

**FM 4-30.3**

# **Maintenance Operations and Procedures**

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**HEADQUARTERS  
DEPARTMENT OF THE ARMY**

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# Maintenance Operations and Procedures

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## Preface

This manual provides authoritative doctrine for the Army maintenance support systems, which comprise strategic to tactical level maintenance operations (at all echelons) across the full spectrum of military operations as part of the combat service support (CSS) system.

During the transition of the first decade of the 21st Century, there will be a mixture of Legacy (Army of Excellence (AOE) and Force Twenty-One (FXXI)) and Interim units operating simultaneously, for which maintenance support will be required. In this manual, we address AOE, FXXI, Interim Brigade, the emerging Interim Division, emerging Echelon Above Division Redesign Maintenance operations, and Army Maintenance Transformation doctrine as it impacts maintenance operations and procedures, including organizations, equipment, and personnel. Interim updates for this manual; unit-specific field manuals; and tactics, techniques, and procedures will be posted electronically on the CASCOM Ordnance Training (<http://www.cascom.army.mil/ordnance/>) and the USAOCS (<http://130.114.88.10>) home pages.

The intended audience of the manual includes the following:

- Combat and Combat Support Commanders – to give them a more universal understanding of how maintenance support operations are organized and provided.
- CSS Commanders and Staffs – to inform them on the integration of transforming maintenance support operations into the CSS and total Army missions.
- Soldiers and Students – to give them a broad knowledge of the maintenance support operations structure and how it works.

The proponent of this publication is HQ TRADOC. Send comments and recommendations on DA Form 2028 directly to Commander, USACASCOM&FL, Director of Combat Developments-Ordnance, ATTN: ATCL-OA, 3901 A Ave. Suite 250, Fort Lee, VA 23801-1809.

NOTE: Unless otherwise stated, the masculine gender in this manual refers to both men and women.

## Chapter 1

# Maintenance Fundamentals

Global interdependence, reduced time, and fast-changing technology affects every aspect of how the Ordnance Corps must do business today and into the 21<sup>st</sup> century. In a Force Projection (FP) Army, maintenance elements are increasingly required to anticipate, analyze, and tailor available resources for effective and timely support of complex weapon systems. Today's focus on adaptive planning, to provide increased options for decision makers, is prompting maintenance managers to embrace change, innovation, and flexibility at all levels. Success will continue to be based on the bottom-line measurement of the following:

- How well our customer's equipment remains operational (availability).
- How quickly it can be returned to service when it becomes inoperable (maintainability).
- How long the user can anticipate failure-free performance (reliability).

Sustaining decisive land force dominance through synchronized maintenance operations will challenge commanders at all levels. They must understand customer requirements, the overall support concept, and the Army Maintenance System to have the right capabilities in the right place at the right time.

## MAINTENANCE SYSTEM OVERVIEW

1-1. Maintenance is one of the 11 CSS functions that supports soldiers and their systems in the field. It sustains materiel in an operational status, restores it to serviceable condition, or upgrades its functional utility through modification or product improvement. The Army Maintenance System designates the scope of tasks performed by maintenance activities. It provides support planning requirements for maintenance of materiel systems when fielded and after fielding. It also establishes requirements for managing activities that physically perform maintenance.

1-2. Maintenance levels form the baseline for determining which specific maintenance tasks are assigned to each level. They are a means to select the scope of maintenance and the skill levels necessary for units and activities at various command levels.

1-3. Maintenance tasks include any action that retains or restores materiel to a fully mission-capable condition. Tasks range from simple preventive maintenance checks and services (PMCS) of equipment to complex depot operations performed in fixed shop facilities. The Maintenance Allocation Chart (MAC) remains the primary tool for assigning tasks.

1-4. Distribution Management. Improvements under the distribution management umbrella must allow the soldier to receive their parts faster, better, and cheaper than the current methods of doing business. A