

Errata Sheet

No. 3

MATERIEL MAINTENANCE POLICIES

ER 750-1-1

30 January 1997

Chapter 4, page 4-6, paragraph 4-5: Change "Maintenance of Federal Information Processing (FIP) Equipment" to read " Maintenance of Information Technology (IT) Equipment."

Chapter 4, page 4-6, paragraph 4-5: First sentence; Change "The maintenance of FIP equipment (formally ADPE) " to read "The maintenance of IT equipment." Strike-out "Federal Information Resources management Regulation (FIRMR) "

CHAPTER 4 COMMODITY - ORIENTED MAINTENANCE POLICIES

4- 1. Maintenance of Watercraft and Amphibians.

a. Purpose. To establish policies which are specific to the maintenance of Corps watercraft.

b. Objective. The objective of watercraft maintenance is to ensure safe, seaworthy, reliable, and fully capable watercraft.

c. Scope. This section applies to all Corps watercraft and amphibians worldwide.

(1) Watercraft and amphibians are defined in EP 750-1-1, para. 7-1a., and DA PAM 738-750.

(2) To accomplish the objectives of watercraft maintenance, tasks are distinctly organized into wholesale and retail maintenance. Each is responsible for the performance and management of its materiel maintenance functions. This responsibility is established in regulatory and maintenance publications.

(3) Wholesale maintenance is that maintenance which is beyond the capability of the operating activity and is commonly referred to as depot level maintenance. Specifically, wholesale maintenance is defined as that level of maintenance requiring the necessary personnel, skills, facilities and equipment to perform industrial type maintenance functions.

(4) Retail maintenance is that maintenance which is within the capability of and is the responsibility of the operating activity. The responsibility to perform retail maintenance operations within a given level is assigned based on mission, degree of complexity, availability of personnel, skills and materiel resources. Actual maintenance tasks to be performed are listed in applicable maintenance manuals.

d. General Maintenance Policies.

(1) Emergency repairs. A thorough marine condition survey/technical inspection will be performed by qualified personnel to ascertain the scope of work necessary to return a watercraft to a serviceable condition. When emergency repairs dictate that a watercraft be dry docked to accomplish the necessary repairs, it will be considered wholesale maintenance. When this condition exists, suitable repairs may be accomplished to correct the emergency. However, personal property so repaired must be removed from operation as soon as possible and properly repaired before being returned to an operational condition.

(2) Watercraft awaiting disposition instructions will be maintained in administrative storage.

(3) When engaged in operations (underway/deployed) and maintenance problems occur where normal corrective action can not be completed, a vessel master is authorized to perform any level of maintenance required to maintain the watercraft in, a seaworthy, safe and operable condition. This decision shall be made while considering the availability of resources, the skill of the crew, and the impact the repairs will or will not have on the basic seaworthiness and operability of the watercraft.

(4) This policy also applies to electronic equipment installed on-board watercraft.

e. **On-Condition Cycle Maintenance (OCCM).** All watercraft will undergo OCCM in accordance with the intervals established in Table 4-1. The intervals in Table 4-1 are the maximum time intervals. If more than 3 months deviation is anticipated, a request for waiver with justification will be sent to the district commander. OCCM consists of a series of inspections and maintenance actions which are designed to assure that a watercraft's structure (internal and external), piping, main and auxiliary engines, electrical installations, life-saving appliances, fire detecting and extinguishing equipment, pollution prevention equipment, and other equipment/systems are maintained in a suitable, seaworthy and safe condition.

f. **Inspections.** Marine condition surveys incident to the performance of OCCM will be accomplished in accordance with the following paragraph.

(1) One hundred eighty days prior to the scheduled OCCM, a marine condition survey will be performed. This survey will provide the basis for written specifications by which OCCM will be accomplished. This will be a dock side inspection. When possible, the services of qualified divers will be utilized to ascertain the condition of the watercraft's hull and appendages below the deep load waterline.

(2) At the time of dry-docking, if required, a dry-dock inspection will be performed to identify additional repair/maintenance requirements not observable at the time of the 180-day inspection (dockside).

(3) Periodic surveys required by the United States Coast Guard (USCG) and the American Bureau of Shipping (ABS) for retention of loadline certification will be accomplished in accordance with 46 CFR subchapter E and TB 55-1900-201-45/1. When such inspections are required, the service of ABS will be employed.

(4) In addition to the marine condition survey, an interim survey after 50% of the OCCM/dry-docking time has elapsed will be conducted. Whenever possible, this survey will also include an underwater hull survey as defined by TB 55-1900-201-45/1.

g. Maintenance. The scope of work to be accomplished during OCCM will vary dependent on watercraft conditions, resource limitations, class of vessel and other factors. As a minimum, the following maintenance and repair actions will be accomplished during OCCM if the inspection so indicates:

(1) Bottom cleaning and painting up to the deep load waterline.

(2) All repairs below the deep load waterline as identified during the dry-dock inspection/underwater hull survey.

(3) Overhaul/replacement/renewal of all major components identified for overhaul at the depot level. The requirements will be determined through diagnostic testing, hours of operation, and inspection of internal parts.

(4) All other maintenance and/or repairs identified by the marine/ship surveyor required to effect a permanent change in the watercraft's condition so as to assure the following:

(a) Capability of operating in an unrestricted manner for the purpose intended.

(b) Capability of being maintained and operated in accordance with all applicable regulations, rules, laws, and policies.

(c) The sustainment of the inherent reliability and maintainability designed and manufactured into the equipment between repair cycles (OCCM).

(d) The sustainment of acceptable rates of readiness between OCCM cycles.

(e) Application of all outstanding Modification Work Orders (MWO), minor alterations, modernization and/or special inspections will, to the maximum extent feasible, be accomplished concurrently with OCCM.

h. Marine Condition Surveys. Marine condition surveys are technical inspections and written evaluations performed by qualified marine surveyors in accordance with TB 55-1900-201-45/1 and other applicable publications.

(1) Marine condition surveys on watercraft shall only be performed by experienced and qualified technical experts. This requires the surveyor to be thoroughly familiar and capable of interpreting written standards, Federal laws, rules and regulations affecting watercraft inspections, common watercraft construction, and maintenance and repair procedures. The marine surveyor must

ER 750-1-1
30 Jan 97

also be capable of preparing written repair specifications and estimating repair costs (man-hour and personal property costs).

(2) When qualified marine surveyors are not available, assistance may be requested through command channels to HQUSACE, ATTN: CECW-OD.

i. Maintenance Reporting. Forms and records on watercraft and amphibians will be completed according to DA PAM 738-750, TB 43-0002-26, TB 55-1900-205-24 and TB 55-1900-201-45/1.

j. On-Condition Cycle Maintenance. Table 4-1 is a list of the proposed Corps dry dock intervals, compared to the required Coast Guard intervals. Based on periodic marine surveys, dry docking intervals may be extended for freshwater vessels, and the extended intervals must be fully documented and justified in accordance with paragraph 7-3c of EP 750-1-1.

k. In some cases, the Corps would be required to dry-dock more often than the proposed intervals if the Coast Guard standards are adapted. However, in other cases, particularly with double hull vessels, the dry-docking intervals can be greatly extended. The Corps has been designing and building newer double hull tank barges, so using the Coast Guard intervals would be an opportunity to take advantage of the increased savings available to these types of vessels. Other advantages for adopting the Coast Guard dry-docking schedules are the general acceptance of the American Bureau of Shipping to the Coast Guard intervals, and the decreased liability of adopting the industry schedule of maintenance in the event of a mishap or oil spill.

4-2. Maintenance of Aircraft and Aviation Electronics AVIONICS). The object of USACE aviation maintenance is to ensure safe and reliable aviation systems. Aviation systems maintenance will be accomplished in accordance with Army regulations and applicable Federal Aviation Administration (FAA) requirements. Contracted maintenance agreements will be reviewed by the aviation manager.

Table 4-1
Dry-docking Intervals (In Months)

Corps Recommendations		Vessel Class	Coast Guard Requirement	
Salt Water	Fresh Water		Salt Water	Fresh Water
36	60	Class A(I)	30	60
36	60	Class B(T)	18 36 (1)	60
36	60	Class C1(I)	s/h(2) 30 d/h(3) 60	s/h(2) 60 d/h(3) 120
38	60	Class C 1 (H)	30 18(4)	60
48	60	Class C2(I)	s/h(2) 30 d/h(3) 60 udcb(5) 60	s/h(2) 60 d/h(3) 120 udcb(5) 120
36-48	60	Class C3(D)	s/h(2) 30 d/h(3) 60	s/h(2) 20 d/h(3) 120

- (1) time interval extended if vessel spends more than 6 months but less than twelve months during the year in fresh water.
- (2) s/h = single hull vessel.
- (3) d/h = double hull vessel.
- (4) time interval is lessened if vessel is greater than 20 years old.
- (5) udcb = unmanned deck cargo barge.

Note: The letter in parenthesis next to the vessel classification is the letter of the subchapter in 46 CFR for that particular vessel.

ER 750-1-1
30 Jan 97

4-3. Maintenance of Communication Systems. The maintenance of fixed and other communication systems is covered in AR 25- 1, AR 25- 11, and DA PAM 25- 1-1. Assistance with maintenance policies and procedures can be obtained by contacting HQUSACE (CEIM-P).

4-4. Maintenance of Communication Security (COMSEC) Materiel and Controlled Cryptographic Items (CCI). The maintenance of COMSEC and CC1 materiel is covered in AR 25-12, DA PAM 25- 16, and TM 11- 5810-310-23&P. Assistance with policies and procedures can be obtained by contacting HQUSACE (CEIM-P).

4-5. Maintenance of Federal Information Processing (FIP) Equipment. The maintenance of FIP equipment (formally ADPE) is covered by the Federal Acquisition Regulations (FAR), Federal Information Resources Management Regulations (FIRMR), AR 25-1, AR 25-3, DA PAM 25-4, DA PAM 25-6, and DA PAM 25-6-1. Assistance with policies and procedures can be obtained by contacting HQUSACE (CEIM-L).

4-6. Maintenance of Commercial Design Vehicles. The maintenance policies in DOD 4500.36R, ER 56-2-1 and the maintenance procedures in TM 38-600 apply to commercial design nontactical vehicles. In general, these policies limit maintenance operations performed on these type vehicles to inspections, services, and replacement of minor components and assemblies. Rebuild maintenance of end items or major components is not authorized.

4-7. Maintenance of Engineer, Special Purpose (SP) Materiel Handling Equipment (MHE). Maintenance will be accomplished on Engineer, SP and MHE as prescribed in this regulation, DA PAM 738-750, applicable TMs and equipment manuals. As much maintenance as possible will be conducted during the service interval. Standard maintenance management policies set forth in the above cited regulations will be followed at all times. Waivers to any part of the regulations must be approved in writing by the division commander prior to implementation. Examples of each type are provided below:

a. Engineer Equipment

- (1) Cranes
- (2) Rollers/Compactors
- (3) Loaders
- (4) Scrapers
- (5) Graders

(6) Bulldozers

b. Special Purpose Equipment (SPE)

(1) Generators

(2) Pumps

(3) Low Bed Trailers

(4) Refuse Trucks

(5) Drill Rigs

(6) Dump Trucks

c. Materiel Handling Equipment (MHE)

(1) Forklifts

(2) Warehouse Tractors