

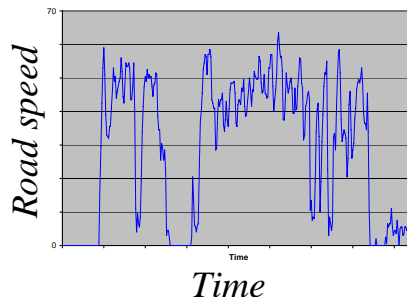
Condition Based Maintenance (CBM) for Ground Vehicles

- Collect vehicle data, GPS, vibration load, and other types
- Implementation will:
 - Enable prognostics and diagnostics
 - Improve fleet management
 - Provide realistic profiles for vehicle testing
 - Provide better data to engineers with actual drive-cycle definitions
 - Improve driver performance
 - Provide users, maintainers, commanders, and Life Cycle Management Command with near real time characterization of vehicle operation and usage severity
- Will field limited number of CBM boxes on Tactical Wheeled Vehicles
- Will link CBM data with actual maintenance actions (i.e., part replacements)

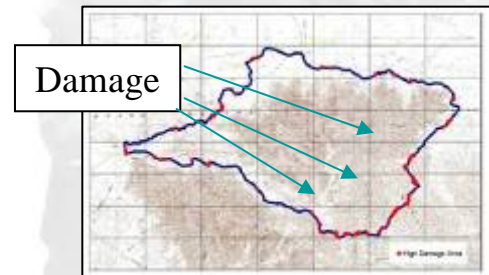
**Commercial Box with
adaptable data processing tools**



Analyze multiple parameters



**Determine where most
damage is occurring**



How Will The CBM Process Work?



Condition Based Maintenance (CBM) for Ground Vehicles

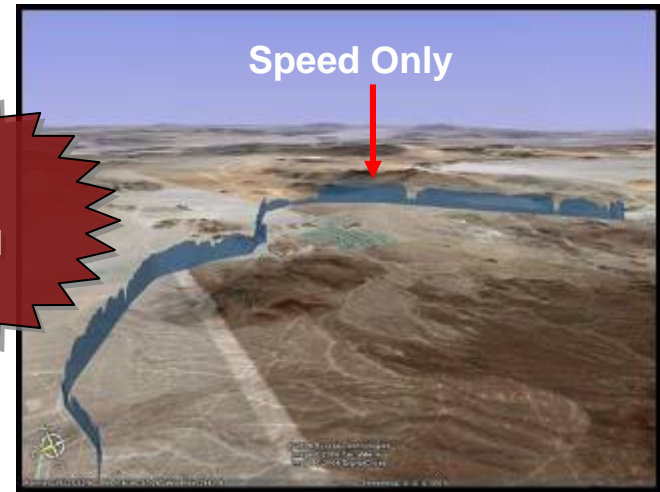
Vehicle Instrumentation – Automated Data Collection

HMMWV Ambulance

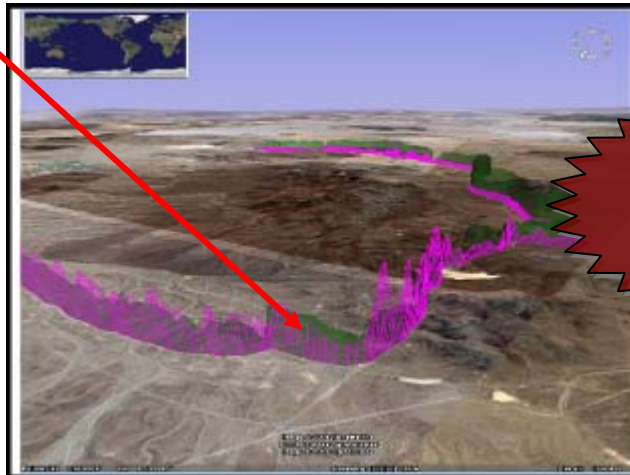


Visual representation of various data elements collected during training exercise

HEMTT Wrecker



HEMTT Tanker



Can provide quick feedback for analysis

HEMTT Cargo



Speed vs. Vertical Accelerations

- ✓ Visualization provides ability to quickly assess terrain conditions & operator characteristics
- ✓ Any collected parameter can be plotted (e.g., coolant temp, horsepower, hard brakes, ...)

Safety

- **DoD Top 40 – 3 of 5 listed AMC installations projected to drop from 2005 list**
- **Safety Rapid Review Team – increases awareness of the value and necessity of Safety and Occupational Health**
- **FY 06 Workers' comp costs are down (factoring inflation)**
 - 6 AMC Installations reducing Workers' Comp Costs – active management
- **Accidents, Claims, and Rates Reducing**
- **OSHA Voluntary Protection Program**
 - Installations efforts to enroll in VPP underway
 - Corpus Christi Army Depot, Pine Bluff Arsenal, Red River Army Depot, McAlester Army Ammunition Plant, Toole Army Depot in DoD VPP Center of Excellence Program
 - Tobyhanna maintains VPP Star Status
 - Integrates Safety and Occupational Health into AMC doctrine and operations



TEAM EFFORT

Partnering = Success



AMC FY 06 Small Business Program

AMC Top 15

- Alliant Techsystems Inc
- AM General LLC
- Armor Holdings Inc.
- BAE Systems
- General Dynamics Corporation
- GD GDLS Defense Group LLC
- Honeywell International, Inc.
- ITT Industries Inc.
- Kellogg Brown & Root Services, Inc.
- Northrop Grumman Systems Corporation
- Oshkosh Truck Corporation
- Raytheon Company
- Sikorsky Aircraft Corporation
- TEXTRON Systems Corporation
- The Boeing Company

- Over \$6.1 Billion in prime contracts (15% of AMC total)
- Nearly 29,000 small business contract actions
- AMC accounts for 35 - 40% of the Army's small business contract obligations
- Seeking sponsorship of mentor protégé agreements – especially in manufacturing

AMC Public-Private Partnerships (in FY06)

Partnerships ~ 340
Totaling ~ \$463M

Public-Private Partnerships

Partnering at RRAD

Common Partnership Objectives



- Improved performance
- Best Value for Government

- Improved reliability of product
- Strengthen and Workload Public and Private Industrial Bases Core Capabilities

BAE Systems

Ground Systems Division
Bradley

Oshkosh

HEMTT

Armor Holdings

FMTV

BAE SYSTEMS



Public-Private Partnerships

Partnering at CCAD

Common Partnership Objectives



- Improved performance
- Best Value for Government

- Improved reliability of product
- Strengthen and Workload Public and Private Industrial Bases Core Capabilities

General Electric
T700 Engine

Sikorsky
H-60 Hawk

Boeing
AH-64 Apache
& CH-47 Chinook

Honeywell
T55 Series Engines

 **General Electric**



Honeywell



Public-Private Partnerships

Partnering at ANAD

Common Partnership Objectives



- Improved performance
- Best Value for Government

- Improved reliability of product
- Strengthen and Workload Public and Private Industrial Bases Core Capabilities

General Dynamics

M1 Abrams

General Dynamics

Stryker

BAE Systems

M113

Honeywell

AGT 1500 Engine

GENERAL DYNAMICS

GENERAL DYNAMICS

BAE SYSTEMS

Honeywell



Public-Private Partnerships

Partnering at TYAD

Common Partnership Objectives



- Improved performance
- Best Value for Government
- Improved reliability of product
- Strengthen and Workload Public and Private Industrial Bases Core Capabilities

Command Post Platform

NORTHROP GRUMMAN
Information Technology



Shadow UAV

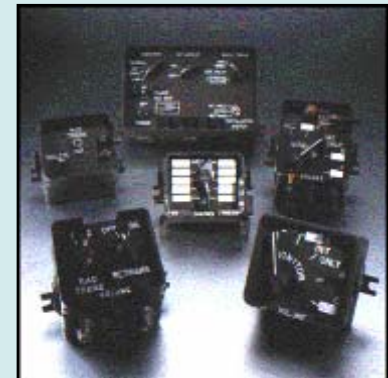


AN/PRC112D



Vehicle Intercom Kits

BAE SYSTEMS



Public-Private Partnerships

Partnering at LEAD

Common Partnership Objectives



- Improved performance
- Best Value for Government
- Improved reliability of product
- Strengthen and Workload Public and Private Industrial Bases Core Capabilities

BAE Systems

Parts for the
Buffalo Mine
Protected Vehicle

BAE SYSTEMS



Boeing

Mounted Battle
Command On The
Move

 **BOEING**



Lockheed Martin

Depot repair of
Apache, TADS,
PNVS


LOCKHEED MARTIN



Macro Industries

Avenger box
fabrication

MACRO INDUSTRIES INC.



Fort Hood RESET/Reconstitution Partners



KALYN SIEBERT
A RailAmerica Company

M871, M129, M969,
M1098




OSHKOSH

PLS, PLS-T, CBT,
HEMTT



The Ginn Group

Trailers




BAE SYSTEMS

M113 FOV, M2/M3
FOV, MLRS,
M109A6, M992A2



Fort Hood



GENERAL DYNAMICS
Strength On Your Side™

M1A2 SEP, M93 FOX, M58
SMOKE, PM TRCS Systems



ARMOR HOLDINGS, INC.

FMTV




ManTech
International Corporation

Power Generation, ECUs,
Communications & Electronics



DynCorp
INTERNATIONAL

AH64D, OH58D,
UH60L, AGPU



AM General

HMMWV, M934



CATERPILLAR®

D5 & D7 Tractors

Setting the Force

What We've Done . . . What We're Doing

ARMY PLAN

The Army will undertake a disciplined, orderly reconstitution to restore combat power.

**4,036 Tracks
FY07**

2,263 Tracks
12,948 Wheels

(* Includes Reset
& Recap)

**11,496 Wheels
FY07**

**3,733
Generators
FY07**

8,284 Generators
16,235 Commo/Electric

FY07 Projections

17,494 FY07

128,531 Small Arms

**666 Aircraft
FY07**

2,054* Aircraft Scheduled
1,798* Completed

**8,787 Missile
FY07**

11,453 Missile Systems
15,032 Missile Rounds Reset
13.3K Short Tons Ammunition
Processed for Reissue in SWA
9 Patriot Battalions
68 MLRS

Future

- Health of the Industrial Base
 - Joint Centers of Excellence
- Increase Efficiency and Partnership
- Increase the Awareness and Synchronization
 - OSD, Congress and the Services
 - Laws, Rules and Regulations
- Totally Integrated Life Cycle Management Commands





FOCUSED ON THE
WARFIGHTER