

Stryker Brigade Combat Team

STRYKER™



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GM

Defense



Overview

- Program
- Supportability Constraints
- Stryker Support Concepts



Why the Stryker?



General Eric Shinseki,
Chief of Staff, US Army

“We must provide early entry forces that can operate jointly, without access to fixed forward bases, but we still need the power to slug it out and win decisively. Today, **our heavy forces are too heavy and our light forces lack staying power.** We will address those mismatches.”

23 June 1999



US Army Stryker Program

- 2131 Stryker Light Armored Vehicles
- 10 Vehicle Configurations
- Based on Canadian LAV III
- 6 Brigade Combat Teams
 - 1 Brigade per year
 - 1st Deliveries Start - Feb 2002



Stryker Partners



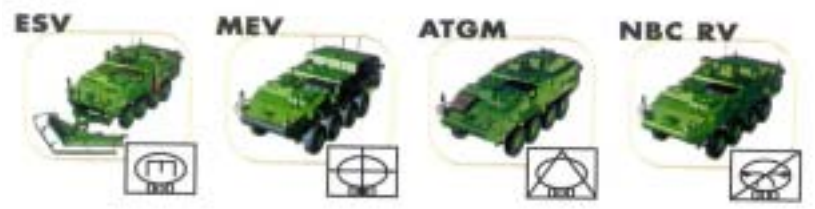
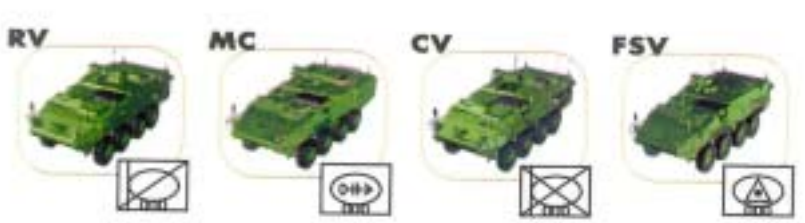
GENERAL DYNAMICS
Land Systems





Stryker Variants

- ICV
- MGS
- ATGM
- ESV
- RV
- FSV
- CV
- MCV
- NBCRV
- MEV



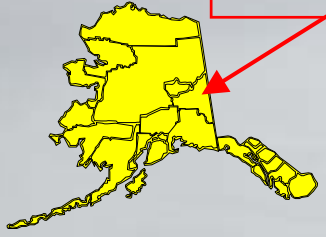


Stryker Quantities per BCT

Infantry Carrier	108
ATGM	9
Mortar Carrier	36
Recon Vehicle	48
Fire Support Vehicle	13
Engineer Squad Vehicle	9
Commander's Vehicle	39
Medical Evac Vehicle	17
NBC Recon Vehicle	3
Mobile Gun System	27
Total	309

Stryker Brigades

**172nd Bde - Ft Wainwright
Ft Richardson, Alaska**



**3rd Bde, 2 Inf Div & 1st Bde, 25 Inf Div
Fort Lewis, Washington**



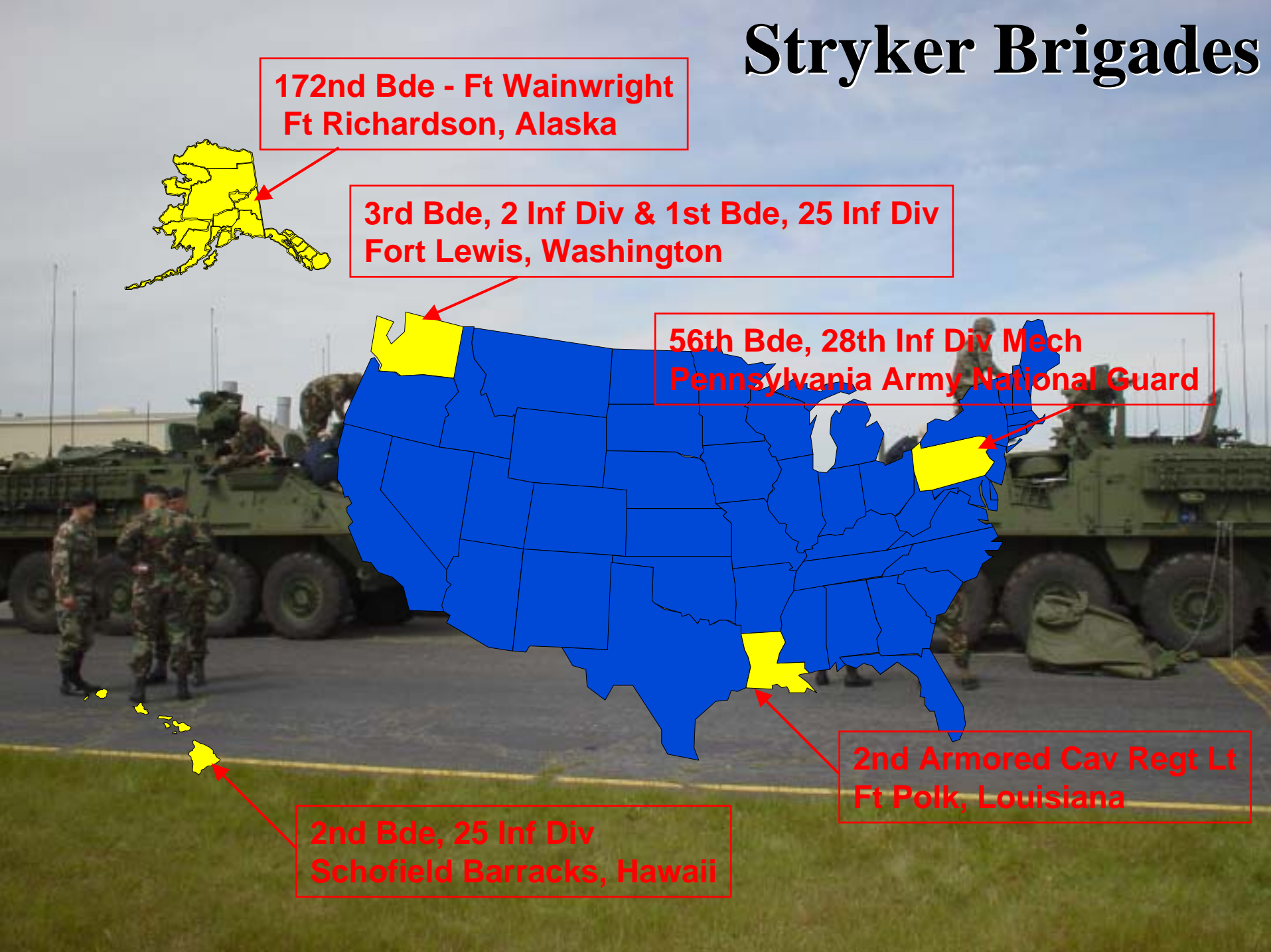
**56th Bde, 28th Inf Div Mech
Pennsylvania Army National Guard**



**2nd Armored Cav Regt Lt
Ft Polk, Louisiana**



**2nd Bde, 25 Inf Div
Schofield Barracks, Hawaii**





Stryker Characteristics

Strategic Deployability
Mobility
Lethality
Survivability





Strategic Deployability



C-130

C-5

C-17



Mobility



Speed - 62 mph
Fwd Slope - 60%
Climb - 23 inches

Range - 330 miles
Side Slope - 30%
Gap - 78 inches



Lethality



**Remote Weapon Station
(Mk 19 40mm or .50 cal)**





Lethality

**Low Profile Turret
M68A1E4 105mm Cannon**





Lethality

TOW 2B Missile





Survivability



Integral All Around 14.5mm Protection
Add-on RPG-7 Armour Protection
152mm HE Airburst Protection
NBC Detection Package
Reduced Audible and Thermal Signature
Proven Mine Survivability



Overview

- Program Overview
- Supportability Constraints
 - Off-the-Shelf Equipment
 - Two Level Maintenance Concept
- Stryker Support Concepts



Off-the-Shelf Equipment

- Field Stryker at the Earliest Possible Date
- Trade-off Objective Fielding Requirements Against Performance Requirements
- The Stryker Family Baseline Has Been in Production Since 1998



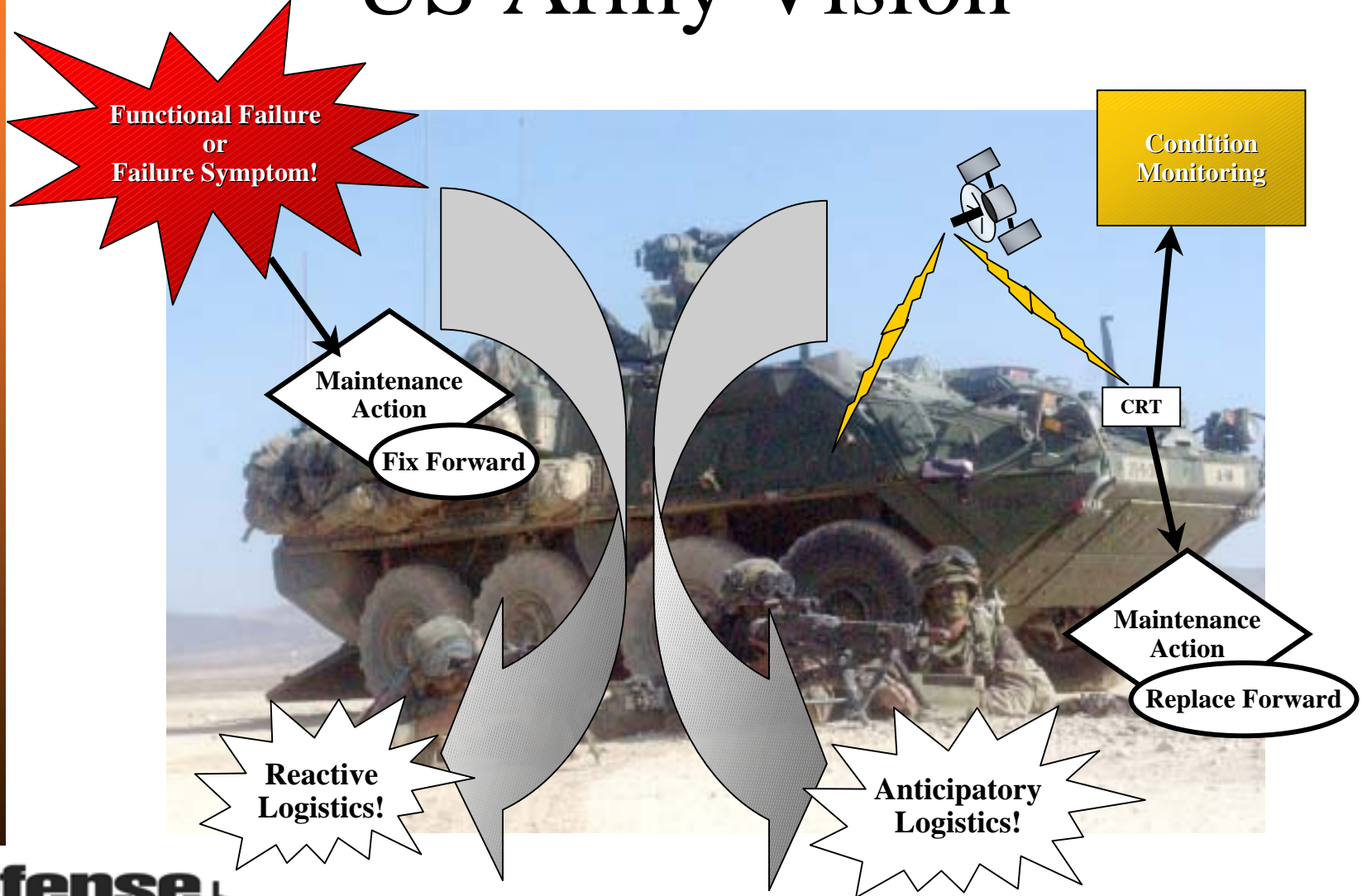


Two Level Maintenance Concept

- US Army Vision
- Two Level Maintenance
- Reducing the Logistics Footprint

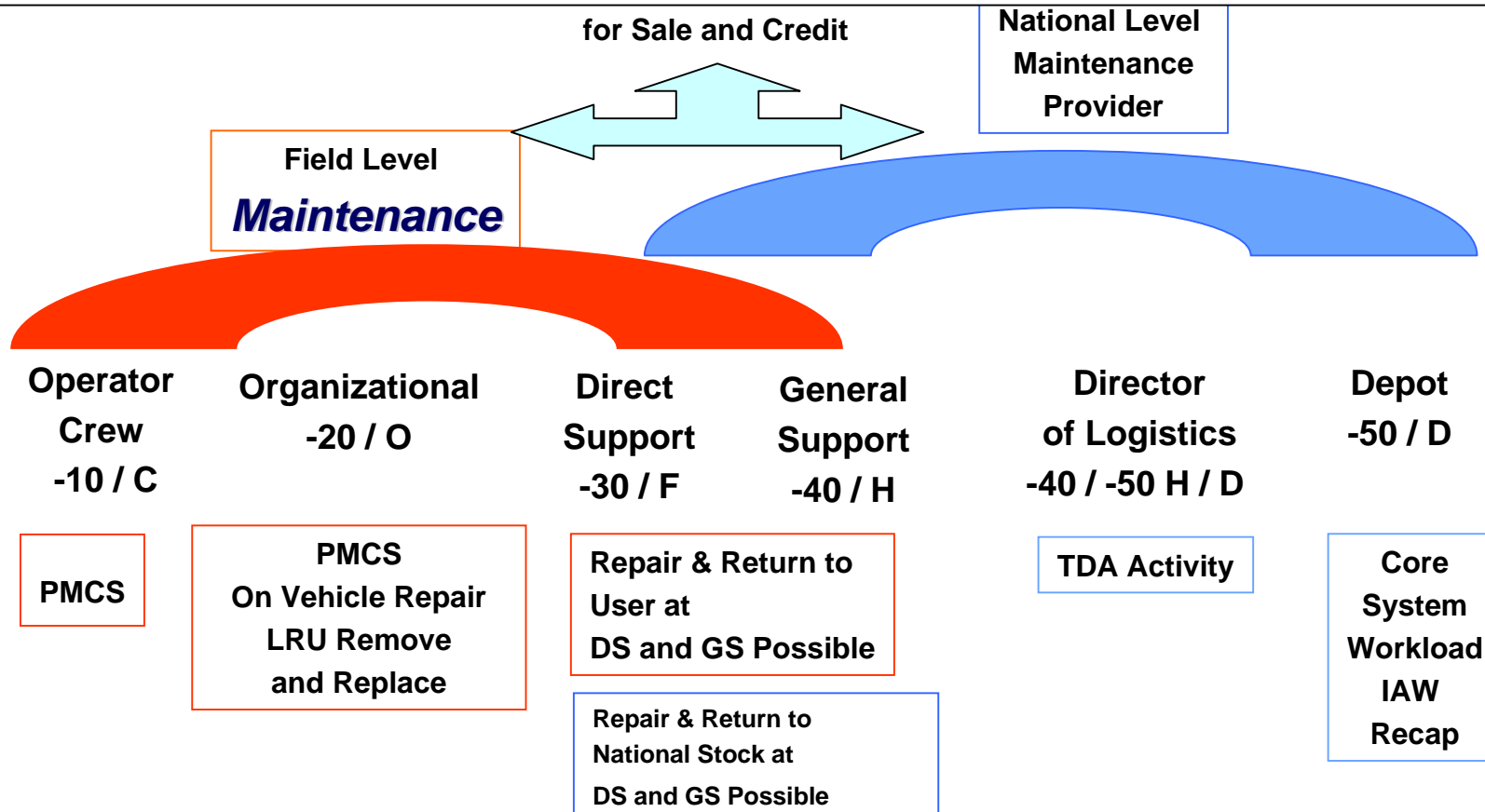


US Army Vision





Two Level Maintenance Concept



The logo features a stylized silhouette of a Stryker vehicle in black, with the word "STRYKER" written in bold, yellow, sans-serif capital letters across its side. A small "TM" trademark symbol is positioned to the right of the text.

STRYKER™

Reducing the Logistics Footprint

- **IAV Logistics Efficiencies**
 - Optimum Mission Critical On-board Spares [O&O, p53]
 - Battle Damage Repair Capability [O&O, p54]
 - Optimum Basic Combat Loads [O&O, p52]
 - Strategically Configured Sustainment Support Packages [O&O, p52]
 - Interchangeable LRUs Removed and Replaced in Field [O&O, p54]
- **IAV Logistics Enablers**
 - Built-in Test (BIT) / Built-in Test Equipment (BITE) [ORD, p14]
 - Embedded Diagnostics to Common Data Network [ORD, p14]
 - IETMs Integrated w/ Diagnostics to Common Data Network [ORD, p15]
 - Maximum Commonality [ORD, p8]

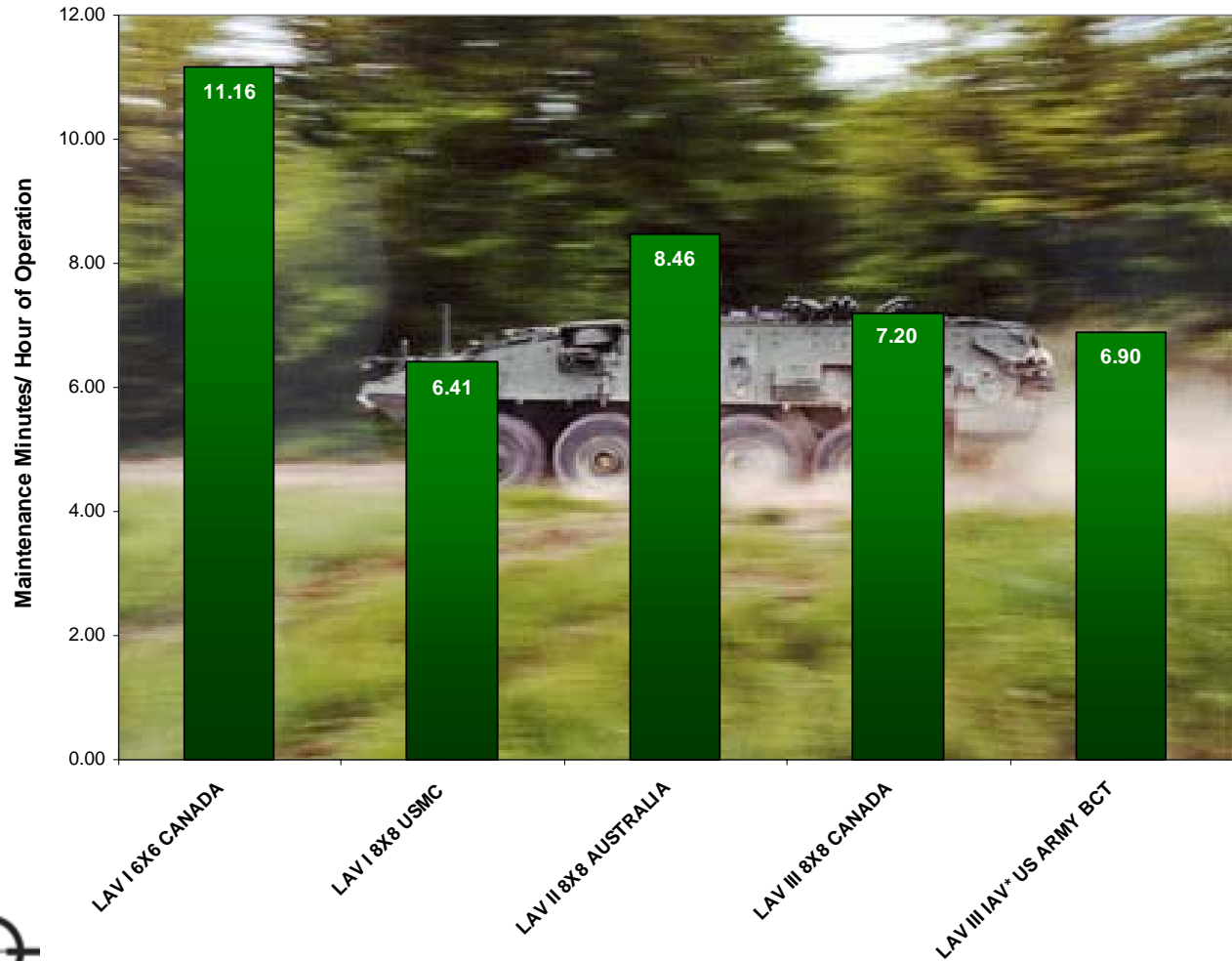


Overview

- Program Overview
- Supportability Constraints
- Stryker Support Concepts
 - Improved System Reliability and Ease of Maintenance
 - Commonality
 - Maintenance Plan
 - System Embedded Diagnostics



Improved System Reliability and Ease of Maintenance





STRYKER™

Stryker Commonality - More Than Parts

- **Between IAV Platforms Allows Common**
 - Mission Functionality
 - Operator Positions and Tasks
 - Crew Positions and Tasks
 - LRUs and Parts
 - Maintenance Tasks
 - Maintenance Skills
 - Tools and TMDE
- **and with**
 - Established Supply and Maintenance Infrastructure
 - Within the BCT / Limited Conversion Force XXI Div / L I D / DoD
- **Results in Reduced**
 - Logistics Footprint
 - Training Burden



Stryker Maintenance Plan - Garrison



Operator
Crew

Brigade
Support
Battalion

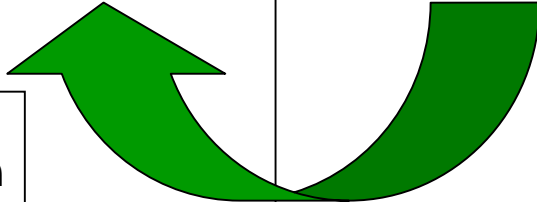


Organizational
Limited Direct
Support

CLS
Supply
New NSNs

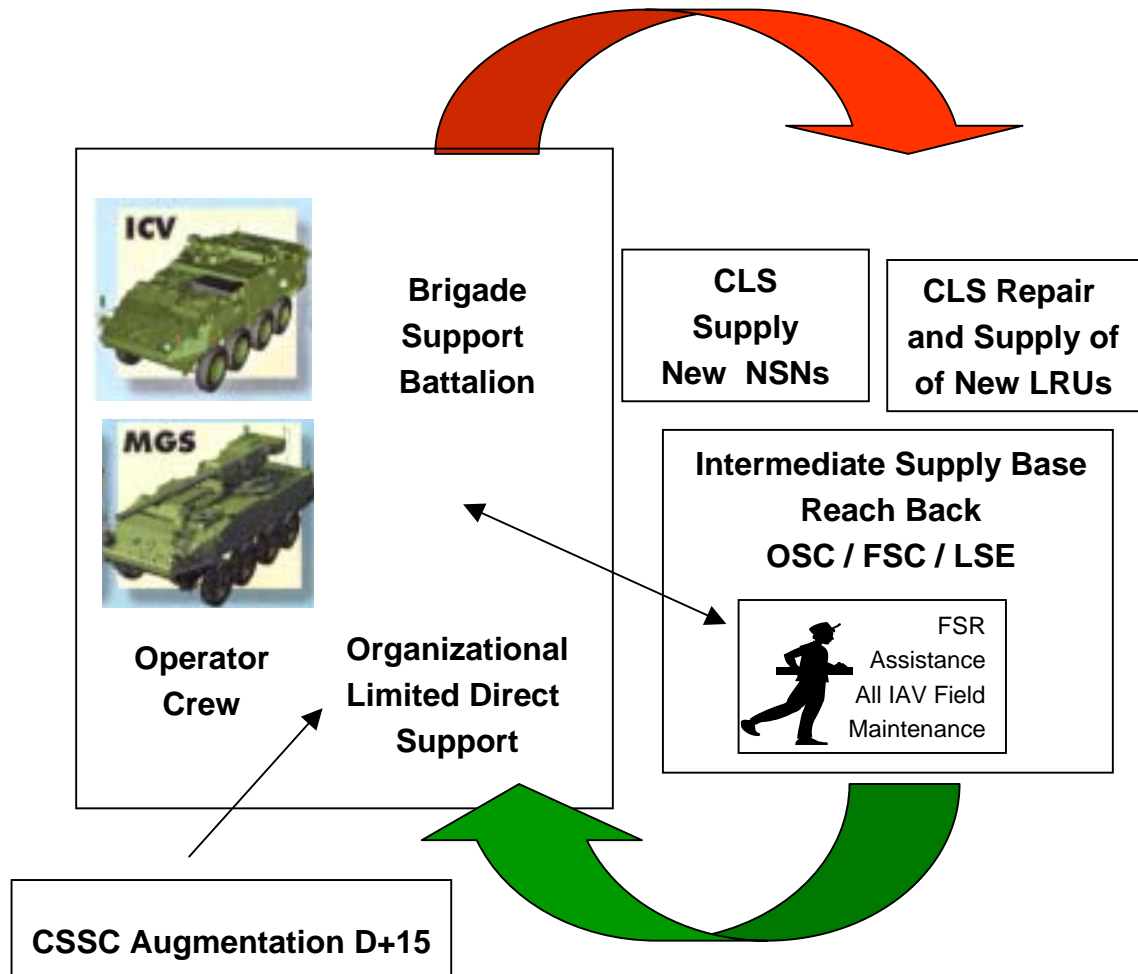
CLS Repair
and Supply
of New LRUs

CSSC Augmentation





Stryker Maintenance Plan - Deployed





Embedded Diagnostics

25% reduction in maintenance labour hours
6% reduction in cost due to clerical errors in ordering parts
6% reduction in cost due to misdiagnosis
12% reduction in Depot Level direct labour hours
--- FY97 LIA study of 130 major systems ---

- Current Capability Is Off-equipment (EMS-2/SPORT)
- Block Upgrade for Embedded Solution (3rd Brigade)



Defense

