

# Simulation, Training & Support

## Enterprise Logistics Solutions

LOCKHEED MARTIN

*We never forget who we're working for™*



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Briefing to: TARDEC's  
CBM Team, et al.

- LM Simulation, Training & Support (STS) – Who We Are
- Current Condition Based Maintenance Programs
- Condition Based Maintenance Goals/Challenges –View from our “Foxhole”
- “A Way” Embedded Platform Logistics System (EPLS)

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## Flight Solutions Mission Area



## Ground, Maritime and Civil Solutions Mission Area

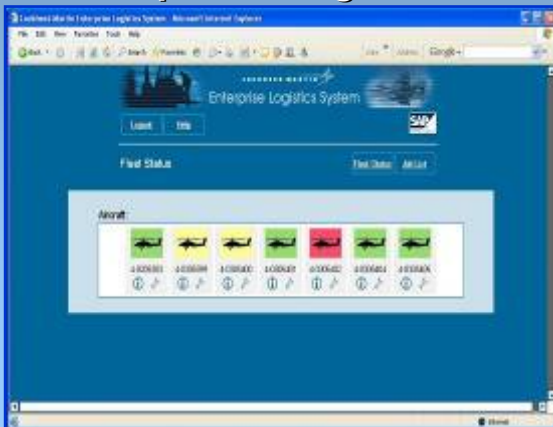


## Enterprise Logistics Solutions Mission Area



## Logistics Support System (LSS)

- Maintenance Mgmt
- Work Order Planning
- Work Order Execution
- Problem Reporting
- Retail Supply Mgmt
- Tech Data / IETM
- Enterprise Integration



## Automated Test & Support Equipment

- LMSTAR® Family of ATE
- Mobile LMSTAR®
- Analog and RF Variants
- Digital Hybrids
- AVN Support Equipment



## Asset Management Decision Support

- Total Asset Visibility
- Platform Sensoring
- In Transit Visibility
- Asset Status
- Fleet Management
- Operations Planning



# Current Condition Based Maintenance Programs

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**USMC Embedded  
Platform Logistics  
System**



**Singapore  
Basic Wing  
Course (BWC)**



**Joint Asset  
Management &  
Engineering  
Solutions (JAMES)**



**F-35 Lightning II  
Autonomic Logistics  
Information System  
(ALIS)**

**Programs Across Multiple Levels of Conditioned Based Maintenance**

## Goals:

- **Extract Data from multiple legacy and transformational IS' and present it in a usable format - "Data to Knowledge"**
- **Support Course of Action development by providing visibility into availability of platforms across the enterprise - Proactive vs Reactive Maintenance**
- **Web enabled, open architecture to support Customer logistics transformation initiatives**
- **Reduce user workload at the tactical level – maintenance as required, not based on time/miles driven threshold**
- **Optimize the competing demands of mission accomplishment and planned maintenance**
- **Reduce total ownership costs**

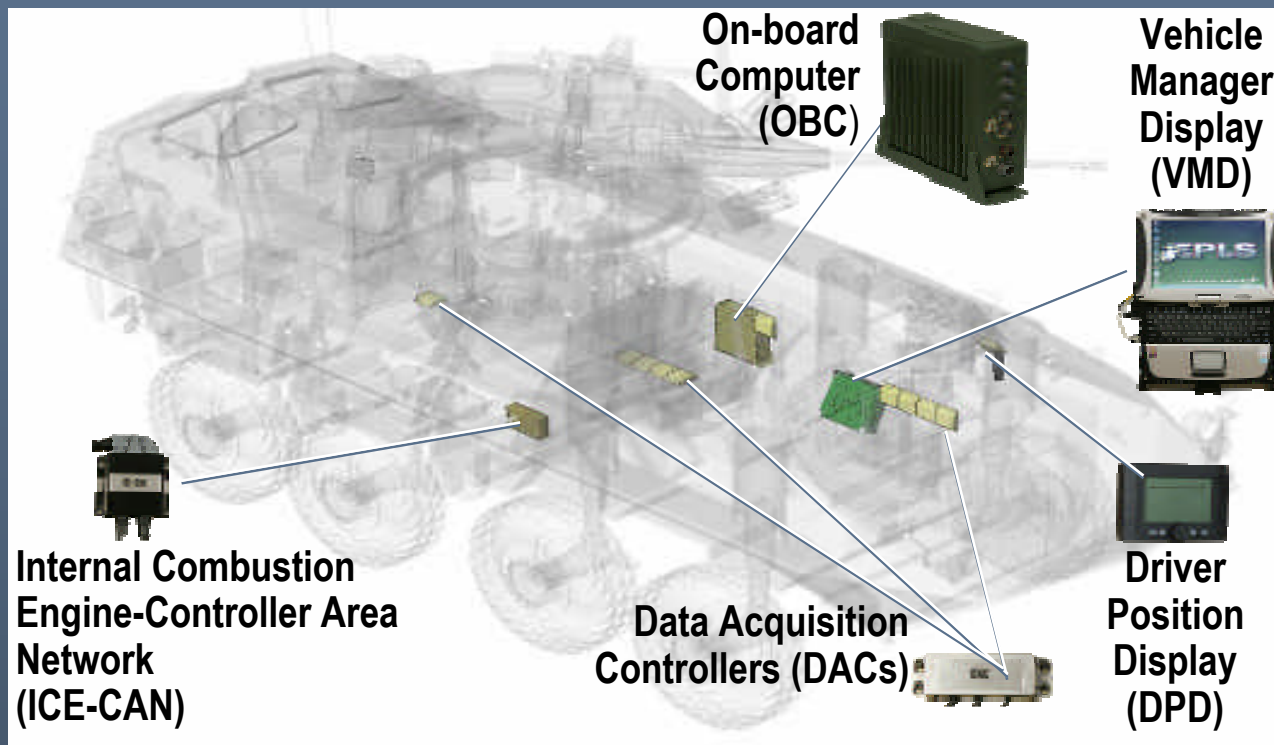
## Challenges:

- **Business Process Capture and Modeling – What datum are required to enable CBM?**
- **What are the current data formats – XML, SGML, Flat Data Files...?**
- **Defining and understanding Semantics across the enterprise**
- **Algorithm Creation and Validation**
- **Ontology development and growth as CBM progresses**
- **Community willingness to share information**
- **Data transmission and storage**

# USMC Embedded Platform Logistics System

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- **Customer Goals**
- **Maximize use of GFE hardware / software**
  - Off-board Server App
  - Data Storage
  - Windows Server OS
  - Oracle
- **Provide capability at customer defined location (s)**
  - Fleet Status
  - Cognos reporting

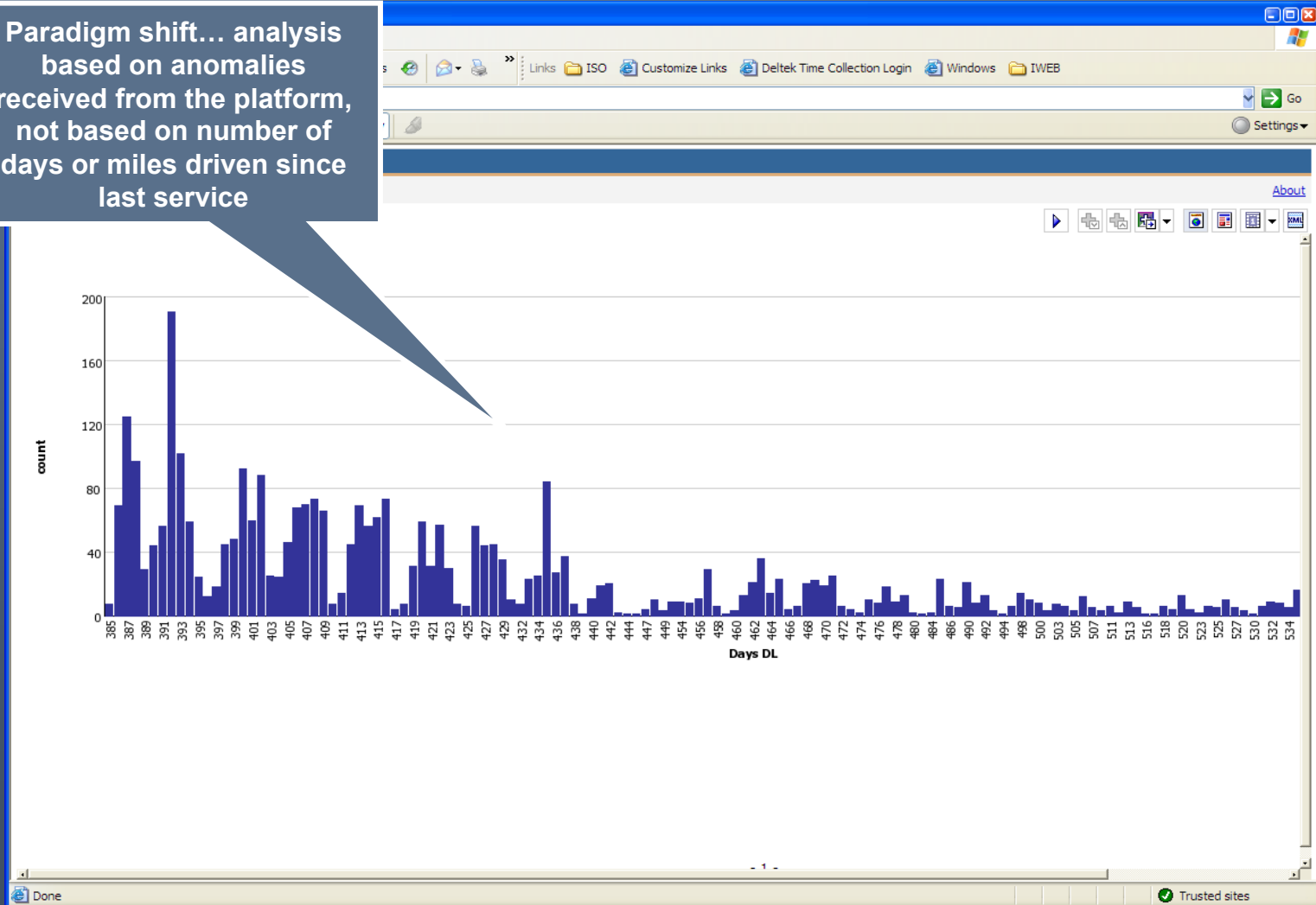


- **Use open source and open architecture where applicable**
- **Provide flexibility and adaptability toward USMC's transformational goals**
- **Reduce TOC through enhanced support capabilities**

# Sample Report

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Paradigm shift... analysis based on anomalies received from the platform, not based on number of days or miles driven since last service



# Simplified User Environment

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The screenshot displays the Lockheed Martin EPLS web application interface. At the top, there is a security banner and a navigation menu. The main content area is titled "Fleet Status" and includes a filter section with dropdown menus for "Material Asset Type" (Level 1-4), a search field for "Material Asset Code", and a dropdown for "Organisation" (TRK COMP 2ND MAR DIV). Below the filter section, there is a table titled "Equipment Held (by unit)" showing various equipment types (MTVR, AAV, LAV, REC) with their respective IDs and status indicators.

Unit	Equipment Type	Asset ID	Status
1 MEF	MTVR	586210	Ready
	MTVR	586211	Ready
	MTVR	586212	Ready
	AAV	635470	Ready
	AAV	635471	Ready
	AAV	635472	Ready
	LAV	458750	Ready
	LAV	458765	Ready
	LAV	458751	Ready
	LAV	458752	Ready
	REC	458766	Ready

Single glance status of the readiness and availability of the entire inventory at a specific time

User interface leveraging context familiar to the user layering information through iconic representation

Interfaces Tailored to User Information Requirements

EPLS-23

# Supports Dynamic Planning

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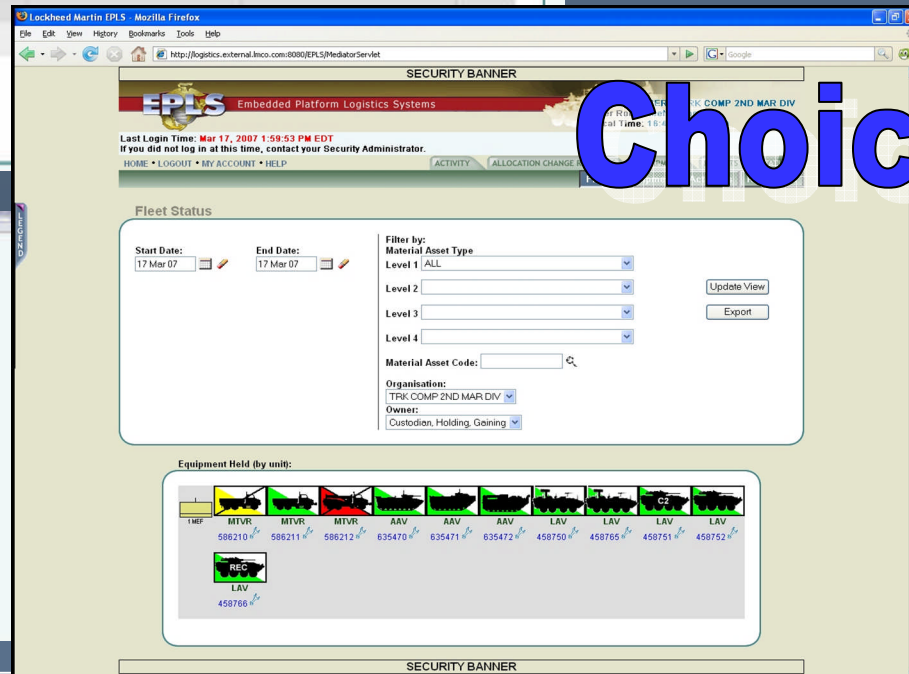
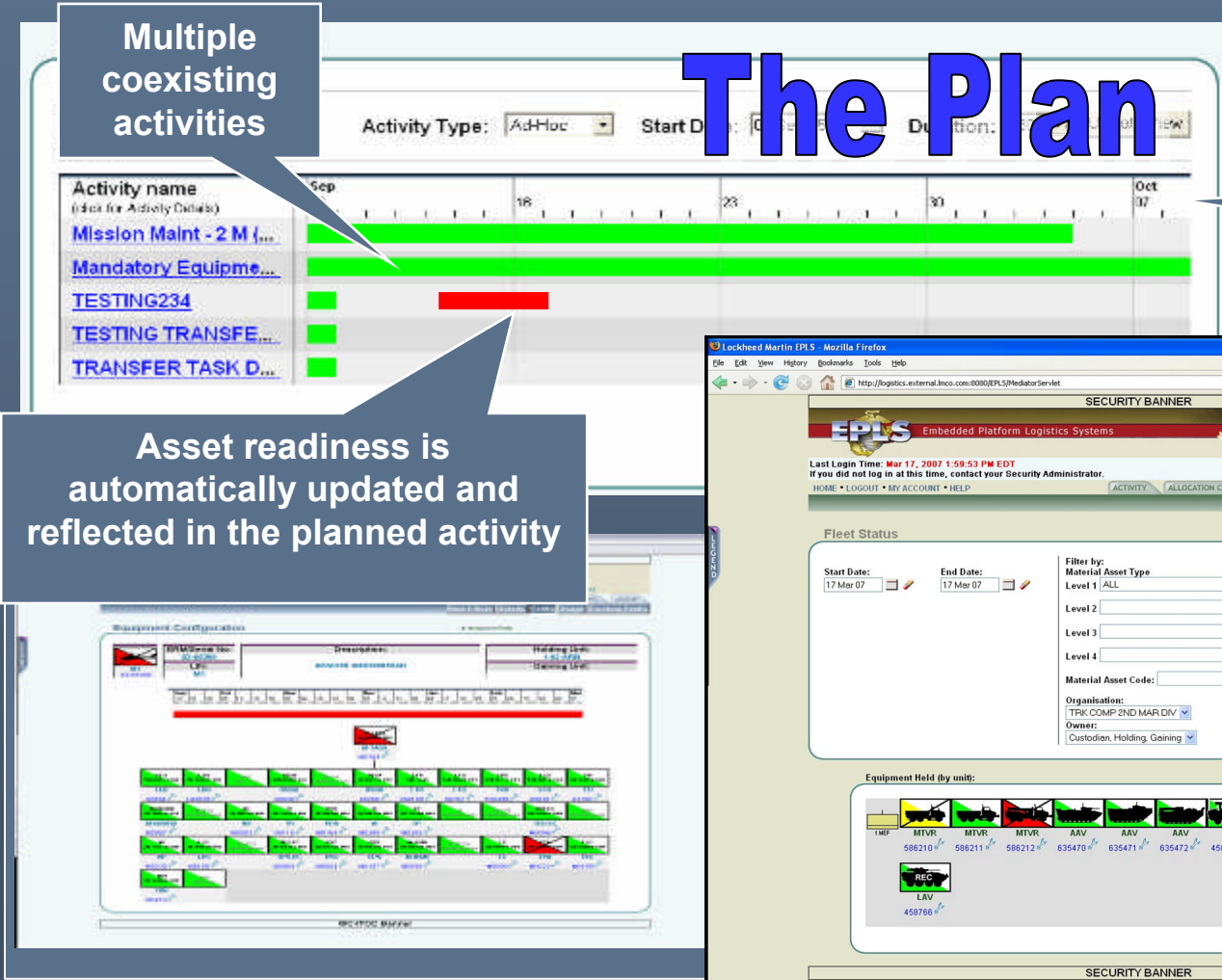
Multiple coexisting activities

## The Plan

Planning can occur years in advance

Asset readiness is automatically updated and reflected in the planned activity

## Choices



Planning Environment is Accurate, Collaborative and Interactive

- Enhance Combat Capability - Readiness
  - Significantly simplify and accelerate Warfighter effectiveness
  - Enterprise wide management of inventories and processes
- Improved reliability, affordability, and maintainability
  - Total Asset Visibility enables rapid assessment of...
    - Readiness and availability
    - Location and usage (both planned and unplanned)
  - Work order controls and automation improve business operations
- Reduce Total Cost of Ownership
  - Reduce operational/reparable asset inventories
  - Diminish redundancies between programs
  - Minimize training costs
    - Designed around Customer Business Processes
    - “Easy to use as Amazon.com”

- **LM STS possesses the capability to design, implement and support enterprise level solutions**
- **These tools and capabilities provide enhanced efficiencies and reduce overall program costs**
- **Solutions are in place today...**

**LM STS is Focused on Integrating Logistics with Operational Readiness**