

DATA ITEM DESCRIPTION

Title: FAILURE SUMMARY & ANALYSIS REPORT

Number: DI-SESS-80255A

AMSC Number: 9506

DTIC Applicable: Yes

<http://www.dtic.mil/dtic/submit>

Preparing Activity: AS

Applicable Forms: N/A

Approval Date: 20141219

Limitation: No

GIDEP Applicable: Yes

<http://www.gidep.org/data/submit.htm>

Use/relationship:

This report presents a summary of the individual failures that occur prior to and during the reporting period and describes the analysis and corrective actions performed. This report is used to evaluate the contractor's failure reporting, analysis, and corrective action efforts in accordance with the solicitation. This Data Item Description (DID) contains the format, intended use information, and content preparation instructions for the data product generated by the specific and discrete task described in the solicitation, and should be tailored appropriately.

This DID supersedes DI-RELI-80255.

Requirements:

1. Format. The Failure Summary and Analysis Report shall be in contractor's format.
2. Content. The report shall summarize the results of the contractor's Failure Reporting, Analysis, and Corrective Action System (FRACAS) implementation required by the statement of work, and shall include a cumulative tabulation of failure data. Failures which occurred during the latest report period shall be identified by suitable notation. The report shall include the following elements at a minimum:
 1. Failure number
 2. Failure analysis number
 3. Failure date
 4. Name of engineer responsible for failure analysis
 5. Failed part name
 6. Failed part number (e.g. national stock number (NSN), logistics control number, work unit code)
 7. Manufacturer of failed part
 8. Subassembly name and number
 9. Major assembly name and number
 10. Equipment name and serial number
 11. Failed part's accumulated test or field operational life data
 12. Test or mission being performed when the failure occurred
 13. Test or mission mode of operation and environmental and use conditions when the failure occurred

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14. Failure symptoms and description of detection or diagnosis methods (e.g. Built In Test)
15. Failure effects (e.g. none, degradation, abort)
16. Repair action (e.g. remove/replace)
17. Failure mode description
18. Description of engineering analysis method employed in failure analysis
19. Failure mechanism/cause of failure
20. Contributing factors, including multiple factor interactions, or secondary effects of the failure
21. Categorization of failure (e.g. equipment design, equipment manufacturing workmanship, part design, part manufacturing workmanship software errors, unverified, intermittent, non-relevant)
22. Information on previous corrective actions for the same part and/or failure mode
23. Corrective action required to mitigate the failure mode, including:
 - i. Identification of the failure mode
 - ii. The recommended process or process control changes, when the failure cause is due to workmanship defects
 - iii. Proposals for retrofit of all equipment already delivered or assembled, including recommended effectivity, in accordance with the contract
 - iv. Disposition of all defective material and material rendered obsolete because of any necessary redesign, to assure their exclusion from production items
 - v. Identification of previous functional and environmental qualification tests, if any, invalidated by the corrective action changes and recommendation of those tests that should be repeated, in accordance with the terms of the contract, to demonstrate the corrective action's effectiveness
 - vi. Effect on operational and diagnostic software programs and plan for changes, if necessary
24. Corrective action status
25. The recommended fix effectiveness factor (FEF) to be applied to the failure mode based on the proposed corrective action
26. Rationale for any open failure analyses past the contract-specified closeout time
27. Severity criticality ranking of the failure modes. The severity classification categories are:
 - i. Category I - Catastrophic - A failure which may cause death or system loss (i.e., aircraft, tank, missile, ship)
 - ii. Category II - Critical - A failure which may cause severe injury, major property damage, or major system damage resulting in mission loss.
 - iii. Category III - Marginal - A failure which may cause minor injury, minor property damage, or minor system damage which will result in delay or loss of availability or mission degradation.
 - iv. Category IV - Minor - A failure not serious enough to cause injury, property, or system damage, but which results in unscheduled maintenance or repair.

End of DI-SESS-80255A.