

Army Regulation 750–10

**Maintenance of Supplies and
Equipment**

Army Modification Program

**Headquarters
Department of the Army
Washington, DC
23 October 2019**

UNCLASSIFIED

SUMMARY of CHANGE

AR 750–10

Army Modification Program

This major revision, dated 6 November 2019—

- o Supersedes Army Directive 2018–07–10, Prioritizing Efforts-Readiness and Lethality (Update 10).

This major revision, dated 23 October 2019—

- o Adds records management requirements (para 1–5).
- o Adds exception to policy for when a Soldier can apply a 23 level modification work order (para 1–6o).
- o Updates Commanding General, U.S. Army Materiel Command responsibilities (para 2–9).
- o Updates Commanding General, U.S. Army Installation Management Command responsibilities (para 2–12).
- o Incorporates and supersedes guidance from Army Directive 2018–07–10, Prioritizing Efforts-Readiness and Lethality (Update 10), by eliminating the requirement for commanders to publish appointment orders for modification work order coordinators (formerly para 2–15b).
- o Incorporates and supersedes guidance from Army Directive 2018–07–10, Prioritizing Efforts-Readiness and Lethality (Update 10), by eliminating the requirement for commanders to ensure unit modification work order coordinators collaborate with installation/state modification work order coordinators to facilitate the reporting of all modification work order applications (formerly para 2-15c).
- o Incorporates and supersedes guidance from Army Directive 2018–07–10, Prioritizing Efforts-Readiness and Lethality (Update 10), by eliminating the requirement for commanders to use internal tools to provide guidance and enforce program requirements (formerly para 2–15d).
- o Adds guidance for rescinding, cancelling, or extending a modification work order (para 3–6(4)).
- o Updates software modification work order guidance (para 3–8).
- o Adds the requirement to verify that the modification work order has an approved materiel release (paras 4–2a and 4–3a).
- o Adds the requirement for the materiel developer to make official coordination with Army command and Life-Cycle Management Command prior to application of the modification work order (para 4–3a).
- o Adds requirement for program managers’ accountability for reporting changes on equipment in Modification Management Information System (para 5–1c).
- o Updates DA Form 7591 (Modification Work Order Fielding Plan (MWOFP)) (app B).

**Maintenance of Supplies and Equipment
Army Modification Program**

By Order of the Secretary of the Army:

JAMES C. MCCONVILLE
General, United States Army
Chief of Staff

Official:


KATHLEEN S. MILLER
Administrative Assistant
to the Secretary of the Army

Guard/Army National Guard of the United States, and the United States Army Reserve, unless otherwise stated.

Proponent and exception authority.

The proponent of this regulation is the Deputy Chief of Staff, G–4. The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency in the grade of colonel or the civilian equivalent. An activity may request a waiver to this regulation by providing a justification that includes a full analysis of the expected benefits. In addition, the waiver must include a formal review by the activity’s senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and will be forwarded through the higher headquarters to the policy proponent. Refer to AR 25–30 for specific guidance.

Army internal control process. This regulation contains internal control provisions in accordance with AR 11–2 and identifies key internal controls that must be evaluated (see appendix E).

Supplementation. Supplementation of this regulation and establishment of command and local forms are prohibited without prior approval from the Deputy Chief of Staff, G–4 (DALO–MPF), 500 Army Pentagon, Washington, DC 20310–0500.

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the Deputy Chief of Staff, G–4 (DALO–MPF), 500 Army Pentagon, Washington, DC 20310–0500.

Distribution. This regulation is available in electronic media only and is intended for the Regular Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

History. This publication is an administrative revision. The portions affected are listed on the summary of change.

Summary. This regulation establishes the policy and procedures and outlines the organizational structure for the Army Modification Program.

Applicability. This regulation applies to the Regular Army, the Army National

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*This publication supersedes AR 750–10, dated 5 August 2013 and AD 2018 – 07 – 10, dated 19 June 2018.

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Glossary

Chapter 1 Introduction

1–1. Purpose

This regulation provides a disciplined approach on how to plan, authorize, implement, track, and control hardware and software modifications made to Army materiel and Army-managed materiel used by other Services.

1–2. References and forms

See appendix A.

1–3. Explanation of abbreviations and terms

See the glossary.

1–4. Responsibilities

See chapter 2.

1–5. Records management (recordkeeping) requirements

The records management requirement for all record numbers, associated forms, and reports required by this regulation are addressed in the Records Retention Schedule-Army (RRS–A). Detailed information for all related record numbers, forms, and reports are located in ARIMS/RRS–A at <https://www.arims.army.mil>. If any record numbers, forms, and reports are not current, addressed, and/or published correctly in ARIMS/RRS–A, see DA Pam 25–403 for guidance.

1–6. Objectives for modification of materiel

a. Modification is any alteration, conversion, or modernization of an end item or a component of end item (COEI), which in any way changes or improves the original purpose or operational capacity in relation to the effectiveness, efficiency, reliability, or safety of that item. This includes, but is not limited to, conversions; field fixes; retrofits; rebuilds; redesigns; upgrades; extended service programs; engineering changes; software revisions; system enhancement programs; service life extension programs; system improvement programs; product improvement programs; preplanned product improvements; modifications developed and applied by contractors as part of prime vendor support or contractor logistics support (CLS) agreements; horizontal technology integration; continuous technology refreshments (CTRs); technology insertions; and all other terms used to describe modifications as defined above.

b. Modifications that improve or diminish end item performance against approved key performance parameters (KPPs) and/or key system attributes (KSAs) to levels above or below objective performance envelope require an updated functional requirements document be submitted to the Deputy Chief of Staff (DCS), G–8 for Army Requirements Oversight Council approval. Modifications that will not exceed the performance envelope defined by the approved KPP and/or KSA do not require DCS, G–8, or Army Requirements Oversight Council approval.

c. Table 1–1 and table 1–2 outline requirements for hardware and software modifications as equipment moves through different phases of the production cycle.

Equipment Stage	Description	Requirement	
		Modification work order (MWO)	Engineering change proposal (ECP)
(1) System is in production, has not been fielded.	DD Form 250 (Material Inspection and Receiving Report) has not been signed. ¹	Not applicable	X
(2) System is in production, initial fielding of equipment has taken place. (DD Form 250 has been signed.)	A portion of new equipment is on the production line or is still physically located at the production facility, and	Not applicable	X

**Table 1–1
Hardware modifications—Continued**

Equipment Stage	Description	Requirement	
	some has been fielded to end units.		
(3) System is out of production and fielded.	Equipment that has already been fielded.	X	Not applicable
	DD Form 250 has been signed. ²	X	Not applicable

Notes:

¹ Technical data packages (TDPs) must be updated before fielding.

² Class 1 ECPs must be developed into a MWO for application to these systems.

If an item is to be modified using CTR, the guidelines, as set forth in paragraph 3–7, govern its integration.

**Table 1–2
Software modifications**

Equipment Stage	Description	Requirement	
		Software change package (SCP)	ECP
(1) System is in production (DD Form 250 has not been signed).	No associated software has been fielded to units (excluding field exercises or test beds) or the software system has no specially produced hardware. ¹	Not applicable	X
(2) System is in production and an initial hardware or software fielding has taken place (DD Form 250 has been signed).	The software and all evolving versions of the software that are undergoing continuing corrective or adaptive revision (for corrected or enhanced future capabilities) for application to systems still on the production line or still at the production facility.	Not applicable	X
(3) System is out of production and fielded.	Software ECPs will be converted into SCPs for application to fielded equipment.	X	Not applicable
	DD Form 250 has been signed. ²	X	Not applicable

Notes:

¹ The TDP must also be concurrently updated before fielding.

² Any SCP that requires or coincides with a hardware modification must be developed into the hardware MWO for application to these systems. Validation and verification of the software MWO must be done in conjunction with, and signed-off on by the developer of the hardware to ensure that there is no degradation to the hardware.

d. If a modification program enhances system software capability or functionality, or if hardware modifications require embedded software (including operating systems) modifications, the modification program manager (PM) will ensure that the Chief Information Officer, G–6 (CIO/G–6) is notified of the modification. The modification PM will also ensure that the system software capabilities and functionality modifications are documented in the command, control, communications, computers, and intelligence (C4I) support plan/information support plan, per the requirements stated in Chairman of the Joint Chiefs of Staff instruction (CJCSI) 5123.01H. See paragraph 3–2 for additional information on ECPs.

e. When a single MWO or a group of concurrent MWOs are combined and applied as a block package, and these modifications exceed the requirements as identified in the initial capabilities document, the capability development document, or the capability production document of the end item, the end item will be covered under the Army Materiel Release Policy, as stated in AR 700–142. The materiel developer (MATDEV) and the capability developer (CAPDEV) are responsible for MWO execution management through the designated U.S. Army Materiel Command (AMC) Life Cycle Management Command (LCMC) MWO coordinator. The program executive officer (PEO) or PM is responsible for MWO

management in coordination with the LCMC MWO coordinator. The appropriate elements of the MATDEV, contractor, supporting commands, or activities will schedule and execute the modification application program.

f. Funding, scheduling, planning, and the application of MWOs are coordinated between the MATDEV and the LCMC MWO coordinator to complete the modification within the required timeframe and in the most cost-effective manner.

g. MWO validation and verification is the responsibility of the MATDEV. Procedures, logistics support, and draft procedures for changed or revised publications will be validated and verified to ensure modifications achieve stated goals prior to release of the draft MWO for publication.

h. When commanders or system MATDEVs require the use of a platform (vehicle or other systems) to mount, install, and/or carry an additional capability in/on/to that platform, the unit commander or system MATDEV must coordinate with the platform MATDEV to ensure that adding this capability will not degrade the performance, safety, or transportability capabilities of the platform.

i. Commercial nondevelopmental items and administrative equipment are excluded from the modification program. Commercial off-the-shelf software and hardware products will be included in the modification program upon transfer to Army organic sustainment and depot maintenance support by the system developer.

j. All modified Army software systems are required to complete Army interoperability certification (AIC) to certify horizontal and vertical interoperability prior to their fielding. This requirement applies to all Army operational and tactical level C4I and weapons systems, regardless of modification or designated acquisition category. The Central Technical Support Facility (CTSF) at Fort Hood, Texas, is the Army's designated AIC test facility. CTSF, with Headquarters, Department of the Army (HQDA) coordination, has developed standard operating procedures describing the AIC process. The modified system will be assigned a software block for system-of-systems AIC testing. CTSF will perform the AIC testing, develop the reports, and provide a recommendation for certification to the CIO/G-6. The CIO/G-6 is the approval authority for AIC of the modified system.

k. All modified software systems must complete all information assurance and security accreditation requirements prior to delivery to CTSF for the AIC testing.

l. An alteration that consists solely of adding a label or data plate to an item is not considered a modification as defined in this regulation.

m. Every MWO published will include item unique identification (IUID) of the item, to include marking and registration, if the item covered by the MWO: (1) is Class VII; (2) has been identified by its lifecycle manager as requiring IUID; (3) can be marked in accordance with military standard (MIL-STD)-130N(1) and the DOD Guide to Uniquely Identifying Items standards by the application of a label or data plate affixed to the item with adhesive; and (4) addresses a modification that is to be applied by depot-level or contractor personnel. (This criterion does not preclude MATDEV from electing to apply IUID concurrently to items undergoing modification that do not meet this four-part criterion.)

n. The MWO's requiring application by operators, crews, and field level maintainers require an exception to policy. The MATDEV can request operators, crews, and field level maintainers apply an MWO when:

- (1) The MWO application poses low risk to the equipment and Soldier safety.
- (2) The MWO requires minimal time and/or equipment density.
- (3) Approval from PEO / CAPDEV verifies a Soldier can technically apply the MWO.
- (4) MATDEV funds the MWO kit and shipping.
- (5) The correct Soldier by military occupational specialty (MOS) is used where applicable.
- (6) The MWO can be performed during normal duty hours without deferring core maintenance.
- (7) The MWO can be done as an expense per DOD 7000 14-R (Volume 2A Chapter 1) during normal unit maintenance, repair, or scheduled service of equipment.
- (8) No special tools are required beyond the general mechanic's tool kit, or special tool is included.
- (9) Performing the MWO adds minimal workload for unit personnel.

o. Once the above criteria is met, request must be staffed with supporting documentation through the Assistant Secretary of the Army (Acquisition, Logistics and Technology) (ASA (ALT)), AMC, Army commands (ACOMs), direct reporting units (DRUs), Army service component commands (ASCCs), and final approval at the DCS, G-4.

Chapter 2 Responsibilities

2-1. Assistant Secretary of the Army (Acquisition, Logistics and Technology)

The ASA (ALT) will—

- a.* Program and budget funds to execute the modification program and support updates as defined in paragraph 4-2.
- b.* Ensure PEOs, PMs, and/or MATDEVs as MWO sponsors will—

(1) Develop, plan, program, prepare, and execute modifications in accordance with all procedures as set forth in this regulation.

(2) Monitor, control, and evaluate overall budget and funding execution activity.

(3) Apply and/or ensure that application of all modifications are recorded in the Modification Management Information System (MMIS).

(4) Coordinate with the U.S. Army Test and Evaluation Command (ATEC) to plan and budget testing and evaluation requirements.

(5) Attend the Commanding General (CG), AMC-chaired annual MWO Workshop, as appropriate.

2–2. Assistant Secretary of the Army (Financial Management and Comptroller)

The ASA (FM&C) will—

a. Manage the planning, programming, and budgeting process for modification efforts.

b. Program and budget for modification funding together with the ASA (ALT), DCS, G–8, and DCS, G–4.

c. Prepare budget justification materials, control and distribute funds, and monitor execution.

2–3. Deputy Chief of Staff, G–3/5/7

The DCS, G–3/5/7 will—

a. Assist in the preparation of budget defense materials.

b. Assist DCS–G–8 as requested and ASA (ALT) as required with evaluation of proposed modifications and update requirement documents as appropriate.

c. Provide representation at the annual MWO Workshop.

d. Ensure training material for the affected system is current.

2–4. Deputy Chief of Staff, G–4

The DCS, G–4 will—

a. Develop and promulgate modification policies and procedures.

b. Assist in the preparation of budget defense materials.

c. Co-chair the annual MWO Workshop in coordination with Headquarters, AMC, and the LCMC MWO coordinators.

2–5. Chief Information Officer, G–6

The CIO/G–6 will—

a. Ensure that the modification program complies with all Title 40, United States Code, Section 1401 et seq. (40 USC 1401 et seq.), known as the Clinger Cohen Act, requirements that apply.

b. Ensure that software modifications comply with all C4I support plan/information support plan, AIC, and software-blocking horizontal and vertical interoperability requirements.

c. Serve as the approval authority for AIC.

d. Provide direction and guidance to the CTSF for the AIC process.

2–6. Deputy Chief of Staff, G–8

The DCS, G–8 will—

a. Update acquisition documents for Army approval when the modification moves system performance outside the approved KPP and/or KSA threshold and objective levels.

b. Prioritize the modification for input to the appropriate program evaluation group during the Army budget and program development cycle. Prioritize and approve acquisition category levels I and II and modifications purchased by procurement appropriations as described in DA Pam 70–3.

c. Review validation and programming funding requirements for the modification program.

d. Review validation and approval of proposed modifications to Army software systems previously certified through the AIC process.

2–7. Chief, U.S. Army Reserve

The CAR will—

a. Establish or designate an office to monitor MWO requirements and applications and coordinate directly with AMC major subordinate command representatives.

b. Maintain the MMIS point of contact listing, updated with current MWO coordinators, telephone numbers, and email addresses for both ground and aviation equipment.

- c.* Maintain coordination with the local aviation field maintenance directorate's contract field team managers for application of MWOs on aviation systems in their geographical areas of responsibility.
- d.* Budget for and attend the annual MWO Workshop.
- e.* Ensure timely and accurate recording and reporting of MWO applications in the MMIS.
- f.* Notify units to deliver equipment as scheduled to the modification site upon call forward from the modification team or contractor.
- g.* Secure and store MWO kits as required until the application team installs them.

2–8. Chief, National Guard Bureau

The CNGB will—

- a.* Establish or designate an office to monitor MWO requirements and applications and coordinate directly with AMC major subordinate command representatives.
- b.* Ensure a State MWO coordinator is assigned by appointment orders for each State and Territory.
- c.* Maintain the MMIS point of contact listing, updating it with current MWO coordinators, telephone numbers, and email addresses for both ground and aviation equipment.
- d.* Maintain coordination with the local aviation field maintenance directorate's contract field team managers for application of MWOs on aviation systems in their geographical areas of responsibility.
- e.* Budget for and attend the annual MWO Workshop.
- f.* Ensure timely and accurate recording and reporting of MWO applications in the MMIS.
- g.* Notify units to deliver equipment as scheduled to the modification site upon call forward from the modification team or contractor.
- h.* Secure and store MWO kits as required until the application team installs them.

2–9. Commanding General, U.S. Army Materiel Command

The CG, AMC will—

- a.* Serve as Army lead for execution of the Army Modification Program.
- b.* Ensure each LCMC has an LCMC MWO coordinator, chartered by the LCMC commander, as the point of contact for all LCMC MWO actions.
- c.* Designate an organization or individual as the AMC MWO coordinator.
- d.* Designate an MWO coordinator at each installation, post, camp, and station to—
 - (1) Coordinate all fielding team visits with the LCMC MWO Coordinator, MATDEV, and appropriate points of contact on the installation for MWO applications.
 - (2) Report application results to the LCMC MWO coordinator and MATDEV as required.
- e.* Coordinate with installation senior and garrison commanders to establish installation MWO programs.
- f.* Co-chair the annual MWO workshop in coordination with the DCS, G–4 and the LCMC MWO coordinators.
- g.* Ensure each Software Engineering Center (SEC) has an ECP/SCP coordinator, chartered by the SEC commander, as the point of contact for all software modifications actions.
- h.* Ensure software modifications receive AIC prior to fielding.
- i.* Monitor the MWO program to ensure conformance with this publication.
- j.* Coordinate MWO program activities with LCMCs, ACOMs, ASCCs, and DRUs.
- k.* Coordinate with the MATDEV for funding, scheduling, planning, and application of MWOs to ensure that modifications are completed in a timely manner.
- l.* Provide administrative and base operations support to sponsoring agency teams as stated in MWO fielding plans.
- m.* Ensure DA Form 7591 (Modification Work Order Fielding Plan (MWOFP)) and DA Form 7592 (Modification Work Order (MWO) Exhibit of Concurrence) are developed, coordinated, and implemented.
- n.* Direct the CG, U.S. Army Security Assistance Command (USASAC) to—
 - (1) Provide management oversight for modifications to foreign military sales (FMS) equipment.
 - (2) Notify military assistance advisory groups or similar groups if the equipment to be modified is in a foreign government inventory as a result of a U.S. Army government-to-government FMS. This requirement does not apply to equipment in foreign government inventory as a result of direct commercial sales from private U.S. companies.
 - (3) Ensure software modifications have completed Army AIC requirements and, if applicable, joint interoperability certification requirements, prior to delivery of the modified system to the foreign government.
- o.* Direct the Director, CTSF to—
 - (1) Work with the PM and U.S. Army Training and Doctrine Command (TRADOC) capability managers to ensure the modified system meets the requirements for AIC testing.
 - (2) Coordinate AIC testing with the PM.

- (3) Perform AIC testing and develop the AIC test reports.
- p. Provide a recommendation for certification to the CIO/G-6.

2-10. Commanding General, U.S. Army Training and Doctrine Command

The CG, TRADOC will—

- a. Assist the MATDEV with the evaluation of proposed modifications, update requirement documents as appropriate, and recommend either a materiel or a nonmateriel solution.
- b. Provide representation at the annual MWO Workshop.
- c. Develop the test threads and assist with the documentation for AIC testing, in conjunction with the system PM.
- d. Determine if any doctrine, organization, training, materiel, leadership and education, personnel, or facilities domains will be affected.

2-11. Commanding General, U.S. Army Cyber Command

The CG, ARCYBER will—

- a. Collaborate with the ASA (ALT), CIO/G-6, and AMC to ensure software modifications do not degrade the security posture of Army networks.
- b. Provide representation at the annual MWO Workshop.
- c. Assist with the evaluation and, in coordination with TRADOC, determine if any cyberspace doctrine, organization, training, materiel, leadership and education, personnel, and facilities domains will be affected.

2-12. Commanding General, U.S. Army Test and Evaluation Command

The CG, ATEC will—

- a. Plan and conduct testing.
- b. Provide a system evaluation of the effectiveness, suitability, and survivability of the system.
- c. Coordinate with the DCS, G-4 regarding information analyzed in support of the MWO process.
- d. Coordinate with the CTSF during AIC testing of software modifications for collected data to support the operational evaluation of the system.
- e. Ensure software modifications have successfully met all AIC exit criteria prior to the start of operational testing.

2-13. Commanding General, U.S. Army Installation Management Command

The CG, IMCOM will—

- a. Provide installation-level support for facilities coordination for MWO application as required.
- b. Participate in the annual MWO Workshop.

2-14. Commanding Generals of Army commands, Army service component commands, and direct reporting units

Each CG, ACOM, ASCC, and DRU will—

- a. Designate an organization or individual as the ACOM, ASCC, and DRU MWO coordinator.
- b. Provide appropriate level of representation at the annual MWO Workshop, ensuring at a minimum that the brigade or above MWO coordinator(s) attend this workshop.
- c. Ensure that each brigade and installation has a MWO coordinator.
- d. Coordinate all fielding team visits with the appropriate LCMC MWO coordinator.
- e. Ensure reporting of modification of sustainment and field level workload in accordance with 10 USC 2466. The cost of labor to install a modification or upgrade is 50/50 reportable in accordance with 10 USC 2466 when the installation is considered a depot-level support (whether performed by a Federal Government employee or non-Government personnel) (see AR 750-1).
- f. Ensure the modified system has received AIC prior to delivery of the system to the command.

Note. Execution of medical MWOs is the responsibility of the Army Surgeon General and is regulated by AR 40-61.

2-15. Unit commanders

Unit commanders will—

- a. Ensure all MWOs are applied to their equipment and recorded in the MMIS in accordance with AR 750-1.
- b. Verify application of the MWO and ensure the accurate and timely recording of applied MWO data into the MMIS, regardless of who applies the MWO and where it is applied.

Chapter 3 Modification Program

3–1. Program overview

a. The Army's Modification Program is the coordinated process used to develop, apply, and document changes in both hardware and software made to end items, components, weapons, and information systems. Modifications may result from one or more of the following:

- (1) Technology changes.
- (2) Safety issues—safety of use messages (SOUMs) or safety of flight (SOF) (see AR 750–6, AR 95–1, AR 385–10, and DA Pam 385–16).
- (3) New or improved capabilities.
- (4) Operational changes.
- (5) Software adaptations, corrections, or enhancements.
- (6) Improved test, measurement, and diagnostic equipment (TMDE) or testing capabilities.
- (7) Corrections of equipment deficiencies or shortfalls.
- (8) Product changes.
- (9) Conversions.
- (10) Validated user requirements.
- (11) Improved reliability, maintainability, and supportability.
- (12) Reduced logistics support through cost reduction and value engineering.
- (13) Simplification or standardization.
- (14) Permit use with new equipment.
- (15) Obsolescence.
- (16) Modifications developed and applied by contractors as part of a prime vendor support or CLS agreement.

b. When a modification is developed, it must be identified against an end item's standard study number, line item number, national stock number (NSN), Army part number, and end-item serial number or unique item identifier.

c. Changes may occur while the item is under development in a factory environment, while under operational testing and/or developmental testing at test sites, or after the fielding of the item. Prior to fielding, changes are normally documented to the TDP through ECPs. If the item is still in production, but some items are already fielded (DD Form 250 has been signed) and the need exists to modify the fielded items outside the production area, a formal MWO must be developed for the fielded items. MWO kits will be purchased and applied to fielded items, and the changes will be incorporated into the appropriate technical manuals (TMs) and software user guides and/or software user manuals.

d. When a MATDEV enters into an agreement with a contractor to provide prime vendor support or CLS, the agreement will—

- (1) Include all applicable regulation references relating to the MWO process.
- (2) Require the contractor to follow the MWO process as outlined in this regulation and AR 700–127 when planning, developing, applying, and recording hardware and software modifications for supported systems and equipment.
- (3) Require the contractor to report the equipment modification to the MATDEV.

e. No modification is authorized for an application unless it has an approved MWO number. Commanders will not allow their equipment to be modified unless there is an official MWO.

f. Applications and MWO kits are provided at no cost to the user per statutory requirements as interpreted in DOD 7000.14–R.

g. Units will not requisition MWO kits based on the MWO itself without prior approval of the MATDEV. All MWO applications must be recorded in the MMIS (see chapter 5).

h. End-item conversion programs that establish a new NSN/model designator will be fielded under the provisions of the Army materiel release, fielding, and transfer policy (see AR 700–142).

i. If an item becomes unserviceable, units will not intentionally degrade the item by demodifying it through the installation of serviceable unmodified repair items, either obtained through the normal supply system or from the Directorate of Resource Management.

j. A MWO will not be applied to modify an aircraft, weapon, or other item of equipment that the military plans to retire or otherwise dispose of within 5 years after completion of the modification. This prohibition will not apply to safety modifications. This prohibition may be waived by the Secretary of a military department if it is in the national security interest of the United States. The waiver request will be submitted to DCS, G–4 (DALO–MPF), 500 Army Pentagon, Washington, DC 20310–0500.

k. DA Pam 385–16 and MIL–STD–882 contain standards for applying system safety processes to modifications. MATDEVs will evaluate and document the safety impact of each modification in coordination with the CAPDEV.

3-2. Engineering change proposals

a. ECPs document proposed changes in the requirements or design of an item, provide a mechanism for coordinating the proposed changes, and provide a way to disseminate changes upon approval. The ECP process is documented in military handbook (MIL-HDBK)-61A(SE), and the format for an ECP is in American National Standards Institute (ANSI)/Electronic Industries Alliance (EIA)-649-B. If there is a need or the decision is made to apply the ECP to fielded equipment, the ECP must be developed into a MWO for hardware/software application to fielded items or into a SCP for a software-only application.

b. There are two types of ECPs, as referenced in ANSI/EIA-649-B and MIL-HDBK-61A(SE). They are—

(1) *Class I engineering change proposal.* A Class I ECP is approved by the configuration control board (CCB) and authorized with a contract modification. Class I ECPs are assigned an engineering change priority (emergency, urgent, or routine), which determines the relative speed at which the ECP is to be reviewed, evaluated, and, if approved, ordered, and implemented.

(2) *Class II engineering change proposal.* A Class II ECP is typically reviewed for concurrence in classification and approved by the MATDEV, unless otherwise specified in the contract.

c. MWOs are based on Class I ECPs, which affect form, fit, and function, and have associated costs. Class II ECPs do not require the generation of a MWO.

3-3. Minor alterations (hardware only)

a. Minor alterations cannot be mandatory for organizational or field support level application and reporting, but they are mandatory for application to depot serviceable assets before issue to the user. Minor alterations will be scheduled concurrently with programmed depot maintenance on unserviceable repairable assets; for example, a flashing light installed on a vehicle to lead a convoy. Minor alterations can be initiated via technical bulletin (TB) or Preventive Maintenance Monthly Magazine.

b. Application done by the user on items located with the user will be at the user's expense.

c. To qualify as a minor alteration, the proposed change must—

(1) Be optional for field application and reported by the user.

(2) Not exceed four man-hours (bench time) when performed separately or concurrently with other maintenance actions.

(3) Be cost-effective.

(4) Ensure that all parts, components, tools, special tools, fixtures, or skills (military occupational specialty) are available in using units or are provided by the MATDEV.

(5) Result in a change to technical documentation (TMs, depot maintenance work requirement (DMWR), national maintenance work requirement, TDPs, and so forth) and applicable procurement request order numbers for overhaul, rebuild, or repair at depot facilities.

(6) Be authorized in equipment publications and in the DMWR. It may be authorized by the MATDEV in the proper equipment improvement report and maintenance digest TB and will be incorporated in the next revision or update to the publications.

3-4. Component modernization

To the maximum extent possible, component modernization should be accomplished through the normal replenishment requisitioning process. If the item is a repairable component and the old item is being modified to the NSN, the modification must be accomplished at a national level facility. This process will be used when—

a. The failure rate does not justify an immediate purge of retail stocks.

b. An improved item can be issued through normal supply procedures.

c. The user is not required to apply the new component and then report its application.

d. The improved component can be installed when the old item on fielded equipment fails.

e. The form, fit, or function is not changed.

f. The related technical publications are revised and/or updated.

g. The application performed by the user is done at the user's expense.

h. The funding is in accordance with AR 710-1 and AR 700-18.

i. The improved component has a different NSN.

j. A system-level or component-level MWO is required if—

(1) The model designation changes when the new/modified component is installed (for example, M34A2 to M34A2/C).

(2) The new/modified component is being installed to comply with provision of law, treaty, and so on (for example, ozone depleting chemicals and/or pollution standards).

3–5. Modification work orders

a. MWOs will be developed to achieve one or more of the following objectives:

- (1) Provide new or improved capabilities.
- (2) Improve reliability, maintainability, and supportability.
- (3) Improve or correct faulty performance or product quality.
- (4) Reduce logistical support requirements.
- (5) Simplify or standardize equipment.
- (6) Permit use with new equipment.
- (7) Prevent injury to personnel and damage to equipment.
- (8) Meet environmental protection standards.
- (9) Implement a safety message.

(10) Implement a 3-year computer hardware re-procurement in accordance with AR 70–1. This does not negate the DOD Information Technology Security Certification and Accreditation Process 3-year review.

b. The proponent for the MWO is responsible for ensuring that the application of MWOs complies with all requirements prescribed in this regulation.

3–6. Modification classifications

a. Modifications will be classified as “emergency,” “urgent,” or “routine” based on the modification or deficiency being applied/corrected.

(1) *Emergency modification work orders.* Emergency MWOs have the highest priority in the modification program and will immediately deadline all equipment affected until the stated deficiencies are corrected or the risk of communications security (COMSEC) or cryptographic compromise is reduced to an acceptable level. The MWO coordinator will notify the command channel that an emergency MWO has been issued and necessitates placing affected equipment into a not mission capable (NMC) status. The unit commander will ensure that equipment under their command is immediately placed in a NMC status. A MWO will be classified as “emergency” when the MWO is needed to—

(a) Correct a hazardous condition that could result in fatal or serious injury to personnel or in extensive damage or destruction of equipment. The PM is required to process a system safety risk assessment and update the hazard tracking system when hazardous conditions are discovered in fielded systems per DA Pam 385–16 and MIL–STD–882E.

(b) Change operational characteristics that, if not accomplished without delay, may seriously compromise national security.

(c) Prevent operation of equipment with an unapplied emergency MWO. The MATDEV will proceed with the utmost urgency to apply any emergency MWO. Such equipment will be reported as NMC according to DA Pam 750–8, DA Pam 738–751, AR 220–1, and AR 700–138. Emergency safety-related MWOs and deadlining or grounding of equipment is usually preceded by a SOUM or SOF message in accordance with AR 750–6 or AR 95–1, respectively. There may be an emergency MWO that does not require a safety message. This type of MWO would correct an operational deficiency (warfighting). The level of urgency for this type of MWO is only approved by the DCS, G–8.

(2) *Urgent modification work orders.* Urgent MWOs have the second highest priority and must be applied within 2 years of the MWO effective date. In those cases where the urgent MWO cannot be applied within the 2-year period because of funding, industrial base, or other resource constraints, the PM/MATDEV or system manager will obtain approval from the DCS, G–4 (DALO–MPF) for extending the timeframe for completing the MWO. An urgent priority is assigned to a modification for either of the following reasons:

(a) To correct a potentially hazardous condition, which if left uncorrected could result in injury to personnel or damage to equipment. The PM is required to process a System Safety Risk Assessment and update the Hazard Tracking System when potentially hazardous conditions are discovered in fielded systems per DA Pam 385–16 and MIL–STD–882E.

(b) To cause a change that, if not accomplished expeditiously, may seriously compromise the mission effectiveness of deployed equipment, software, or forces.

Note. The equipment may continue to be operated under restrictions determined by the MATDEV. Equipment not modified 2 years from the effective date of the MWO will be reported as NMC according to DA Pam 750–8, DA Pam 738–751, AR 220–1, and AR 700–138. Urgent safety-related MWOs and deadlining or grounding of equipment may be preceded by a SOUM or SOF message in accordance with AR 750–6 or AR 95–1, respectively, but it is not required. This type of MWO would correct an operational deficiency (warfighting). The level of urgency of this type MWO is only approved by the DCS, G–8.

(3) *Routine modification work orders.* A modification will be classified as “routine” when emergency or urgent priorities are not applicable.

(a) Application of all routine MWOs will be completed within the stated timeframe on the MWO, which cannot exceed a maximum period of 5 years from the effective date of the MWO.

(b) Routine MWOs published but not applied will not cause equipment to be reported as NMC. Action to apply overdue MWOs will continue and require command emphasis. The proponent and/or MATDEV of each MWO will review the MWO to determine if action to apply the MWO should continue or be discontinued due to lack of current relevance—that is, kits, funding, or other compelling reasons. The proponent/MATDEV will notify the field of the decision made for each MWO reflected as due.

(4) *Rescinding, cancellation, or extension of modification work orders.* The PM/MATDEV or system manager will submit an official request with justification through their respective LCMC prior to obtaining a signed memorandum of approval from the DCS, G-4 (DALO-MPF) before rescinding, cancelling, or extending an MWO.

b. When the MATDEV applies a mandatory MWO, the MATDEV must concurrently modify all spares. Retail level spares, shop stock, and authorized stockage list (ASL) items must be modified as the MWO is applied to the organization. Depot-level spares must be modified proportionally to coincide with the modification of all fielded assets.

c. As applicable, supporting TMDE must be modified concurrently with the end item of equipment and materiel being modified. This includes equipment and test program spares and test program sets required for diagnosing and repairing modified items. Any MWO that introduces a new TMDE or automatic test equipment requirement must coordinate with and gain approval from the Army TMDE activity for the recommended calibration and repair support requirements.

d. When MWOs are applied to automated data processing equipment, provisions must be made to ensure that associated software is not rendered obsolete by the automated data processing hardware modifications.

e. All supporting training aids, devices, simulators, and simulations (TADSS) must be modified concurrently with the end item of equipment and materiel or software being modified.

f. The MWOs will be annotated in the applicable logistics information system with an appropriate fault code based on the classification of the MWO.

g. An MWO that has exceeded its date range remains in effect unless otherwise rescinded or canceled by the MATDEV. These will be considered on a case-by-case basis.

3-7. Continuous technology refreshment

a. A CTR is an acquisition strategy for spares applied throughout the materiel acquisition cycle to maintain readiness, modernize equipment, and reduce total ownership costs. It is based on technology insertion and the use of state-of-the-art commercial products, processes, and practices to extend a system’s useful life in an economical manner.

b. Modernization efforts that meet the requirements in paragraphs 3-7c and 3-7d can be considered for CTR and may be incorporated during the normal maintenance and repair process. Modernization efforts that do not meet the requirements in paragraphs 3-7c and 3-7d must be applied using the MWO procedures.

c. An item modernized through the CTR process must—

(1) Be two-way compatible or interchangeable with the original item it replaces.

(2) Be issuable and supportable within the normal supply system.

(3) Be documented in accordance with interchangeability and substitutability (I&S) family structures and coding in accordance with AR 710-1 and AR 725-50. Cataloging will be in accordance with AR 708-1 and DA Pam 708-2.

d. An item modernized through the CTR process does not—

(1) Require additional repair at or below field level and/or sustainment level, except for minor changes in maintenance procedures.

(2) Require revised, new, or special TMDE.

(3) Require changes in system software beyond the scope of necessary documentation consistent with two-way hardware interchangeability noted in paragraph 3-7c.

(4) Increase, intentionally, the operational capability of the end item of equipment to be modified. Incidental improvements obtained as a result of CTR are permitted.

3-8. Software modifications

a. *Post-production software support.*

(1) Software release will be processed using the criteria outlined in accordance with AR 700-142, table 4-4.

(2) Software release and/or change package (SRP/SCP) will be prepared in accordance with the procedures and format prescribed by the SEC.

(3) The SRP/SCP will contain, at a minimum, inputs from the product manager, SEC, and the Industrial Logistics System Center (Weapons System Directorate).

(4) The Director SEC and/or the product manager will determine when such statements are required.

(5) Post-production (non-COMSEC) software notifications and actions will be prepared in accordance with AR 750–6 and posted in MMIS through a maintenance action (MA) message or a maintenance information (MI) message. The organization/user that applies a software update directed by an MA message is responsible for reporting modifications to equipment in MMIS as equipment is modified verifying the modification and completion with the unit/command for accountability. A mandatory MWO will not be published in addition to an MA message or MI message for COMSEC and non-COMSEC software modifications.

b. Communications security post-production software support.

(1) When a National Security Agency mandatory software upgrade or Army mandated baseline change or update is required, the operator, organization, and unit must download and install the Army-approved software version for their devices only from the U.S. Army Cryptographic Modernization Device Portfolio at <https://cryptomod.kc.us.army.mil>. For simple key loader the operator, organization, and unit must download and install the Army-approved software version for their devices at the LandWarNet site at <https://lwn.army.mil/>.

(2) Army-approved Software versions are located in TB 11–5810–423–10 and operators, organizations, and units will only use those Army-approved baseline and approved versions documented in that TB.

(3) COMSEC software notifications and actions will be posted in MMIS through a MA Message or a MI message. The organization/user that applies a COMSEC MA is responsible for reporting modifications to equipment in MMIS as equipment is modified verifying the modification and completion with the unit/command for accountability.

c. Accountability of Internal use Software. Accountable records must be updated to reflect the physical changes made to the Accountability of Internal use Software (IUS) and the associated costs when IUS enhancements, improvements, or other modifications occur.

3–9. Alternate changes to equipment

When a commander or system MATDEV requires the use of a platform (vehicle or other system) to mount/install/carry an additional capability in/on/to that platform, the unit commander or system MATDEV must coordinate with the platform MATDEV to ensure that adding this capability will not degrade the performance, safety, or transportability capabilities of the platform. The two recognized alternate methods to make changes to equipment are—

a. Special mission modification of materiel.

(1) A special mission modification is a change to fielded equipment that is designed to assist the commander in accomplishing a special mission.

(2) Approval requests for special mission modifications of equipment must be sent to the MATDEV (including all COMSEC and electronic warfare/signals intelligence equipment). To qualify as a special mission, a change must—

(a) Be temporary (or later approved for permanent application).

(b) Be easily removed by field support personnel to return the equipment or software to its standard design before evacuation, transfer to another command, or upon completion of the special mission, unless an alternate configuration is authorized by the MATDEV due to required one-time installation/interface hardware.

(c) Not require changing technical documentation, such as DMWR, TDPs, or TMs.

(d) Apply only to a limited quantity of the total Army inventory.

(3) Report applications of special mission modifications to the appropriate MATDEV.

(4) The requesting command is responsible for total funding, to include engineering, testing, evaluation, special mission modification kits, logistical support, training, training devices, TMDE, installation of kits, maintenance, and removal of kits. The following elements must be included in the special mission modification request to the MATDEV:

(a) Equipment description.

(b) Purpose and justification.

(c) Technical description and drawing of the modification.

(d) Proposed date for installation.

(e) Estimated length of time the modification will remain installed on the equipment and estimated timeframe as to when the equipment will be restored to its standard design.

(5) Before approval, the sponsor of the special mission modification, in coordination with the MATDEV, will analyze the proposed change to determine engineering feasibility and the total cost. The sponsor of the special mission modification will also ensure that equipment reliability or personnel safety is not adversely affected. Exceptions to this must be approved in advance by the DCS, G–4 (DALO–MPF). For aircraft, the MATDEV will certify the special mission modification and issue an airworthiness release to the requesting unit or activity on approval for application of the modification.

(6) An aircraft will not be altered in any way without prior approval of AMC, U.S. Army Aviation and Missile Command, in coordination with the DCS, G–4, Aviation Logistics Division (DALO–AV). Unauthorized alterations include

but are not limited to: all important person configurations; additions or changes in bulkheads; windows; autopilots; distance-measuring equipment; air conditioners; radar; altimeters; flight control; and navigational, weapon, or sensor system software.

(7) Commercial manufacturer-approved auxiliary and/or accessory items are authorized for adapting commercial equipment to handicapped personnel requirements.

(8) Commercial-type vehicles, when used solely for facilities engineering, may be modified at the local level. Examples are mounting sprayers, foggers, compressors, generators, and other equipment and items used to perform real property maintenance activities. Vehicles will be returned to their original configuration when evacuated, transferred, or when the need for the special mission modification ends. Vehicles that will be salvaged need not be returned to the original configuration.

(9) Policy, responsibilities, and procedures for application or removal of the special mission modification must be included in TBs and TMs.

b. Special purpose modification of materiel.

(1) These modifications must meet climatic, geographic, or equipment interface requirements. Examples are winterization kits, weapon mounting kits, tie down kits, radio/television frequency-interference shielding kits, telemetry kits, distribution panels, and auxiliary kits or accessories that are accountable items and authorized by a table of organization and equipment or a modification table of organization and equipment. When authorized, this equipment will be issued through normal supply procedures. Instructions for the installation, operation, maintenance, and removal of these kits will be included in the technical publications or in the TB of the affected equipment.

(2) Funding for special purpose modifications will be provided by the requesting command unless directed by HQDA to be programmed and budgeted under provisions of DOD 7000.14-R and Defense Finance and Accounting Service-Indianapolis (DFAS-IN) Regulation 37-100 (current fiscal year (FY)).

(3) The COMSEC electronic warfare and/or signals intelligence equipment that is type-classified "standard" and is used in U.S. Army Intelligence and Security Command fixed field stations will be returned to its original design when evaluation or need ends.

(4) Special purpose modifications will be reported electronically to the appropriate MATDEV.

3-10. Modification funding

a. It is the MATDEV's responsibility to ensure that funding covers the entire life cycle of the MWO from research and development (R&D) through kit application, to include shipment of equipment—including kits, hardware, or software—to and from modification sites and the electronic reporting of completed applications in the MMIS.

b. Funding for the MWO ends 5 years from the effective date of the MWO but may be considered on a case-by-case basis by the MATDEV.

c. Program and budget for the modification process according to DOD 7000.14-R and DFAS-IN Manual 37-100 (current FY). Subject to and in accordance with that guidance—

(1) Fund modification applications to include programming for the acquisition of modification kits in sufficient quantities to modify all applicable serial numbers, as stated in the MWO and the funding for contract or field team support to apply kits where applicable.

(2) Budget requirements are submitted through ASA (ALT) to the DCS, G-8.

(3) Monitor, control, and evaluate overall funding execution activity, to include any end-of-year closeout responsibilities.

(4) Ensure that the modification planning and programming address the total funding requirement for each MWO, to include procurement appropriations; research, development, test, and evaluation; operational maintenance appropriations; and Army Working Capital Fund.

d. Modification to an item currently in production may be applied by an ECP. If an item that is in production has assets that have already been delivered to field units, the ECP must be developed into a MWO to apply the modification to the fielded equipment. The development, testing, kits, and associated installation costs of this type of modification will be financed by the procurement appropriation.

e. Modification to an item that is already fielded and no longer in production but still in the operational inventory will be applied by a MWO. The development and testing of this type of modification should be financed by operations and maintenance appropriations, while the cost to procure the kits and the associated installation costs will be financed by the procurement appropriation (unless otherwise approved by the DCS, G-8 or appropriate office).

f. Outside the factory, R&D testing involves equipment that has been diverted from the Army's inventory specifically for rapidly developing modifications. Records of changes to equipment must be documented because this type of testing may or may not be developed into a MWO. The research, development, test, and evaluation account will finance the development, testing, and any cost necessary to return the item to its pre-existing configuration. If the decision is made to

develop the MWO, the cost to procure the kits and the associated installation costs will be financed by the procurement appropriation.

g. Violations and penalties for using the wrong source of funding to finance MWO kits and the associated parts and installation are outlined in the Antideficiency Act, available at <http://www.gao.gov/>.

h. The cost of labor to install a modification or upgrade is 50/50 reportable in accordance with 10 USC 2466 when the installation is considered a depot-level support (whether performed by a Federal Government employee or non-Government personnel) (see AR 750–1).

3–11. Components of end items

a. The MATDEVs for systems (sponsor), components, and items mounted on or installed in another MATDEV’s platform (host) must provide the kit that mounts or installs the item onto the host and/or primary platform.

b. The MATDEV of the associated support items of equipment (ASIOE) (sponsor) who is fielding, installing, or modifying equipment that is mounted on or installed in another MATDEV’s platform ASIOE will coordinate with the primary system’s MATDEV to ensure that—

(1) The COEI, mounting, and/or installation hardware are compatible and will fit onto or into the host and/or primary platform’s design without degrading performance of the platform or the modification. The MATDEV of the COEI (sponsor) must develop, test, validate, and/or verify this, in coordination with the MATDEV of the host and/or primary platform.

(2) Validation/verification of the modification is done in coordination with the host/primary platform MATDEV of the installed hardware or mount to ensure that there is no degradation of performance.

(3) Mounting and/or installation hardware spares are modified in accordance with paragraphs 3–6c and 3–6e.

(4) Component parts are listed in the appropriate repair parts and special tools list.

(5) To the fullest extent possible, application of these MWOs will be accomplished using the block modification process to minimize manpower, resource requirements, and equipment downtime.

(6) The COEI MATDEV developing the modification (sponsor) applies and electronically records installation of the modification in the MMIS in accordance with chapter 5. The COEI MATDEV (sponsor) will provide a copy of this information to the host/primary platform systems MATDEV within 7 working days.

(7) The data interchange process is used to pass new and updated ASIOE requirements to the host system MATDEV (see AR 710–1).

c. The primary platform MATDEV will ensure that—

(1) Any required changes are made to the TDP.

(2) All applicable information is changed in primary system TMs.

(3) The application of the modification, as reported by the COEI MATDEV (sponsor), is recorded in the host and/or primary system’s configuration database and the MMIS.

Chapter 4 Modification Process

4–1. General

This chapter sets forth procedures for developing, budgeting, applying, and recording MWOs. The process of developing, budgeting, applying, and historically documenting MWOs is a joint endeavor of ASA (ALT); DCS, G–3/5/7; DCS, G–4; DCS, G–8; TRADOC; IMCOM; and AMC.

4–2. Modification process

a. The MATDEV receives and evaluates recommendations for changes from many sources. These recommendations are for reasons such as safety; capability; technology change; software change; equipment deficiency; and logistical, operational, and support changes. The MATDEV will verify the MWO has an approved materiel release if the modification changes form, fit, or function, changes model number, alters transportability requirement, results in new basis of issue plan, results in new ASIOE, results in new MOS or skill identifier or adversely alters safety and health characteristics in accordance to AR 700–142. If the recommendation is rejected, the MATDEV will provide the originator the rationale for the rejection and no further action is required. If the recommendation is accepted, the MATDEV and the CAPDEV will evaluate and prioritize the recommendation jointly in accordance with DA Pam 70–3. The recommendation could require a nonmateriel solution.

(1) *Materiel solution.* For a materiel solution, the MATDEV is responsible for development of the modification. There are two ways that a modification can be developed:

(a) From a Class I ECP that has been developed in the factory and applied to equipment that is still in production; however, if there is equipment in the field (a DD Form 250 has been signed), the ECP must be developed into a MWO for application to the fielded equipment.

(b) From an accelerated R&D project outside of factory developmental testing. A developmental testing project simulates a factory environment where a section of configuration items are used to develop changes and to test those changes (validation). Any such changes are truly engineering-based changes and must be documented in a manner that, if and/or when approved for application to the rest of the Army, will allow the orderly transition to a valid ECP and/or MWO. In essence, the only difference is how and where the Army develops, tests, and approves the change.

(2) *Nonmateriel solution.* Combat developers should use changes in doctrine, tactics, training, or organizational structure as the primary method to meet the user's capability requirements, eliminating a need for a materiel solution or modification.

b. The MATDEV will convene a CCB to review the modification and, if approved, ensure that the LCMC MWO coordinator has assigned a materiel change number (MCN) per appendix D (the MCN is self-generated). The CCB decision will then be the authorization for the publication control officer to assign a valid MWO number. Both the materiel change and MWO numbers will be recorded in the MMIS by the LCMC MWO coordinator. The MATDEV will also enter the materiel change and MWO numbers into their MWO database.

c. MWOs are prepared in accordance with instructions in military performance specification (MIL-PRF) 63002M.

d. During development of the ECP/MWO, the MATDEV must document all changes to components within the kits. This must include TM and software user manual updates; repair parts definitions; I&S family structures and coding in accordance with DODM 4100.39; cataloging in accordance with AR 708-1; and disposition.

e. Each MWO will have its own MCN. However, if the decision is made to have a block package of fully related MWOs applied, these MWOs can either be identified to one MCN or maintain separate MCNs that will be entered into both the MMIS and the MATDEV's database. After the MCN has been generated, it is reported to the MATDEV and the supporting (matrix) LCMC publications control officer will assign a MWO number. The MATDEV then provides the MWO number to the original equipment manufacturer, contractor, or LCMC technical writers to draft the MWO. The MATDEV will record the MWO number into the MATDEV's database and will then report the MWO number to the LCMC MWO coordinator, who will then enter it into the MMIS.

f. The LCMC MWO coordinator will review the proposed modification to ensure that the following items have been addressed and sufficiently planned in the solution:

(1) Training aids, devices, simulations, simulators, manuals, and software user guides are being updated and funding for distribution is being identified.

(2) Management plan identifies fleet density and projected application schedule. This plan must include the modification of spares at unit through depot levels.

(3) Funding requirements are identified, including quantity requirements and spares.

(4) Provisioning master record will be updated.

(5) TDP will be updated.

(6) In accordance with AR 708-1, I&S will be established and documented.

(7) New test equipment or tools will be identified and available.

(8) Test program sets will be updated to be available, when needed.

(9) Software and hardware changes have been coordinated to ensure that all needed changes are made and tested and that changes to one do not negatively impact the other.

(10) Embedded instrumentation is being used, to include embedded diagnostics, prognostics, testing, and training.

(11) Environmental impact.

(12) Safety impact.

(a) Identification of new hazards introduced by the modification.

(b) Assessment of whether risks associated with current hazards will increase or decrease.

g. The LCMC MWO coordinator will coordinate with the MATDEV for resolution if shortcomings are discovered.

h. Prior to application of the first MWO kit to field units, the MATDEV will perform full validation/verification. At that time, coordination with the platform, hardware, or software MATDEV is initiated.

i. The MATDEV will prepare and negotiate DA Form 7591 with the LCMC MWO coordinators. The DA Form 7591 establishes a coordinated agreement between users and MATDEVs on application of the MWO.

j. When notified that funding is available, MATDEVs will review DA Form 7591 for any changes that need to be integrated. The application scheduling plan within DA Form 7591 will be derived from the DCS, G-8-approved prioritized sequence of MWOs in the equipment distribution scheduling system. The MATDEV will ensure maximum use of block and/or block package modifications. The LCMC MWO coordinator will coordinate the DA Form 7591 with the IMCOM-designated installation or activity MWO coordinator prior to shipment of any MWO kits.

k. Installation MWO coordinators or units will review the proposed DA Form 7591 for inclusion of an application schedule and will request out-of-sequence approval from the MATDEV. A signed DA Form 7591 forms the basis for MWO application.

l. Commanders at all levels will assist in developing and providing needed resources to accomplish MWO applications. MWOs will only be applied for through the LCMC MWO coordinators.

m. The LCMC MWO coordinator will chair the MWO fielding review board, which approves the final release of the MWO. This review will confirm that all actions outlined in paragraph 4–2f(1–12) have been accomplished to the satisfaction of all members of the review. At the direction of the MWO fielding review board, the fielding plan and/or DA Form 7591 will be approved for execution.

n. For equipment still in production, the MWO fielding review board will publish the serial number and/or date range of affected equipment. The serial number range “All” will only be used on equipment no longer in production.

4–3. Modification application process

a. In accordance with the signed fielding plan/DA Form 7591, the MWO is applied and the data elements are recorded into the MMIS database. The MATDEV will ensure the MWO has an approved materiel release prior to modification application per AR 700–142. The MATDEV will coordinate with the ACOM and LCMC with official memorandum prior to application of the MWO. The MATDEV will also record the application of the MWO into the configuration database.

b. Completion of the MWO application and reporting the completed application to the MMIS database are mandatory, even if no kit is required to modify the equipment (see chapter 5).

c. The organization that actually applies the MWO (contractor, unit, or sustainment organization) is responsible for reporting its application. Reporting will be accomplished by electronic means directly into MMIS using the online reporting mechanism. Email submission and/or spreadsheets are accepted on a case-by-case basis.

d. Record and report applied and/or existing MWOs that had not previously been recorded in MMIS when a new MWO is being applied. In those cases where MWOs are missing, the MWO application team will verify and report the equipment's configuration status concurrently with the MWOs or block MWOs that are being applied.

e. MWOs showing as due in the MMIS but that have been completed will be reported to the MMIS by the unit's supporting MWO coordinator.

Chapter 5 Modification Management Information System

5–1. General

a. The MMIS is a web-based system available at the Logistics Information Warehouse (LIW) website (<https://liw.logsa.army.mil>) as read-only to any authorized LIW account holder with Internet access and a “.mil” email address. Entry into the system is common access card protected. Once a user logs into the website, they can access MMIS by searching in the App Warehouse under Keyword for MMIS. Users requiring higher access than read-only can submit a permission request through the App Warehouse based on the specific functionalities they require. Within the MMIS application there are screen-specific help guides and an overall help module.

b. The level of access within the MMIS is determined based on the user-provided system access request justification concerning their duties and responsibilities. Most users will not have access to all modules within the MMIS, as certain modules are restricted to Army PMs and system administrators.

c. The organization that actually applies the MWO (MATDEV PM), contractor, unit, or sustainment organization is responsible for reporting modifications to equipment in MMIS as equipment is modified and verifying the modification and completion with the unit/command for accountability.

d. The MMIS is designed to assist users at all levels (unit level through Army leadership) in determining the status of modifications to equipment end items and components at the serial number level.

e. There are 13 modules within the MMIS modification section—

(1) *Modification work order end-item information.* This module contains three submodules. The equipment data submodule allows users to search for equipment listed in the MMIS. The MWOs not applied submodule provides the MWOs that are still needed for the equipment items. The MWOs applied submodule provides data for the MWOs that have been applied to the equipment items. As in all of the modules, there are various filters that allow system users to array the data based on their informational needs.

(2) *Modification work order component information.* This module provides MWO status information for components. Like the previous module, it displays this information at the serial number and unit identification code level of detail.

(3) *Modification work order library.* This module allows users to do basic research concerning MWOs that are applicable to equipment items. Users can search by a variety of criteria.

(4) *Modification work order reporting.* This module provides users with an online capability to report through the LIW website. Users can create a DA Form 2408–5 (Equipment Modification Record) based on MWO information in the system. Additionally, the LCMC MWO coordinators can track MWO kits shipped to the units by using the MWO kits shipped reporting feature of this module.

(5) *Modification work order management.* This module is for the LCMC MWO coordinator to use to create or enter a new MWO into the MMIS. It is then reviewed and/or revised by the MWO coordinators.

(6) *Excess kit module.* This module allows MMIS system users to report excess MWO kits that remain after the MWO application is completed. Users can also search for needed kits that may be at other locations. Once identified, a system user can contact the LCMC MWO coordinator to arrange for transfer of the kits from where they are located to where they are needed.

(7) *User information.* This module allows users to update profile information, to include addresses and telephone numbers. Users can also access and rerun saved data queries.

(8) *Administration.* This module provides users with the capability to review and submit questions and inquiries regarding the data and sources from which the MMIS pulls and checks its information. The preferred method to submit questions and inquiries is through the MMIS support inbox at usarmy.redstone.logsa.mbx.mmis@mail.mil.

(9) *Modification work order coordinators directory.* This module provides a searchable directory of MWO coordinators. Users can also download or print a hard copy of the document.

(10) *Frequently asked questions.* This module allows users to view questions submitted by other MMIS users and the responses to these questions.

(11) *Links.* This module provides links to the DCS, G–4 home page, this regulation, and AR 750–6.

(12) *Modification Management Information System user manual.* This module is the online MMIS tutorial and user manual, which is organized along the lines of the MMIS menu. It describes how each module works and shows examples of the MMIS screen captures. Users can also download or print a hard copy of the user manual.

(13) *Modification Management Information System training.* This module contains training sessions posted on Defense Connect Online (<https://www.dco.dod.mil/>). Users require a valid Defense Connect Online account to access.

5–2. System inputs

a. MATDEVs that apply MWOs will maintain a configuration database that, as a minimum, contains the following data elements arranged as follows:

(1) The modification change number.

(2) The MWO number being applied.

(3) The unit identification code of the unit owning the equipment being modified.

(4) The NSN of the end item to which the MWO is applied. If the MWO results in a change to the NSN, report both the old NSN and the new NSN.

(5) Serial number of the item to which the MWO is applied.

(6) Registration number, if applicable.

(7) Date the MWO is applied.

(8) MWO published man-hours software version.

(9) The unique item identifier.

b. MATDEVs will maintain the required data elements in an accessible electronic database and forward to the MMIS administrator on a periodic basis or as requested by the administrator.

Chapter 6

Modification of Multi-Service or Foreign Military Sales Equipment and Systems

6–1. General

This chapter applies to multi-Service equipment and systems for which the Army has either been named executive Service/lead military department or is a participating Service for equipment assigned to another Service, or modifications to former Army equipment and systems that have been sold to another country through the USASAC FMS Program.

6–2. Army executive Service or lead military department

a. The Army MATDEV has the responsibility for advising other Services that a MWO is being proposed and/or is pending for Army-managed equipment and weapon systems that may be owned or possessed by the Services.

b. All proposed equipment and system modifications will be processed and controlled by mutual agreement between the affected Services. No changes will be made nor will a MWO be issued unless the CCB has approved the changes.

c. All multi-Service changes will be made through publication of a multi-Service numbered MWO. Changes will not be made before the published MWO is available. Exceptions are authorized where safety to personnel, security, emergency mission requirements, or loss of property warrant them. When exceptions are made, the modification will be confirmed by expediting a multi-Service MWO.

d. The ACOM, ASCC, DRU, and installation commanders may authorize field emergency changes only when life, safety, or security dictates. All emergency changes will be documented and processed through the internal CCB and through the multi-Service CCB.

e. Integrated logistics support planning, including the development or update of a Joint supportability strategy, for proposed modification of equipment or systems may begin only after it has been approved by the MATDEVs of all the Services. This planning will be done according to AR 700–127. All approved multi-Service equipment or system modifications will be reported when complete. The activity or organization applying a MWO reports application of the MWO in accordance with DA Form 7591. The Army MATDEV, along with other Service MATDEVs, will develop methods of communication for data exchange.

f. If the Army is the lead Service for multi-Service consideration, the Army MATDEV is responsible for funding the engineering leading to the modification and will coordinate the modification with other Services. However, funding of all modifications and acquisition of modification kits will normally be carried out by each Service based upon stated requirements. The U.S. Navy, U.S. Marine Corps, U.S. Air Force, or other Federal agencies' operation and maintenance commands and/or components are responsible for funding the application of modifications and reporting the application in accordance with DA Form 7591.

6–3. Army participating Service responsibility

a. The principles in the paragraph 6–2 apply to multi-Service equipment and systems changes for which any Service other than the Army is the designated executive Service or lead military department and should be applied as appropriate and agreed upon.

b. The Army MATDEV will adopt the modification instruction or authorization format prescribed by the lead Service. Army managers will provide MWO numbers for multi-Service numbered change instructions prepared by the responsible Service.

c. The Army modification field reporting will be done in accordance with DA Form 7591. Other responsible Services' MATDEVs will be consulted to determine procedure and method of reporting data exchange.

6–4. Foreign military sales equipment

a. If a MWO is released for equipment that once belonged to the Army inventory and is now owned by a FMS customer or was procured specifically by the Army for a FMS customer, the MATDEV and LCMC MWO coordinator will work application of the MWOs with the USASAC (AMSAC–WP), Fort Belvoir, VA 22060–5940. USASAC will be provided estimated cost data for application of a MWO to FMS customer-owned materiel to facilitate FMS customer surveys.

b. A minimum of 270 days—after USASAC is contacted by the MATDEV and the LCMC MWO coordinator—will be allowed for foreign customers to submit funded requirements for inclusion in DA Form 7591.

Appendix A

References

Section I

Required Publications

AR 220–1

Army Unit Status Reporting and Force Registration—Consolidated Policies (Cited in para 3–6a(1)(c).)

AR 700–18

Provisioning of U.S. Army Equipment (Cited in para 3–4h.)

AR 700–127

Integrated Product Support (Cited in para 3–1d(2).)

AR 700–138

Army Logistics Readiness and Sustainability (Cited in para 3–6a(1)(c).)

AR 700–142

Type Classification, Materiel Release, Fielding, and Transfer (Cited in para 1–6e.)

AR 710–1

Centralized Inventory Management of the Army Supply System (Cited in para 3–4h.)

AR 725–50

Requisitioning, Receipt, and Issue System (Cited in para 3–7c(3).)

DA Pam 70–3

Army Acquisition Procedures (Cited in para 2–6b.)

DA Pam 738–751

Functional User’s Manual for the Army Maintenance Management System–Aviation (Cited in para 3–6a(1)(c).)

DA Pam 750–8

The Army Maintenance Management System (TAMMS) User’s Manual (Cited in para 3–6a(1)(c).)

Section II

Related Publications

A related publication is a source of additional information. The user does not have to read it to understand this publication. Unless otherwise indicated, DA publications are available on the Army Publishing Directorate website (<https://armypubs.army.mil>).

ANSI/EIA–649–B

Configuration Management Standard (Available for purchase at ANSI (Customer Service Department), 25 West 43rd Street, 4th Floor, New York, NY 10036, or at the ANSI website (<http://webstore.ansi.org>).

AR 11–2

Managers’ Internal Control Program

AR 25–30

Army Publishing Program

AR 40–61

Medical Logistics Policies

AR 70–1

Army Acquisition Policy

AR 95–1

Flight Regulations

AR 385–10

The Army Safety Program

AR 700–145

Item Unique Identification

AR 708–1

Logistics Management Data and Cataloging Procedures for Army Supplies and Equipment

AR 750–1

Army Materiel Maintenance Policy

AR 750–6

Army Equipment Safety and Maintenance Notification System

CJCSI 5123.01H

Charter of the Joint Requirements Oversight Council (JROC) and the Implementation of the Joint Capabilities Integration and Development System (Available at <http://www.jcs.mil/library/>.)

DA Pam 25–403

Guide to Recordkeeping in the Army

DA Pam 385–16

System Safety Management Guide

DA Pam 708–2

Cataloging and Supply Management Data Procedures for the Army Enterprise Material Master

DFAS–IN Manual 37–100

Financial Management: The Army Management Structure (Current Fiscal Year) (Available at <https://www.asafm.army.mil/dfas.aspx?doc=37–100>.)

DFAS–IN Regulation 37–1

Finance and Accounting Policy Implementation (Available at <https://www.asafm.army.mil/dfas.aspx?doc=37–1>.)

DOD Guide to Uniquely Identifying Items

(Available at http://www.acq.osd.mil/dpap/uid/attachments/doduidguidever2_5.pdf.)

DOD 7000.14–R

Department of Defense Financial Management Regulations (FMRS) (Available at <http://comptroller.defense.gov/fmr/>.)

DODM 4100.39

Federal Logistics Information System (FLIS) Procedures (Available at <http://www.esd.whs.mil/dd/>.)

MIL–HDBK–61A(SE)

Configuration Management Guidance (Available at <http://quicksearch.dla.mil/qssearch.aspx>.)

MIL–PRF– 63002M

Requirements for Preparation of Modification Work Orders (Available at <http://quicksearch.dla.mil/qssearch.aspx>.)

MIL–STD–130N(1)

Identification Marking of U.S. Military Property (Available at <http://quicksearch.dla.mil/qssearch.aspx>.)

MIL–STD–882

System Safety (Available at <http://quicksearch.dla.mil/qssearch.aspx>.)

TB 11–5810–423–10

Communications Security (COMSEC) Army-Approved Software Guide

10 USC 2466

Limitations on the performance of depot-level maintenance of materiel. (Available at <http://www.gpo.gov/fdsys/>.)

40 USC 1401 et seq.

Clinger-Cohen Act of 1996 (Available at <https://www.gpo.gov/fdsys/>.)

Section III**Prescribed Forms**

Unless otherwise indicated, DA forms are available on the Army Publishing Directorate website (<https://armypubs.army.mil>).

DA Form 7591

Modification Work Order Fielding Plan (MWOFP) (Prescribed in para 2–9*m.*)

DA Form 7592

Modification Work Order (MWO) Exhibit of Concurrence (Prescribed in para 2–9*m.*)

Section IV

Referenced Forms

Unless otherwise indicated, DA forms are available on the Army Publishing Directorate website at (<https://armypubs.army.mil/>); DD forms are available from the Office of the Secretary of Defense website (<http://www.esd.whs.mil/directives/forms>); and SF forms are available on the General Services Administration website (<http://www.gsa.gov/portal/forms/type/sf>).

DA Form 11–2

Internal Control Evaluation Certification

DA Form 2028

Recommended Changes to Publications and Blank Forms

DA Form 2408–5

Equipment Modification Record

DD Form 250

Material Inspection and Receiving Report

SF Form 1080

Voucher for Transfers Between Appropriations and/or Funds

Appendix B

Instruction for Preparation of a Modification Work Order Fielding Plan for Modification Work Orders

B-1. Purpose

DA Form 7591 defines and schedules a FY MWO application program (1 October through 30 September) with user commands, installations, or activities. If policy requires coordination with ACOM, ASCC, DRU, or installation headquarters, the DA Form 7591 will be provided no later than 90 calendar days prior to negotiations.

B-2. Tasks

- a.* The MATDEVs will—
- (1) Develop proposed fielding plans based on program objective memorandum funding guidance to serve as the initial point of negotiations.
 - (2) Ensure that a fielding plan is developed and implemented on a weapon system basis where applicable.
 - (3) Serve as lead command for fielding plan development, negotiation, and implementation when their MWO requirements impact another MATDEV's component, assembly, weapon system, end item, or TADSS.
 - (4) Serve as supporting command when another MATDEV establishes a MWO requirement that impacts their supported component, assembly, weapon system, end item, or TADSS.
 - (5) Negotiate the terms and conditions, including quality assurance of each fielding plan, with the installation MWO coordinators at their supported post, camps, stations, and organizations for the affected ACOMs, ASCCs, DRUs, and other tenants stationed there.
 - (a)* When negotiating fielding plans for U.S. Army Forces Command (FORSCOM) units with the installation MWO coordinators, include U.S. Army Reserve Command (USARC) requirements. The fielding plans should also be coordinated individually with USARC units scheduled to receive the MWO, with a copy provided to the Headquarters, USARC MWO point of contact and the regional IMCOM office.
 - (b)* Negotiate fielding plans directly with the IMCOM/installation MWO coordinators at installations with Army activities that are predominantly TRADOC installations and provide a copy of the fielding plan to the Headquarters, TRADOC MWO point of contact. An information copy of all DA Forms 7591 pertaining to modification of FORSCOM-owned systems and equipment will be provided to the Headquarters, FORSCOM MWO coordinator.
 - (c)* Provide a notice 30 calendar days prior to arrival of the MWO fielding team and a 7-calendar-day confirmation notice.
 - (d)* Identify special equipment and facilities if needed. If none, so state.
- b.* The organization that applies the modification (user applied or MATDEV) will—
- (1) Accomplish MWO application as stated in fielding plans.
 - (2) Constantly monitor MWO programs to prevent any problem from impeding completion of the change.
 - (3) Perform and bill reimbursable applications, SF Form 1080 (Voucher for Transfers Between Appropriations and/or Funds), as negotiated in the fielding plan.
 - (4) Ensure that the application of the MWO, hours it took to apply, and the dates of application are reported in the MMIS.
 - (5) Develop, distribute, and coordinate the maintenance allocation chart.

B-3. Modification work order fielding plan format

The MWOFP will clearly define the work, assign responsibilities, and schedule resources for each signatory command. The standard required format for the MWOFP is DA Form 7591.

B-4. Additional elements

In addition to the above data, the MATDEV and ACOMs, ASCCs, and DRUs may add or request that more data elements be included to provide essential data as an appendix to DA Form 7591.

B-5. Distribution of the fielding plans

All fielding plans will be directed to action addresses. In addition, copies will be furnished to the following:

- a.* Headquarters, TRADOC (ATBO-HM).
- b.* A minimum 270 days, after the MATDEV contacts USASAC, will be allowed for foreign customers to submit funded requirements for inclusion in DA Form 7591.

Appendix C

Matériel Change Number Assignment Process

C-1. Matériel change numbers

The LCMC MWO coordinators generate MCNs from data in the MMIS. The MCN is a system-generated nine-digit number that identifies the modification in the early part of the modification process all the way through to the application and recording of the modification. The MCN, once assigned, will never change. One MCN will be assigned for each modification. If more than one MWO is assigned to an MCN, the LCMC MWO coordinator is responsible for keeping track of all MWOs assigned to an MCN. The MCN will be used on all modification documentation, including all procurement documentation per DOD 7000.14-R and in the formal MWO.

C-2. Explanation of matériel change numbers

The MCN is formed as follows:

- a.* The first digit (for example, 1-99-03-1004) stands for the MATDEV.
 - (1) 1-AMC.
 - (2) 2-Army Acquisition Executive.
 - (3) 3-Chief of Engineers.
 - (4) 4-U.S. Army Signal Command.
 - (5) 5-The Surgeon General.
- b.* The second and third digits are separated from the 1st by a hyphen (for example, 1-99-03-1004). These two digits stand for the FY in which the modification is first submitted to the MATDEV for approval or the FY approved by the modification approval authority.
- c.* The fourth and fifth digits are separated from the second and third by a hyphen (for example, 1-99-03-1004). These digits stand for the general category of equipment being modified.
 - (1) 01-Aircraft.
 - (2) 02-Watercraft.
 - (3) 03-Missiles.
 - (4) 04-Soldier, chemical and biological.
 - (5) 05-Weapons and tracked combat vehicles.
 - (6) 06-Tactical and support vehicles.
 - (7) 07-Communications and electronics equipment.
 - (8) 08-Other support equipment.
 - (9) 09-Ammunition/Explosives.
- d.* The sixth through ninth digits are separated from the fourth and fifth by a hyphen (for example, 1-99-03-1004). These are assigned by the LCMC MWO coordinator to identify each modification. It is the responsibility of the MWO coordinators to ensure that no two MCNs are identical.

Appendix D

Sample Modification Work Order Control Release Checklist and Exhibit of Concurrence

D–1. Examples of documentation to use during modification work order fielding review boards

Included in this section are samples for use during MWO release boards. Regardless of the complexity of the MWO, each LCMC is required to maintain a signed copy of that LCMC's DA Form 7592. The purpose is to maintain a record of all concurrences or nonconcurrences during MWO release and to ensure that all aspects of the release have been evaluated and discussed.

D–2. Modification work order fielding review board checklist

Below is a sample list of questions and statements that may be used to construct a checklist for use at the MWO board to facilitate discussion and ensure that all aspects of the MWO fielding process have been acknowledged and addressed as required.

- a. *Validation and/or verification.*
 - (1) Where was the verification site located?
 - (2) Where was the validation site located?
 - (3) Who were the personnel involved in the verification/validation?
 - (4) Has coordination been accomplished with the LCMC materiel release office to determine if the provisions of materiel release apply?
- b. *Technical data availability.* Have the following been developed, approved, and are available?
 - (1) A maintenance allocation chart.
 - (2) Final MWO.
 - (3) Verified TM.
 - (4) A DMWR.
 - (5) A repairs, parts, and special tools list.
 - (6) A provisioning master record.
 - (7) A support list allowance card, or ASL, or shop stock.
 - (8) Software.
- c. *Support and test, measurement, and diagnostic equipment.* Have the following support items been developed, approved, or are otherwise available?
 - (1) Spares.
 - (2) A test program set.
 - (3) A TMDE.
 - (4) Special tools.
 - (5) Kits.
 - (6) Management documents.
 - (7) A DA Form 7591.
- d. *Training and training devices.* Is training required to instruct operators and maintainers on the modified equipment or weapon system? If so, have the following items been identified or scheduled?
 - (1) Training required.
 - (2) A new equipment training team scheduled.
 - (3) Publication required.
 - (4) Equipment and weapon systems available.
- e. *Safety.* Has the following been addressed?
 - (1) Planned or completed corrections of any safety deficiencies.
 - (2) Communicating the updated residual risk to the user per DA Pam 385–16.
 - (3) Updating the item's Hazard Tracking System.
 - (4) Providing the required safety documentation per AR 700–142 to support follow-on materiel release actions.
 - (5) Updating elements of the demilitarization/disposal plan.
- f. *Environmental.* Have environmental issues been analyzed and satisfied (for example, creation of hazardous waste, demilitarization, disposal, and so forth)?
- g. *Test and evaluation.* Did the MWO successfully pass quality assurance specifications and checks, acceptance test, and interoperability certification?
- h. *Release statements.* Are there any actions, concerns, or conditions that would prohibit the full release of the MWO for application? If so, would a conditional release be possible?

- (1) Full—no conditions.
- (2) Conditional—list all actions that must be completed before release approval is granted.

D-3. Exhibit of concurrence

The DA Form 7592 is used at the MWO release board to ensure that all aspects of the MWO fielding process have been acknowledged and addressed as required. The safety representative on the MWO board and the “safety” signatory on the DA Form 7592 will be a representative of the appropriate LCMC safety office or a designee approved by that office in writing. Each LCMC MWO coordinator is required to maintain the signed copy of this form. Release statements must be signed by the director/chief of the related office. All DA forms are available at <https://armypubs.army.mil/>.

Appendix E

Internal Control Evaluation

E-1. Function

The function covered by this evaluation is the Army Modification Program.

E-2. Purpose

The purpose of this evaluation is to assist AMC, assistant division commander-support and/or ACOMs, ASCCs, and DRUs in evaluating the key internal controls listed below. It is intended as a guide and does not cover all controls.

E-3. Instructions

Answers must be based upon the actual testing of key internal controls (for example, document analysis, direct observation, interviewing, sampling, simulation, or other). Answers that indicate deficiencies must be explained and the corrective action identified in supporting documentation. These internal controls must be evaluated at least once every 5 years. Certification that the evaluation has been conducted must be accomplished on DA Form 11-2 (Internal Control Evaluation Certification).

E-4. Test questions

- a. AMC test questions—
 - (1) Does each LCMC have a MWO coordinator appointed by the LCMC commander?
 - (2) Does each life cycle SEC have a software ECP and/or SCP coordinator chartered by the SEC commander?
 - (3) Are the LCMC MWO coordinators assigning MCNs?
 - (4) Are LCMC MWO coordinators conducting MWO fielding reviews prior to the MWO execution?
 - (5) Is the MWO MATDEV coordinating DA Form 7591 with the ACOM, ASCC, and DRU's designated installation or activity MWO coordinator prior to shipping the MWO kits?
- b. Assistant division commander-support/ACOMs, ASCCs, DRUs, DCS, G-4 test questions—
 - (1) Is there an individual/organization designated as the ACOM, ASCC, DRU, or installation MWO coordinator?
 - (2) Does each post, camp, and station have an individual appointed as the installation MWO coordinator?
 - (3) Is the MWO coordinator attending the annual MWO Workshop?
 - (4) Is the MWO coordinator reviewing all DA Forms 7591 and providing timely feedback to the MATDEVs, including the complete ship-to address, point of contact for management of kits once received, and quantity of items in ASL and/or shop stock and fielding schedule?
 - (5) Is the MWO coordinator properly coordinating DA Forms 7591 between the MWO coordinators at the equipment-owning units and the parties performing the modifications to minimize disruptions to mission performance?
 - (6) Is the LCMC materiel release office providing an assessment concerning the applicability of materiel release to the LCMC MWO coordinator?
 - (7) Is there a command established MWO program?
 - (8) Is equipment immediately being placed in NMC status for emergency modifications?
 - (9) Is there evidence of command emphasis to ensure urgent/limited urgent, routine/normal MWOs were applied and/or reported to the MATDEV and the DCS, G-4 (DALO-MPF) once MWO effective dates and timeframes have passed?
 - (10) Are MWO coordinators trained in the operation and use of the MMIS database?

E-5. Supersession

This evaluation replaced the Army Modification checklist, dated 5 August 2013.

E-6. Comments

Help make this a better tool for evaluating internal controls. Submit comments to the Deputy Chief of Staff, G-4 (DALO-MPF), 500 Army Pentagon, Washington, DC 20310-0500.

Glossary

Section I

Abbreviations

ACOM

Army command

AIC

Army interoperability certification

AMC

U.S. Army Materiel Command

ANSI

American National Standards Institute

AR

Army regulation

ARCYBER

U.S. Army Cyber Command

ASA (ALT)

Assistant Secretary of the Army (Acquisition, Logistics and Technology)

ASA (FM&C)

Assistant Secretary of the Army (Financial Management and Comptroller)

ASCC

Army service component command

ASIOE

associated support items of equipment

ASL

authorized stockage list

ATEC

U.S. Army Test and Evaluation Command

C4I

command, control, communications, computers, and intelligence

CAPDEV

capability developer

CAR

Chief, U.S. Army Reserve

CCB

configuration control board

CG

commanding general

CIO/G-6

Chief Information Officer, G-6

CJCSI

Chairman of the Joint Chiefs of Staff instruction

CLS

contractor logistics support

CNGB

Chief, National Guard Bureau

COEI
component of end item

COMSEC
communications security

CTR
continuous technology refreshment

CTSF
Central Technical Support Facility

DA
Department of the Army

DA Form
Department of the Army form

DA Pam
Department of the Army pamphlet

DCS
Deputy Chief of Staff

DD Form
Department of Defense form

DFAS-IN
Defense Finance and Accounting Service-Indianapolis

DMWR
depot maintenance work requirement

DOD
Department of Defense

DRU
direct reporting unit

ECP
engineering change proposal

EIA
Electronic Industries Alliance

FMS
foreign military sales

FORSCOM
U.S. Army Forces Command

FY
fiscal year

HQDA
Headquarters, Department of the Army

I&S
interchangeability and substitutability

IMCOM
U.S. Army Installation Management Command

IUID
item unique identification

IUS
Internal use software

KPP

key performance parameter

KSA

key system attribute

LCMC

Life Cycle Management Command

LIW

Logistics Information Warehouse

MA

maintenance action

MATDEV

materiel developer

MCN

materiel change number

MI

maintenance information

MIL-HDBK

military handbook

MIL-PRF

military performance specification

MIL-STD

military standard

MMIS

Modification Management Information System

MOS

military occupational specialty

MWO

modification work order

MWOFP

modification work order fielding plan

NMC

not mission capable

NSN

national stock number

PEO

program executive officer

PM

program manager

R&D

research and development

SCP

software change package

SEC

Software Engineering Center

SF

standard form

SOF

safety of flight

SOUM

safety of use message

SRP/SCP

software release and/or change package

TADSS

training aids, devices, simulators, and simulations

TB

technical bulletin

TDP

technical data package

TM

technical manual

TMDE

test, measurement, and diagnostic equipment

TRADOC

U.S. Army Training and Doctrine Command

USARC

U.S. Army Reserve Command

USASAC

U.S. Army Security Assistance Command

USC

United States Code

Section II**Terms****Block modification**

The combining of equipment changes into blocks of MWOs that are applied concurrently regardless of LCMC and/or MATDEV responsibility.

Block package modification

The combining of related concurrent MWOs that is specific to one system.

Canceled modification work order

A published MWO that is rescinded before any application is performed or, if applied, kits are removed and all references to the MWO are removed from all publications.

Configuration status accounting

That status accounting function that provides traceability of configuration baselines and changes thereto and acts as management tool for accomplishing all related tasks resulting from such changes.

Current modification work order

A MWO that has been published, released, and for which the required resources are available for application within a specified time (FY). Required resources, as a minimum, include the availability of funds, kits, and manpower.

Deadlining

The act of removing an item of equipment from operation or use because it is inoperative due to damage or malfunction, is in need of repairs, is unsafe, or would be damaged by further use.

Deferred modification work order

Current MWO for which application has been rescheduled because of resource diversion or shortfall, reprogramming action, or HQDA direction.

Effective date (modification work orders)

For emergency and urgent MWOs, the first day on which the MWO is authorized for application. For routine MWOs, the first day of the FY in which application will start or the actual date on which application is scheduled. This will be made clear on the MWO itself.

Embedded diagnostics

A capability that accomplishes self-diagnosis using on-board resources as an integrated system (that is, sensors, analytical software, and embedded devices); collects, correlates, and synthesizes systems performance data to provide a system-level assessment via on-board processing.

Embedded prognostics

A further refinement of embedded diagnostics to address system condition, support failure prediction, and enable anticipatory logistics by use of software algorithms. Prognostic capabilities identify impending failures and provide appropriate actionable logistics support direction.

Equipment Distribution Support System

The force management subsystem used to establish Army priorities for equipment fielding of major end items and their modifications because of resource constraints.

Field maintenance

Field maintenance is the first operation of the Army maintenance system. Field maintenance is characterized by the performance of maintenance tasks “on system” in a tactical environment using trained personnel, tools, and TMDE. Field maintenance is typically operator/crew maintenance and repair and return to user maintenance operations.

Form, fit, and function

FORM: The shape, size, dimension, mass, weight, and other physical parameters that uniquely characterize an item. For software, form denotes the language and media. FIT: The ability of an item to interface or interconnect physically with or become an integral part of another item. FUNCTION: The action or actions an item is designed to perform.

Grounding

The act of removing an item of aircraft equipment from operation or use because it is inoperative due to damage or malfunction, is in need of repairs, is unsafe, or would be damaged by further use.

Hazard categories

Descriptions established to determine classification of vehicle safety recall campaigns. Category I-Emergency: will cause death or severe injury to personnel or will cause system loss. Category II-Urgent: will cause personnel injury or major system damage or will require immediate corrective action for personnel or system survival. Category III-Routine: can be counteracted or controlled without injury to personnel or without major system damage.

Installation kit

That assemblage of hardware and software that interfaces between the modified host system and the mounted system. The installation kit is intended for removal from the host system upon disposition. It is not a permanent part of the host.

Internal use software

Software acquired or developed to meet the entity’s internal or operational needs (intended purpose);

A standalone application, or the combined software components of an information technology system that can consist of multiple applications, modules, or other software components integrated and used to fulfill the entity’s internal or operational needs (software type); Used to operate an entity’s programs (for example, financial and administrative software, including that used for project management); Used to produce the entity’s goods and to provide services (for example, maintenance work order management, loan servicing); or developed or obtained for internal use and subsequently provided to other federal entities with or without reimbursement. Not software that is integrated into and necessary to operate property, plant, and equipment rather than perform an application.

Life Cycle Management Command

The AMC major subordinate command that performs the life cycle management functions, including item management and logistics support for specific commodity groups (formerly AMC major subordinate commodity command).

Mandatory modification

Any modification with a published MWO. Any permanent modification made after an end item has been fielded. It must meet the criteria for designation as a modification and exceed the criteria for accomplishment as another type of non-mandatory modification.

Matériel developer

The command, organization, or agency responsible for accomplishing life cycle system management of a matériel system, to include research, development, production, fielding, and acquisition sustainment that fulfills DA-approved system requirements. The principal Army MATDEVs are the Army PEOs/PMs. For non-PEO/PM managed systems, other MATDEVs include AMC, U.S. Army Information Systems Command, U.S. Army Intelligence and Security Command, Corps of Engineers, The Surgeon General, and U.S. Army Space and Missile Command/Army Forces Strategic Command. Can also refer to the specific organization assigned primary responsibility for matrix functional and developmental support to the PEO/PM.

Modification

The alteration, conversion, or modernization of an end item or component of investment equipment that changes or improves the original purpose or operational capacity in relation to effectiveness, efficiency, reliability, or safety of that item.

Modification kit

That assemblage of hardware and software necessary to modify the host system to accept the mounted system. The modification kit is a permanent part of the host system and remains with it.

Modification work order

A publication that contains technical requirements for accomplishing mandatory modifications.

Publication date (modification work order)

The date the MWO was published or revised that appears in the upper right corner of the MWO title page.

Special mission modification

A temporary matériel change required to achieve a special mission that may be published in a TB.

Special purpose modification

Matériel change incorporating a special modification and designed to meet a specialized requirement.

Suspended modification work order

A published and released mandatory MWO on which no further action will be taken in regard to application or removal of kits pending modification re-evaluation. After re-evaluation, the MWO will be reinstated, revised, canceled, or completed.

Sustainment maintenance

Sustainment maintenance is the second operation of the Army maintenance system. Sustainment maintenance is characterized by the performance of maintenance tasks “off system” in a secure environment using trained personnel, tools, and TMDE. Sustainment maintenance is typically repair and return to stock and depot maintenance operations.

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