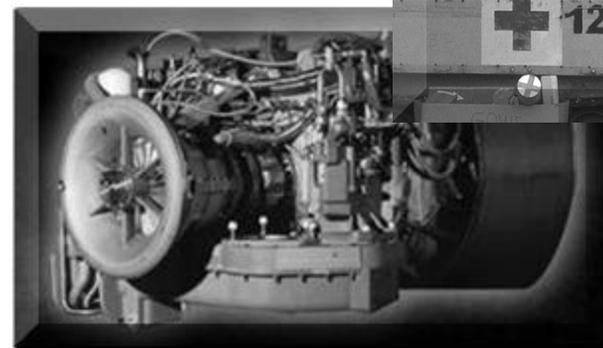
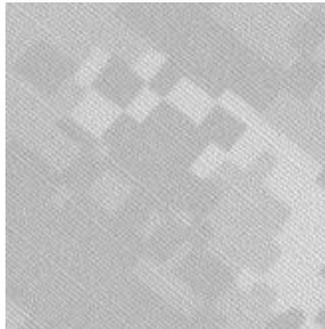
HBCT x 4



Heavy Brigade Combat Team



Sustain the Fleet



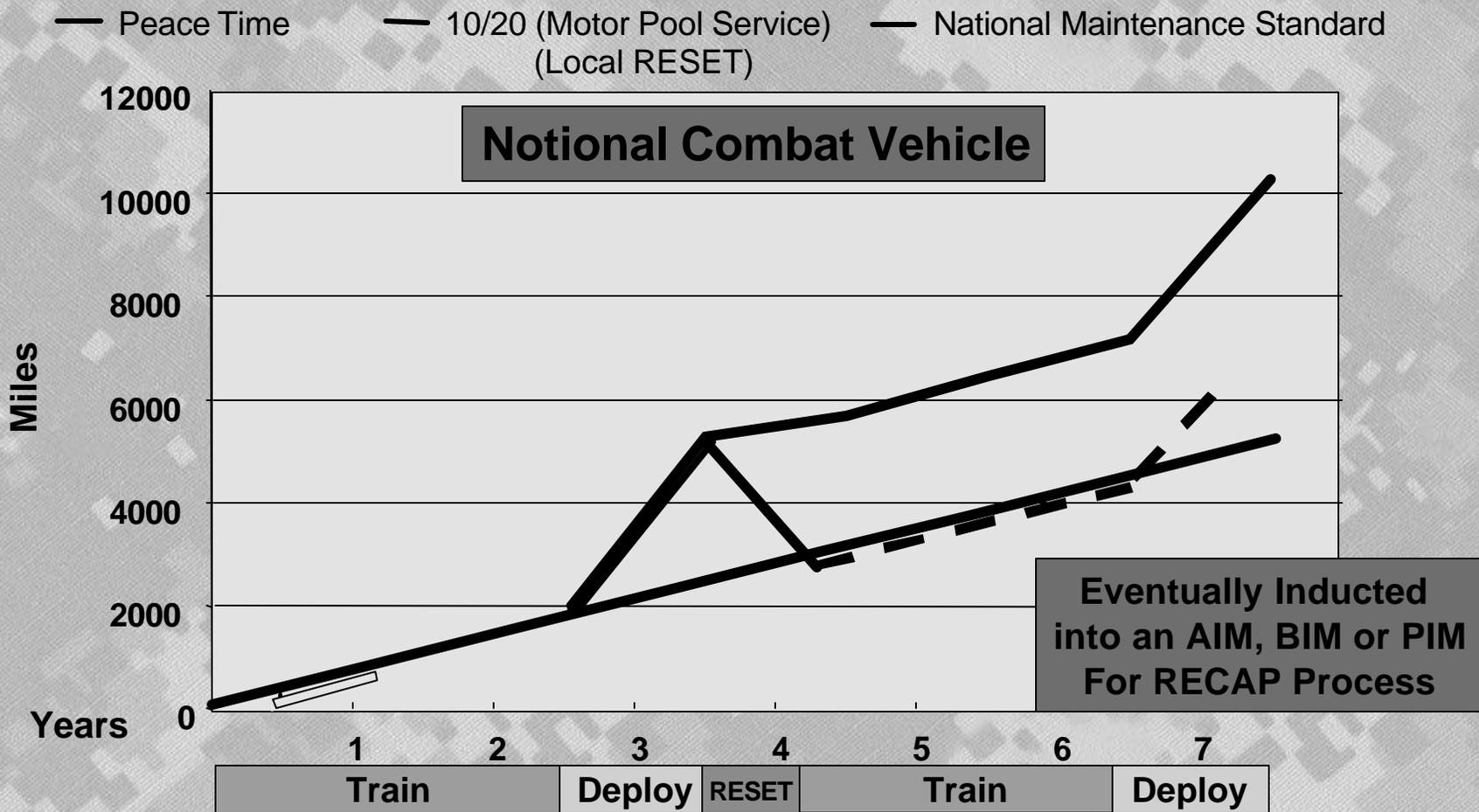


National Level RESET

Work performed to correct equipment faults that are above the Field level of maintenance (that is, above ORG and DS), as laid out in Technical Manual Maintenance Allocation Charts. National level Reset is orchestrated by AMC, performed to a National standard that AMC is responsible for defining, and could be done in the Army Materiel Command, by contractor, by installation DOL maintenance activities, or any combination of the three. It is conducted in depots, arsenals and forward on or near installations where the equipment is stationed. The AMC life cycle management centers (LCMCs) develop strategies for National Level maintenance ICW their PEO/PM (LCMCs include PEO/PMs) partners and IMA (for work done by DOLs). National level Reset can also be performed on pieces of equipment which exceed Field level Reset capability because of the quantity, aggregate labor in a given unit and/or complexity of work to be performed. [Certain types of equipment, delete between <><due to its inherent complexity> will automatically be done at the National level of maintenance. Aviation STIR and the Generator Reset program are examples. AMC and MACOM agreed to items are selected for automatic RESET, and AMC publishes a list of equipment which is treated in this manner.



Goals for National Level RESET



- Peace Time OPTEMPO is 800 Miles/Year
- Abrams and Bradley Mileage in SWA is 5000 - 8000 Miles



Recapitalization

Rebuild, Reman and/or Systemic Upgrade of systems in our inventory to *ensure Operational Readiness and a zero time/zero mile system.* To PM HBCT the primary purpose of RECAP is build sufficient current configuration assets to achieve the Modular End State. Traditionally RECAP objectives include; extending service life, reducing O&S costs, improving system reliability, and enhancing capability. For us RECAP is taking an old configuration system and *delivering an upgraded system to the fleet.* RECAP occurs at the National Level of Maintenance and is done in an AMC Depot/Arsenal, by the OEM or a Partnership of the two. RECAP is managed by PMs as part of AMC LCMCs

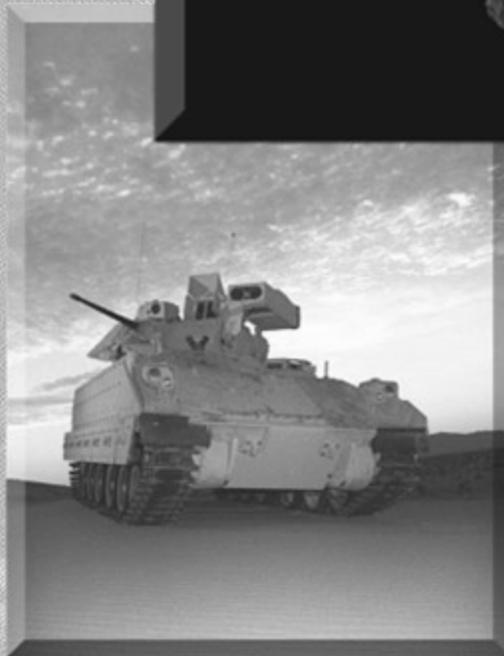
Upgrading Existing Systems to Deliver Current Configuration Combat Platforms to achieve the Modular Fleet End State



Heavy Brigade Combat Team



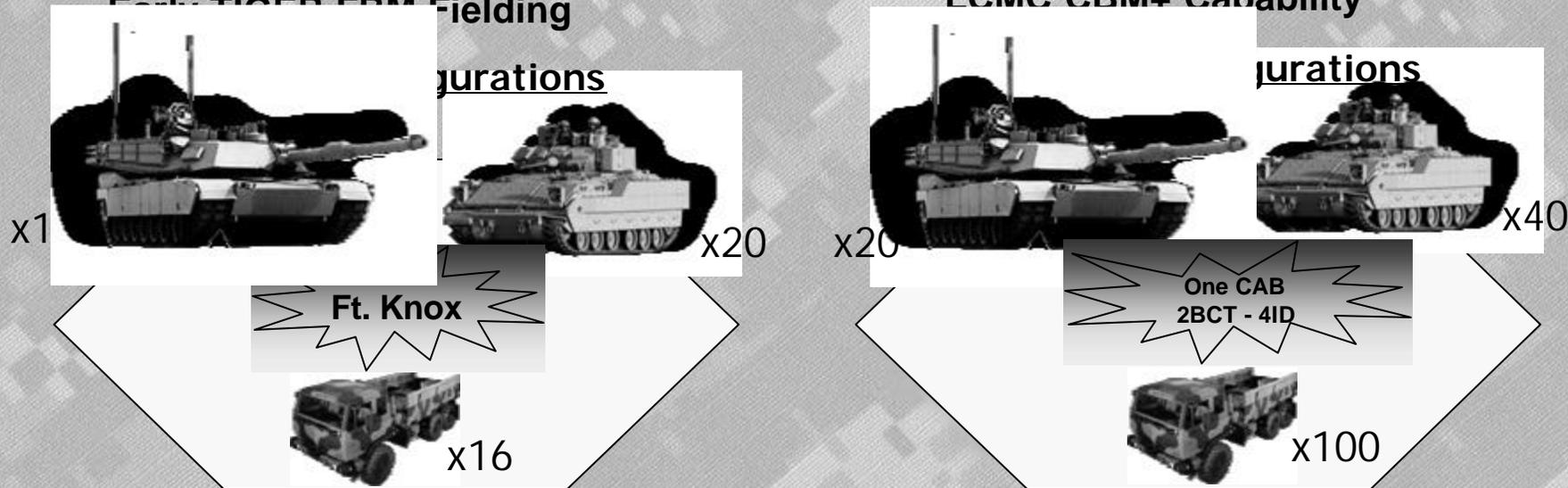
Modernize the Fleet





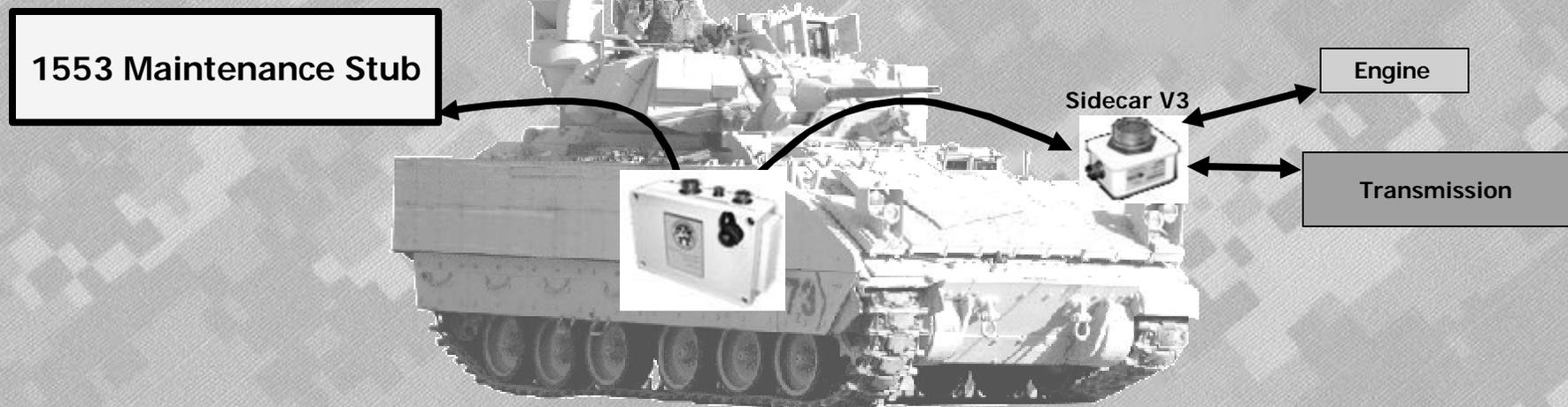
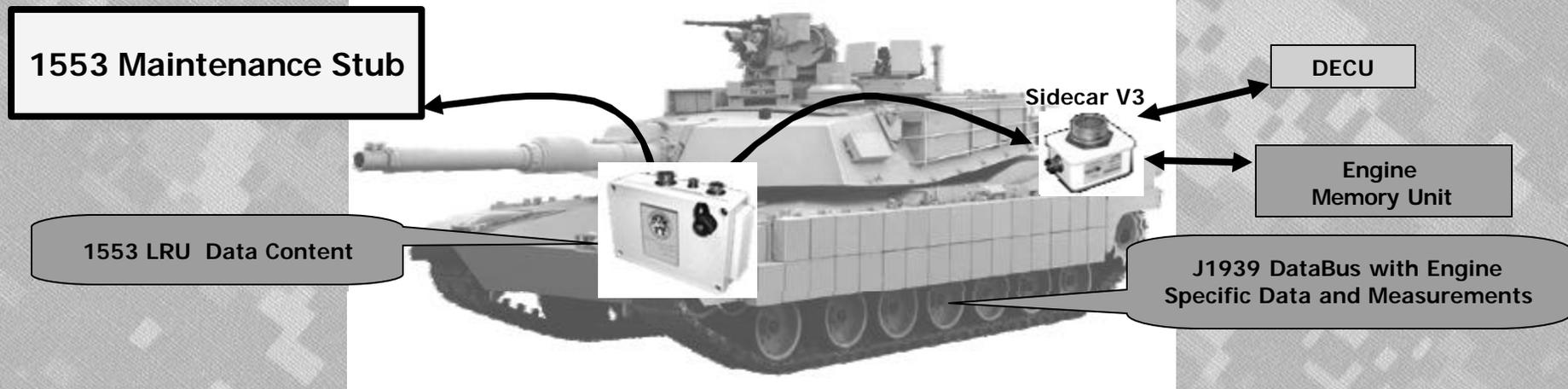
Conditioned Based Maintenance Reliability Assessment (COBRA)

- Functional Data from an Operational Unit
- Additional Platform Sensed Parameters
- Autonomous Data Collection, Storage, and Transmission
- Enable Configuration Management (ID Tagging)
- Logistics and Maintenance Situational Awareness (SA)
 - On and Off Vehicle
- Maintenance and Log Analytical Tools and Reports
- Standing Up Developmental Platform
- Risk Reduction with Fort Knox Fielding
- Supports Development of FCS Interoperability and CLOE
- Establishes the Foundation for the LCMC CBM+ Capability





M1A2 SEP/M2A3 Configuration





Modernization *Commonality*

Mobility

*Power Train
Suspension
Track*

Situational Awareness

*Next Gen FLIR
FBCB2
BFT
DVE
360° SA*

Survivability

*APS
Seats
CREW II
DVE
Gun Shields*

Common Focus

*Power Mgmt
Spin Outs
LRU Consolidation
Thermal Mgmt
Embedded Training*

Vehicle Health

*CM/ED
Cobra
TMDE*

Lethality

*Next Gen Ammo
Common Weapon
Stations*

Commonality Opportunities - Technologies, Products & Components



Summary

PM HBCT is the LCM for about 40% of BCT Combat Power

HBCTs are integral to the Current and Future Army Force

**M2A3 and M1A2 Represent the EBCT Platforms for FCS
Spinouts 1-4**

**Transformation must include a Current Force Modernization
Strategy that Compliments FCS**

Commonality is the Center of Gravity for HBCT Modernization