

MIL-STD-704A
NOTICE 3 (USAF)
11 April 1973

MILITARY STANDARD

ELECTRIC POWER, CHARACTERISTICS AND UTILIZATION OF

TO ALL HOLDERS OF MIL-STD-704A

1. This notice is applicable to all U. S. Air Force activities.
2. Make pen and ink changes to add new paragraphs and to modify or delete changes previously made by Notice 2 as indicated below:
 - a. Page 4, add the following new paragraph:

"4.3 Voltage spikes. Spikes can occur on the voltage waveform of both AC and DC power systems. Because of their high-frequency characteristics, spikes are recognized as a form of electromagnetic interference and shall be controlled by the applicable electromagnetic specification, MIL-E-6051, rather than by this standard (see 7.9)."
 - b. Page 5, paragraph 5.1.4: Delete: "Transient spike voltages shall be controlled to comply with the spike requirements of MIL-E-6051."
 - c. Page 7, paragraph 5.2.3: Delete: "Transient spike voltages shall be controlled to comply with the spike requirements of MIL-E-6051."
 - d. Page 9, paragraph 6.7: Delete: "Utilization equipment shall meet the voltage spike susceptibility requirements of MIL-E-6051. However, when the spike environment of the aircraft installation does not comply with paragraph 5.2.3, the equipment shall withstand any spike within the envelope of Figure 17."
 - e. Page 9, paragraph 6.8.1.1: Delete entire paragraph from the standard.
 - f. Page 14: Add the following new paragraph:

"7.9 MIL-E-6051 spike control. MIL-E-6051 achieves spike compatibility in aircraft by insuring that the spike levels present at the terminals of equipments are less than the maximum levels which the equipments can tolerate. Subsystems and equipments must comply with requirements for both spike emission and spike susceptibility. No spike suppression requirement is imposed on inductive devices such as relays and solenoids as individual components. Figure 17 shows the envelope of a typical unsuppressed spike caused by the

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switching of such an inductive component. These spikes which occur on both AC and DC power lines are suppressed in the aircraft installation only to the extent necessary to meet the spike level requirement at the terminals of sensitive equipments or to achieve system compatibility."

3. RETAIN THIS NOTICE PAGE AND INSERT BEFORE THE TABLE OF CONTENTS.

4. Holders of MIL-STD-704A will verify that the additions and changes indicated herein have been entered. This notice page will be retained as a check sheet. This issuance is a separate publication. Each notice is to be retained by stocking points until the Military Standard is completely revised or cancelled.

Custodian:
Air Force - 11

Preparing activity:
Air Force - 11

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