DATA ITEM DESCRIPTION

Title: RELIABILITY TEST REPORT

Number: DI-SESS-81628A AMSC Number: N9590 DTIC Applicable: Yes Defense Technical Information Center ATTN: DTIC-8725 John J. Kingman Road, Suite 0944 Fort Belvoir VA 22060-6218 Preparing Activity: AS Applicable Forms: N/A Approval Date: 20151001 Limitation: No GIDEP Applicable: Yes GIDEP Operations Center Naval Warfare Assessment Center P. O. Box 8000 Corona, CA 91718-8000 Project Number: SESS-2015-082

Use/relationship:

The Reliability Test Report is a formal record of the results of the contractor's reliability tests and will be used by the procuring activity to evaluate the degree to which the reliability requirements have been met. The reports shall be periodic test Summary Reports or Final Test Reports, as reflected in the contract, and are applicable for each reliability test performed. These reports may be used to report the results of reliability tests or test from which reliability evaluation is a byproduct.

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.

Requirements:

- 1. <u>Format.</u> The Reliability Test Report shall be in contractor's format.
- 2. <u>Content.</u> The Reliability Test Report shall contain the results of each test or other action taken to demonstrate the level of reliability achieved. The reports shall contain the following:
 - a. Description of test performed.
 - b. Statement of test objectives, including type, unit of measure and quantitative goals/requirements to be demonstrated, including specific references to the applicable sections of the specification.
 - c. Test article identification and full description of test articles utilized, including software (i.e. lot from which the test sample was taken, lots represented by the sample, test group number, software version/configuration, etc), including any deviations for the configuration specified in the applicable test plan., along with reasons for each deviation.
 - d. Date and location of test or evaluation.

DI-SESS-81628A

- e. Discussion of methods and conditions of the test/demonstration, including test plan and procedure used, environmental levels, operational and performance profiles, duration, measurements, methods of evaluating the data obtained and comparison of the conditions with those anticipated in ultimate deployment and use of the contract item.
- f. Results obtained, including specific identification and discussion of objectives demonstrated satisfactorily and those not demonstrated satisfactorily.
- g. Statistical confidence calculations, if applicable.
- h. Test incident reports or FRACAS reports generated and corrective action anticipated, if applicable.
- i. Contractor's conclusion and recommendations based on evaluation of the test results.
- j. Requirements for and results of retest in cases where a reject decision was reached.
- 2.1 Summary Reports. Periodic test summary reports shall consist of summaries of the progress or status of reliability tests underway during the reporting period. All periodic summaries shall include the following:
 - a. Type and number of units on test and the type of test.
 - b. Total elapsed unit hours of test time during the period covered in the report.
 - c. Total number of equipment failures for each operational mode specified in the duty cycle.
 - d. Description of each failure problem area, related failure analysis, and corrective action status/disposition.
 - e. Test conditions and analysis of any variation from specified conditions.
 - f. Present accept/reject status.
 - g. A reliability growth curve showing a plot of the observed reliability from start of test through the report period and the predicted value of reliability for comparison.
- 2.2 Final Report. The final reliability test report shall include the information required by the summary report, and the results of the completed reliability tests or other action performed or evaluated to demonstrate reliability.

End of DI-SESS-81628A