

DATA ITEM DESCRIPTION			Form Approved 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 Services, 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.				
1. TITLE			2. IDENTIFICATION NUMBER	
Failure Analysis and Corrective Action Report			DI-RELI- 81315	
3. DESCRIPTION/PURPOSE				
3.1 Provides immediate reporting of failure and subsequent details failure analysis results and corrective action recommendation.				
4. APPROVAL DATE (YYMMDD)		5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)		6a. DTIC APPLICABLE
930125		G/Y224		6b. GIDEP APPLICABLE
7. APPLICATION/INTERRELATIONSHIP				
7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data resulting from the work task as described by MIL-STD-781D and MIL-STD-785B.				
7.2 This DID supersedes DI-R-5299C.				
8. APPROVAL LIMITATION		9a. APPLICABLE FORMS		9b. AMSC NUMBER
				G6891
10. PREPARATION INSTRUCTIONS				
10.1 <u>Reference documents</u> . The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.				
10.2 <u>Content</u> . The report shall contain the following:				
a. Failure Analysis Report Number. (See 10.5)				
b. Contract number.				
c. Equipment title.				
d. Equipment serial number.				
e. Date of failure.				
f. Test failed.				
g. Effect on equipment.				
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11. DISTRIBUTION STATEMENT				
DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.				

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10. PREPARATION INSTRUCTIONS (Continued)

h. Total test time at failure.

10.3 Preliminary Report. Content and format shall be as follows:

10.3.1 Content.

- a. Originator of the report.
- b. Date of the failure.
- c. Date of the report.
- d. Contractor's name.
- e. Failure Analysis Report Number. (See 10.5)
- f. Contract number.
- g. Equipment, title, part number, and serial number.
- h. Assembly title, part number, and serial number.
- i. Subassembly title, element or module title, part number, and serial number.
- j. Part name, part number, serial number, date code, and manufacturer.
- k. Name and specification of test failed.
- l. Elapsed time and phase of test failed.
- m. Total operation time of unit at time of failure.
- n. Failure symptoms.
- o. Failure mode.
- p. Classification failure (independent or dependent).
- q. Type of failure from Failure Keyword List. (See 10.7)
- r. Disposition of failed item.
- s. Any supplemental information relating to the failure (i.e., any internal contractor assessments, records, reports, correspondence, etc.).

10.3.2 Format. The report may be handwritten and legible.

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10. PREPARATION INSTRUCTIONS (Continued)

10.4 Final Report

10.4.1 Content. The final report shall contain the items required in the Preliminary Report and the following additional items shall be included:

- a. Reference-Failure Analysis Report Number (see 10.5)
- b. Failure Analysis methods.
- c. Failure Analysis results.
- d. Statement as to whether this is a pattern failure. If it is, the reports of the other failure(s) will be referenced.
- e. Corrective action:
 - (1) Action on individual equipment failure.
 - (2) Measures to prevent other failures.

10.4.2 Format. The same format may be used for both Preliminary report and Final report.

10.5 Failure Analysis Number

a. Format. In accordance with the format code: X - N - T - F1 -F2

- (1). X is the equipment type number.
- (2). N is the sequential failure number.
- (3). T is the test phase in which the failure occurred.

- (a) T=A for acceptance test.
- (b) T=B for subassembly test.
- (c) T=C for receiving inspection.
- (d) T=D for reliability test.
- (e) T=E for qualification test.
- (f) T=F for system/equipment burn-in.
- (g) T=G for system integration.

(4). F1 is the total number of failures of the same part number (i.e., resistor, capacitor, inductor, transistor, etc.) manufactured by the same vendor.

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10. PREPARATION INSTRUCTIONS (Continued)

(5). F2 is the total number of occurrences of a specified failure mechanism of the same part number manufactured by the same vendor.

10.6 Nonrelevant and Unverified Failures. Nonrelevant and unverified failures shall not have the F1 and F2 numbers assigned because these types of failures do not relate to a part type failure. Instead, these failures shall be coded as "NR" for a nonrelevant failure and "UV" for an unverified failure.

10.7 Failure Keyword List.

10.7.1 Content. The content shall include:

- (1) Workmanship.
- (2) Handling.
- (3). Process.
- (4). Design.
- (5). Marking.
- (6). Test Equipment.
- (7). Contamination.
- (8). Open Bond Wire.
- (9). Electrical Short.
- (10). Electrical Open.
- (11). Software.
- (12). Mechanical.
- (13). Nonrelevant.
- (14). Under Investigation.
- (15). Unknown.
- (16). Unverified.
- (17). Glitch.
- (18). Testing Error.
- (19). Tolerance.