When is CBM⁺ Used?

CBM⁺ ensures timely, cost effective maintenance implementations in new acquisition programs as well as across the sustainment life cycle for fielded DoD weapon systems.

CBM⁺ is used to support the maintenance decision-making processes during system acquisition, sustainment, and operations.

Who is involved in CBM⁺?

CBM⁺ is focused on the maintainer's effectiveness and the weapon system's reliability.

CBM⁺ implementation is the responsibility of the Services, their policy makers, program managers, system engineers, logisticians, and maintenance managers.

How does CBM⁺ affect maintenance?

CBM⁺ provides strategy and guidance for implementation of enabling technologies and procedures that improve business processes and maintenance performance to enable greater productivity, lower costs, better availability, and enhanced reliability of materiel resources.

CBM⁺ encourages a systems engineering approach to collect data and enable analysis that allows for a continuous development of maintenance processes and procedures that improve capabilities, practices and technologies.

CBM⁺ Action Group

The AG was established by DASD(MPP) to lead the development of CBM⁺ in OSD and across the Services through a collaborative effort. AG activities include policy revision, Service plan review, project coordination, and sharing of information. AG members are from the Army, Navy, Air Force, Marine Corps, Defense Logistics Agency, and Joint Staff. Specific teams, established through the AG for short-term projects and studies, include current efforts in Reliability Centered Maintenance, business case analysis, and enterprise health management.

CBM⁺ Goal

The ultimate goal of CBM⁺ is to increase combat power, expressed in terms of operational and materiel availability and readiness, throughout the weapon system's life cycle.

What is CBM⁺?

CBM⁺ is the application and integration of appropriate processes, technologies, and knowledge-based capabilities to improve the reliability and maintenance effectiveness of DoD systems and components.

At its core, CBM⁺ is condition based maintenance based on evidence of need provided by Reliability Centered Maintenance analysis and other enabling processes and technologies.

Why do CBM⁺?

CBM⁺ is used in concert with other total life cycle management tools to enhance materiel readiness and, when fully implemented, improves maintenance decisions and integration of all aspects of life-cycle management processes.

CBM⁺ supports long term DoD goals of improving maintenance technologies and providing timely joint logistics support to meet war fighter needs by minimizing unscheduled repairs and reducing scheduled maintenance activities.

Condition Based Maintenance Plus

Condition Based Maintenance Plus DoD Guidebook

2008

For CBM⁺ information go to
http://www.acq.osd.mil/log/mpp/CBM+.html

Contact the CBM+ Action Group at 703-697-7980
or DSN 227-7980

Condition Based Maintenance Plus

CBM

Digital Source Collectors

- Engine Nose Gearboxes, Main Transmission and Accessory Clutches
- Main Rotor Swashplate
- APU and Clutch
- Tail Rotor Gear Box and Tail Rotor Swashplate
- Advanced Rotor Smoothing/Diagnostics
- Engines
- Modernized Signal Processing Unit (MSPU)
- Forward/Aft Hangar Bearings
- Intermediate Gearbox

Apache CBM+ effort
Today — Demonstrating 2-way data interchange from platform on the ground to the CBM Data Warehouse
Tomorrow — Perform in-flight data transmission to the flight line

Air Force CBM+ empowers the systems experts to make knowledge-based decisions that increase system availability and decrease cost

New Acquisitions:
C-17 CBM+ Pilot Program
JSF Prognostic Health Management
F-22 Integrity Data and Reporting System (IDARS)

Legacy Systems:
C-130 Automated Inspection, Repair, Corrosion and Aircraft Tracking (AIRCAT)
C-5 Aging Fleet Integrity Management (AFIRM)
Engine Health Management Plus (EHM+)

Programs:
C-5 MSG-3
C-130 and B-1 HVM Programs
Collective Mind Predictive Trending
CBM+ Research Environment and Web Services
Systems Lifecycle Integrity Management (SLIM) AFIT Educational Course

Integrated Condition Assessment System

Engineering Knowledge Base Added to the Maintenance Team

Distance Support *Offloads Data Seamlessly*

ICAS *Collects and Processes Data*

E-mail Data

Server Formats & Presents Reports

Regional Maintenance Center *Evaluates Information*
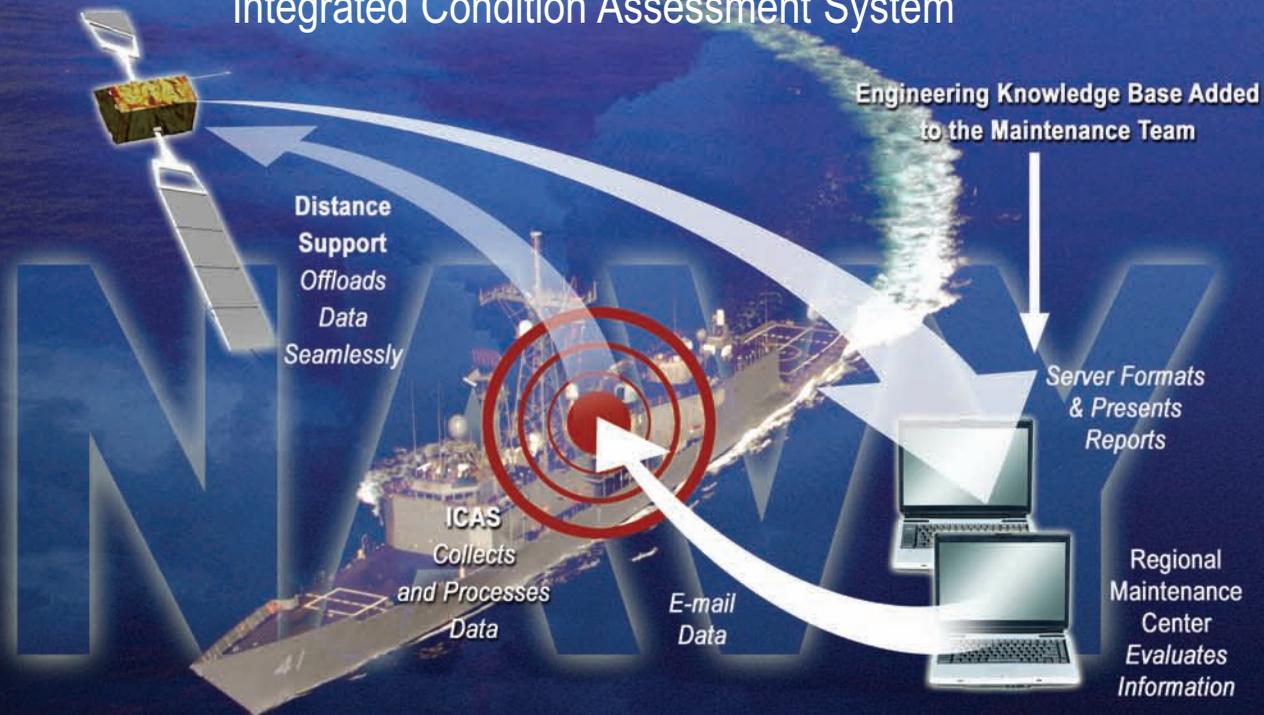
Technologies and processes that improve the maintenance decisions and integrate logistics

NET Centric Integrated Logistics
Joint Intelligence/Integration
Command and Control

Organized
Optimized
Modernized
Postured

- Global Information Grid
- Vision & Strategy 2025
- Reliability Centered Maintenance
- Sense & Respond Logistics

Anticipatory Logistics
Enterprise Health Management
Failure Management Strategies
Reliability Availability Maintainability

Autonomic Logistics Services
Combat Power Assessment
Embedded Platform Logistics Systems