

Department of the Army
Pamphlet 700–24

Logistics

Sample Data Collection

Headquarters
Department of the Army
Washington, DC
25 April 2013

UNCLASSIFIED

SUMMARY of CHANGE

DA PAM 700-24
Sample Data Collection

This major revision, dated 25 April 2013--

- o Updates the point of contact information for inquiries concerning the Sample Data Collection Program (paras 1-1, 6-1, 7-3, and B-2).
- o Changes the types of new initiatives and includes electronic data collection (para 2-4).
- o Revises the description of the Sample Data Collection Program (para 4-1).
- o Updates the types and methods of collection (para 4-3).
- o Adds information on the types of analysis (para 4-4).
- o Adds information on Delayed Desert Damage and Degradation (para 5-11).

Logistics

Sample Data Collection

By Order of the Secretary of the Army:

RAYMOND T. ODIERNO
General, United States Army
Chief of Staff

Official:


JOYCE E. MORROW
Administrative Assistant to the
Secretary of the Army

History. This publication is a major revision.

Summary. This pamphlet provides an overview of the Sample Data Collection Program, established by DODD 4151.18 to efficiently and effectively collect data to support failure analysis, cost, reliability, availability, and maintainability studies, special requirements, and Army Staff

programs. Army Materiel Systems Analysis Activity, as the Department of the Army and/or U.S. Army Materiel Command Lead Agent for the Sample Data Collection Program has full responsibility for administering the program as prescribed in AR 750–1.

Applicability. This pamphlet applies to the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve, unless otherwise stated.

Proponent and exception authority. The proponent of this pamphlet is the Deputy Chief of Staff, G–4. The proponent has the authority to approve exceptions or waivers to this pamphlet 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, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this pamphlet by providing justification that includes a full analysis of the expected benefits and must include 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 forwarded through their higher headquarters to the policy proponent. Refer to AR 25–30 for specific guidance.

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–MNN), 500 Army Pentagon, Washington, DC 20310–0500.

Distribution. This publication is available in electronic media only and is intended for command levels C, and D for the Active Army, the Army National Guard/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*

General • 1–4, *page 1*

Chapter 2

History and Background, *page 1*

Inception • 2–1, *page 1*

Prescribing elements • 2–2, *page 1*

Expansion • 2–3, *page 1*

New initiatives • 2–4, *page 1*

Chapter 3

Scope, *page 2*

Scope • 3–1, *page 2*

*This pamphlet supersedes DA Pam 700–24, dated 30 January 2007.

Contents—Continued

Application • 3–2, *page 2*

Chapter 4

General description of Sample Data Collection Operations, *page 2*

Overview • 4–1, *page 2*

Function • 4–2, *page 3*

Types and methods of collection • 4–3, *page 3*

Types of analysis • 4–4, *page 3*

Chapter 5

Benefits and Uses of Sample Data Collection, *page 4*

Overview • 5–1, *page 4*

Recapitalization • 5–2, *page 5*

Two-level maintenance • 5–3, *page 5*

National Maintenance Program • 5–4, *page 5*

Stryker Brigade Combat Team • 5–5, *page 5*

Resetting the force • 5–6, *page 6*

Manpower requirements • 5–7, *page 6*

Authorized stockage list • 5–8, *page 6*

Condition-Based Maintenance • 5–9, *page 6*

Fleet health assessments • 5–10, *page 7*

Delayed Desert Damage and Degradation Program • 5–11, *page 7*

General • 5–12, *page 7*

Chapter 6

Requests for Data Collection, *page 7*

Requirements • 6–1, *page 7*

Funding • 6–2, *page 7*

Existing data requests • 6–3, *page 7*

Chapter 7

Conclusion and Summary, *page 7*

Provisions • 7–1, *page 7*

Coverage • 7–2, *page 8*

Additional information • 7–3, *page 8*

Appendixes

A. References, *page 9*

B. Unit Procedures Guide, Sample Data Collection Program, *page 10*

Table List

Table 5–1: Usage and parts, *page 4*

Table 5–2: Data collected over 18-month period, *page 4*

Table 5–3: Division data, *page 4*

Table 5–4: Example of top 10 parts sorted by quantity replaced (notional data), *page 5*

Figure List

Figure 5–1: Recapitalization, *page 5*

Figure 5–2: Stryker Brigade Combat Teams, *page 6*

Glossary

Chapter 1 Introduction

1–1. Purpose

This Department of the Army (DA) Pamphlet serves primarily as a reference for the field units but also provides all personnel, offices, and activities associated with equipment readiness an understanding of the Army's Sample Data Collection (SDC) and Analysis Program. It has been written to provide basic or general information about the SDC Program. Detailed information concerning the SDC Program may be obtained from the Army Materiel Systems Analysis Activity (AMSAA). The AMSAA is the DA lead agent for the SDC Program. Any requests for specific data collection, data collected, queries, or analysis should be directed to the U.S. Army Materiel Systems Analysis Activity (AMXAA-LR), 392 Hopkins Road, Aberdeen Proving Ground, MD 21005-5071.

1–2. References

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

1–3. Explanation of abbreviations and terms

Abbreviations and terms used in this pamphlet are explained in the glossary.

1–4. General

Analysis of SDC information provides an assessment of equipment supportability and performance to support initiatives relating to manpower and personnel integration, safety, design improvements, production processes, modification work orders, supply, maintenance, Manpower Requirements Criteria (MARC), engineering evaluation, and operating cost reduction. The SDC Program establishes an audit trail to conduct quality assurance per AR 70-1.

Chapter 2 History and Background

2–1. Inception

The DA authorized the SDC Program in the early 1970s to preclude the cumbersome requirement to report all maintenance data to the national maintenance point. The statisticians realized that a small number of units could be selected to provide data that would represent the total fleet with a high degree of confidence. The sampled data could be stored, managed, and analyzed with great accuracy and at a lower cost than collecting on 100 percent of the maintenance actions. The data were initially used to support studies such as weapon systems performance, logistics supportability, reliability, availability, maintainability, degradation due to aging, cost, and training. The analysis has expanded to support many Army staff requirements and initiatives.

2–2. Prescribing elements

The SDC Program is established by DODD 4151.18 and identified in AR 750-1 to—

- a.* Improve weapons systems performance.
- b.* Improve logistics supportability.
- c.* Improve maintainability.
- d.* Support Army staff programs.

2–3. Expansion

The program was expanded in 1982 to incorporate data collection during field exercises to capture data on all major items during high usage. The Field Exercise Data Collection (FEDC) Program was managed by AMSAA, where much of the data analysis was performed. In 1995, AMSAA was designated as the DA lead agent for the SDC and/or FEDC Programs. In 1998, AMSAA added collection efforts on high-priority weapons systems, such as, selected Army aircraft, and started to collect data to support contingency operations in 2000. In 2001 data collection was reestablished in U.S. Army Europe. The data collection has since been broadened to cover wartime operations and new initiatives.

2–4. New initiatives

Many initiatives are being supported by the current collection efforts. The Army recapitalization, MARC studies, other contingency operations, maintenance concept changes, resetting the force (RESET), system health monitoring and/or condition based maintenance, interior crew compartment temperatures, vehicle weights, and total cost of ownership are

programs being supported by the SDC Program. Automatic Information Technology (AIT) and electronic data collection devices have been incorporated into the program to enhance the accuracy and timeliness of the data collection efforts.

Chapter 3 Scope

3-1. Scope

The SDC Program is worldwide. The collection of data will be from selected continental United States (CONUS) and outside continental United States (OCONUS) units during normal operations, contingencies, or exercises.

3-2. Application

The SDC Program applies to all Army commands (ACOMs) and subordinate units, to include Army service component commands (ASCCs), direct reporting units, and special repair facilities. The Army National Guard and U.S. Army Reserve units may request data or request analysis based on need as applicable to their equipment. Data are not routinely collected within Army National Guard or U.S. Army Reserve units during normal operations.

Chapter 4 General description of Sample Data Collection Operations

4-1. Overview

a. Structure. The SDC Program covers many Army systems at various locations throughout the CONUS and outside continental United States. The AMSAA manages the program through an established contract that is awarded to collect and store logistics data then houses the data and allows broad access throughout the Army. The AMSAA analysts also provide information and analysis for the major decision makers within the Army staff. Unit feedback reports and special studies are provided to the participating and like units. The Army SDC Program consists of two major collection efforts and a field studies analysis capability:

(1) *Sample data collection.* Selected units, through the cluster sampling technique, participate in the SDC Program. When a particular system is nominated and approved for data collection, units that possess and operate the system are then selected to participate. Data collectors then collect and review maintenance information and enter the required data into the central database at AMSAA.

(2) *Field exercise data collection.* When units go through a field exercise, a data collector is assigned at the exercise location to collect data during that period. This program collects data on major end items in the unit before, during, and after the exercise. The pre-collection period serves to establish the baseline, determine the equipment to be monitored, and determine the preexisting condition of the equipment to be monitored. During the exercise, data are collected to determine maintenance requirements during high Operational Tempo (OPTEMPO), parts and labor requirements, and costs. The post collection period is conducted to capture any deferred maintenance actions and follow-up on the ending status of the equipment.

(3) *Field studies analysis.* Field studies analysis provides enhanced materiel and maintenance analysis capability to the SDC Program in addition to providing rapid and responsive investigation of problems that are systemic in nature, have potential for improvement, are of command interest, or that could lead to a deeper understanding of related problem areas. Field studies analysis is initiated through unit request, direct observation, data analyses, or through user feedback. Approved studies are conducted by analysts using pertinent tools and methodology that consist of user interviews, collecting photo exhibits, logistics and system data collection, root cause analysis, and the completion of detailed written reports. Reports are then provided to the appropriate organization for processing and consideration

b. Intent. The vision for the SDC Program is to maximize the value added in support of Army programs and studies. Future SDC efforts should tailor programs to—

- (1) Avoid duplication of data that may be available from another source.
- (2) Use AIT to enhance or improve the collection of data.
- (3) Support other initiatives and programs to the maximum extent possible.
- (4) Provide unique data to support unique analysis needed.
- (5) Provide quality control to data collection in the field.

c. Collector expectations. Collection efforts are conducted by contracted data collectors with noninterference to the unit to the maximum extent possible. A unit procedures guide is located in appendix B of this document to outline the data collection methodology and responsibilities the unit may expect. The collectors conduct data quality reviews and the program has built in edits for quality assurance. Data accuracy and completeness are essential in order to determine requirements, support studies, and provide information to Army staff for high level decisionmaking.

d. Origin. All data originate from the equipment operators and/or maintainers through the current Logistics Information System. SDC efforts, however, can provide optional elements, personal readings, reports on unique equipment, tailored reports, and quality edit checks. The intent is to capture data that are not available through current Logistics Information System. In addition, special data collection initiatives can be tailored to address specific needs of program managers, field units, DA, and U.S. Army Materiel Command.

4-2. Function

The Deputy Chief of Staff, G-4 provides guidance and direction to AMSAA for the SDC program, and ensures that all Army elements are aware of data availability. The ACOMs review the proposals for SDC and provide approval for unit participation. The AMSAA has been designated as the lead agent for overall SDC program management and conducts SDC and/or FEDC in an ACOM subordinate unit in accordance with terms prescribed in a memorandum of understanding signed by both organizations.

4-3. Types and methods of collection

The three types of SDC are used—

a. Conventional sample data collection. This encompasses specific equipment end items and comprises mandatory and discretionary projects. Mandatory SDC projects are directed and funded by the Deputy Chief of Staff, G-4. The equipment proponent selects discretionary projects. When properly justified, any activity requiring data may request that the SDC proponent establish a discretionary SDC project. Discretionary projects are normally funded by the activity identifying the need for information. Conventional projects normally have an indefinite duration, unless terminated by the requesting activity owning unit, and support personnel should allow SDC agency representatives to review and/or copy standard DA Forms and reports listed in appendix A. The SDC representatives should collect additional data elements, orally and through direct observation of owning and support units. The SDC representatives should collect standard DA Forms and reports listed in appendix A, perform quality checks, transcribe data as required, reduce data if required, and forward forms and/or reduced data to a designated site. No additional reporting burden should be placed on participating field units.

b. Field exercise data collection. The FEDC encompasses collection of maintenance and operational data on mission-essential end items (normally equipment readiness code P and A, as defined in AR 220-1) during selected major field training exercises and during other contingency operations, military operations other than war, stabilizing operations, and peacekeeping operations. Contingency operation FEDC programs can occur with approval of the contingency operation task commander. Owning unit and support personnel should allow SDC agency representatives to review and/or copy standard DA Forms and reports listed in appendix A. The SDC proponent representatives should collect additional data elements orally and through direct observation of owning and support units. The SDC representatives should collect standard DA Forms and reports listed in appendix A, perform quality checks, transcribe data as required, reduce data if required, and forward forms and/or reduced data to a designated site. No additional reporting burden should be placed on participating field units. The standard DA Forms and reports related to this publication are listed below:

- (1) DA Form 2404 (Equipment Inspection and Maintenance Worksheet).
- (2) DA Form 2407 (Maintenance Request).
- (3) DA Form 2407-1 (Maintenance Request Continuation Sheet).
- (4) DA Form 2408-12 (Army Aviator's Flight Record).
- (5) DA Form 2408-13 (Aircraft Status Information Record).
- (6) DA Form 2408-13-1 (Aircraft Inspection and Maintenance Record).
- (7) DA Form 2408-13-2 (Related Maintenance Actions Record).
- (8) DA Form 2408-13-3 (Aircraft Technical Inspection Worksheet).
- (9) DA Form 5988-E (Equipment Inspection Maintenance Worksheet).

c. Special field information tasks. These are generally short term and are designed to support program executive officer, program manager, and ASCC requirements that do not dictate a full-scale SDC project. The special field information tasks (SFIT) also may be used to augment selected Army staff objectives but cannot duplicate other ongoing efforts. An activity having a need for materiel system field performance data may request an SFIT through the SDC Program. The SFITs are normally funded by the requesting activity (program manager or equipment proponent). This data collection method is highly detailed and is associated with data collection during intensive usage scenarios in which SDC representatives should collect highly complex reliability, availability, and maintainability data, including data reported through various standard Army systems. The SFITs may be accomplished during either of the two major collection efforts or as an independent data collection.

4-4. Types of analysis

Three types of field studies are used—

a. Sustained usage damage and degradation analysis. This analysis is a study of materiel-related issues and

environmental effects. Environmental factors such as heat, cold, humidity, sand, terrain, elevation, and their corresponding effects on system reliability, performance, and durability are investigated to assist engineering, maintenance, and materiel managers in developing solutions or mitigating courses of actions.

b. Special studies. Special studies are normally conducted at the request of a using unit or upon request from an Army organization with an analysis requirement. Special studies typically involve the full spectrum of AMSAA analytic capability such as physics of failure (modeling and simulation) and root cause analysis of known or perceived problems and result in recommended corrective courses of action.

c. Investigative studies. Investigative studies are conducted upon the discovery of potential problems and may include a variety of topics such as materiel reliability and performance, maintenance practices and policy, tactics, techniques, and procedures, or Soldier and training related issues. Investigative studies lead to a deeper understanding of potential problem areas and may not always result in actionable recommendations for improvement; however, these studies may reveal additional areas for further studies or may support other related studies and cause and effect analyses. Investigative studies are also used for deductive and exclusionary research.

Chapter 5 Benefits and Uses of Sample Data Collection

5-1. Overview

Some of the current projects being supported include recapitalization, two-level maintenance, National Maintenance Program, Stryker Brigade Combat Team sustainability, war reserves and/or contingency planning, manpower requirements methodology development, and Authorized Stockage List (ASL) determinations. Reshaping of SDC includes incorporation of AIT devices to enhance the collection efforts to improve data accuracy and decrease costs. Top component failures can be identified by cost, man-hours expended to replace, or frequency of occurrence as shown in tables 5-1, 5-2, 5-3, and 5-4.

Table 5-1
Usage and parts

M1114 Usage and parts consumption in a specified location (source: SDC)

Table 5-2
Data collected over 18-month period

476 M1114s
Over 4 million miles total
Average OPTEMPO of 186. miles per day

Table 5-3
Division data

Average TEMPO
Top 50 most frequently replaced parts
Top 50 most costly parts replaced
Top 50 parts requiring the most MMH to replace

Table 5-4
Example of top 10 parts sorted by quantity replaced (notional data)

| Part national stock number | Noun nomenclature | Cost of part (\$) | Quantity |
|----------------------------|--------------------|-------------------|----------|
| 2540-01-123-4567 | Seat, vehicular | 231.00 | 131 |
| 2920-01-234-5678 | Glow plug | 5.36 | 128 |
| 2610-00-345-6789 | Tire, pneumatic | 267.00 | 122 |
| 5820-00-456-7890 | Spring assembly | 61.70 | 116 |
| 1560-00-567-8901 | Bracket | 144.00 | 111 |
| 6140-00-678-9012 | Battery, storage | 80.45 | 97 |
| 2910-01-789-0123 | Nozzle, windshield | 1.68 | 92 |
| 2540-01-890-1234 | Seat, vehicular | 2.00 | 83 |
| 2540-01-901-2345 | Diffuser, air | 4.31 | 82 |
| 6240-01-012-3456 | Lamp, incandescent | 1.35 | 81 |

5-2. Recapitalization

Historical data provide the baseline for recapitalization studies. Contact memory buttons are placed in easily readable locations with birthing data. This allows the data collector to download accurate data and reduce the time required to manually enter these data. The equipment with the contact memory button installed will then be fielded to a unit participating in SDC. The data analysis can then show the performance comparisons with the baseline, system reliability and/or maintainability, and other characteristics as shown in figure 5-1.

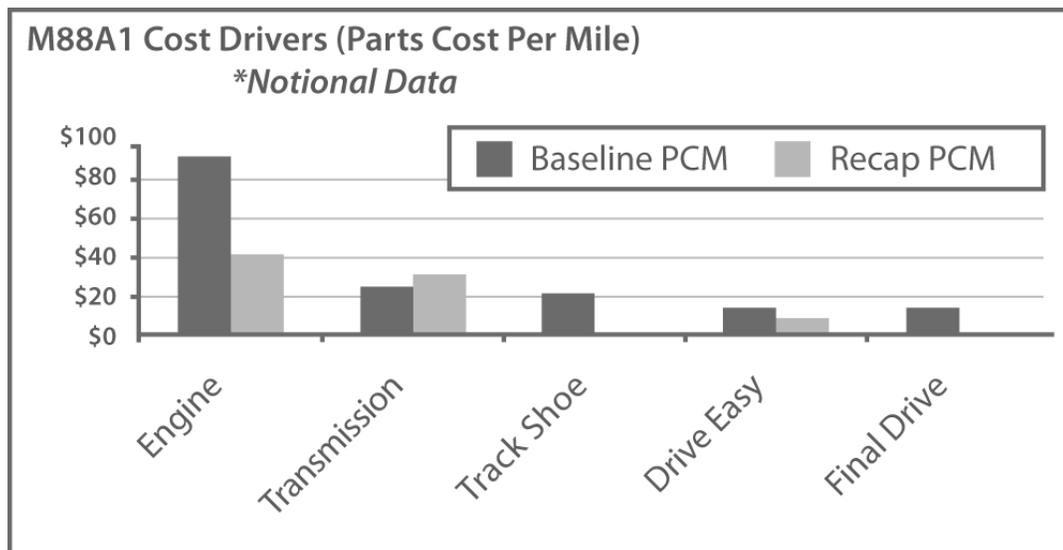


Figure 5-1. Recapitalization

5-3. Two-level maintenance

The SDC Program may also be used to assist and evaluate the transition to two-level maintenance. This program can be used to conduct scenarios that evaluate business rules, developing demand adjustment factors for cost computations and presenting criteria to select cost-effective procurements.

5-4. National Maintenance Program

The AMSAA supports the National Maintenance Program by development of a simulation tool for evaluating business rules. Also, budget cost factors can be adjusted as needed from demand predictions.

5-5. Stryker Brigade Combat Team

The team can also be supported by the expanded SDC Program efforts. The AMSAA should collect usage data and a support contractor will provide parts consumption data. The AMSAA should also conduct standard SDC on legacy systems as illustrated in figure 5-2.

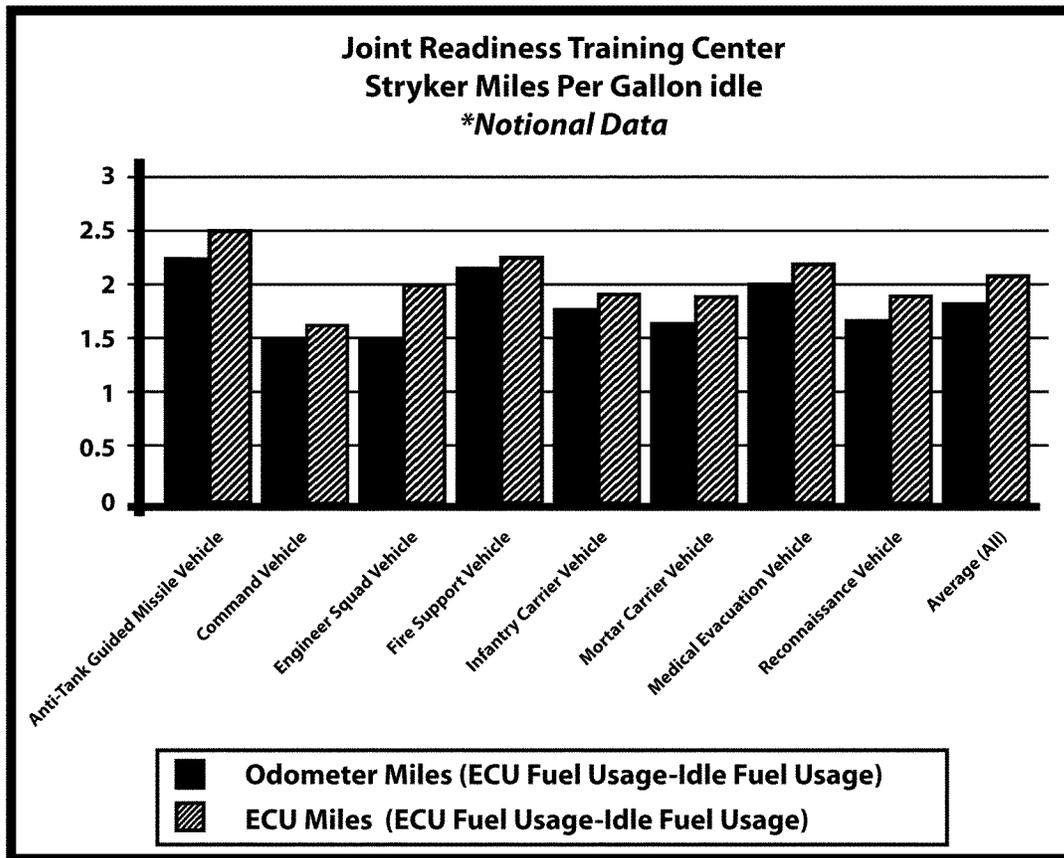


Figure 5-2. Stryker Brigade Combat Teams

5-6. Resetting the force

Data may also be used to support Army restockage and restoration programs such as, RESET. The data repository houses data by weapon systems, such as, parts required and man-hours expended. The collection effort may take place at the theater of operations or at the depot and/or repair facility. These data may be used to support war reserve requirements determinations.

5-7. Manpower requirements

The Army Audit Agency identified a deficiency concerning the lack of a standard procedure in determining wartime manpower requirements for combat support and combat service support functions in tables of organization and equipment. As a result, AMSAA developed a standard MARC methodology which incorporates the use of field data to determine and update direct productive annual maintenance man-hours. This standard MARC methodology has been accepted and approved by the Army community for implementation across its various weapon systems. Utilizing the standard MARC methodology, system level usage, coupled with military occupational specialty (MOS) task level maintenance man-hours, can be combined to derive direct productive annual maintenance man-hours, which are used to develop wartime manpower requirements. The SDC is crucial in capturing accurate unit-level maintenance man-hours along with the associated operational tempo for standard MARC methodology.

5-8. Authorized stockage list

Many units are benefiting from the improved ASL. Improved readiness through engineering redesign and product modifications are realized as well. Models are developed to use the data to determine optimum stockage and locations of repairs and consumables. Analysis produces such factors as mean miles to replace, mean time to repair, consumption data and costs, downtimes, and man-hours used per unit (flight hour, mile, operating hour, or kilometer).

5-9. Condition-Based Maintenance

Program managers are required to optimize operational readiness through affordable, integrated, embedded diagnostics

and prognostics, AIT, and iterative technology refreshment. CBM is a set of maintenance processes and capabilities that improve operational availability and reduce the maintenance burden by enhancing diagnostics ultimately evolving to predicting remaining component life. The goal of CBM is to perform maintenance only upon evidence of need rather than hours or days, providing commanders the ability to meet mission requirements with proactively driven maintenance. CBM processes can increase operational availability and readiness at a reduced cost throughout the weapon system life cycle. By using vehicle instrumentation and automated data collection, AMSAA can compile and report usage data to fleet managers, engineers (product improvement), and logistics managers. When embedded diagnostic technologies are not available data compiled from current preventive maintenance programs, such as oil analysis, may be used. Additionally, by developing and feeding data to prognostic tools and/or algorithms, impending failure and unsafe or damaging usage information can be provided to vehicle operators, maintainers, commanders, and Life Cycle Management Commands.

5–10. Fleet health assessments

Data may be used to define equipment health, prioritize maintenance options, forecast future operating costs, and optimize equipment utilization.

5–11. Delayed Desert Damage and Degradation Program

The TACOM Life Cycle Management Command Delayed Desert Damage and Degradation Program is supported by both SDC data and field studies analysis capabilities. The AMSAA provides this program with requested SDC data to identify candidates for potential CBM instrumentation and inclusion in the CBM Program. In addition, to complete required failure mode and effect analyses, the AMSAA field studies analysis team supports the Delayed Desert Damage and Degradation Program by gathering additional information and data from the field or onsite.

5–12. General

Data are being provided to users and Army staff questions are being answered from data query. Data analysis is also being used to support special studies and programs. These data are also being used to identify problems in fielding and operations in a field type environment that cannot be found during prefielded testing.

Chapter 6 Requests for Data Collection

6–1. Requirements

Project managers, ACOMs, ASCCs, direct reporting units, field units, Life Cycle Management Commands, special repair activities, or any data user may request data collection efforts on any system or systems. The request should be sent to AMSAA, Logistics Analysis Division (AMXAA–LR), for consideration. Each request should be accompanied with appropriate and adequate justification for requirement of the data and AMSAA, with support from AMC should prioritize each request based on justification and need pending funding and resource availability. The AMSAA should coordinate the memorandum of understanding with the affected ACOM and units.

6–2. Funding

The AMSAA may support a portion of the data collection effort requested. If the requestor has additional or unique requirements, they may provide additional funding to support these efforts or contract separately for these data collections. All requests should be directed to AMSAA to include those additional or separately funded tasks.

6–3. Existing data requests

Requests for data or analysis from data that already exist should also be directed to AMSAA.

Chapter 7 Conclusion and Summary

7–1. Provisions

The Army SDC Program is active throughout CONUS and outside continental United States sites on many systems and in many operational environments. It provides centralized project support to critical requirements determinations for high priority weapon systems. It provides reliable data to support analysis for operation and support cost computations, readiness, reliability, maintainability, logistics support, Class IX sustainment, and Class VII deployability. It also provides an analytical basis for establishing Class IX war reserve requirements.

7-2. Coverage

The FEDC Program covers the major end items in a battalion size unit during an exercise to observe wartime OPTEMPO. The SDC collects continuous data for a particular type vehicle or system for a select period of time. It also collects all scheduled and unscheduled maintenance events during a peacetime environment.

7-3. Additional information

Because the data elements collected, systems involved, and participating unit locations vary and change frequently, this information has been intentionally omitted from this document. This information can be obtained from AMSAA, Logistics Analysis Division (AMXAA-LR), Aberdeen Proving Ground, MD 21005-5071.

Appendix A References

Section I Required Publications

AR 70-1

Army Acquisition Policy (Cited in para 1-4.)

AR 220-1

Unit Status Reporting (Cited in para 4-3*b*.)

AR 750-1

Army Materiel Maintenance Policy (Cited in the title page and 2-2.)

DODD 4151.18

Maintenance of Military Materiel (Cited in para 2-2.) (Available at <http://www.dtic.mil/whs/directives/>.)

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.

AR 25-30

The Army Publishing Program

DA Pam 738-751

Functional Users Manual For The Army Maintenance Management System Aviation (TAMMS-A)

DA Pam 750-8

The Army Maintenance Management System (TAMMS) Users Manual

DODI 4000.19

Interservice and Intragovernmental Support (Available at <http://www.dtic.mil/whs/directives/>.)

Section III Prescribed Forms

This section contains no entries

Section IV Referenced Forms

Unless otherwise stated, DA Forms are available on the APD Web site (<http://www.apd.army.mil>).

DA Form 2028

Recommended Changes to Publications and Blank Forms

DA Form 2404

Equipment Inspection and Maintenance Worksheet

DA Form 2407

Maintenance Request (Available through normal forms supply channels.)

DA Form 2407-1

Maintenance Request Continuation Sheet (Available through normal forms supply channels.)

DA Form 2408-12

Army Aviator's Flight Record

DA Form 2408-13

Aircraft Status Information Record

DA Form 2408-13-1

Aircraft Inspection and Maintenance Record

DA Form 2408-13-2

Related Maintenance Actions Record

DA Form 2408-13-3

Aircraft Technical Inspection Worksheet

DA Form 5988-E

Equipment Inspection Maintenance Worksheet (This form is generated electronically in SAMS-I/IE.)

DA Form 5990-E

Maintenance Request (This form is generated electronically in SAMS-I/IE.)

Appendix B**Unit Procedures Guide, Sample Data Collection Program****B-1. Introduction**

Your unit has been selected to participate in a data collection program. The program has been developed to record OPTEMPO, the parts replaced and the maintenance man-hours expended during contingency operations, field training exercises and/or garrison operations. Contractor personnel have been hired to complete most of the paperwork. Some additional information should be requested, but interference to your unit operations should be kept to a minimum. All government and contractor data collection personnel possess appropriate security clearances necessary for them to gain access to areas, such as, motor pools and maintenance areas. The government representatives and contractors on the data collection team are not inspectors. They are not looking for or reporting on unit problems. The only report generated from the data collection that specifically identifies your unit is sent solely to the unit commander. It simply compares how the unit equipment performs against the database averages for similar equipment. For other analyses, data from your unit is appended to a database with data on all other units so that Armywide statuses can be determined. The data collection team members are gathering only the required data. The cooperation of all unit personnel should assure the success of many important programs. The collected data will be used in critical studies to facilitate proper support of your unit during wartime, such as—

- a. *Combat sustainment packages.* To determine your unit's parts stockage.
- b. *Manpower studies.* To determine the quantity and MOS of the mechanics authorized for your unit.
- c. *Readiness studies.* To determine stockage requirements for contingency operations.
- d. *Vehicle life studies.* To determine when your ground or aviation equipment should be replaced.

B-2. Unit and contractor personnel functions*a. Your unit should—*

(1) Provide the contractor access to the unit's supply and maintenance records to include Unit Level Logistics System-Air (ULLS-A) Enhanced and Standard Army Maintenance System-Enhanced (SAMS-IE) reports when available.

(2) Allow the contractor access to your equipment and records to obtain age, miles, hours, rounds, petroleum, and oil and lubricants consumption.

(3) Complete standard Army forms in appendix A, for supply and maintenance in accordance with DA Pam 750-8, and DA Pam 738-751, with some additional information requirements explained in this guide.

(4) Provide completed maintenance forms in appendix A (ground and/or aviation) to the contractor.

(5) Provide copies of equipment data files and shop stock listings.

(6) Contact the government's contracting officer's representative to resolve conflicts with any contractor personnel. The contracting officer's representative contact information is available from U.S. Army Materiel Systems Analysis Activity, 392 Hopkins Road (AMXAA-LR), Aberdeen Proving Ground, MD 21005-5071.

b. Contractor personnel should—

(1) Collect required data with minimal interference to supply and maintenance personnel.

(2) Collect required data with no interference to maneuver elements.

(3) Conduct initial and final inventories of unit's equipment.

(4) Assist unit personnel with data collection procedures.

(5) Interview crews only as necessary to gather additional required information.

(6) Be identified by unique headgear and identifier tags.

(7) Update AIT devices, as required.

c. Government contracting officer representative—

(1) Assures that the contractor, in cooperation with unit personnel, collects the required data.

(2) Answers questions regarding data collection.

(3) Resolves any problems between unit personnel and contractor(s).

B-3. Definitions

a. Reportable actions. Information should be reported on—

(1) All operator or crew actions requiring a replacement part on any reportable item included in the data collection program in your unit.

(2) All maintenance actions accomplished on any reportable item included in the data collection program in your unit.

(3) All support maintenance actions on reportable items included in the data collection program in your unit.

b. Reportable maintenance man-hours. This includes all direct productive man-hours spent performing a maintenance action.

(1) Getting to a job in the immediate area (no transportation required).

(2) Consulting reference books (log books and technical manuals).

(3) Preparing the item for maintenance.

(4) Diagnosing the problem (obtaining, connecting, and using diagnostic equipment in the immediate area).

(5) Documenting (prepare standard forms listed in app A as in log books).

(6) Nonreportable man-hours (maintenance man-hours not directly related to a specific action).

(7) Contact team travel outside the immediate area.

(8) Any delays during which the mechanic is available to perform maintenance, such as waiting for a part.

(9) Maintenance administration, training, or meetings.

c. Part source. When a part is used to repair an item, the data collectors want to know where the part was actually obtained, but are not attempting to validate unit supply sources. Possible sources include—

(1) Shop stock.

(2) Self-service supply center.

(3) The ASL.

(4) Repairable exchange.

(5) Cannibalization point.

(6) Unit controlled substitution.

(7) Other.

d. Reportable Items Mission essential end items in your unit will be included in this data collection. For this data collection, mission essential end items have been divided into two categories; bulk and individual.

(1) *Individual reportable items* Those which have usage meters—

(a) Combat vehicles.

(b) Tactical vehicles.

(c) Generators - over 3 kilowatts.

(d) Aircraft.

(2) *Bulk reportable items.* Those which do not have usage meters—

(a) Communications gear (radios and telephone typewriters).

(b) Weapons (small arms and crew served weapons).

(c) Chemical, biological, radiological, nuclear items.

(d) Generators (3 kilowatts and under).

(3) *Items which are not included in Class VII and Class IX will not have data collected unless a special short term effort has been requested.* These items include the following:

(a) Field mess items.

(b) Test, measurement, and diagnostic equipment.

(c) Personal use items (binoculars and compasses).

B-4. Data collection procedures

a. The contractor collects initial inventory data at your unit's home location. The contractor should be located in the approximate vicinity of your maintenance shops. Your unit provides access to supply and maintenance records, and individual end items.

b. During daily operations, or field training exercises, your unit completes the standard maintenance and supply forms in appendix A. The contractor collects and makes copies of those maintenance forms and checks other available

data sources. The contractor may follow-up and interview selected maintenance personnel to insure completeness of the data.

c. After field training exercises when the unit returns to its home station, the contractor collects the final inventory data. The final inventory will not be accomplished until completion of the program on that specific end item. The contractor will follow-up with any maintenance that was deferred during the exercise until the unit has returned to its home station.

B-5. Ground data collection reports and forms

a. Organization and direct support (field-level maintenance) forms.

- (1) DA Form 2404.
- (2) DA Form 5988-E (Equipment Inspection Maintenance Worksheet) (SAMS-1E generated).
- (3) DA Form 2407.
- (4) DA Form 2407-1.
- (5) DA Form 5990-E (Maintenance Request) (SAMS-1E generated).
- (6) DA Form 2404/DA Form 5988-E.

b. Organization and direct support (Field Level Maintenance) STAMIS reports.

- (1) AWCMF-436 Parts received not installed (SAMS-1E report).
- (2) AWCMF-458 Nonmission capable report (SAMS-1E report).
- (3) AWCSF-253 Inactive document control register (SAMS-1E report).
- (4) AWCSF-255 Open/closed document control register (SAMS-1E report).
- (5) AHN-004 Customer work order reconciliation (SAMS-1E report).
- (6) ANH-006 Shop summary (direct support unit) (SAMS-1E report).
- (7) AHN-008 Document control register (SAMS-1E report).
- (8) AHN-018 Workorder detail report (SAMS-1E report).
- (9) AHO-026 Equipment deadline over xxx days by battalion (SAMS-2E report).
- (10) Army Materiel System Status roll-up by system and/or subsystem admin number.

B-6. Preparation of DA Form 2404/DA Form 5988-E

DA Form 2404/DA Form 5988-E should be completed in accordance with DA Pam 750-8. A separate DA Form 2404/DA Form 5988-E should be completed for each repair of an individual reportable mission essential end item. The following information should also be recorded on the form.

a. MOS and skill level (for each corrected fault, the MOS and skill level of each person who worked on the item should be entered in column d).

b. Total man-hours that each person expended on the action should be listed after the MOS and skill level.

c. All parts replaced during each action should be reported with national stock number and/or part number, quantity and source. Part source is used to verify PLL and/or ASL adequacy, not to check on unit activity.

d. The date and time the item entered maintenance and the date and time it was returned to service.

B-7. Preparation of DA Form 2407

DA Form 2407 should be completed in accordance with DA Pam 750-8 and DA Pam 738-751. The following information should also be recorded on the form.

a. *Tail and/or bumper number.* The unit equipment number should be entered in block number 20.

b. *Military occupational specialty and skill level.* For each corrected fault, the MOS and skill level of each person who worked on the item should be entered. Actual MOS and skill level are required.

c. *Man-hours.* The number of man-hours that each person expended on the action should be listed after the MOS and skill level.

d. *Parts replaced.* For each action, the national stock number or part number, quantity, and source should be reported.

B-8. Aviation data collection forms

Aviation forms (see app A, referenced forms) and nay phased maintenance inspection checklists should be completed in accordance with DA Pam 738-751. No additional information is required. If there are any questions on data reporting, contact the government representative.

Glossary

Section I Abbreviations

ACOM

Army command

AIT

Automatic Information Technology

AMSAA

Army Materiel Systems Analysis Activity

ASCC

Army service component command

ASL

Authorized Stockage List

CBM

condition-based maintenance

CONUS

continental United States

DA

Department of the Army

FEDC

Field Exercise Data Collection

MARC

Manpower Requirements Criteria

MOS

military occupational specialty

OPTEMPO

Operational Tempo

RESET

resetting the force

SAMS-E

Standard Army Maintenance System-Enhanced

SDC

Sample Data Collection

SFIT

special field information tasks

Section II

Terms

Baseline

Initial or historical data usually used to compare and/or contrast performance after application of modification, restoration, or new like system.

Class VII

The class of supply pertaining to major end items or systems.

Class IX

The class of supply pertaining to repair parts.

Contingency

Alternate military operations requiring a high level of effort.

OPTEMPO

Operational intensity of or pertaining to intensity of use.

Proponent

Activity or agent responsible for oversight of a project, mission, or system.

Queries

Tailored questions asked of systems that require a response in a desired format.

RESET

A term that represents a series of actions taken to restore units to a desired level of combat capability commensurate with mission requirements and available resources.

Stryker

Wheeled vehicle fighting system armored wheeled fighting vehicle.

Two level maintenance

Concept of repair that essentially combines the unit and DS levels of maintenance (and is called "field maintenance") and combines the GS and depot levels (and is called "sustainment maintenance"). Field maintenance is characterized by "on-system maintenance," and sustainment maintenance is "off-system maintenance." Field maintenance is repair and return to user; sustainment maintenance is repair and return to supply.

Section III**Special Abbreviations and Terms**

This section contains no entries.

UNCLASSIFIED

PIN 053740-000