Paragraph 5-2 was superseded by ER 700-1-1, 2 October, 2000. The balance of the document remains current.

CHAPTER 5 EQUIPMENT MANAGEMENT

5-1. <u>Maintenance Management Indicators.</u> To effectively measure the performance of maintenance management, each USACE activity will use maintenance indicators. Three of the most common and effective indicators are the tracking of equipment usage, equipment maintenance costs, and equipment operational rates. The importance of accurate data documentation cannot be over stressed. Commanders and managers rely on this type data to measure and improve the effectiveness of the materiel maintenance program in the Corps. Taken collectively, these indicators provide materiel maintenance managers the required tools to perform effective, efficient, and comprehensive life cycle materiel maintenance management activities. The goal of our efforts is to field, operate, maintain, and sustain the range and depth of equipment adequate to perform our missions at the lowest life cycle cost of ownership.



- 5-2. Equipment Usage Standards. This section explains how personal property usage standards can be used as part of an overall personal property management program. Appendix B, Table B-2, in EP 750-1-1, is the list that shows personal property requiring usage reporting in USACE and Table B-3 contains usage standards for selected categories of equipment. Equipment categories that are exempt from usage reporting in USACE, are shown in Table B-4 of the cited EP.
- a. General. Please note that objective and minimum usage standards are listed in the EP. Minimum standards were established as ones that should be attainable for general purpose assignment and normal use of equipment. When individual equipment items within a category are not attaining the minimum usage, the whole category should be reviewed by the using activity, with a view toward equalizing use through rotation, asset pooling, or other management actions. Assets and/or authorizations should be reduced when indicated by the review.
- b. Basis for Computation. Army usage standards are generally expressed in terms of hours, days, or times used. Chapter 9 of EP 750-1-1, shows how usage standards are computed.
- c. General Use Equipment. ER 700-1-1, Chapter 3, Section IV, Equipment Usage Management, provides general USACE policy that governs personal property usage management and explains why documenting historical usage data is important. EP 750-1-1, also gives details on how this data should be collected and reported.

5-3. Maintenance Costs (Parts & Labor)

a. This section explains how life cycle costing techniques can serve to indicate how effective an equipment management program is. A goal of a good program would be to provide historical

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records of maintenance costs, parts and labor, associated with personal property usage. Access to this information can help us improve future equipment acquisitions and management decisions.

- b. Life cycle costing attempts to identify projected personal property related expenditures, using the acquisition to retirement approach. Its focus considers maintenance costs from the time of initial equipment acquisition, until equipment is retired and disposed of. Command emphasis on the importance of keeping accurate cost documentation is necessary for success in using life cycle cost projections and historical cost data to efficiently manage our materiel maintenance program.
- c. All personal property reaches a time in its service life when it becomes more of a liability than an asset. When the cost to maintain personal property reaches a pre-established level or when the property has mission crippling inoperative patterns, it is probably time to replace it.
- d. USACE activities should document maintenance costs using the methods described in EP 750-1-1 for scheduled and corrective maintenance. In each case the costs for labor, parts, and those associated with maintenance contracts will be recorded.
- 5-4. <u>Equipment Operational Rates.</u> Operational rates can be a helpful indicator for maintenance management. The rates are mathematical expressions of equipment up time versus down time. Chapter 9, EP 750-1-1, lists equipment categories suggested for operational rates tracking and gives the formula for computing rates.

TABLE 5-1
EQUIPMENT REQUIRING UTILIZATION REPORTING

	Equipment Category Code	Nomenclature	Federal Supply Class
1	LE	Boat, Tow	1925
2	LE	Boat, Tug	1925
3	LG	Propelling Unit, (Outboard), 100 HP and Larger	2010
4	LH	Crane, Barge Mounted	3950
5	LH	Derrick, Crane Barge	3950
6	NB	Distributor, Water, 1000 Gal and Above, Trk Mtd, Engine Driven	3825
7	NB	Mixer, Concrete, Trailer Mounted	3895
8	NB	Mixer, Concrete, Truck Mounted	3895
9	NC	Scraper, Earthmoving, Self Propelled	3805
10	NC	Scraper, Earthmoving, self Propelled	3805
11	ND	Tractor, Full Tracked, with Backhoe/Loader	2430

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12	ND	Tractor, Full Tracked, with Bulldozer, (High Speed)	2430
13	ND	Tractor, Full Tracked, with Bulldozer, (Low Seed)	2410
14	ND	Tractor, Wheeled, Industrial, with Bulldozer	2420
15	ND	Tractor, Wheeled, Industrial, with Backhoe/Loader	2420
16	ND	Tractor, Wheeled, Industrial, with Bulldozer	2420
17	NE	Grader, Road Motorized (All)	3805
18	NF	Crane, Crawler Mtd	3810
19	NF	Crane, Truck Mtd	3810
20	NF	Crane, Wheel Mtd	3810
21	NF	Crane Shovel, Crawler Mounted	3810
22	NF	Crane Shovel, Truck Mounted	3810
23	NF	Excavator, Multi- Purpose, Crawler Mounted	3805
24	NF	Excavator, Multi- Purpose, Truck Mounted	3805

25	NG	Loader, Scoop, Engine Driven, Full Tracked	3805
26	NG	Loader, Scoop, Engine Driven, Wheel Mounted	3805
27	NH	Roller, Motorized, Engine Driven	3895
28	NH	Roller, Vibratory, Self Propelled	3895
29	NJ	Drill, Machine, Truck Mounted	3820
30	NJ	Drill, Machine Truck Mounted	3820
31	NJ	Truck, Well Drill support	3820
32	NN	Truck, Concrete Mixer, CCE	3895
33	NN	Truck, Dump, CCE, 20T	3805
34	NV	Auger, Earth, Skid Mounted, Engine Driven	3820
35	NV	Auger, Earth, Truck Mounted, Engine Driven	3820
36	NV	Compactor, Motorized (HS)	3805
37	NV	Ditching Machine, Engine Driven	3805

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38	NV	Hammer, Pile Driven Self Powered, (All)	3895
39	NV	Sweeper, Rotary, Self Propelled	3825
40	PA	Crane Truck, Warehouse, Electric	3810
41	PA	Crane Truck, Warehouse, Engine Driven	3950
42	PB	Truck, Forklift, Electric, Lbs., and Above	3930
43	PC	Truck, Forklift, Gasoline Engine Driven, 4000 Lbs., and Above	3930
44	PE	Tractor, Wheeled, Warehouse, Electric	3930
45	PE	Tractor, Wheeled, Warehouse, Engine Driven	3930
46	PG	Truck, Forklift- Rough Terrain	3930
47	PI	Truck, Forklift, Diesel Engine Driven	3930
48	QB	Generator Set, Skid Mounted, 15 kw and Above	6115
49	QB	Generator Set, Trailer Mounted, 15 kw and Above	6 115

50	QB	Generator Set, Truck Mounted, 15 kw and Above	6 115
51	QB	Generator Set, Wheel Mounted, 15 kw and Above	6115
52	QC	Compressor, Skid Mounted, 125 CFM, 100 psi and Above	4310
53	QC	Compressor, Trailer Mounted, 125 CFM, 100 psi and Above	4310
54	QC	Compressor, Truck Mounted, 125 CFM, 100 psi and Above	4310
55	QC	Compressor, Wheel Mounted, 125 CFM, 100 psi and Above	4310
56	QD	Pump, Centrifugal, Water, Engine Driven, Skid Mounted	4320
57	QD	Pump, Reciprocating, Water, Engine Driven, Skid Mounted	4320
58	QG	Welding Machine, Skid Mounted	3431
59	QG	Welding Machine, Trailer Mounted	3431

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60	QU	Truck, Fire Fighting Equipment Engine Driven (All)	4210
61	QU	Pump, Fire Fighting Equipment Trailer Mounted	4210
62	SY	Snowblower, Self Propelled	3825
63	SY	Snowblower, Truck Mounted	3825

Table 5-2 USACE Equipment Exempt From Usage Reporting

The following equipment categories are usually exempt from meeting usage tracking standards:

- a. Information Management Area Equipment. This is covered by the AR 25-series.
- b. Government furnished equipment (GFE). Contracts will include the requirement for the collection and recording of utilitization data.
- c. Defense Industrial Plant Equipment Center (DIPEC) controlled equipment. Although DIPEC controlled, equipment is exempt from usage collection and reporting, walk-through procedures will be used to evaluate the need for it.
- d. Equipment used in direct support of a research, development, test, and evaluation mission (RDTE). This equipment is exempt from usage collection and reporting. Walk-through Procedures will be used to evaluate the need for it.
- e. One of a kind equipment. The requirement for utilization data collection for one of a kind equipment is not required. "One of a kind," is defined as that "one and only specific type of equipment located at a project site. This does mean equipment that is a site specific.
- f. Common Tables of Allowance (CTA) equipment. Equipment authorized by CTA does not require collecting of utilization data. This means that low dollar valued items (e.g., typewriters, calculators, desks, fans, etc.) are exempt from collection of utilization data
- g. Installed equipment (see glossary). Usage data collection for installed equipment such as generators, and compressors, which are part of a real property facility, is not required.
- h. Emergency equipment. Equipment required to be on hand for emergencies, such as generators, compressors, wreckers, ambulances, fire trucks, etc., does not require utilization data collection. Retention for such equipment will be based on documented justification.

NOTE: ACTIVITIES ARE RESPONSIBLE FOR DOCUMENTING EQUIPMENT WHICH IS EXEMPTED FROM USAGE REPORTING. A MEMORANDUM FOR RECORD WILL BE KEPT ON FILE FOR THIS PURPOSE.