



Defense Health Agency

TECHNICAL MANUAL

NUMBER 4165.01, Volume 6
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Director J-8

SUBJECT: Defense Medical Logistics Standard Support-Facilities Management: Volume 6:
Preventive Maintenance Schedule Module

References: See Enclosure 1.

1. PURPOSE. This Defense Health Agency-Technical Manual (DHA-TM), based on authority of References (a) and (b), and in accordance with guidance of References (c) through (l), establishes DHA procedures for managing data in the Military Health System's (MHS) Computer Aided Facility Management/Computerized Maintenance Management System (CAFM/CMMS) of record, Defense Medical Logistics Standard Support-Facilities Management (DMLSS-FM).

2. APPLICABILITY. This DHA-TM applies to the DHA, DHA Components (activities under the authority, direction, and control of DHA), and all personnel to include: assigned or attached active duty and reserve members, federal civilians, members of the Commissioned Corps of the Public Health Service, contractors (when required by the terms of the applicable contract), and other personnel assigned temporary or permanent duties at DHA.

3. POLICY IMPLEMENTATION. It is DHA's instruction pursuant to References (b) and (d) to:

a. Implement policy, administer Defense Health Program (DHP) Facilities Operations and Maintenance (O&M) budgets, and perform financial oversight at an enterprise level in order to ensure consistency, optimize performance, and meet strategic priorities across the MHS facility portfolio consistent with guidance from the Assistant Secretary of Defense for Health Affairs (ASD(HA)).

b. Develop consistent standards for medical facility management necessary for programmatic oversight of the DHP.

c. Establish DMLSS-FM as the database of record for all MHS facility inventory, maintenance, requirements, and project data including related financial data.

4. RESPONSIBILITIES. See Enclosure 2.

5. PROCEDURES. See Enclosure 3.

6. PROPONENT AND WAIVERS. The proponent of this publication is the Director, J-8. When Activities are unable to comply with this publication the activity may request a waiver that must include a justification, to include an analysis of the risk associated with not granting the waiver. The activity director or senior leader will submit the waiver request through their supervisory chain to the Director, J-8 to determine if the waiver may be granted by the Director, DHA or their designee.

7. RELEASABILITY. **Cleared for public release**. This DHA-TM is available on the Internet from the Health.mil site at: <https://health.mil/Reference-Center/Policies> and is also available to authorized users from the DHA SharePoint site at: <https://info.health.mil/cos/admin/pubs/SitePages/Home.aspx>.

8. EFFECTIVE DATE. This DHA-TM:

a. Is effective upon signature.

b. Will expire 10 years from the date of signature if it has not been reissued or cancelled before this date in accordance with Reference (c).

/S/
RONALD J. PLACE
LTG, MC, USA
Director

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ENCLOSURE 1

REFERENCES

- (a) DoD Directive 5136.01, “Assistant Secretary of Defense for Health Affairs (ASD(HA)),” September 30, 2013, as amended
- (b) DoD Directive 5136.13, “Defense Health Agency (DHA),” September 30, 2013, as amended
- (c) DHA-Procedural Instruction 5025.01, “Publication System,” April 1, 2022
- (d) DHA “Plan 3: Implementation Plan for the Complete Transition of Military Medical Treatment Facilities to the Defense Health Agency,” Version 6, August 12, 2019¹
- (e) DoD Directive 7045.14, “The Planning, Programming, Budgeting, and Execution (PPB&E) Process”, January 25, 2013, as amended
- (f) DoD Instruction 6015.17, “Military Health System (MHS) Portfolio Management,” January 13, 2012, as amended
- (g) DHA-Procedural Instruction 4165.01, “Real Property Asset (RPA) Management,” June 22, 2017, as amended
- (h) Military Health System Real Property Systems Standards (RPSS)²
- (i) DHA SOP, “Development, Implementation, and Sustainment of Reliability Centered Maintenance (RCM) and Condition Based Monitoring (CBM) V1,” August 21, 2020³
- (j) DoDI 4165.14, "Real Property Inventory (RPI) and Forecasting," January 17, 2014, as amended
- (k) DoD Directive 4165.06, “Real Property,” August 31, 2018, as amended
- (l) DoD Instruction 4165.70, “Real Property Management,” August 31, 2018, as amended

¹ This reference is located at: <http://facilities.health.mil/Repository/GetFile/56684> and can only be accessed with an approved Max.gov account.

² This reference is located at www.rpss.facilities.health.mil and can only be accessed with an approved Max.gov account.

³ This reference is located at https://community.max.gov/download/attachments/2170859655/SOP_Reliability%20Centered%20Maintenance%20and%20Condition%20Based%20Monitoring_V1_20200821.pdf?api=v2 and can only be accessed with an approved Max.gov account.

ENCLOSURE 2

RESPONSIBILITIES

1. DIRECTOR, DHA. The Director, DHA will implement policy, guidance, and instructions consistent with References (b) and (d).

2. DIRECTOR-J8, DHA. The Director, J8, will:
 - a. Prepare and submit program and budget requirements for sustainment, restoration, and modernization pursuant to guidance of the ASD(HA) for the DoD Planning, Programming, Budgeting, and Execution (PPBE) process.

 - b. Provide programmatic oversight of the DHA O&M appropriations in accordance with instructions issued by the ASD(HA), fiscal guidance issued by the Under Secretary of Defense (Comptroller)/Chief Financial Officer, and applicable law.

3. CHIEF, FACILITIES ENTERPRISE (FE), DHA. The Chief, DHA-FE, will:
 - a. Establish DMLSS-FM data standards for effective CAFM/CMMS management and operations in accordance with References (f) and (g).

 - b. Monitor medical facilities operations to ensure conformance with established standards.

 - c. Program and budget for CAFM/CMMS maintenance requirements to be submitted by the Director, DHA for the DoD Planning, Programming, Budgeting, and Execution process.

 - d. Develop and implement training for DHA-directed data management standards and reporting.

4. DIRECTORS, DIRECT REPORTING ORGANIZATIONS (DRO). The Directors, DRO will: coordinate with DHA-FE regarding DRO focused facilities requirements via the DRO-based Facilities Liaison as described in Reference (d) and as follows:
 - a. Serve as a communication contact point for disseminating information between the DROs and DHA-FE.

 - b. Represent the DROs goals and objectives.

 - c. Provides DROs facilities status updates, forwards Director's Critical Information Requirements, and coordinates DROs driven demand signals.

5. FACILITY MANAGERS, DHA-FACILITIES (DHA FMs). DHA FMs of DHA facilities will:

a. Ensure Facility Inventory Records include all assigned permanent, semi-permanent, temporary facility assets (including DHA Components relocatable buildings, Military Medical Treatment Facility (MTF) tenants in a Military Department building, and DHA Component leased facilities).

b. Ensure all Facility Room Inventories properly reflect conditions at DHA Components and that any revisions are coordinated with Space Managers, Quality Assurance Evaluators, Janitorial Contractors, Maintenance Contractors, Facility Managers, Medical Maintenance staff, and other support staff.

c. Ensure all Facility Systems Inventory (FSI) records include all existing, new, and replacement Real Property Installed Equipment (RPIE) and record information, at a minimum, reflecting Real Property Systems Standards (RPSS) requirements as cited in Reference (h).

d. Ensure all preventive maintenance (PM) procedures include all existing, new, and replacement RPIE equipment and that tasks and schedules meet all applicable regulatory requirements.

e. Ensure all PM work orders are scheduled to include all existing, new, and replacement RPIE equipment and that tasks and schedules meet all applicable regulatory requirements.

f. Ensure all DMLSS Work Requests (WRs) are properly and completely entered, maintained, and closed out in accordance with established standards and as directed by DHA-FE.

g. Initiate DMLSS Requirements for any unfunded liability/deficiency related to sustainment, restoration, or modernization that may be identified as a result of formal condition assessments, BUILDER work items, engineering studies, architect/engineer analysis, informal inspections, commander walk-through, or maintenance technician observations.

ENCLOSURE 3

PROCEDURES

1. INTRODUCTION. The PM Schedule module is an automated management tool for storing and retrieving information about PM schedules. This module links together the Maintenance Procedures module and the FSI module. Using information from both the Maintenance Procedures module and the FSI module, the PM Schedule module enables each DHA Activity to schedule RPIE items or groups of like kind RPIE for PM. Key operational elements of the PM Schedule module include the following:

a. Information on PM schedules is maintained in a single location accessible to everyone with privileges to the PM Schedule module, with it primarily being used by the Facility Managers, Database Sustainment Specialists, Maintenance Managers, and Maintenance Technicians.

b. Once a schedule has been established for each item, the system will automatically create a reminder for the PM WRs due for that month.

c. As PM WRs are completed, detailed information about the PM is saved as part of the historical record for the RPIE item. This historical record is critical for compliance with The Joint Commission and other accreditation organizations.

d. This module automates the PM program, thereby reducing the amount of time spent documenting performance of PMs. Information on PM schedules is stored in a relational database that enables the generation of various management reports generated via DMLSS. These management reports can be used for a variety of purposes, e.g., PM status, accreditation compliance.

2. MANDATORY USE. All DHA Components are required to use the DMLSS-FM PM Schedule module to manage their PM programs. Use of another scheduling method or an alternate CMMS system will require approved waiver from DHA-FE. At a minimum, equipment designated by the DHA RPSS as requiring an O&M record shall meet manufacturer requirements for inspection, testing, and maintenance. In place of these manufacturer requirements, inspection, testing, and maintenance requirements may also incorporate other local procedures established through an approved reliability centered maintenance (RCM) or condition-based maintenance program in accordance with Reference (i). When manufacturer's instructions are not available, MTFs will consider use of the recommended procedures in the DHA RPSS as baseline standards. However, special attention must be paid when reviewing all applicable regulatory codes and standards, PM frequencies, and operational requirements to ensure compliance with regulatory bodies. Accordingly, changes to the PM procedures or schedule shall not be incorporated into the DMLSS database without the Facility Manager's review and approval and maintenance contract contracting officer's representative concurrence (where applicable) since the contractor could incur additional costs. The RPSS procedures are

already in DMLSS Maintenance Procedures Module as centrally managed procedures. They can be identified by the “DMLSS-WIDE” checkbox displayed on the screen. In addition, when viewed, all fields of an RPSS procedure are grayed out (not editable). Refer to Reference (h) for RPSS maintenance procedures. Note: a DoD Common Access Card is required to access the RPSS site.

3. IMPORTANCE OF A PM PROGRAM. A comprehensive PM program is critical to the safe and reliable operation of healthcare facilities. RPIE items, such as chillers, boilers, air handlers, elevators, pneumatic tube systems, fire alarm systems, emergency power systems, dental vacuum pumps, and medical air compressors (and others), require regular PM to minimize unexpected breakdowns and catastrophic failures, any one of which can compromise the provision of medical care. A comprehensive PM program can also increase the odds RPIE items will reach their life expectancy or even surpass it.

4. TASKS/ACTIONS. The following Tasks/Actions can be performed in the PM Schedule Module:

- a. Create a new PM schedule
- b. Modify an existing PM schedule
- c. Delete a PM schedule
- d. Search for PM schedule
- e. Print a list of PM schedules
- f. Add parts to PM schedules
- g. View the Fiscal Year Summary for a PM Schedule
- h. View the Workload Summary for an Installation
- i. Create an Ad Hoc WR
- j. Add, delete, edit, or print a note for a PM schedule
- k. Generate a parts list
- l. Launch DMLSS data queries for detailed reporting

5. HIGH-LEVEL BUSINESS PROCESS. The process in Figure 1 below summarizes how newly acquired RPIE items shall be added to the FSI and scheduled for PM. For additional

detailed information on this process, see the associated DHA-FE DMLSS Standard Operating Procedures (SOP).

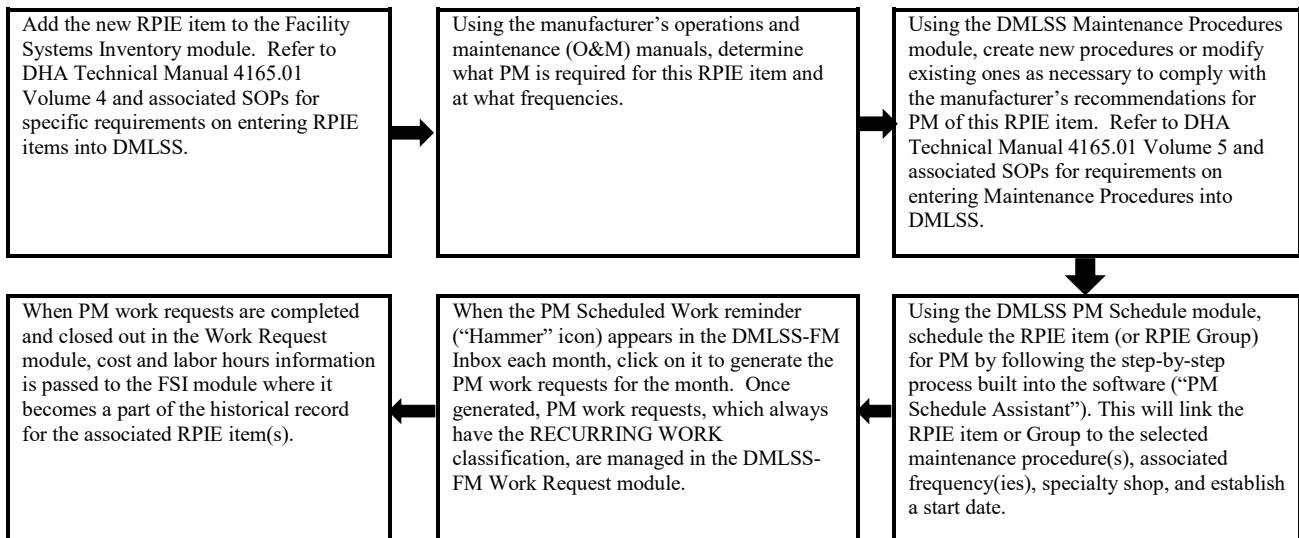


Figure 1. Process for Scheduling A Newly Acquired Real Property Installed Equipment Item for Preventive Maintenance

6. DATA FIELDS IN THE PM SCHEDULE MODULE. Table 1 below summarizes the data fields included in the PM Schedule module. For additional detailed information on how these data fields are used with any of the tasks/actions listed in paragraph 4 of this enclosure, see the associated DHA-FE DMLSS SOP. NOTE: All fields are **mandatory** fields unless specifically indicated as optional.

Table 1. Required Fields for Preventive Maintenance Schedule Module

Data Field	DMLSS-FM Mandatory	DHA-FE Mandatory	Optional (Local Use)	Remarks
Installation	X	X		
Facility	X	X		
RPIE Index Number (if the schedule is for a single RPIE item)	X	X		
RPIE Group (if the schedule is for a Group)	X	X		
Hierarchy of the RPIE item or GROUP, TO INCLUDE: - Facility System	X	X		

- Facility Subsystem - Assembly Category - Nomenclature				
Risk Factor of the RPIE item or GROUP	X	X		
Data Field	DMLSS-FM Mandatory	DHA-FE Mandatory	Optional (Local Use)	Remarks
Procedure ID	X	X		
Labor Hours Estimate (for the Procedure)	X	X		
Frequency	X	X		
Start Date	X	X		
End Date			X	Mandatory for buildings that are to be excessed
Assigned Organization	X	X		
Assigned Specialty Shop	X	X		
Assigned Specialty Shop POC			X	
PM Schedule Serial (unique identifier assigned by the system)	X	X		
Labor Project Center	X	X		
Labor Expense Center	X	X		
Labor Commodity Class/Element of Resource (EOR)	X	X		
Material Project Center			X	
Material Expense Center			X	
Material Commodity Class/Element of Resource (EOR)			X	
Part Location			X	
Item ID			X	
Long Item Description			X	
Part Manufacturer			X	
Manufacturer Part Number			X	
Unit of Sale			X	
Unit of Purchase			X	
Source of Supply (SOS)			X	
Part Quantity			X	
Total Cost			X	

Schedule Type		X		Reserved for RCM
QA Required		X		
QC Required		X		

7. PM SCHEDULE MODULE PROCESSING

a. Overview. As RPIE items and RPIE groups are scheduled for PM, the system adds the new requirements to a master “work projected” table organized by month and year. This “work projected” table tracks which PMs are due each month. Once a month, a “Scheduled Preventive Maintenance Reminder” message appears in the inbox next to a “Hammer” icon. When an authorized user clicks on this “Hammer,” PMs due for the month are turned into WRs and passed to the WR module where they can be tracked until completion. Once completed, cost and labor hours information is passed to the FSI module, where it becomes part of the historical record for the RPIE item.

b. Subordinate PM Roll-up Process. Ideally, whenever a RPIE item (or group) has more than one PM procedure associated with it and the assigned specialty shop is the same for each one, the "subordinate PM roll-up" process takes effect for selected frequencies and only **one** WR will generate for that month. This is by design and intended to reduce the amount of paper produced each month. For example, if a monthly and quarterly are due in the same month as a semi-annual, only the semi-annual will be turned into a physical WR. The system assumes the semi-annual procedure includes all of the tasks for the quarterly and monthly procedures. For maintenance procedures created by a site, maintenance managers will have to manually edit the tasks of each maintenance procedure to include subordinate tasks, where viable. The system does not automatically roll-up the tasks for a subordinate procedure, so the tasks for a monthly procedure will not roll-up and be included in the tasks for a quarterly procedure.

c. DMLSS Frequencies. The DMLSS PM module supports the following frequencies:

Table 2. Preventive Maintenance Frequencies Available in Preventive Maintenance Schedule Module

FREQUENCY	INCLUDED IN SUBORDINATE PM ROLL-UP
Daily	NO
Weekly	NO
Bi-Weekly (Every 2 Weeks)	NO
Monthly	YES
Bi-Monthly (Every 2 Months)	YES
Quarterly (Every 3 Months)	YES
Every 4 Months	YES
Semi-Annual (Every 6 Months)	YES
Annual	YES
Every 2 Years	NO

Every 3 Years	NO
Every 4 Years	NO
Every 5 Years	NO
Every 6 Years	NO
Every 7 Years	NO

8. DHA STANDARDS/REQUIREMENTS/EXPECTATIONS. The following highlights the most important DHA standards for PM program management and identifies items a DHA Activity should consider when creating PM requirements. Refer to the PM Schedule SOP document for detailed instructions and supporting graphics of the DMLSS application screens.

a. The RPSS provides recommendations for what does and does not need a PM. Users need to be aware of current DHA standards on what is to be included, especially for equipment items not typically included in a building's infrastructure (e.g., information technology equipment, select kitchen equipment).

b. In the Site Preferences, the recommended Schedule Lead Time for "Dropping the Hammer" is 10 calendar days. This value is the number of days, prior to the beginning of the month, that the Generate Scheduled WRs reminder (the "Hammer Icon") appears in the Inbox. This value can be adjusted based on the needs of the site. Larger sites may want to increase this number to allow the reminder to appear sooner.

c. Where a Pass/Fail indicator for PMs is required by regulatory or accreditation bodies, sites can utilize a DMLSS data query showing a Pass/Fail indicator per RPIE item. It is left to the site to determine whether to generate the reports through DMLSS, utilize the O&M contractor's deliverables, or use some other means to satisfy the requirement.

d. Provide hard copies of PM WRs to the Maintenance Manager for distribution of work at end of month prior to the month the PMs are due. The Database Sustainment Specialists will print PM WRs and provide them to the appropriate O&M service provider supervisor.

e. Closing Out PMs. The closing out of PMs is similar to that of unscheduled WRs. The major difference is the Prorate feature. When there is more than one RPIE associated with a WR the work must be prorated. If it is done incorrectly the work on multiple RPIE items would be associated with only one of the RPIE. All the hours and costs would be displayed on the single RPIE's history tab in the FSI module providing inaccurate information when conducting research.

f. RPIE Group Naming Convention. The PM Schedule module allows RPIE groups to be created on demand. When grouping RPIE, use the following naming format (Figure 2). For example, 00123-CB-ALL or 00123-CB-Z1. 00123 = Facility Number. CB = Circuit Breaker, or the acronym for the nomenclature. Z1 = identifies the zone number area represented in the group. If RPIE groups are broken down by floor, it may read 00123-CB-FLR1. This acronym should match both that of the RPSS and the FSI records. In order to group RPIE, the equipment

must have the same hierarchy, e.g., a Circuit Breaker cannot be grouped with a Fire Alarm Panel. Only Circuit Breakers can be grouped together.

Facility Number	-	RPIE Nomenclature Acronym	-	Group Identifier (Floor (FLR), Zone (Z), All)
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Figure 2. RPIE Group Naming Convention

g. Ad Hoc WR. The DMLSS system is designed to manage the scheduled maintenance program on a monthly basis. However, the system also supports creating a single PM WR out of cycle. This is called an Ad Hoc WR. This feature will allow the user to create a PM WR ahead of its normal schedule. It is also used to generate the very first PM WR when a new PM schedule is created later in the month after the month's PM WRs have already been created via the "hammer process".

h. Workload Leveling. The start date for the PM schedule should occur on the first of the month. O&M service providers (e.g., in-house staff, on-site maintenance contractors, specialty subcontractors) have until the end of the month to complete their recurring work. Accordingly, DMLSS-FM includes data query reporting capabilities that make recommendations for workload leveling. When PMs are rescheduled along these lines, special attention must be paid to all applicable regulatory codes and standards, PM frequencies, and operational requirements. Workload leveling changes, or any other changes to the PM schedule, shall not be incorporated into the PM schedule without the Facility Manager's review and approval and contracting officer's representative concurrence (where applicable).

GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

ASD(HA)	Assistant Secretary of Defense for Health Affairs
CAFM	Computer Aided Facility Management
CMMS	Computerized Maintenance Management System
DHA-TM	Defense Health Agency Technical Manual
DHP	Defense Health Program
DMLSS-FM	Defense Medical Logistics Standard Support-Facilities Management
DRO	Direct Reporting Organizations
EOR	Element of Resource
FE	Facilities Enterprise
FSI	Facility Systems Inventory
MHS	Military Health System
MTF	Military Medical Treatment Facility
O&M	operations and maintenance
PM	preventive maintenance
RCM	Reliability Centered Maintenance
RPIE	Real Property Installed Equipment
RPSS	Real Property Systems Standards
SOP	Standard Operating Procedure
WR	work request

PART II. DEFINITIONS

Unless otherwise noted, these terms and their definitions are for the purpose of this manual.

DHA Components. Under the authority, direction, and control of DHA. NOTE: Includes (DROs and MTFs/Dental Treatment Facilities/Veterinary Treatment Facilities).

DRO. Direct Reporting Markets, Small Market and Stand Alone Military Treatment Facility Organization, and Defense Health Agency Regions reporting to the DHA.

facility. A building, structure, or linear structure whose footprint extends to an imaginary line surrounding a facility at a distance of 5 feet from the foundation that, barring specific direction to the contrary such as a utility privatization agreement, denotes what is included in the basic record for the facility (e.g., landscaping, sidewalks, utility connections). This imaginary line is commonly referred to as the “5-foot line.” A facility will have a Real Property Unique Identifier received from the Real Property Unique Identifier Registry and entered into a Service RPIE system as a unique real property record.

internal control. A method or process that provides an organization’s management reasonable assurance the following objectives are being achieved:

- a. Effectiveness and efficiency of operations.
- b. Reliability of financial reporting.
- c. Compliance with applicable laws and regulations.

Synonymous with management control, helps government program managers achieve desired results through effective stewardship of public resources.

real property. Land and improvements to land (e.g., buildings, structures, and linear structures (see facility)).

RCM program. A formal program, whose implementation is headquarters centrally funded. RCM is the process of determining the most effective maintenance Approach, which includes the use of Condition Based Monitoring (also known as PM), techniques such as Vibration Analysis, Infrared Thermography, Ultrasonic, Motor Current Analysis, Oil Analysis, etc., to detect defects in the most efficient and economical way possible to optimize the use of limited resources while maintaining or improving reliability.

RPIE. An item of equipment affixed and built into a facility as an integral part of that facility. To qualify as RPIE, the equipment must be necessary to make the facility complete, and if removed, would destroy or severely reduce the designed usefulness and operation of the facility. RPIE costs are included as a funded initial construction or renovation cost. RPIE may be accounted for as a real property equipment asset record, but not as a separate facility record in the RPIE. RPIE includes such items as chillers, boilers, air handling units, pumps, generators, elevators, electrical panel boards, fire doors, control systems, emergency lighting, etc. For all potential RPIE that could be utilized at an MTF, the MHS RPSS as cited in Reference (h) provides standardized default information including, but not limited to, nomenclature, PM procedures, maintenance drivers, maintenance frequencies, and risk categories.