

MIL-E-81910A(AS)
Amendment 1
23 June 1978

MILITARY SPECIFICATION

Electrical Power Generating and Control Equipment, Aircraft, General Specification For

This amendment forms a part of Military Specification MIL-E-81910A(AS) dated 21 November 1977.

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Table II Column 2 change 2,6,8 etc. to read 2,6,10 etc.

PAGE 9

Paragraph 4.6.3.1.2, lines 10 and 11: Delete "the component shall be varied as follows: in successive four hour cycles: one hour each" and substitute "the component shall be varied in successive cycles as follows: four hours each."

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Paragraph 4.6.9: Delete, and substitute:

Vibration. Components shall be classified as engine mounted (starters, generators, constant speed drives, etc.) or non-engine mounted (inverters, converters, regulators, power monitors, etc). Engine mounted qualification and qualification verification components shall be subjected to sinusoidal type forcing functions. Non-engine-mounted qualification components shall be subjected to both sinusoidal and random vibration forcing functions. Non-engine-mounted qualification verification components shall be subjected to random vibration forcing functions only.

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Paragraph 4.6.9.2: Delete, and substitute:

"Non-engine-mounted components. Non-engine-mounted components shall be vibrated in accordance with Procedure 1A, Method 514.2, MIL-STD-810. Procedure 1A shall be accomplished using broadband random vibration. Two test levels are required, a functional level and an endurance level. For each axis of the three orthogonal axis of the component, one half of the functional test shall be conducted first, then the endurance test, followed by the second half of the functional test. The acceleration power spectral density (G^2/Hz) of applied vibration and test envelope for the functional and endurance tests shall be as depicted in Figures 4 and 5, respectively. The functional and endurance test time durations

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shall be one hour each for each axis. In addition, another sample shall be subjected to sinusoidal cycling via Procedure I, Method 514.2, MIL-STD-810. The vibration levels and test envelope shall conform to the requirements of curve M, Figure 514.2-3 and the test time schedule of Table 514.2-III, for components mounted without vibration isolators. During the functional and cycling test, the component shall operate at full electric load, and when functioning as a control component, it shall control the other components of the system as specified in the equipment specification. During the endurance test, the component shall be operating but need not be monitored for specified performance. The component, however, shall be observed for catastrophic failures. Any deterioration or change in performance of the component shall not exceed that defined per 4.5. At the conclusion of the test, the component shall be operated and inspected per 3.3. There shall be no evidence of cracking or rupture of any solder connection or part of the component, or of the mounting assembly."

Preparing Activity
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