DATA ITEM DESCRIPTION

Form Approved
OMB No. 0704-0188

1. TITLE	2. IDENTIFICATION NUMBER
PLANNED MAINTENANCE SYSTEM (PMS) FUNCTIONAL FAILURE ANALYSIS (FFA)	DI-MNTY-80981

3. DESCRIPTION/PURPOSE

3.1 The Planned Maintenance System (PMS) Functional Failure Analysis (FFA) defines what constitutes a functional failure.

4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
900517	N/CEL-TD		X

7. APPLICATION/INTERRELATIONSHIP

7.1 This Data Item Description (DID) contains the format and content preparation instructions for the PMS Functional Failure Analysis resulting from the work task described by3.7.3 of MIL-P-24534 (Navy).

7.2 This DID is related to DI-MNTY-80994, Planned Maintenance System Functional Block Diagram; DI-MNTY-80979, Planned Maintenance System

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8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER
		N4935

10. PREPARATION INSTRUCTIONS

10.1 Format. The PMS Functional Failure Analysis (FFA) shall be documented using contractor format.

10.2 Content. The analysis shall contain the following:

10.2.1 ESWBS number. Duplicate each Expanded Ship Work Breakdown Structure (ESWBS) entry in the Master Systems and Subsystems Index.

10.2.2 Nomenclature. Enter the nomenclature used on the Master Systems and Subsystems Index for the selected system or subsystem.

10.2.3 Ship class. Duplicate the entries on the Master Systems and Subsystems Index.

10.2.4 Prepared by. Enter the analyst's name and the date.

10.2.5 Reviewed by. Enter the first level reviewer's name and the date.

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11. DISTRIBUTION STATEMENT

Distribution Statement A: Approved for public release; distribution is unlimited.

7. Application/Interrelationship (Continued)

Master System and Subsystem Index; DI-MNTY-80980, Planned Maintenance System Failure Modes and Effects Analysis; DI-MNTY-80982, Planned Maintenance System Functionally Significant Items Index; DI-MNTY-80983, Planned Maintenance System Additional Functionally Significant Item Index Selection Report; DI-MNTY-80984, Planned Maintenance System Logic Tree Analysis With Supporting Rationale and Justification; DI-MNTY-80985, Planned Maintenance System Servicing and Lubrication Analysis; DI-MNTY-80986, Planned Maintenance System Requirement Index; DI-MNTY-80987, Planned Maintenance System Procedure Evaluation Sheet; DI-MNTY-80988, Planned Maintenance System Task Definition; DI-MNTY-80989, Planned Maintenance System Inactive Equipment Maintenance Requirement Analysis; DI-MNTY-80990, Planned Maintenance System Reliability Centered Maintenance Documentation Control Sheet; DI-MNTY-80991, Planned Maintenance System Maintenance Requirement Card; DI-MNTY-80992, Planned Maintenance System Maintenance Index Page; DI-MNTY-80993, Planned Maintenance System Quality Assurance Check Sheet.

7.3 This DID requires data to be provided to the Government Information Data Exchange Program (GIDEP) at the following address: Program Director, GIDEP Operations Center Corona, CA 91720-5000

10. Preparation Instructions (Continued)

10.2.6 Approved by. Reserved for the PMS coordinating activity approval signature and the date.

10.2.7 Revision. Enter Original, A, B or C, sequentially and the date.

10.2.8 Sources of information. Enter the drawing, manual, document and report numbers. Enter titles of reference material actually used in this analysis.

10.2.9 Description. Referring to the block diagram prepared in phase 1, enter a brief physical and functional description of the subdivision. Focus on what the hardware is and what it does, oriented toward preventive maintenance needs. After this narrative, document the following specific information about the system, containing the following (parenthetical statements describe the information to be documented):

a. REDUNDANCY: Enter "None" or describe the redundant relationship.

b. PROTECTIVE DEVICES: List the protective devices and the circumstances under which they operate; for example, circuit breaker - 30 amp, casing relief valve - lifts at 150 pounds per square inch (lb/in^2), reseats at 135 (lb/in^2).

c. SAFETY FEATURES: Describe special safety features such as interlocks.

d. FAIL SAFE OR UNSAFE FEATURES: State whether system is fail safe or unsafe; describe any fail safe features.

10. Preparation Instructions (Continued)

e. CONDITION INDICATORS: Document TYPE, INDICATES, and TO WHOM in a single group for each indicator.

(1) TYPE: Enter gauge, thermometer, meter, bite, indicator light, audible visual alarms, as appropriate.
(2) INDICATES: Describe what the indicator tells about the system.
(3) TO WHOM: List the watch station or the title of the operator who observes the indicator. Specify the conditions when that station is manned.

f. ENVIRONMENT: Describe the environment to which the system is exposed; for example, exposed to weather, exposed to high humidity, exposed to high heat, or other.

g. DUTY CYCLE: Describe the particulars of normal operational practices and estimated operational time per year. For example, The system is normally on line when underway and is automatically controlled. Air compressors cycle ON and OFF under control of associated receiver pressure switches. Compressors run about 250 hours a year, depending on demand.

h. USE RESTRICTIONS: Enter, in capital letters, any special restrictions on the operation of the system; for example, CANNOT BE SAFELY ACTIVATED IN PORT.

i. SPECIAL MAINTENANCE FEATURES: Describe any special provisions for maintenance installed; for example, System is equipped with external test connections enableing full diagnostics while on line.

10.2.10 Functions and out interfaces. Enter a description of functions of the system. Include self or crew protective features, out interfaces and all cofunctions. State minimum operational function parameters or performance standards if appropriate. Number functions sequentially; for example, 1, 2, and 3.

10.2.11 System in interface. Enter sources of input and critical values. Specify the ESWBS number for each source.

10.2.12 Functional failures. Enter the definition of what constitutes a failure for each function and output interface listed in 10.2.10. There may be several functional failures for each function; all functional failures must be identified. Number each functional failure 1.1, 1.2, 1.3, 2.1, 2.2, and 2.3 to correspond to the function number in 10.2.10.

10.2.13 Serial number. Enter a 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

10. Preparation Instructions (Continued)

development activities, assign a development number followed by a slant (/).

c. Segment 3 - Enter the number 116, indicating the FFA, followed by a slant (/).

d. Segment 4 - Enter the ESWBS number from 10.2.1.