2006 Combat Vehicles Conference
Current to Future...Future to Current

The HBCT
"Back for the Future"

24 October 2006
Larry Hollingsworth
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
Systems We Manage

- 3,962 Fire Support Platforms
- 8,325 Abrams FoV
- 13,943 M113
- 6,452 Bradley
- 32,810 Vehicles in Active Use
Additions To The Formation
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

**Circa 1999**

- Sustain & Recapitalize
- R&D and Procurement
- Transform

**Legacy Force**

**Objective Force**

**Interim Force**

**PM Combat Systems Funding**

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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”**
### 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 Objectives

- Relevant and Ready Landpower
- Trained and Equipped Soldiers to Serve as Mentors and可借用 Enhance Adaptive Leaders
- Sustain an All-Volunteer Force Composed of Highly Competent Soldiers that are Provided an Equally High Quality of Life
- Provide Infrastructure and Support to Enable the Force to Fulfill its Strategic Roles and Missions

#### Total Program Funding:

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**Total Program Funding:** 28.7 Billion

**PM Heavy Brigade Combat Team**

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

- 31 HBCT Equipment Sets
- 25 Manned HBCTs
- 45 IBCT / SBCT

**“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
Modernize
Modularize

Heavy Brigade Combat Team
Sustain
Support the Fight

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

FLEET AGE
OPTEMPO
ARFORGEN

ARMY CAMPAIGN PLAN
Modularity
**Responsibilities Include:**

- Deliver Combat Overmatch through Lethal Survivable Systems
- Modernize HBCTs
- Sustain:
  - Reconstitution
  - Recapitalization
  - Remanufacture
  - Upgrade
- Modernize
- Maintain Operator and Maintenance Training Devices
- Maintain Interoperability between Systems and with FCS BCT

**Bottom line...**

PM HBCT is the Life Cycle Manager for about 40% of the Army’s BCT Combat Power.
Linking the Current Force to the Future Force
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

ACTIVE COMPONENT
36 MONTH
DEPLOYMENT CYCLE

Alert
Swell

Ready

Deployed

Avail

RESET & Training

HBCT Fleet Strategy

Heavy Brigade Combat Team

Army Transformation

Modernize

Modularize

Support the Fight

FLEET AGE

OPTEMPO

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

- RESET Planning Conference
- Training Support Planning Conference
- Deployment Planning Conference
- Fleet Performance Update
- Redeployment Conference

~ 6 Months
~ 18 Months
~ 12 Months
ARFORGEN is a BCT Planning Tool
(31 HBCT)

EBCT x 4

HBCT x 4

HBCT x 2

RC = HBCT x 6
(notional Units)

RESET & Training

Alert Swell

Avail

Ready

*HBCT x 9
Heavy Brigade Combat Team

Sustain the Fleet
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
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
    - Early TIGER FBM Fielding
- 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

Vehicle Configurations:
- x15
- x20
- x16
- x20
- x40
- x100

Ft. Knox
One CAB
2BCT - 4ID
M1A2 SEP/M2A3 Configuration

- 1553 Maintenance Stub
- 1553 LRU Data Content
- J1939 DataBus with Engine Specific Data and Measurements
- DECU
- Engine Memory Unit
- Engine
- Transmission
Modernization
Commonality

Mobility
Power Train
Suspension
Track

Survivability
APS
Seats
CREW II
DVE
Gun Shields

Vehicle
Health
CM/ED
Cobra
TMDE

Lethality
Next Gen Ammo
Common Weapon
Stations

Situational Awareness
Next Gen FLIR
FBCB2
BFT
DVE
360° SA

Common Focus
Power Mgmt
Spin Outs
LRU Consolidation
Thermal Mgmt
Embedded Training

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