

## DATA ITEM DESCRIPTION

FORM 1664-100  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Service, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

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2. IDENTIFICATION NUMBER

DI-ILSS-81495

## FAILURE MODE, EFFECTS, AND CRITICALITY ANALYSIS REPORT

## 3. DESCRIPTION/PURPOSE

- 3.1 This report provides an analysis of independent single item failures and the resulting potential impact on mission success, performance, personnel safety, and maintainability.
- 3.2 This analysis is intended to promote design corrective actions by identifying potential failure risks in order that appropriate corrective actions may be taken early to eliminate or control high risk items to improve operational readiness and reduce life cycle costs.

4. APPROVAL DATE  
(YYMMDD)

951030

5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)

N/AIR-4.1.6

6a. DTIC APPLICABLE

X

6b. GIDEP APPLICABLE

## 7. APPLICATION/INTERRELATIONSHIP

- 7.1 This Data Item Description contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.
- 7.2 This DID is primarily applicable during the E&MD acquisition phase.
- 7.3 This DID supersedes DI-R-7085A.
- 7.4 DID's DI-ILSS-80116 and DI-ILSS-80114 are related to this DID for an automatic and a non - automated Logistic Support Analysis Record, respectively.
- 7.5 Defense Technical Information Center (DTIC), Cameron Station, Attn: DTIC-FDAC, Alexandria, VA 22304-6145.

8. APPROVAL LIMITATION

9a. APPLICABLE FORMS

9b. AMSC NUMBER

N7165

## 10. PREPARATION INSTRUCTIONS

10.1 Content. This report shall document the results of the Failure Mode Effects Analysis, criticality analysis (FMECA), the FMECA-maintainability information, and the damage modes and effects analysis (DMEA) when required in the contract statement of work. The report shall identify the level of analysis, summarize the results, document the data sources and techniques used in performing the analysis, and include a system definition narrative, resultant analysis data, and worksheets. The worksheets shall be organized to first display the highest indenture levels of the system. CA worksheets, FMECA-maintainability information worksheets, and DMEA worksheets, when required by contract, shall be organized in the report following the FMEA worksheet(s) for the same indenture level. Information not available for interim reports, due to incomplete design or planning details, shall be noted and provided when available. For each indenture level, the report shall contain the following:

- a. FMECA assumptions
- b. Block diagrams
- c. Completed FMEA worksheets
- d. Completed CA worksheets (when applicable)
- e. Completed FMECA-maintainability information worksheets (when applicable)
- f. Completed DMEA worksheets (when applicable)

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## DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

**Block 10, Preparation Instructions (Continued)**

10.2 Summary. The report shall contain a summary which provides an overview of the major problems detected during the analysis. Contractor interpretation and comments concerning the analysis and identification of the initiated or recommended actions for elimination or control of failure risks shall be included. Both positive and negative tradeoffs of design problems shall be addressed to provide identification of residual problems, risks, constraints, and other factors which may impact the system design and require management attention. The summary shall include contractor conclusions and recommendations based on the analysis results and problem information included in the report. When required by contract, the results of the CA, FMECA-maintainability information, and DMEA shall be summarized in a like manner in separate summary paragraphs.

10.3 Format. Contractor format is acceptable.