



**DEFENSE LOGISTICS AGENCY
LAND AND MARITIME
P.O. BOX 3990
COLUMBUS, OHIO 43218-3990**

1 May 2024

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

**SUBJECT: Engineering Practice Study Concerning Current MIL-PRF-55342J
w/Amendment 1 Power Conditioning Requirements
Project Number 5905-2024-038.**

The initial draft for this subject document, dated 1 May 2024, is now available for viewing and downloading from the DLA Land and Maritime website:

<https://LandandMaritimeApps.dla.mil/Programs/MilSpec/DocSearch.aspx>

The study results will be used to help determine the feasibility of adding a requirement in MIL-PRF-55342.

Concurrence or comments are required at this Center within 30 days from the date of this letter. Late comments will be held for the next coordination of the document. Comments from Military departments must be identified as either "Essential" or "Suggested". Essential comments must be justified with supporting data. Military review activities should forward comments to their custodians of this office, as applicable, in sufficient time to allow for consolidating the department reply. Since Navy-EC is the custodian for this document, all Navy review activities should forward their comments directly to this Center.

The point of contact for this document is Mr. Joe Galbraith, DLA Land and Maritime-VAT, Post Office Box 3990, Columbus, OH 43216-3990. Mr. Galbraith can also be reached at 614-692-9821, or by e-mail to: joseph.galbraith@dlamail.mil.

Michael Radecki
Chief
Electronic Component Branch

ENGINEERING PRACTICE STUDY

TITLE: Engineering Practice Study Concerning Current MIL-PRF-55342J
w/Amendment 1 Power Conditioning Requirements

1 May 2024

STUDY PROJECT (SEE ATTACHMENT 1)

PRELIMINARY

Study Conducted by DLA LAND AND MARITIME

Prepared by:

Joe Galbraith

Objective

This engineering practice study is being conducted to determine the feasibility of defining an additional requirement to paragraph 4.8.4. Power Conditioning in MIL-PRF-55342J w/Amendment 1. The proposed wording which is to be determined to be acceptable is *"Any resistors damaged due to handling during power conditioning will be removed from the lot prior to shipment. These resistors shall not be considered for lot rejection."* Input from QPL customers, manufacturers, and the appropriate qualifying activity will support determining the acceptability of this statement.

Background

Initially, and in subsequent revisions of MIL-PRF-55342 there have been no specific allowances for part substitutions specifically for mishandling of resistors. However, there are similar exceptions in other military specifications. The following sentence is found in the current revision of MIL-PRF-83536: *"Relays indicating failure, but not verified as failures in accordance with a failure verification procedure approved by the qualifying activity, may be returned to test."* The inclusion of this sentence may be used to not categorize certain relays as ones that failed if it was determined there was mishandling during test setup, or test equipment failure.

Proposal

Please comment on the following questions below, prompted by the following proposed addition to paragraph 4.8.4.: *"Any resistors damaged due to handling during power conditioning will be removed from the lot prior to shipment. These resistors shall not be considered for lot rejection."*

Questions needing answers are:

1. Are resistors most prone to be damaged due to handling during the power conditioning test?
2. Would the proposed wording reduce the reliability of resistors subjected to the power conditioning test in any way?

Concurrence or comments are required at the Center no later than May 31, 2024. Comments from military department must be identified as either "Essential" or "Suggested." Essential comments must be justified with supporting data. Military review activities should forward comments to their custodians or this office, as applicable, in sufficient time to allow for considering the department replay.

Please forward your comments or concurrence electronically to the project engineer listed below. This can be done in the form of a return e-mail, with or without an attached text file. If an electronic response is not possible, we will accept comments via letter, facsimile, or phone call but only after you have contacted the project officer. Any further coordination concerning these documents will be circulated only to firms and organizations that furnish comments or reply that they have an interest.

The point of contact for this document is Mr. Joe Galbraith, DLA, VAT. The preferred method of contact is e-mail: joseph.galbraith@dla.mil. Mr. Galbraith can also be reached by phone at 614-692-9821

Conclusions

The results of this study will be published in a final EP study report after all submitted comments have been reviewed.

Recommendations

DLA Land and Maritime recommends that all military and industry representatives review this study and provide comments.