



DEFENSE LOGISTICS AGENCY

LAND AND MARITIME
POST OFFICE BOX 3990
COLUMBUS, OH 43218-3990

October 17, 2013

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: Initial draft; Engineering Practice Study (EPS), Adding Leakage Inductance testing to MIL-PRF-21038; Project Number: 5950-2013-034

The initial draft of this subject document, dated 17 October 2013, is now available for viewing and downloading from the DLA Land and Maritime-VA Web site:

<http://www.landandmaritime.dla.mil/Programs/MilSpec/DocSearch.aspx>

Recommended test procedures should be submitted to this Center no later than 45 days from the date of this letter. Suggestions will be drafted into a proposed test procedure for incorporation into MIL-PRF-21038 that will be coordinated at a later date

Concurrence or comments are required at this Center no later than 45 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 or this office, as applicable, in sufficient time to allow for consolidating the department reply. Lack of response will be construed as concurrence with or no interest in this draft.

The point of contact for this document is Mr. Ken Beymer, DLA Land and Maritime, VAT, P. O. Box 3990, Columbus, OH 43218-3990. The preferred method of contact is via e-mail: ken.beymer@dla.mil. Mr. Beymer can also be reached at (614) 692-0557/DSN 850-0557, or by facsimile (614) 692-6939.

Signature on file

Michael A. Radecki
Chief
Electronics Component Team

cc:
DLA Land and Maritime-VQP

ENGINEERING PRACTICE STUDY

TITLE: LEAKAGE INDUCTANCE TEST FOR MIL-PRF-21038

17 October 2013

PROJECT NUMBER
5950-2013-034

INITIAL REPORT

Study Conducted and
Prepared by:

Ken Beymer

- I. OBJECTIVES. The objective of this study is to determine the test procedure for leakage inductance and to determine the maximum allowable leakage inductance for MIL-PRF-21038.
- II. BACKGROUND. Users of MIL-PRF-21038 transformers have been having issues with excessive ringing on the primary side of the transformer which resulted in MIL-STD-1553 non-compliance and caused occasional bit errors communicating with other controls. The root cause has been determined to be high leakage primary inductance to center-tap. Since transformer designs vary, a leakage inductance test needs to be added for the total primary and each half of the primary (with secondary shorted) in lieu of additional waveform tests. Any suggested test configurations and maximum leakage inductance requirements would be considered for inclusion in MIL-PRF-21038.
- III. RESULTS. After comparing gathered information, comments, and reviews, I will announce the results of the study in a Final Report.
- IV. CONCLUSIONS. No conclusion has been determined yet. The conclusion of the study will be in the Final Report.
- V. RECOMMENDATIONS. Recommendations of the study will be in the Final Report. No recommendations at this time.