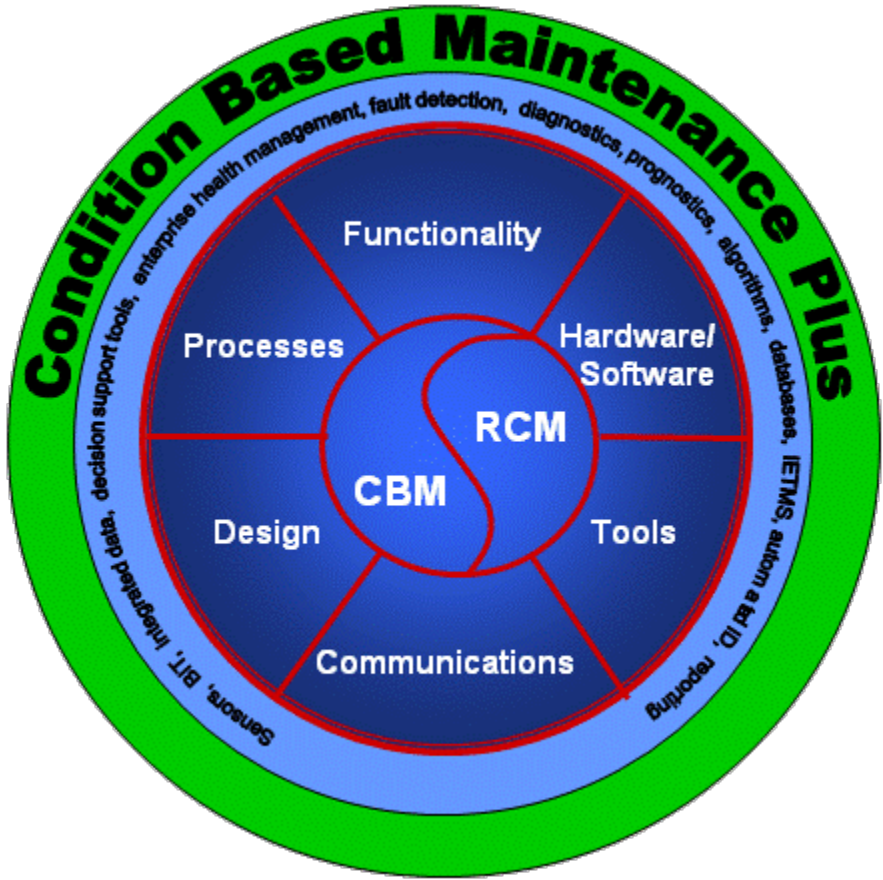


CONDITION-BASED MAINTENANCE PLUS (CBM+)



2021 CBM+ Plan

DASD (Materiel Readiness)

CY21

1. Introduction

Condition-Based Maintenance Plus (CBM+) is established Department of Defense (DoD) policy in DoD Instruction (DoDI) 4151.22. The CBM+ Working Group (WG) has been developed pursuant to the authority of the Assistant Secretary of Defense for Sustainment (ASD(Sustainment)), the responsible maintenance official for DoD, and is led by the Deputy Assistant Secretary of Defense for Materiel Readiness (DASD(MR)).

This 2021 CBM+ Plan defines the CBM+ initiative's organization and defines the members, responsibilities, relationships, procedures and proposed activities directly associated with the CBM+ WG. The mission of the CBM+ WG is to promote, advocate, and monitor the implementation of CBM+ across DoD's maintenance and logistics processes. Additional details are delineated in DoDI 4151.22, DoD 4151.22-M, the DoD CBM+ Guidebook, and Attachment A of this document.

2. Background

DoD policy requires that CBM+ be implemented for maintenance and logistics support of Service weapon systems as a proactive maintenance strategy for achieving cost-effective weapon system life-cycle sustainment. The scope of CBM+ includes maintenance-related processes, procedures, technological capabilities, information systems, and other logistics concepts that can be applied to both legacy systems and new acquisition programs. CBM+ is:

“A collaborative DoD readiness initiative focused on the development and implementation of data analysis and sustainment technology capabilities to improve weapon system availability and achieve optimum costs across the enterprise. CBM+ is the application and integration of processes, technologies, and knowledge-based capabilities to improve the reliability and maintenance effectiveness of DoD systems and components. At its core, CBM+ is maintenance performed based on evidence of need.

CBM+ is built upon RCM and condition-based maintenance to enhance safety, increase maintenance efficiency, improve availability, and ensure environmental integrity.

CBM+ diminishes life-cycle costs by reducing unscheduled maintenance and enabling predictive maintenance.

CBM+ turns rich data into information about component, weapon system, and fleet conditions to more accurately forecast maintenance requirements and future weapon system readiness to drive process cost efficiencies and enterprise activity outcomes”¹

¹ DoDI 4151.22, *Conditioned Based Maintenance Plus (CBM+) for Materiel Maintenance*, 14 August 2020

3. Organization

The key groups involved in CBM+ activities are the WG and Working Integrated Product Teams (WIPTs). Responsibilities and procedures are provided in Attachment A.

a. CBM+ Working Group (WG). The WG is a cross-service team that meets on a regular basis and is chaired by the DASD(MR) representative. The WG monitors CBM+ progress across the DoD. The primary WG members are designated by the Army, Navy, Air Force, Marine Corps, Defense Logistics Agency, and the Joint Staff. Adjunct members participate and can be added by the CBM+ WG Chair. The following table lists the current core WG membership.

| Department | Component | Member |
|--------------|----------------|------------|
| ASD(S) | DASD(MR) | [REDACTED] |
| | LMI | [REDACTED] |
| Army | USA/G4 | [REDACTED] |
| | USA/G4 | [REDACTED] |
| | USA/CCDC C5ISR | [REDACTED] |
| Air Force | HAF/A4 | [REDACTED] |
| | AFLCMC/RSO | [REDACTED] |
| Marine Corps | USMC I&L | [REDACTED] |
| | | [REDACTED] |
| Navy | OPNAV N9 | [REDACTED] |
| | NAVAIR | [REDACTED] |
| | NAVSEA | [REDACTED] |
| | NAVSEA | [REDACTED] |
| Space Force | USSF/S4U | [REDACTED] |
| | USSF/S4UX | [REDACTED] |
| | USSF/S4UX | [REDACTED] |
| Joint Staff | JAIC | [REDACTED] |
| | JAIC | [REDACTED] |
| | JAIC | [REDACTED] |
| DLA | | |
| | | |

b. CBM+ Working IPTs (WIPTs). A WIPT is established to accomplish a specific short-term goal(s) related to improvement of a maintenance technology, process, policy or capability. The leader of each WIPT is designated by the CBM+ WG Chair and their charter is approved by the WG. The WIPT may request support and/or participation of government or industry personnel to gain knowledge of additional or new CBM+ technologies or processes. The following table lists the current/proposed 2021 WIPTs and their leads.

| WIPT | Lead |
|---|-------------|
| CBM+ Standards Development | |
| Condition Based Maintenance Plus (CBM+) Guidebook | |
| CBM+ Predictive Maintenance | |

4. Actions

The following CBM+ activity is planned for CY 2021. Other activities may be pursued at the direction of the CBM+ WG Chair.

- a. Evaluate / Develop CBM+ Standards
- b. Grow the CBM+ Community of Interest
 - Expand the CBM+ WG; obtain increased participation from members of the acquisition communities.
 - Continue hosting monthly forums to collaborate and share information. Include presentations and material from DoD agencies/services, commercial industry, and academia.
 - Develop an “On-line” CBM+ Body of Knowledge
- c. Update Condition-Based Maintenance Plus (CBM+) Guidebook
- d. Identify and leverage opportunities to accelerate Predictive Maintenance
- f. Share information and communicate to other organizations on CBM+ progress.

CBM+ initiatives reflect universally popular objectives, but they can lose support when faced with competing operational priorities. Continued research into emerging technologies and business practices provides programs with the latest information for selecting optimum maintenance

solutions. Sharing the information between programs and Services will stimulate forward progress in CBM+ development and implementation. Regular progress reviews will ensure that new personnel and programs will be included into the CBM+ environment and that CBM+ strategic plans stay on track.

- Update CBM+ brochure, as necessary (ongoing)
- Update CBM+ introduction presentation (Nov 20)

g. Conduct studies and analysis in support of CBM+ implementation.

The WG will meet on a periodic basis/as required to share information, plan activity, and respond to directed tasking. Additional studies can be adopted for completion by the Chair and WG members are expected to participate with resources sufficient to effectively represent their Service or activity. Members are encouraged to engage other Service personnel to satisfy any required expertise for the subject or technology issue at hand.

Attachment A

Responsibilities and Procedures

1. CBM+ WG.

a. WG Chair: The CBM+ WG Chair is responsible for:

- Selecting topics, scheduling and presiding over CBM+ meetings, as well as publishing and distributing results of all sessions
- Facilitating the CBM+ agenda and the decision process for resolving conflicts or issues among members
- Developing and maintaining access to all CBM+ information
- Accomplishing established goals and updating the MESC concerning CBM+ progress and issues
- Authorizing other studies and analyses related to CBM+ implementation

b. WG Core Members: To maintain continuity and meeting coverage, member organizations should designate an alternate member and keep them informed of WG activities. The CBM+ WG members are responsible for:

- Advancing CBM+ through planning development and research
- Developing communications plans to distribute CBM+ information throughout their organizations
- Contributing to the improvement of CBM+ through participation in symposiums, workshops, Web sites, newsletters, and publications
- Recommending strategic direction, policy, and guidance for implementation of CBM+ throughout DoD
- Identifying and analyzing resource strategies for CBM+ initiatives
- Representing their organizations on maintenance and reliability issues
- Providing support and guidance to the WIPTs and other selected projects
- Developing, reviewing, and recommending improvements for the implementation and execution of Service CBM+ plans and selected programs

- Providing regular updates on their organization's CBM+ activities
 - Collecting and sharing government and commercial CBM+ development, implementations, benefits, lessons learned, and research
- c. WG Adjunct Members: Reflecting their responsibilities for oversight and technology advancement, members from the OSD are invited by the CBM+ WG Chair to participate in the WG to assist in performance of duties outlined in DoDI 4151.22.
- d. CBM+ WIPTs: Both established and emerging maintenance technologies, concepts, and procedures can be leveraged for CBM+ development. The WG may establish a relationship with an existing program or create a new WIPT to pursue a specific CBM+ task, concept, or initiative. In their specific areas of interest, the CBM+ WIPTs are responsible for:
- Conducting and coordinating activities based on a specific charter
 - Meet as required to complete the WIPT's activity
 - Providing recommendations or performing actions, as appropriate