

Army Regulation 56-3

Surface Transportation

Management of Army Rail Equipment

**Headquarters
Department of the Army
Washington, DC
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UNCLASSIFIED

SUMMARY of CHANGE

AR 56-3

Management of Army Rail Equipment

Specifically, this revision--

- o Implements DOD 4140.50-R.
- o Updates AR 56-3 to reflect current policies and procedures.
- o Incorporates administrative changes and does not reflect any major policy changes.
- o Incorporates guidance from AR 700-53 on railroad equipment and AR 750-56 on maintenance of supplies and equipment (chaps 7 and 8).

Effective 1 July 2001

Surface Transportation
Management of Army Rail Equipment

By Order of the Secretary of the Army:

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General, United States Army
Chief of Staff

Official:



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Secretary of the Army

History. This printing publishes a revision of this publication. Because the publication has been extensively revised, the changed portions have not been highlighted.

Summary. This regulation prescribes Army policies and command responsibilities for maintaining and operating rolling stock, track maintenance equipment, and locomotives; providing theater military railway service; and operating utility railroads. It also provides guidance for using

common carrier railroads for switching service at installations.

Applicability. This regulation applies to the Active Army, the Army National Guard of the United States (ARNGUS) including periods when operating in an Army National Guard (ARNG) capacity, and the U.S. Army Reserve. Provisions of this regulation apply to Department of the Army (DA) commands, agencies, and activities that operate or use DA-owned or leased railroad equipment.

Proponent and exception authority. The proponent of this regulation is the Deputy Chief of Staff for Logistics (DCSLOG). The DCSLOG has the authority to approve exceptions to this regulation that are consistent with controlling law and regulation. The DCSLOG may delegate this approval authority, in writing, to a division chief within the proponent agency in the grade of Colonel or the civilian equivalent.

Army management control process. This regulation does not contain management control provisions.

Supplementation. Supplementation of

this regulation and establishment of command and local forms are prohibited without prior approval from DA Deputy Chief of Staff for Logistics (DCSLOG), ATTN: DALO-TSM, WASH DC 20310-0562.

Suggested Improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to ODCSLOG, ATTN: DALO-TSM, WASH DC 20310-0562.

Distribution. This publication is available in electronic media only and is intended for command levels C, D, and E for the Active Army, the Army National Guard of the United States, and the U.S. Army Reserve.

Contents (Listed by paragraph and page number)

Chapter 1

Introduction, page 1

Purpose • 1-1, page 1

References • 1-2, page 1

Explanation of abbreviations and terms • 1-3, page 1

Responsibilities • 1-4, page 1

Army rail policy • 1-5, page 3

Chapter 2

Determination and Authorization of Requirements, page 3

Locomotives • 2-1, page 3

Track maintenance equipment and rolling stock • 2-2, page 3

Chapter 3

Operations and Safety, page 3

Utility rail operations • 3-1, page 3

*This regulation supersedes AR 56-3, 30 September 1989, AR 700-53, 15 July 1981, and AR 750-56, 9 March 1976.

Contents—Continued

Rail safety • 3-2, *page 4*

Chapter 4

Acquisition, *page 4*

Standardization • 4-1, *page 4*

Procurement criteria • 4-2, *page 4*

Chapter 5

Numbering and Lettering of Equipment, *page 4*

Marking standards • 5-1, *page 4*

Reporting marks • 5-2, *page 4*

Allocation of numbers • 5-3, *page 4*

Renumbering • 5-4, *page 5*

Chapter 6

Management of Army Rail Equipment, *page 5*

Inventory • 6-1, *page 5*

Reporting procedures • 6-2, *page 5*

Chapter 7

Maintenance Support for Railroad Equipment, *page 6*

Maintenance program responsibilities • 7-1, *page 6*

Repair parts supply support • 7-2, *page 7*

Mandatory inspections • 7-3, *page 7*

Funding • 7-4, *page 7*

Chapter 8

Repair, Replacement, and Disposition of Railroad Equipment, *page 7*

Definitions • 8-1, *page 7*

Repair criteria • 8-2, *page 7*

Replacement criteria • 8-3, *page 9*

Remanufacture criteria • 8-4, *page 9*

Disposition of equipment • 8-5, *page 9*

Maintenance performance • 8-6, *page 9*

Rolling stock operating in interchange • 8-7, *page 9*

Appendixes

A. References, *page 10*

B. Equipment Numbering, *page 11*

Glossary

Chapter 1 Introduction

1-1. Purpose

This regulation implements the Department of the Army (DA) procedures for the policies cited in DOD 4140.50-R. It prescribes policies and procedures for rolling stock, locomotives, and track maintenance equipment. It applies to all activities and installations that use Army-owned rail equipment. This regulation reforms procedures that pertain to the revisions of Department of Defense (DOD) rail policy.

1-2. References

Required and related publications and referenced forms are listed in appendix A.

1-3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

1-4. Responsibilities

a. The Deputy Chief of Staff for Operations and Plans (DCSOPS) will ensure that the requirements documents for locomotives and track maintenance equipment submitted by the U.S. Army Tank-Automotive Command (TACOM) are incorporated into the Structure and Composition System file after approval through normal in-process review procedures.

b. The Deputy Chief of Staff for Logistics (DCSLOG) will—

- (1) Provide general staff policy and program guidance for Army rail management.
- (2) Act as proponent for this regulation.
- (3) Provide a representative to chair the Interservice Locomotive Management Steering Group (ILMSG). The chairman of the ILMSG will coordinate an annual meeting with all the DOD services to ensure an integrated management system and the performance of ILMSG responsibilities. The ILMSG will—

- (a)* Conduct periodic reviews of locomotive management information.
- (b)* Review locomotive replacement and distribution plans of DOD components.
- (c)* Review locomotive inventory for effective utilization.
- (d)* Review usage standards for each DOD component.

(e) Assure that rail equipment in interchange service meets Federal Railroad Administration (FRA) and Association of American Railroads (AAR) standards and is incorporated into the Defense Freight Railway Interchange Fleet (DFRIF).

(f) Review standards established by each Service for utility rail equipment. Such equipment is not subject to AAR or FRA regulations.

(4) Has the final authority to approve, disapprove, or modify any request from the Military Traffic Management Command (MTMC) or the Army Forces Command (FORSCOM) to reduce temporarily the minimum number of DFRIF flatcars in the positioned pools.

c. The Commanding General, U.S. Army Materiel Command, has delegated overall responsibility for DA rail equipment to TACOM.

d. The Commander, TACOM, will—

- (1) Act as DOD point of contact for locomotive management information.
- (2) Act as the initial requirements document developer for all locomotives and track maintenance equipment (see a above, for DCSOPS responsibilities).
- (3) Identify the specific planning documents that Army installations will use to determine what locomotive and track maintenance equipment requirements to incorporate into the installation's table of distribution and allowances (TDA).
- (4) Execute and maintain the Locomotive Management Information System (LMIS), which is assigned Report Control Symbol DD-P&L(A)1683.
- (5) Maintain current DOD locomotive replacement criteria.
- (6) Provide utilization criteria to ensure the accuracy and quality of the locomotive usage data gathered under Report Control Symbol DD-P&L(A)1683. These data will be used to support the commercial-industrial-type activity analysis described in paragraph 2-1b. They will not be used as the basis for determining either peacetime TDA or mobilization TDA requirements.
- (7) Perform the inventory, distribution, storage, and disposal functions associated with rail equipment. (See chap 7 for specific responsibilities.)
- (8) Ensure that all Army utility rail equipment receives an annual technical inspection performed by qualified rail equipment specialists.

(9) Maintain the operations of the Defense Non-Tactical Generator and Rail Equipment Center (DGRC), which

provides direct support and general support maintenance of rail equipment. This support ensures adequate provision of repair parts, supply parts, and technical information necessary to meet mission and mobilization requirements.

- (10) Develop and implement programs to upgrade and modernize equipment.
- (11) Establish and maintain qualification criteria for locomotive crews.
- (12) Determine funding requirements.
- (13) Establish maintenance standards for Army utility rail equipment that operates within Army installations.
- (14) Control the serial numbering and lettering of all DOD-owned railroad equipment.
- (15) Provide a representative to serve as an ex-officio member of the ILMMSG.
- (16) Act as the central point for acquisition of all DOD rail assets.
- (17) Establish models and procedures for computing rail equipment requirements.
- (18) Direct the DGRC to provide direct and general support maintenance to users of utility rail equipment in CONUS.

(19) Provide for performance of depot maintenance for Army utility rail equipment in CONUS by Army-owned rail repair facility and/or by commercial contract.

(20) Provide through the DGRC, direct and general support maintenance to other DOD components having an interservice support agreement with TACOM.

(21) Provide a TACOM technical representative to perform a pre-maintenance inspection of utility rail equipment at Army installations and other DOD activities covered by interservice support agreement at least annually. The representative will assure that equipment is maintained to standard indicated in applicable technical manuals and in compliance with FRA/DOT regulations. (A report of the inspection will be prepared and forwarded to the appropriate Commander with a copy to the appropriate MRRS.)

(22) Disburse funds for repair of Army and Air Force passenger and utility freight equipment repaired under the provisions of the Interchange Rules, Association of American Railroads (AAR).

(23) Provide direct and general support maintenance by use of the DGRC to other DOD components on a reimbursable basis upon request to TACOM.

(24) Provide technical assistance service for the Military Traffic Management Command's (MTMC) Defense Freight Railway Interchange Fleet as requested.

(25) Upon request, provide lay away storage requirements for utility rail equipment authorized for retention at AMC GOCO Activities.

e. The Commanding General, U.S. Army Training and Doctrine Command (TRADOC) will—

(1) Determine which Army rail equipment, doctrine, and equipment applications best support current and future Army concepts.

(2) Administer rail training program to title 49, chapter II, Code of Federal Regulations (CFR) safety standard.

f. The Assistant Chief of Staff for Installation Management (ACSIM) will—

(1) Establish DA policies for maintaining, repairing, and improving railroad trackage in accordance with AR 420-72.

(2) Provide DA staff supervision and technical direction related to rail trackage maintenance, including promulgating rail trackage maintenance standards.

(3) Maintain an inventory of Army railroad trackage and related facilities in accordance with AR 405-45 and AR 415-28.

(4) Maintain an inventory of Army military real property in accordance with AR 405-45 and AR 415-28. The inventory will show the identification, measurement, and condition of all the railroad tracks including spurs, sidings, yards, turnouts (with accessories and appurtenances), and railroad bridges at each military installation.

g. Commanders of Major Army, Air Force, Navy, and Marine Commands, Heads of Army, Air Force, Navy, and Marine Agencies, Installations, or Activities will—

(1) Assure that maintenance is accomplished on utility rail equipment at installations under their command. Army Commanders overseas are responsible for all echelons of maintenance of Army utility rail equipment, and for direct, general, and depot support of utility rail equipment in the areas where the Army has command authority. In areas where the Air Force, Navy, and Marines have command authority, those commands shall be responsible for all echelons of maintenance except organizational maintenance of Army utility rail equipment.

(2) Assure that the condition of rail equipment is in compliance with Federal Railroad Administration (FRA) and Department of Transportation (DOT) safety requirements, with the exception of utility rail equipment. The safety requirements for utility railroad cars will apply with the following exceptions:

(a) Application of steel wheels is not required.

(b) Removal of running boards and lowering of hand brakes is not required.

(c) Removal of "K" type braking system is not required.

(d) Disposal of overage cars is not required.

(3) Assure that interservice support agreements are in effect where one Department of Defense (DOD) component performs maintenance on rail equipment belonging to another DOD component.

(4) Assure that Installation and Activity Commanders provide proper care and preservation of utility rail equipment in layaway storage at their respective installations or activity, in accordance with TB 740-97-5 and special instructions provided by the Commodity Command.

(5) Commanders of Major Army and Air Force Commands and Heads of Agencies/Installations/Activities will ensure that provisions for the execution of their responsibilities are consistent with the provisions of AR 235-5.

h. U.S. Air Force, Navy, and Marine Commanders desiring to use Army rail maintenance services will—

(1) Program rail maintenance above the organizational level, such as direct/general and depot support.

(2) Furnish depot maintenance workload requirements for fiscal year programming upon request from TACOM.

(3) Provide reimbursement for services performed on Air Force, Navy, and Marine utility rail equipment.

(4) Participate in appropriate intraservice support agreements.

(5) Provide representation to TACOM in performing pre-maintenance inspection of Air Force, Navy, and Marine utility rail equipment.

1-5. Army rail policy

a. Rail resources. Rail assets will be acquired according to the availability of commercial rail transportation assets. Army-owned rail equipment for use in the continental United States (CONUS) will generally be standard, commercially designed equipment comparable to equipment being used in commercial industry. The objectives are to provide for Army logistics and training needs in peacetime and mobilization through the acquisition and maintenance of rail equipment that is not available or in limited supply from commercial rail industry.

b. Rail maintenance. Equipment acquired to operate in interchange service, as part of the DFRIF will be maintained in accordance with AAR and FRA rules and practices. Utility rail equipment will be maintained to the same general standards practiced by private industry operating similar fleets.

Chapter 2

Determination and Authorization of Requirements

2-1. Locomotives

a. Peacetime and mobilization requirements for locomotives will be based on specific rail inbound and outbound requirements. TACOM will identify the appropriate planning documents that each type of Army installation will use when requesting a locomotive.

b. Before requesting a locomotive, the installation will determine the feasibility of using commercial service. The installation will then determine whether the following criteria are met:

(1) The serving rail carriers cannot provide switching service on a contract basis.

(2) Transferring rail traffic to an alternate transportation mode is not economically feasible.

(3) The locomotive is needed to meet mobilization requirements.

c. The installation will submit a request for a TDA authorization in accordance with AR 71-32. Assistance and advice with requirement computations can be obtained from TACOM, ATTN: PM-Force Projection, Warren, MI 48397-5000.

2-2. Track maintenance equipment and rolling stock

Peacetime and mobilization requirements for equipment and rolling stock that will be used solely by Army utility railroads will be based on the same planning documents used in computing locomotive requirements.

Chapter 3

Operations and Safety

3-1. Utility rail operations

a. Army-operated utility railroads. Army installations and other activities may be authorized to operate utility railroads if it is not economically or operationally feasible to use the services of commercial rail carriers.

b. Utility railroad operating contracts. At installations where the serving carrier as part of the line does not provide switching requirements haul charge, operating contracts with the serving carriers or contract-switching operators will be explored. A utility railroad operation is a commercial activity covered under the provisions of AR 5-20.

c. Lease/contract approvals. Approval authority for leases or contracts related to utility railroad operations is vested with the installation commander. Major Army commands (MACOMs) will be responsible for reviewing any leases or contracts made by their subordinate activities.

3-2. Rail safety

a. All commands and agencies operating or using Army-owned or leased utility rail equipment will develop and implement a rail safety program. The program will comply with applicable safety procedures, using the following publications as guides where appropriate.

- (1) FM 55-21.
- (2) TM 55-203.
- (3) Title 49, Code of Federal Regulations.
- (4) AAR Field Manual, Rules for Interchange of Railroad Cars.

b. Trains will operate at safe speeds as governed by track conditions. Service will be suspended where minimum track safety standards are not met. The installation Director of Public Works should immediately notify the installation transportation officer, verbally and in writing, of any track conditions requiring train operations to be restricted or suspended.

Chapter 4 Acquisition

4-1. Standardization

To ensure mobility and interchange ability of equipment, Army-owned locomotives provided for use in CONUS will be comparable to locomotives commonly in commercial service. Motive power will be of standard commercial design with types and models restricted to the minimum number consistent with current and projected requirements. Rolling stock and track maintenance will be similarly standardized to the maximum extent possible.

4-2. Procurement criteria

For Army-owned rail equipment to be eligible for procurement, retention, maintenance, or upgrading, it must meet one of the following criteria:

- a.* It is a specialized type of equipment peculiar to the military and not available from commercial sources or not available in the number or at the time required to meet military needs.
- b.* The equipment is needed to meet overseas or mobilization requirements.
- c.* The equipment is needed to meet utility railroad requirements of a military activity.
- d.* The cost of obtaining locomotive service from commercial sources exceeds the cost of operating military-owned equipment and would be wasteful of public funds.
- e.* The equipment is required for rail deployment training and/or actual deployment of active and Reserve component units.

Chapter 5 Numbering and Lettering of Equipment

5-1. Marking standards

The assignment of numbers and letters applies to all DOD-owned railroad equipment with a Federal supply group of 22. Numbers and letters of DA-owned railroad equipment will conform to the standards in TM 55-203.

5-2. Reporting marks

- a.* The Association of American Railroads (AAR) considers DOD or Army-owned railroad equipment as privately owned.
- b.* All railroad equipment operating in interchange service must have reporting marks assigned by the Assistant Vice President-Business Services, AAR. Reporting marks for DFRIF equipment are "DODX."
- c.* Army-owned railroad equipment operated in interchange service must be registered in the Universal Machine Language Equipment Register (UMLER), which is maintained by RAILINC Corporation, a subsidiary of the AAR.
- d.* The Commander, MTMC is responsible for registering Army-owned, interchange-capable railroad equipment in UMLER. Army-owned railroad equipment cannot be placed or used in interchange service without MTMC approval.
- e.* To facilitate the reassignment of Army-owned utility rail equipment, it is given the reporting marks "USAX."

5-3. Allocation of numbers

TACOM will assign numbers to all Army-owned railroad equipment. The rail fleet numbering system aids interface with the AAR. The number of digits used will be limited, when possible, to five digits in CONUS and six digits outside the continental United States (OCONUS). Freight cars will be classified according to AAR car type code, using

the code and mechanical designation in addition to the description. This system aids recognition of the type of equipment by car number without physical inspection. Railroad equipment accepted for operation in interchange service will be assigned an individual number in the series for the applicable class and code. Groups of numbers will be allocated as listed in appendix B.

5-4. Renumbering

Existing railroad equipment will not be renumbered unless TACOM issues such instructions.

Chapter 6 Management of Army Rail Equipment

6-1. Inventory

The commander of each MACOM will designate a point of contact to maintain an inventory record of all Army-owned locomotives and rolling stock within that command.

6-2. Reporting procedures

a. Each MACOM representative will submit the command's locomotive inventory and usage data to TACOM by 20 January of each year. The data will cover the period from 1 January through 31 December. Table 6-1 shows the file layout of the data to be reported.

b. TACOM will—

- (1) Review the data for accuracy.
- (2) Provide hardcopy printouts of locomotive data to members of the ILMC and the Office of the Assistant Secretary of Defense by 20 February of each year. Additional printouts for the ILMC and/or printouts for the DOD components will be provided as required.
- (3) Recommend ways to improve reporting and present these recommendations at the annual ILMC meeting.

c. The report is assigned Requirement Control Symbol DD-P&L(A)1683.

Table 6-1
LMIS asset and usage reporting-Rail data file layout

Columns: 1-13

Description: NSN-National stock number

Columns: 14-15

Description: MFG YR-Calendar year in which locomotive was manufactured or remanufactured

Columns: 16-17

Description: STATE-State where installation and locomotive are located

Columns: 18-20

Description: WEIGHT-Tonnage of locomotive

Columns: 21

Description: MAJOR COMMAND-Major Army Command to which installation is assigned. A-AMC, F-FORSCOM, T-TRADOC, M-MTMC

Columns: 22

Description: SERVICE-DOD Component. A-Army, N-Navy, F-Air Force, M-Marine Corps, S-Defense Logistics Agency

Columns: 23

Description: BLANK

Columns: 24-29

Description: LOC CODE (UIC)-Alphanumeric for each location

Columns: 30-33

Description: INSP DATE-Date of last technical inspection. (Year/Julian date, in this instance, 1 Jan 85=5001)

Columns: 34-38

Description: OPER HRS-Total accumulated hours on each locomotive since overhaul or remanufacture

Columns: 39-42

Description: ANNUAL HRS-Total hours each locomotive was operated from Jan. to Dec. of each year

Columns: 43-46

Table 6-1
LMIS asset and usage reporting-Rail data file layout—Continued

Description: CARS IN-Number of rail cars received (loaded or empty) by installation during the past 12 months. This is an installation value regardless of how many locomotives are used

Columns: 47-50

Description: CARS OUT-Number of rail cars going out of an installation during the past 12 months. This is an installation value regardless of how many locomotives are used

Columns: 51-55

Description: INTRA SWITCHES-Each rail car moved and spotted at a different location within an installation. This is an installation value regardless of how many locomotives are used. Exercising of rolling stock is to be counted as an intraswitch

Columns: 56

Description: BLANK

Columns: 57-71

Description: ROAD NUMBER-Reporting marks and numbers identifying each locomotive

Columns: 72

Description: CONDITION CODE-Current status of equipment. A-serviceable, F-unserviceable, M-being remanufactured or overhauled; or other MILSTRIP condition codes.

Columns: 73

Description: REQUIREMENTS CODE-Application of equipment.

- 1-in-use serviceable
 - 2-standby serviceable
 - 3-contingency serviceable
 - 4-storage serviceable
 - 5-storage unserviceable
 - 6-excess serviceable
 - 7-excess unserviceable
 - 8-loan
 - 9-in transit
-

Columns: 74-77

Description: ACQUISITION COST-Cost in dollars

Chapter 7

Maintenance Support for Railroad Equipment

7-1. Maintenance program responsibilities

a. TACOM is responsible for—

(1) Maintenance of utility rail equipment used by DA and other DOD agencies having interservice support agreements (ISSAs) with TACOM. Maintenance inspections are recorded on DD Form 1144 (Support Agreement).

(2) Operation of DGRC to provide direct and general support maintenance on this equipment. TACOM will ensure that adequate support is available to handle other service requirements-on a reimbursable basis.

(3) Depot-level maintenance of Army locomotives. TACOM will coordinate depot-level maintenance requirements of other DOD components.

b. Installations are responsible for—

(1) *Unit maintenance.* The operator and crew of railroad equipment and qualified maintenance personnel (as defined in the glossary) will provide its organizational maintenance. They will report maintenance data on DD Form 862 (Daily Inspection Worksheet for Diesel-Electric Locomotive and Locomotive Cranes) and Form FRA F6180-49A (Locomotive Inspection and Repair Record). DGRC is available on request to augment the installation's organizational maintenance capability on a reimbursable basis.

(2) *Direct and general support maintenance.* Installation commanders will request direct and general support maintenance of assigned equipment from the DGRC. The DGRC representative will complete the annual inspection portion of FRA F6180-49A during the inspection.

7-2. Repair parts supply support

a. To obtain organizational maintenance repair parts not available through normal local supply channels, user installations will submit requisitions to Defense Non-Tactical Generator and Rail Equipment Center (DGRC), 6233 Aspen Ave, Building 1701, Hill AFB, Utah 84056.

b. DGRC will verify that the repair parts requisitioned are required for organizational maintenance. It will supply the items by—

- (1) Shipping them from DGRC stock.
- (2) Making funded requisitions for parts to the proper servicing installation stock fund. (Shipment may be direct to the user.)
- (3) Using the procurement activity of the servicing installation to obtain repair parts not available through sources (1) and (2) above. (Shipment will be direct from the vendor to the installation.)
- (4) Using Standard Form 44 (Purchase Order Invoice Voucher) to purchase repair parts locally in emergencies. These local purchases are subject to limitations in the Federal Acquisition Regulation, section 13.505-3.

7-3. Mandatory inspections

To ensure that rail equipment is maintained and reported in compliance with Army regulations, TACOM representatives will conduct a mandatory technical inspection of all assigned Army locomotives at least once every 12 months. Inspections will be made for other DOD components that request and provide funds for this service. The inspection will be conducted regardless of the means of maintenance support and/or the organization providing the support.

7-4. Funding

a. TACOM provides funds for direct and general support maintenance and supply support for Class I Army installations directly to the DGRC. These installations shall not cite consumer requisitions funds.

b. Customers other than Class I will reimburse DGRC using Standard Form 1080 (Voucher for Transfers Between Appropriations or Funds). These customers include industrial-funded installations, DOD agencies covered by ISSA (see DD Form 1144), and other Federal agencies requesting DGRC support.

c. DGRC will report cost and production data.

d. TACOM provides funds for the annual inspections required by paragraph 7-3.

Chapter 8

Repair, Replacement, and Disposition of Railroad Equipment

8-1. Definitions

Maintenance of railroad equipment involves three types of repair: Overhauling, rebuilding, and remanufacturing (see glossary for definitions).

8-2. Repair criteria

a. *Maintenance expenditure limits (MELs)*. The MEL is the total allowable one-time cost to restore an end item, subsystem, or component to a fully serviceable condition as prescribed in the appropriate technical manual or depot maintenance work requirements. The criteria to be used in computing MELs are described in AR 750-1. MELs are used to determine the economic feasibility of overhauling an end item given its current age and its expected life.

b. *Technical inspections*. An experienced, technically qualified rail technician will inspect all rail equipment at least once annually. Unserviceable equipment shall be inspected by a qualified rail technician before repair or before being sent to the next higher supporting maintenance facility for repair or disposal. The inspection report shall include defects and malfunctioning components and the estimated cost of restoring the equipment to standard operating condition. The objectives of the technical inspection are—

- (1) To ensure that equipment meets Army safety and maintenance standards.
- (2) To determine the economical reparability of DOD material at unit, direct support, and general support levels of maintenance.
- (3) To prevent the evacuation of uneconomically reparable equipment unless specifically required and directed.
- (4) To preclude equipment loss to the DOD based solely on age.

c. *Estimating repair costs*. Before preparing detailed cost estimates, the equipment manager will review previous work orders to determine whether similar items in a similar condition have been repaired. If a work order exists, use the actual work order cost as the estimating basis. Using prescribed operation and maintenance inflation factors to reach an estimate of repairing the component should accelerate old work order cost.

(1) *Cost elements*. If no previous work order of a similar repair is available, the estimated repair costs will be computed using the following cost elements: Direct labor (military and civilian), direct materials, indirect or overhead costs, contractual services, and shipping costs. These costs are described individually in (2)-(6) below.

(2) *Direct labor costs.*

(a) Direct labor is work by civilian or military personnel that is specifically related to the repair or overhaul job. It includes only personnel who have direct productive contact with the equipment or service involved. Initial and final inspections are included in this category.

(b) Estimate direct labor costs by determining the number of applicable direct labor hours and then applying current pay rates plus the cost of annual, sick, and other leave, as well as Government contributions for employee benefits.

(c) Determine the direct labor hours to be applied based on work-hour requirements for maintenance tasks listed in applicable publications, such as commercial flat rate manuals, on similar work previously performed, or on individual experience.

(d) Base estimated civilian labor costs on the labor rate of the individuals who actually perform the service. When civilian labor pay scales are stated in terms of annual salaries, compute costs by converting work-years to average productive working hours. In either case, include the cost of annual, sick, and other leave, and Government-contributed fringe benefits in the labor rates.

(e) Base estimated costs of military labor on the average military wage rate for the individuals performing the work, assuming standard costs.

(f) Heads of DOD components or their designees may establish and use standard hourly rates for direct labor including indirect and overhead costs. Separate rates will then be established for direct support, general support, and depot maintenance for each category of supportable equipment listed for rail and each major geographical area where wage levels vary greatly.

(3) *Direct materials costs.*

(a) Direct materials are all materials used in repairing or overhauling a particular piece of equipment, including Government-furnished material used by a private contractor.

(b) Figure cost estimates of consumables at the standard inventory price as published in appropriate supply manuals. Material to be obtained from local sources shall be priced at the latest invoice cost. Cost of material will be the actual cost of fabrication. When actual costs are not available, use engineering estimates.

(c) When credit is given for a serviceable return, it shall be the full price minus the applicable surcharge and a small risk mitigation factor. When credit is given for an unserviceable return, it will be the full price minus the applicable surcharge, washout rate, repair cost, and a risk mitigation factor. HQDA will establish the risk mitigation factor value and provide it to AMC annually. No additional factors will be included in the credit given for an item.

(4) *Indirect and overhead costs.*

(a) Include the indirect or overhead costs associated with the process in the repair or overhaul cost estimate. Determine these costs by applying the indirect or overhead rate to the estimated direct labor hours.

(b) Include the following in the costs used to develop the indirect or overhead rate:

1. Manufacturing or production expense, such as indirect costs incurred by the maintenance shop or organization performing the repair work, although not identifiable to a particular repair or overhaul job.

2. General and administrative expenses, such as costs incurred in general management or supervision, which are measurable costs chargeable to maintenance units and activities.

(5) *Contractual services.* Include in the estimate contractual service costs related to the performance of all or part of the maintenance job.

(6) *Shipping costs.* Include all costs involved in preparing the material for shipment and transporting and handling it from the point of use to the point of repair.

(7) *Excluded costs.* Do not include the following elements in depot repair or overhaul unit cost estimates:

(a) Replacement of non-integral components of basic issue items.

(b) Items of operating expense, such as replacement of batteries, antifreeze, and petroleum products, except where the replacement is required as a result of accidental damage.

(c) The labor cost of applying modification work orders except when the amount of labor is so small that it causes no major material distortion in either modification or other depot maintenance costs.

(d) The cost of overhauling or replacing accessory items used to adapt equipment for special uses.

d. *Adjusting repair cost and work-hour estimates.*

(1) When unserviceable equipment is reported to the commodity manager based on repair cost estimates, the commodity manager shall compare the labor rate used by field personnel with the labor rate of the depot maintenance facility selected to complete the maintenance. The repair cost estimate will be adjusted to reflect depot maintenance labor rates before a decision is made as to the disposition of the equipment.

(2) When equipment is reported to the commodity manager based on work-hour estimates, the commodity manager shall convert the direct labor work hours and other information related to the maintenance effort to a repair or overhaul cost estimate in dollar amounts as prescribed in this regulation. This shall be done before a decision is made as to the disposition of the equipment.

e. *Waivers by major commands.*

(1) Heads of DOD components or their designees have authority to approve requests for waivers of published

maximum repair and overhaul allowances when the required maintenance can be accomplished at the organizational, direct support, or general support level. Required repairs shall not be broken into separate job estimates merely to bypass prescribed maximum repair allowances.

(2) In approving such requests, commanders will ensure that—

(a) The unit or organization requesting the waiver has been unable to obtain timely replacement of the uneconomically repairable equipment by checking with the appropriate commodity manager.

(b) An urgent operational or essential training requirement justifies the uneconomical repair.

(c) Resources are available (or can be made available) to the requesting organization or command to do the required repairs within an acceptable period. Normal maximum time is 60 days.

(d) Unit and activity commanders requesting material waivers will submit copies of the technical inspection report, with justification for the uneconomical repair, through proper support maintenance channels to DOD service commanders for approval.

f. *Waivers by national maintenance point (NMP)/national inventory control point (NICP).* NICPs in coordination with the proper NMP may grant waivers to publish maximum one-time repair and overhaul allowances when the required maintenance will be accomplished at the depot maintenance level and operational requirements necessitate such.

8-3. Replacement criteria

A determination by TACOM of whether to replace a piece of equipment should be based on the unit price of equivalent or like equipment currently being produced, as identified in trade journals, rather than on the Federal Logistics Information System (FLIS) unit price.

8-4. Remanufacture criteria

The determination by TACOM to remanufacture rail equipment rather than overhaul it will be evaluated on a case-by-case basis. The justification should be substantiated with an approved product improvement program that considers the price as well as technological improvements.

8-5. Disposition of equipment

a. All Reports of Excess/Requests for Disposition should be directed to the installation's MACOM. Such equipment will be transferred or redistributed between installations. If excess assets cannot be used within the MACOM, the Report of Excess/Request for Disposition is forwarded to TACOM for review. As the DOD rail focal point, TACOM determines whether an item is eligible for disposal or for transfer as an excess asset within DOD. TACOM will provide disposition instructions to the requesting installation.

b. The installation will submit DA Form 3590 (Request for Disposition or Waiver) and DD Form 1348 (DOD Single Line Item Requisition System Document Manual) and either DD Form 1335 (Field Inspection Data USA, USAX, USNX, DODX Rail Cars) (for railcars) or DA Form 2404 (Equipment Inspection and Maintenance Worksheet) (for equipment other than railcars) to the MACOM.

c. The installation will ensure that all USAX and DODX reporting marks are completely removed from the equipment before it is transferred to the Defense Reutilization and Marketing Service.

8-6. Maintenance performance

Performance of maintenance will be in accordance with—

a. TM 55 202-/TO 45A2-2-1-2, TM 55-203-/TO 45A-1-101 and other technical manuals related to specific items of equipment. Maintenance reporting and recording for all DOD components will be in accordance with DA Pam 738-750.

b. Organizational maintenance on assigned utility rail equipment is the responsibility of the user.

c. Depot maintenance is governed and programmed by TACOM.

8-7. Rolling stock operating in interchange

a. DOD component passenger and freight equipment moving in interchange service over commercial railroads are subject to the standards established by the AAR and the FRA/DOT. Running repairs and maintenance are performed by the handling railroad under provisions of the AAR Rules of Interchange. Bills and supporting papers applicable to equipment assigned to the Defense Freight Railway Interchange Fleet are rendered by the railroads to MTMC for payment. On occasions when utility rail equipment is repaired by interchange railroads, applicable bills are rendered to TACOM for payment.

b. Rail equipment subject to interchange service is listed in the commercial publication "The Official Railway Equipment Register". Utility rail equipment is not listed in the Official Railway Equipment Register.

Appendix A References

Section I Required Publications

AR 5–20

Commercial Activities Program. (Cited in para 3-1.)

AR 71–32

Force Development and Documentation-Consolidated Policies. (Cited in para 2-1.)

AR 420–72

Transportation Infrastructure and Dams. (Cited in para 1-4.)

Section II Related Publications

A related publication is merely a source of additional information. The user does not have to read it to understand this regulation.

AAR Field Manual, Rules for Interchange of Railroad Cars

Association of American Railroads Interchange Rules (May be obtained from the Association of American Railroads, 50 F St. NW, Washington DC 20001-1564 (Web site www.aar.org))

AR 405–45

Real Property Inventory Management

AR 415–28

Real Property Category Codes

AR 750–1

Army Material Maintenance Policy and Retail Maintenance Operations

CFR Title 49, chap II

Code of Federal Regulations, title 49-Transportation, chap II-Federal Railroad Administration (www.gpo.gov/nara/cfr)

DOD 4140.50–R

Management and Standards of DOD Locomotives

FM 55–21

Railway Operating and Safety Rules

TM 55–203

Maintenance of Railway Cars

Requirement Control Symbol

RCS DD-P&L(A)1683 (Locomotive Management Information System)

Section III Prescribed Forms

This form is available on the OSD Web site (<http://web1.whs.osd.mil/icdhome/icdhome.htm>)

DD Form 862

Daily Inspection Worksheet for Diesel-Electric Locomotive and Locomotive Cranes

Section IV Referenced Forms

Except where otherwise indicated below, the following forms are available as follows: DA and SF Forms are available on the Army Electronic Library (AEL) CD-ROM (EM0001) and the USAPA Web site (www.usapa.army.mil); DD Forms are available from OSD Web site (<http://web1.whs.osd.mil/icdhome/icdhome.htm>).

DA Form 2404

Equipment Inspection and Maintenance Worksheet

DA Form 3590

Request for Disposition or Waiver

DD Form 1144

Support Agreement

DD Form 1335

Field Inspection Data USA, USAX, USNX, DODX Rail Cars

DD Form 1348

DOD Single Line Item Requisition System Document

Form FRA F6180-49ALocomotive Inspection and Repair Record (May be obtained from The Federal Railroad Administration, 1120 Vermont Ave NW, Washington DC, 20590 (Web site, www.fra.dot.gov))**SF Form 44**Purchase Order Invoice Voucher (This form is available on the GSA Web site (www.gsa.gov/forms/forms.htm))**SF Form 1080**

Voucher for Transfers Between Appropriations or Funds

**Appendix B
Equipment Numbering****B-1. General numbering guidelines**

Each item of DA-owned rail equipment receives an identifying number. The number of digits used is limited, when possible, to five in CONUS and six OCONUS. Tables B-1 through B-7 show how the numbers are allocated.

B-2. Numbering guidelines for special cars

Railway equipment listed in table B-1 will be marked with the letter prefix as indicated and numbered consecutively from 1 through 9999 (and higher if necessary) for each grouping of equipment for both standard gauge (56 1/2 inches) and multigauges (56 1/2 inches, 60 inches, 63 inches, 66 inches).

**Table B-1
Special Cars-CONUS and OCONUS**

Numbers	Type or gauge	Capacity
Prefix AR	Auto railers	All
Prefix D	Dump cars	All
Prefix J	Prison cars	All
Prefix M	Maintenance of way, motor cars	All
Prefix MC	Mortuary cars	All
Prefix P	Push cars	All
Prefix PM	Passenger motor cars	All
Prefix SN	Snow plows	All
Prefix T	Trackmobiles	All

Table B-2
Standard and multigauge rolling stock-CONUS

Numbers	Type or gauge	Capacity
C-1 through C-999	Rail cranes	All
G-1 through G-999	Guard cars	All
K-89667 through K-90000	Kitchen cars	All
MP-(serial number)	Multiple-purpose cranes	All
S-1 through S-49999	Sleepers, troop	All
W-1 through W-999	Work train cars (bunk, shop, store, crew)	All
1 through 99	Special cars (boiler, instruction, test, special device, office)	All
100 through 899	Passenger-type cars (baggage coaches)	All
900 through 999	Cabooses	All
89000 through 89099	Hospital cars (old type)	All
89100 through 89999	Hospital cars (ward, ward dressing, ambulance)	All
6000 through 18999	Tank cars (all except water)	All
19000 through 19999	Tank cars (water only)	All
20000 through 21999	Box cars	39 tons or less
22000 through 24999	Box cars	40-49 tons
25000 through 28999	Box cars	50-59 tons
29000 through 29999	Box cars	60 tons or more
30000 through 31999	Flat cars	39 tons or less
32000 through 34999	Flat cars	40-49 tons
35000 through 37999	Flat cars	50-79 tons
38000 through 38850	Flat cars	100-130 tons
38851 through 38999	Well flat cars	85-200 tons
39000 through 39199	Flat cars	100-110 tons
39500 through 39699	Flat cars	80-99 tons
39780 through 39809	Depressed center flat cars	140 tons
39810 through 39882	Flat cars (all other)	140-149 tons
39833 through 39849	Well flat cars	150-174 tons
39850 through 39898	Depressed center flat cars	175 tons
39899 through 39999	Flat cars	175 tons or more
40000 through 44999	Flat cars (M-1 tank)	140-149 tons
45000 through 47999	Gondola cars	50-59 tons
48000 through 49999	Gondola cars	60 tons or more
50000 through 51999	Self-clearing gondola and hopper cars	39 tons or less
52000 through 54999	Self-clearing gondola and hopper cars	40-49 tons
55000 through 57999	Self-clearing gondola and hopper cars	50-59 tons
58000 through 59999	Self-clearing gondola and hopper cars	60 tons or more
60000 through 69999	Refrigerator cars	All

**Table B-3
Standard and multigauge locomotives-CONUS**

Numbers	Type or gauge	Capacity
600 through 999	Steam	All
3800 through 3999	Diesel electric	59 tons or less
4001 through 4199	Diesel electric	60-79 tons
4200 through 4399	Diesel electric	80-99 tons
4400 through 4599	Diesel electric	100-119 tons
4600 through 4799	Diesel electric	120 tons or more
4800 through 4999	Gas mechanical	All
5000 through 5199	Diesel mechanical	All

**Table B-4
Rail equipment other than standard and multigauge-CONUS**

Numbers	Type or gauge
1900 through 1999	Locomotives
90000 through 94999	Rail equipment other than locomotives

**Table B-5
Standard and multigauge rolling stock-OCOUS**

Numbers	Type or gauge	Capacity
C-1000 through C-1999	Rail cranes	All
G-1000 through G-1999	Guard cars	All
K-50000 through K-50999	Kitchen cars (old type)	All
K-51000 through K-99999	Kitchen cars (troop and hospital)	All
MP-(serial number)	Multiple-purpose cranes	All
S-50000 through S-99999	Sleepers, troop	All
W-1000 through W-9999	Work train cars (bunk, shop, store, crew)	All
7000 through 7099	Hospital cars (ward, ward dressing, ambulance)	All
100000 through 100999	Special cars (boiler, instruction, test, special device)	All
101000 through 109999	Caboose cars	All
110000 through 119999	Tank cars	All
120000 through 129999	Refrigerator cars	All
200000 through 239999	Box cars	19 tons or less
240000 through 299999	Box cars	20-29 tons
300000 through 359999	Box cars	30-39 tons
260000 through 399999	Box cars	40 tons or more
400000 through 449999	Flat cars	29 tons or less
450000 through 499999	Flat cars	30 tons or more
500000 through 549999	Gondola cars	29 tons or less
550000 through 569999	Gondola cars (high side)	30 tons or more
570000 through 599999	Gondola cars (low side)	30 tons or more
600000 through 699999	Self-clearing gondola and hopper cars	All

Table B-6
Locomotives of all gauge-OCONUS

Numbers	Type or gauge	Capacity
2000 through 2999	Diesel electric	100 tons or more
3000 through 3999	Diesel electric	49-99 tons
4000 through 5999	Diesel electric	48 tons
6000 through 6999	Diesel electric	Under 48 tons
9000 through 9999	Steam and other	All

Table B-7
Rail equipment other than standard gauge and multigauge-OCONUS

Numbers	Type or gauge	Capacity
700000 through 749999	Tank cars	All
750000 through 799999	Box cars	All
800000 through 849999	Flat cars	All
850000 through 899999	Gondola cars	All
900000 through 949999	Self-clearing gondola and hopper cars	All
950000 through 950499	Hospital cars	All
950500 through 959999	Caboose cars	All
960000 through 969999	Work cars	All
970000 through 979999	Special cars	All

Glossary

Section I Abbreviations

AAR

Association of American Railroads

CONUS

Continental United States

DCSLOG

Deputy Chief of Staff for Logistics

DCSOPS

Deputy Chief of Staff for Operations and Plans

DFRIF

Defense Freight Railway Interchange Fleet

DGRC

Defense Non-Tactical Generator and Rail Equipment Center

DPW

Director of Public Works

FORSCOM

Forces Command

FRA

Federal Railway Administration

ISSA

interservice support agreement

LMIS

Locomotive Management Information System

MACOM

major Army command

MEL

maintenance expenditure limit

MTMC

Military Traffic Management Command

NICP

national inventory control point

NMP

national maintenance point

OCONUS

outside continental United States

ODCSLOG

Office of the Deputy Chief of Staff for Logistics

TDA

table of distribution and allowances

TM

technical manual

TRADOC

Training and Doctrine Command

TACOM

Tank-Automotive Command

Section II

Terms

Contract switching railroad

A commercial company that provides switching and related services on industrial in-plant or military utility railroads. Related services can include providing and/or maintaining locomotives, track maintenance, car inspections and maintenance, equipment management, coordination with connecting carriers, intermodal terminal operations, car loading, and other related logistical services.

Common-carrier railroad

A commercial railroad that transports freight for the general public. The Department of Transportation, the Federal Railway Administration, the Code of Federal Regulations, title 49, and the Association of American Railroads govern common-carrier railroads.

Defense Freight Railway Interchange Fleet

Railway rolling stock owned by or leased to the Department of Defense and registered for operation in interchange service.

Interchange

The physical transfer of railroad cars, along with legal responsibility for the cars and their contents, from one common-carrier railroad to another.

Interchange Service

Movement over one or more common-carrier railroads.

Maintenance

a. Overhaul. Restore an item to a completely serviceable condition as prescribed by maintenance serviceable standards.

b. Rebuild. Restore an item as nearly as possible to original condition in appearance, performance, and life expectancy. This requires completely disassembling the item, inspecting all parts or components, and repairing or replacing worn or unserviceable elements using original manufacturing tolerances and specifications.

c. Remanufacture. Repair a rail asset to such an extent that it meets the characteristics typical of equipment presently coming off the production line. In general, this process would require the replacement of approximately 80 percent of existing component parts with new systems.

Motive power

Railroad locomotives and other self-propelled equipment designed for moving rolling stock. Motive power includes self-propelled equipment designed to carry freight and/or passengers inside the car and car movers designed to operate interchangeably on either rubber tires or steel flanged wheels.

Qualified maintenance personnel

Individuals with a working knowledge of diesel engines, electrical systems, air systems, and other components, specifically geared to locomotives, railway cranes, and rolling stock.

Rolling stock

Railroad cars moved by a locomotive or other external means and used to transport freight or passengers. Use or design, such as box, flat, depressed center flat, gondolas, dump, hopper, tank, caboose, and passenger further categorize rolling stock.

Track maintenance equipment

Locomotive cranes, motor cars and trailers, tamping machines, and other powered machines used on or off track to inspect, maintain, and repair railroad tracks.

Utility rail equipment

Locomotives and rolling stock that are bought for or used by a utility railroad. They are not operated off of utility railroads except when being reassigned.

Utility railroad

Privately owned and/or operated railroad that connects with common-carrier rail interchange lines. Utility railroads range in size and complexity from a simple siding to a warehouse to a complete rail network with receiving, classification, and departure yards; switching leads; interchange, running, repair, and inspection tracks; and additional tracks to ease the receipt and delivery of carload freight and provide a network for intra-installation transportation.

Section III**Special Abbreviations and Terms**

This publication uses the following abbreviations, brevity codes, or acronyms not contained in AR 310-50:

FLIS

Federal Logistics Information System

ILMSG

Interservice Locomotive Management Steering Group

TACOM

U.S. Army Tank-Automotive Command

UMLER

Universal Machine Language Equipment Register

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