DATA ITEM DESCRIPTION

Form Approved
OMB No. 0704-0188

2. TITLE	1. IDENTIFICATION NUMBER
Critical Items List	DI-RELI-80685

3. DESCRIPTION / PURPOSE

3.1 The Critical Items List contains a listing of items which can critically impact the reliability of contract end items. The list includes summaries of and references to specific documents defining compensating controls and features. The list is used to evaluate the adequacy and implementation of critical item controls.

4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC REQUIRED	6b. GIDEP REQUIRED
880930	AF-19		

7. APPLICATION / INTERRELATIONSHIP

7.1 This Data Item Description contains the format and content preparation instructions for data resulting from work Task 208 of MIL-STD-1543B.

7.2 This Data Item Description is applicable to system and acquisition phases including validation and full scale development with updates during operational test and evaluation plus production phases. Preliminary lists are appropriate in conceptual phase and with proposals. Most critical items will be discovered during reliability analyses, especially during failure modes, effects, and criticality analyses. These critical items and others

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8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER
		F4543

10. PREPARATION INSTRUCTIONS

10.1 Reference Documents. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revision, shall be as specified in the contract.

10.2 Content Instructions.

10.2.1. Critical Item list content. The list shall contain the following data:

a. The identification of each critical item with cross-reference information such that it is possible to trace directly to the related failure modes, effects, and criticality analysis (FMECA) entry and to drawings, schematics, and hardware (Refer to task 204.2.12 of MIL-STD-1543B).

b. Identification of the page of the FMECA describing the related failure modes.

c. The reason or criteria causing the item to be classified as critical

d. A summary in specific terms for each critical item of the compensating features, controls, and other practices incorporated or planned to minimize the likelihood or effect of the critical items failing during the life of the program. Specific documentation containing compensating features shall be referenced.

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11. DISTRIBUTION STATEMENT

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

7. Application/Interelationship (Continued)

discovered during design analyses, testing, quality engineering and other program activities shall be added to the list to provide for management attention and appropriate methods of control. This DID was developed for space and launch vehicle contracts invoking Task 208 MIL-STD-1543B, but may be tailored and applied to other systems.

7.3 This DID supersedes DI-R-30508 and DI-R-30511.

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10. Preparation Instructions (Continued)

e. Identification of the activity that discovered the critical items, such as an FMECA test planning, stress analysis, reliability prediction or risk assessment, and reference to the related applicable documents.

f. The rationale for not eliminating the critical item or related failure mode(s).

g. Single point failure mode (SPFM) which shall include the added data specified in paragraph 10.2.3 below.

10.2.2 Supporting Data. The following information shall be included if it has not been previously submitted (such as in a Reliability or System Effectiveness Program Plan), or if repetition is needed for clarity. If the supporting data is not included, a cross-reference to where it appears shall be included in this section.

a. A list of the criteria used to identify critical items. (Refer to MIL-STD-1543B, Task 208).

b. A summary of the contractor's formal policy and procedures for critical item control and notification to affected personnel of the essential and critical nature of such items.

c. A description of the traceability system applicable to the critical items list to facilitate follow-up verification that all planned critical item compensating features, controls, and practices have been implemented.

d. A description of the methods and plans for updating the critical items list to provide timely management visibility.

e. A description of the relationship of the critical items list to the registered components provisions, if under contract, of MIL-STD-1586.

f. An identification of critical items which are on calendar age limited life and limited operating life item lists when applicable (Refers to MIL-STD-1543B, Task 208, paragraph 208.2.3).

10.2.3 Single Point Failure Modes (SPFM). SPFM items shall be compiled as a separate section of the critical items list. In addition to the data in paragraphs 10.2.1 and 10.2.2, the following data shall be included:

a. Each uncorrected SPFM shall be characterized as to mission impact, probability of occurrence, and the practicality of correction.

b. For each uncorrected SPFM, the list shall include contractor recommended options for elimination or mitigation of the failure modes for procuring contracting officer consideration.

10.2.4 Cross References. To facilitate locating copies, the list shall include the applicable CDRL sequence identifier of cross-referenced document. Data available in other documents submitted with or before the critical items list may be cross-reference rather than duplicated if savings result and traceability is not degraded.

10.2.5 Updates. Revision of the list may be submitted by individual page changes or additions with a complete listing of the current list pages by date or other unique identifier. Information not available for initial lists, due to incomplete design or planning details, shall be so noted and provided when available.

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