DATA ITEM DESCRIPTION

Title: RELIABILITY CENTERED MAINTENANCE (RCM) INACTIVE EQUIPMENT MAINTENANCE (IEM) REQUIREMENT ANALYSIS REPORT

Number: DI-SESS-80989A   **Approval Date: 20100923**
AMSC Number: N9172   **Limitation: N/A**
DTIC Applicable: N/A   **GIDEP Applicable: N/A**
Office of Primary Responsibility: SH/SEA 04RM
Applicable Forms: N/A

Use/Relationship:
The Reliability Centered Maintenance (RCM) Inactive Equipment
Maintenance (IEM) Requirement Analysis Report defines tasks to
be performed during equipment inactive periods.

This Data Item Description (DID) contains the format, content,
preparation instructions and intended use for the data
deliverable resulting from the work task described in the 5.1.7
of MIL-STD-3034.

This DID is related to DI-SESS-80979A, RCM Master System and
Subsystem Index (MSSI); DI-SESS-80994A, RCM Functional Block
Diagram (FBD); DI-SESS-80981A, RCM Functional Failure
Analysis(FFA)Report; DI-SESS-80983A, RCM Additional Functionally
Significant Item (AFSI) Selection Report; DI-SESS-80982A, RCM
Functionally Significant Items (FSI) Index; DI-SESS-80980A, RCM
Failure Modes and Effects Analysis (FMEA) Report; DI-SESS-
80984A, RCM Logic Tree Analysis (LTA) with Supporting Rationale
and Justification Report; DI-SESS-80985A, RCM Servicing and
Lubrication Analysis (SLA) Report; DI-SESS-81829, RCM Corrective
Maintenance (CM) Development Report; DI-SESS-80986A, RCM
Maintenance Requirements Index (MRI); DI-SESS-80988A, RCM Task
Definition Report; DI-SESS-80987A, RCM Procedure Validation
Report.

This DID supersedes DI-MNTY-80989.

Requirements:

1. Reference documents. The applicable issue of documents
cited herein, including approval dates and dates of any
applicable amendments, notices, and revisions, shall be as cited
in the contract.

2. <u>Format</u>. This report shall be in contractor's format and shall be presented in the electronic database specified in the contract.

3. <u>Content</u>. The report shall contain all of the information specified in the sample form of Figure 1 of this DID as follows:

3.1 <u>Block 1 ESWBS number</u>. Enter the Expanded Ship Work Breakdown Structure (ESWBS) number of the system under analysis, as defined in on the Master Systems and Subsystems Index (MSSI).

3.2 <u>Block 2 Nomenclature</u>. Enter the nomenclature of the system under analysis from block 9 of the MSSI.

3.3 <u>Block 3 Ship class</u>. Duplicate the entry from block 3 of the MSSI.

3.4 <u>Block 4 Prepared by</u>. Enter the analyst's name and the date.

3.5 <u>Block 5 Reviewed by</u>. Enter the first level reviewer's name and the date.

3.6 <u>Block 6 Approved by</u>. Reserved for maintenance coordinating activity approval signature and date.

3.7 <u>Block 7 Revision</u>. Enter Original, A, B, or C, sequentially and the date.

3.8 <u>Block 8 Degradation</u>. List what degradation will occur if equipment is inactive while ship is (a) operational, and (b) in an industrial environment. Consider separately the equipment's internal workings, external surfaces, attachments, connecting lines, piping, or valves. Under the industrial environment, consider what the effects will be under conditions such as lack of power and heating or cooling problems. Consider the effects if the equipment is exposed to abnormal conditions, for example, having the bulkhead, overhead, and decking removed; or industrial work in progress in the immediate area such as welding, chipping, sandblasting, or painting.

3.9 <u>Block 9 Requirements</u>. Considering location and equipment design, state maintenance actions, with alternatives, to protect and prevent degradation of the equipment under the conditions listed:

a. <u>Block 9a Protection</u>. List maintenance actions necessary to protect and maintain inactive equipment during a period of prolonged idleness. For example,

  (1) Remove equipment and place in a protected area.

  (2) Lubricate and cover exposed areas.

  (3) Inactivate radar set.

b. <u>Block 9b Activation</u>. List maintenance actions necessary to return sub-system or equipment to service following a period of prolonged idleness. Specify what tests are required to ensure the operational readiness of the equipment.

3.10 <u>Block 10 Expense</u>. The answer "yes" or "no" shall be entered to the question: "Considering cost and resources is the requirement of block 9 worthwhile?" State whether or not the action would satisfy all requirements and give the reason. Justification is required for each requirement listed in block 9 and only the most cost effective requirements should survive the justification. Justification may recommend more than one alternative under different environmental conditions during a shut-down period.

3.11 <u>Block 11 Periodicity</u>. Enter the IEM periodicity established; lay up maintenance (LU), periodic maintenance (PM), start up maintenance (SU), or operational test (OT), for each requirement fully justified in block 10. A maintenance requirement (MR) may be used under more than one IEM periodicity. For periodic maintenance, identify the periodicity of performance required by adding a code to the PM indicator; for example, "PM(W)", "PM(M)." Justify each periodicity decision. If a requirement is to be performed in an industrial environment only, indicate by the notation (I); for example, "LU(I)." This MR shall be entered on the RCM Task Definition form (Phase 10) with a note to describe the circumstance.

3.12 <u>Block 12 Source Procedure</u>. List available maintenance procedures that could satisfy the requirements justified in blocks 10 and 11. Maximum use of existing maintenance procedures is desired. Identify any changes to the procedures found that will improve the procedures. Maintenance procedures requiring modifications and maintenance actions which must be developed shall be annotated in block 13. Indicate the source of existing procedures. Some of the sources will be technical manuals (TMs), ordnance publications (OPs), or existing MRCs.

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3.13 Block 13 Editing. This column provides a summary and
check-off list of the development work required for IEM.
Opposite each MR listed in block 11, indicate what must be done
to complete the IEM development with one of the following:

(S)	The MR procedure exists on a MIP and is to be used as written. Enter MRC SYSCOM number.
(M)	The MR procedure exists on a MIP; but the procedure or periodicity must be modified for IEM. Enter MRC SYSCOM number.
(N)	A complete new procedure must be developed to satisfy the MR and shall be subjected to procedure validation.

3.14 Block 14. Serial number. Enter four-segment serial number
as follows:

    a.   Segment 1 - Enter the developing organization
abbreviation followed by a slant (/).

    b.   Segment 2 - For developers, enter the development
authorization number followed by a slant (/); for other
development activities, assign a development number followed by
a slant (/).

    c.   Segment 3 - Enter the number 129 to indicate the
inactive equipment maintenance analysis form, followed by a
slant (/).

    d.   Segment 4 - Enter the ESWBS number from block 1.

4. End of DI-SESS-80989A.

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1. ESWBS NUMBER	2. NOMENCLATURE		3. SHIP CLASS	SH OF
4. PREPARED BY DATE:	5. REVIEWED BY DATE:	6. APPROVED BY DATE:	7. REVISION DATE:	
8. DEGRADATION: a. operational b. industrial environment	9. REQUIREMENTS 9a. Protection	9a. Activation	10. EXPENSE Y / N	Justify
			11.PERIODICITY (LU, PM, SU, OT) Code	Jus ify
14. SERIAL NUMBER			12. SOURCE PROCEDURE (TM, OP, MRC, ETC.)	13. EDITING (S) (M) (N)

INACTIVE EQUIPMENT MAINTENANCE (IEM)

FIGURE 1. INACTIVE EQUIPMENT MAINTENANCE REQUIREMENT ANALYSIS