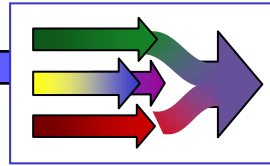


# National Maintenance Program (NMP)

October 29, 2002

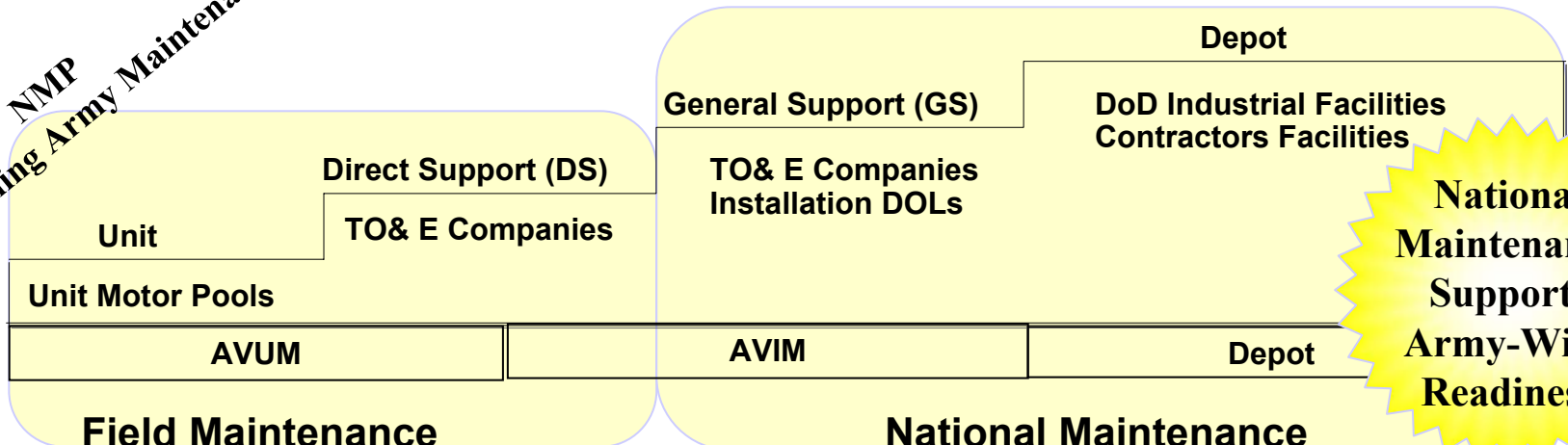


Maintenance Policy Division



# The National Maintenance Program

*NMP  
Transforming Army Maintenance*



## Field Maintenance

- Consists of
  - Unit
  - Direct Support

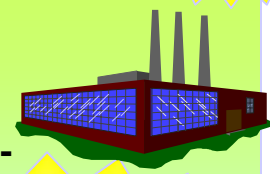


Repair and Return to User

**Field Maintenance Supports Unit Readiness**

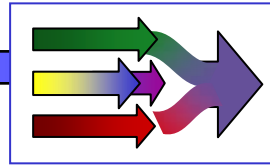
## National Maintenance

- Consists of
  - Organic Depots
  - Industrial Base
  - GS Companies/Qualified Below-Depot Activities



Repair and Return to Supply System

**Single Standard for Maintenance Provides Predictable Reliability Expected Useful Life Rightsizes National Inventory Supports Single Stock Fund Enhances Readiness**



# NMP Tenets

## The Four NMP Tenets

- **Develop National Repair Objectives**
  - Repair to National Vice
  - Regional Need
- **Establish a Single Standard of Repair**
  - Repair to the NMP Overhaul Standard
- **Qualify Sources of Repair**
  - Consists of ISO compliance and technical qualification
- **Enable a Repair-Based Logistics System**
  - Repair & Return to Supply

**Objectives:**

- Visibility of all Stocks – Division and above
- National Workload Plan
- Visibility of Army Maintenance requirement

**Objectives**

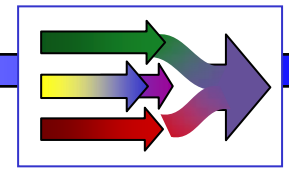
- Provide components with an expected useful life
- Publish National Maintenance Work Requirement

**Objectives:**

- Establish Single Quality System
  - ISO 9002 Qualification
  - Skills/ Tools/TMDE to meet the national standard
  -

**Objectives:**

- Maximize Repair of Serviceable Components
  - Match Capacity to Requirements
  - Maximize repair of serviceable components



# Implementation Timeline

✓ July 99 HQDA Message announces the NMP

**FY 99-02**

## **NMM Workload**

- ID Regional & Wholesale Demand
- National Production, Planning & Control
- Award National Workload to satisfy total worldwide Army demands

**FY 00-05**

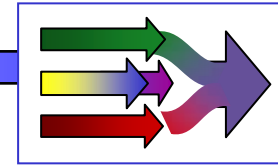
## **National Maintenance Standard**

- Conduct Engineering Analysis
- Develop Component Specific Maintenance Procedures
- Publish National Maintenance Work Requirement

**FY 02-05**

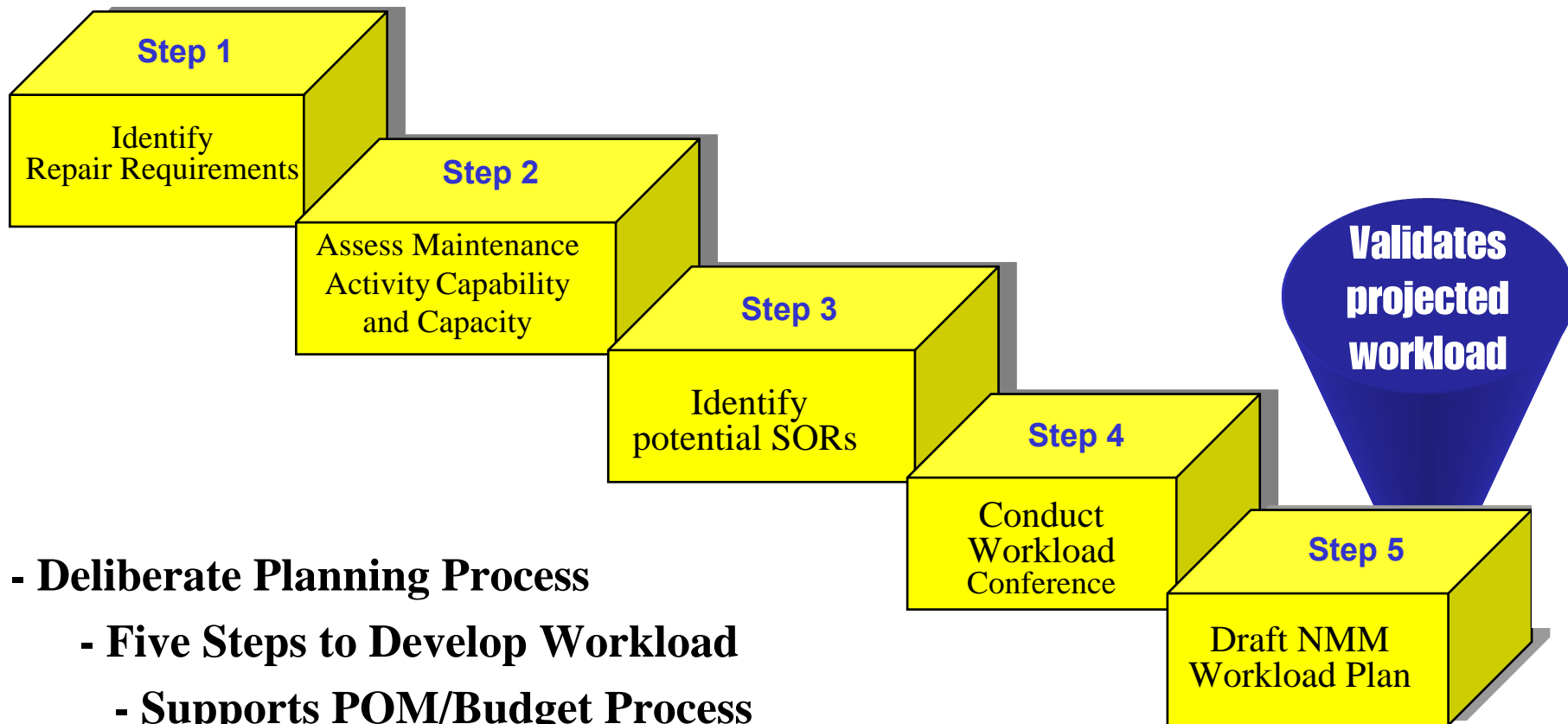
## **Qualification**

- NSN Specific Qualification
- Capability, Capacity, Equipment, TMDE and Skills
- ISO 9002 Compliant



# National Repair Objective

## Workload Development Process

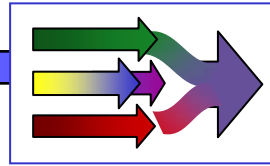


### - Deliberate Planning Process

- Five Steps to Develop Workload

- Supports POM/Budget Process

- Involves Army Commodity & Operational Major Commands



# National Standard

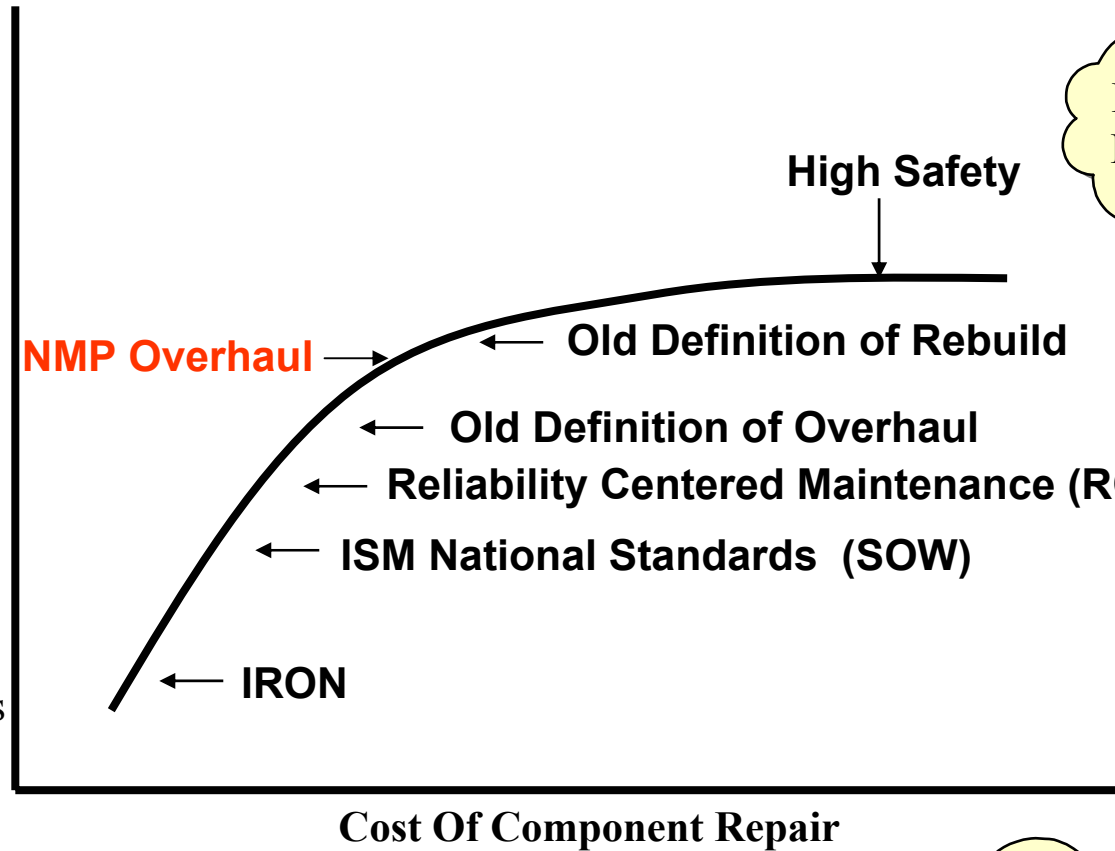
**Expected Life**

**What we are looking at:**

- Existing Technical Documentation
- Historical Failure Data
- Soldier Input
- Sample Data Collection Records

**Led To:**

- Engineering Analyses
- Physics of Failure Analyses



Diminishing Returns Area

Existing DMWRs

NMP  
NMWR for FLRs  
DMWRs for DLRs

IRON-Fix what's broke, nothing more.

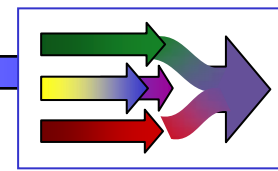
ISM SOW-Restore an item to a complete serviceable condition. Normally at below-depot.

RCM-Achieve inherent design reliability and safety doing least amount of maintenance.

Overhaul-Restore item to a complete serviceable condition. Normally at depot.

**NMP Overhaul-Restore item to a complete serviceable condition with a measurable (expected) life.**

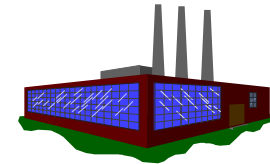
Rebuild-Restore an item to a standard as nearly as possible to original or new. Repair or replace all worn or unserv items to OEM specs.



# Repair Source Qualification

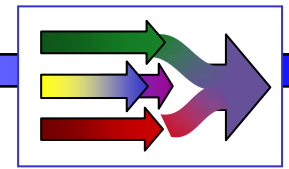
## Qualified National Providers

NMP qualification is a 2 part process:



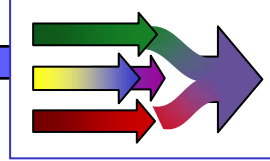
- Part 1 requires a source of repair to develop, implement, and maintain a measurable quality system IAW provisions of the ISO quality standard. (Compliance)
- Part 2 is a technical certification to validate possession of necessary facilities, tools, TMDE, skills, and manpower to perform required maintenance to the NMP overhaul standard.



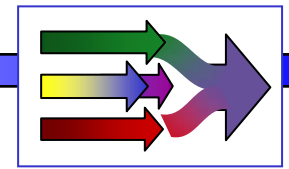


# National Maintenance Program

- What we would leave you with –
  - National Maintenance Program is a linchpin to Army Transformation
  - Implementation of the National Standards is expected to reduce O&S Cost, decrease the maintenance burden and produce higher Mean Time Between Failure



# Back-up



# National Maintenance Program In Action

- **National Maintenance Program:**

- Objective: Provide Class IX components with an expected reliability
- Goal: Reduce equipment O&S Cost
- Status: NMP Phase I implementation expected to be complete by FY 05

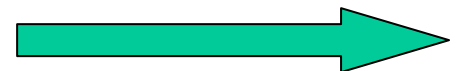
- **DS+ Conversion:**

- Objective: Transition the Abrams Gas Turbine 1500 (AGT 1500) repair concept from a four level system to two levels.
- Goal: Increase Mean Time Between Failure (MTBF)
- Status: 4<sup>th</sup> ID (Ft Hood) and 3<sup>rd</sup> ACR (Ft Carson) to convert in FY 03. Remaining active Divisions complete by FY 05.

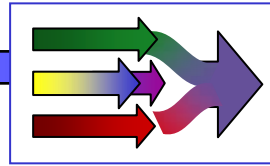
- **Recapitalization Standards:**

- Objective: Support the Recap programs with Class IX components repaired to the National Repair Standard.
- Goal: Sustain lower O&S cost achieved through Recapitalization and Unit Set Fielding
- Status: USAMC developing repair standards in support of Recapitalization.
  - 120 Complete
  - 826 Required by FY 05
  - AMC On-schedule

Why these goals are attainable



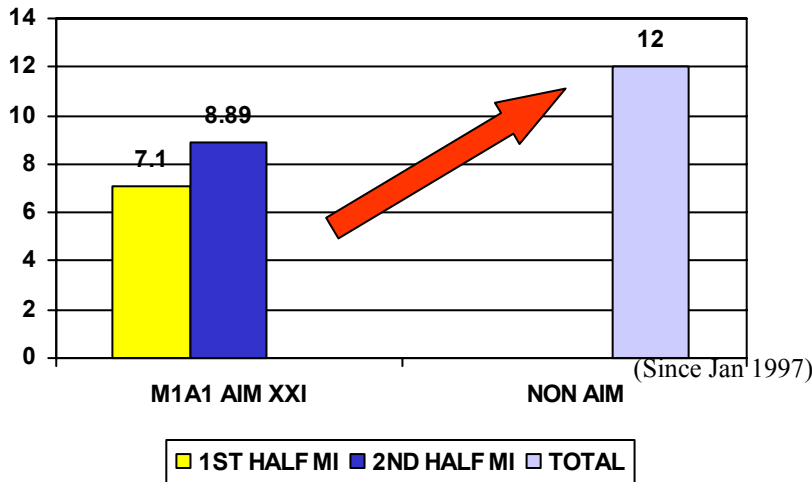
***Sustaining The Transforming Army***



# Analysis

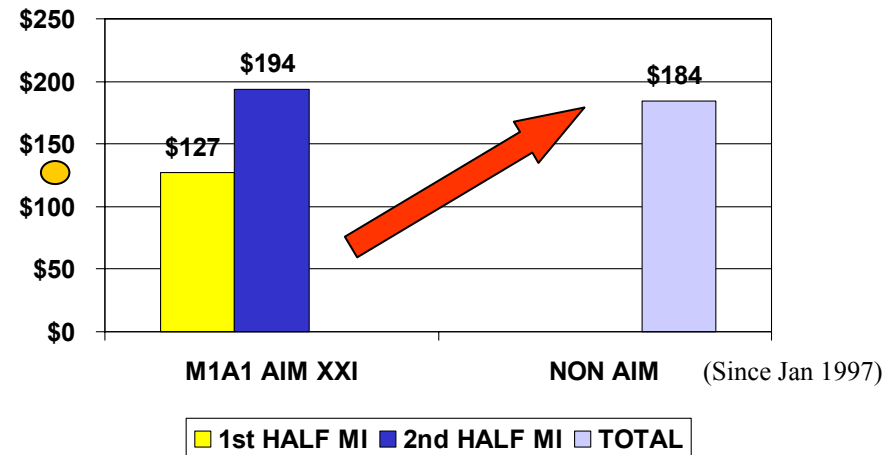
## Comparison of M1A1 AIM XXI Experience

### MANHOURS/100 MILES



AIM Recapitalization PoP – Shows Initial reduction in sustainment metrics with a steady increase over time if supported through status quo Army Logistics System

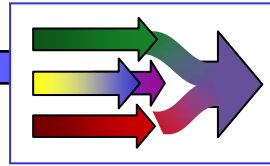
### NET OMA credit COST PER MILE



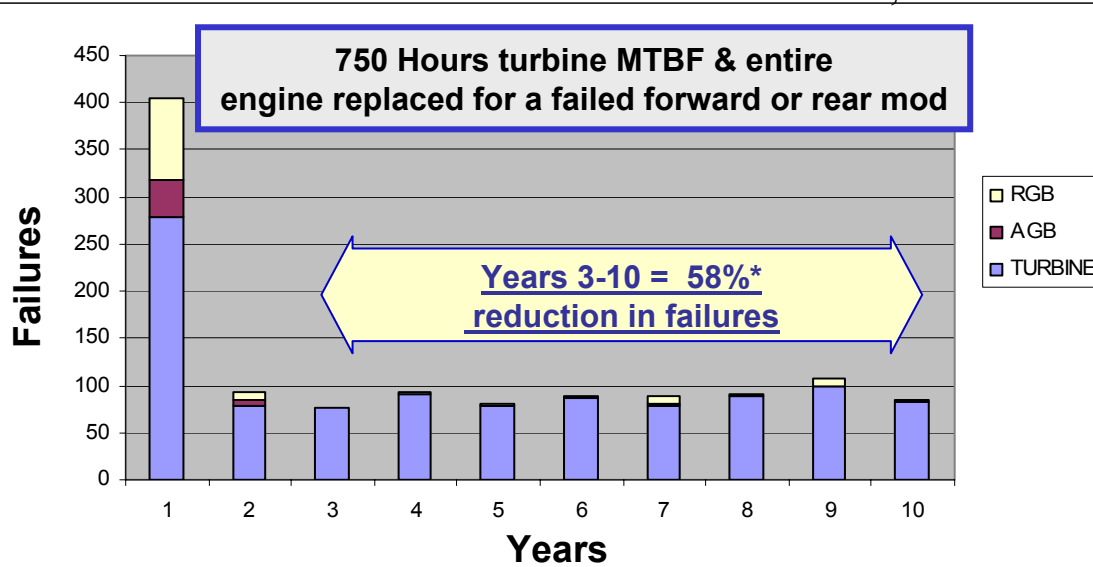
Source: AMSAA Study TR-698 Dec 2001



# DS+ Conversion O&S Costs



Notional Division - 253 tanks, OPTEMPO = 800 miles

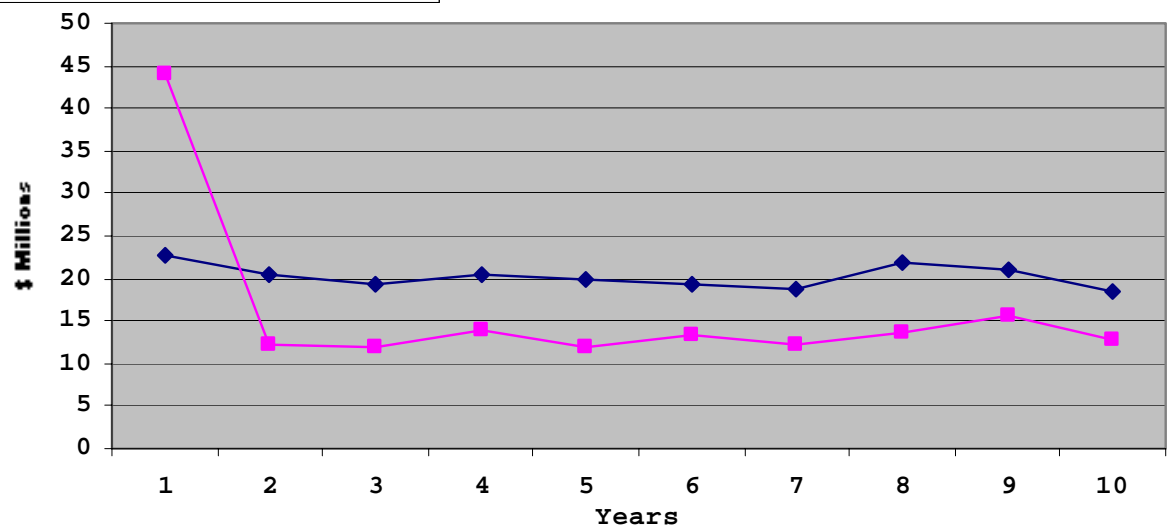


**TACOM MTBF Data (hrs)**

	DS+	NMP
Engine	255	750
Fwd Mod	388	
Rear Mod	776	
AGB	1275	3750
RGB	657	1932

## Expected Benefits:

- Positive ROI beginning in year two
- Reduction in TOA Requirements
- Sustains SEP and AIM Tanks Fielded
- O&S Cost Reduction
- Potential to reduce NMCM Rates for the Division
- Consistent with NMP Policy



Bottom Line **Sustaining The Transforming Army**