

MIL-STD-704A
NOTICE -1
7 FEBRUARY 1968

MILITARY STANDARD

ELECTRIC POWER, AIRCRAFT,
CHARACTERISTICS AND UTILIZATION OF

This notice should be filed in front of Military Standard MIL-STD-704A, dated 9 August 1966.

TO ALL ACTIVITIES:

1. Make the following pen and ink changes:

(a) Page 1, paragraph 1.3: Delete, and substitute:

"1.3 Basis for characteristics. The characteristics and limits delineated and specified in this standard are based on the utilization restrictions and requirements stated in section 6 and the notes and assumptions stated in section 7 of this standard."

(b) Page 1, paragraph 3.3.2, last line: Delete "limits" and substitute "level".

(c) Page 5, paragraph 5.1.3.5: Delete, and substitute:

"5.1.3.5 Wave form.- The voltage wave form shall be within the following limits:

- (a) Deviation factor: The wave form shall not deviate from corresponding points of the fundamental by more than 5 percent of the peak value of the fundamental.
- (b) Total harmonic content: 8 percent of the fundamental (rms) when measured with a distortion meter as distortion of the fundamental frequency.
- (c) Individual harmonic content: 5 percent of the fundamental (rms) when measured with a harmonic analyzer.
- (d) Crest factor: 1.41 ± 0.15 (see 7.6.8). (Note: Deviation factor computed from the actual crest factor may exceed the deviation factor at the peak of the wave form.)"

(d) Page 6, paragraph 5.1.5: Revise item (b) to read as follows:

"(b) Emergency power sources - The frequency shall be maintained at 400 $\pm$ 40 cps with the voltage within the limits of table I. Below 360 cps, the frequency/voltage (F/V) ratio shall not fall below 3.0 (F/V)."

(e) Page 7, paragraph 5.2.3, last two lines: Delete last sentence.

(f) Page 9, paragraph 6.8.1.1, second and third lines: Delete second sentence.

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(g) Page 12, paragraph 7.6.4: Delete, and substitute:

"7.6.4 Electric-system characteristics. Characteristics covered in this standard are based on the electric power source being:

(a) AC or dc generators driven by:

(1) Constant speed drives (speed control in hydraulic or mechanical torque converter).

(2) Constant speed turbines (speed control on air or gas turbine).

(3) Narrow range, variable speed transmissions (turboprops, helicopter rotors, etc.).

(b) DC generators driven by:

(1) Wide range, variable speed transmissions (piston engines).

(c) Inverters

(d) Transformer-rectifiers

(e) Batteries

Components of the power system are to meet the requirements of their detail specifications, and the system is to provide the characteristics specified in this standard."

(h) Page 13, paragraph 7.6.7: Change "85 percent" to "80 percent".

(i) Page 15, table II, under column titled "LANDING":

Delete:	Substitute:
"21 - 28.5"	"23.5 - 28.5"
"20 - 28.5"	"22.5 - 28.5"
"19 - 28.5"	"21.5 - 28.5"

(j) Pages 17, 18, and 19, figures 2, 3, and 4, respectively: Delete, and substitute new figures 2, 3, and 4 attached (pages 3, 4, and 5 of this notice).

(k) Page 32, figure 17: Delete, and substitute new figure 17 attached (page 6 of this notice).

2. Retain this Notice and insert before table of contents.

Custodians:
Army - AV
Navy - AS
Air Force - 11

Preparing activity:
Navy - AS

Project No. MISC-0441

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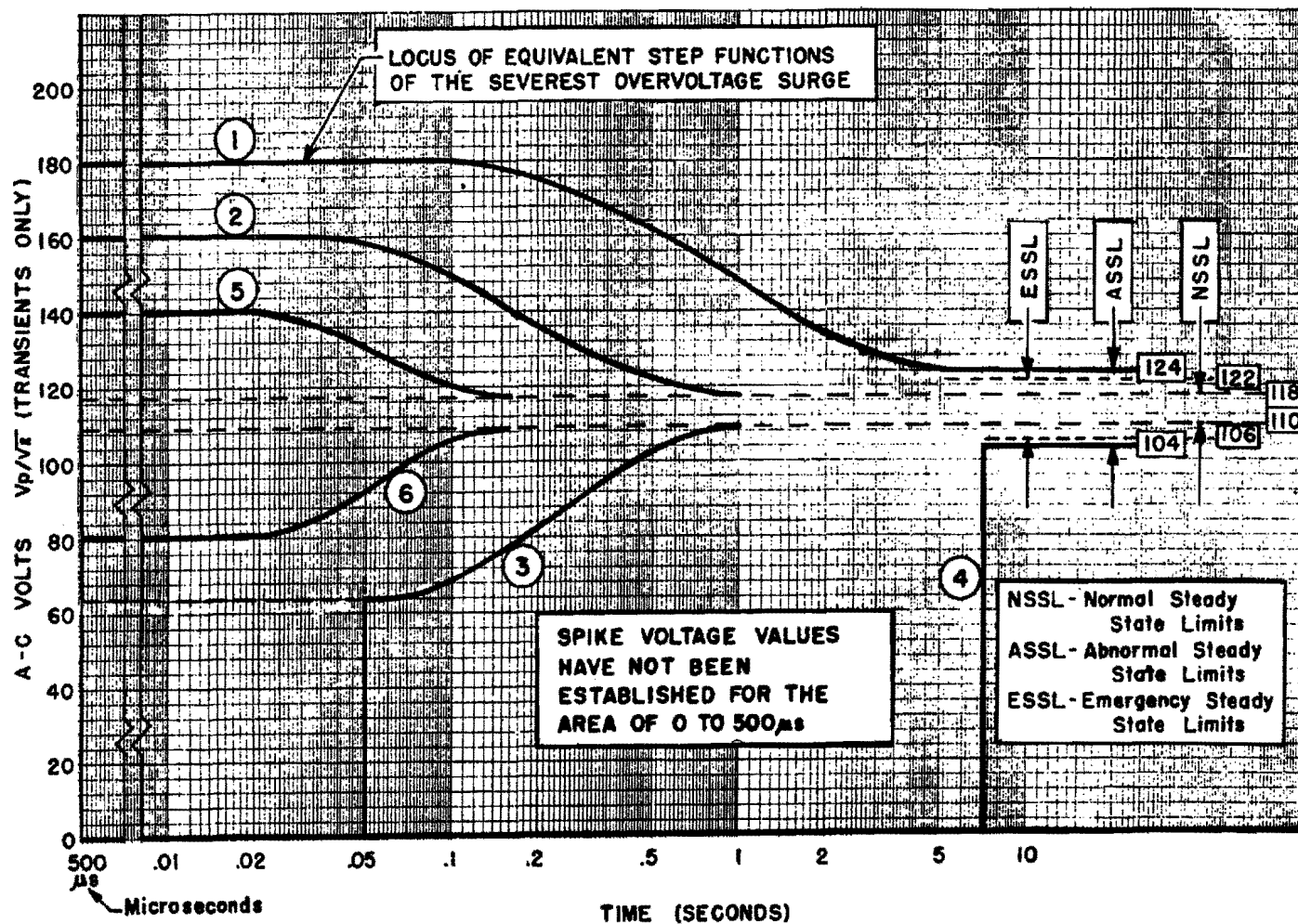


FIGURE 2.. Transient surge ac voltage step function loci limits for category A equipment

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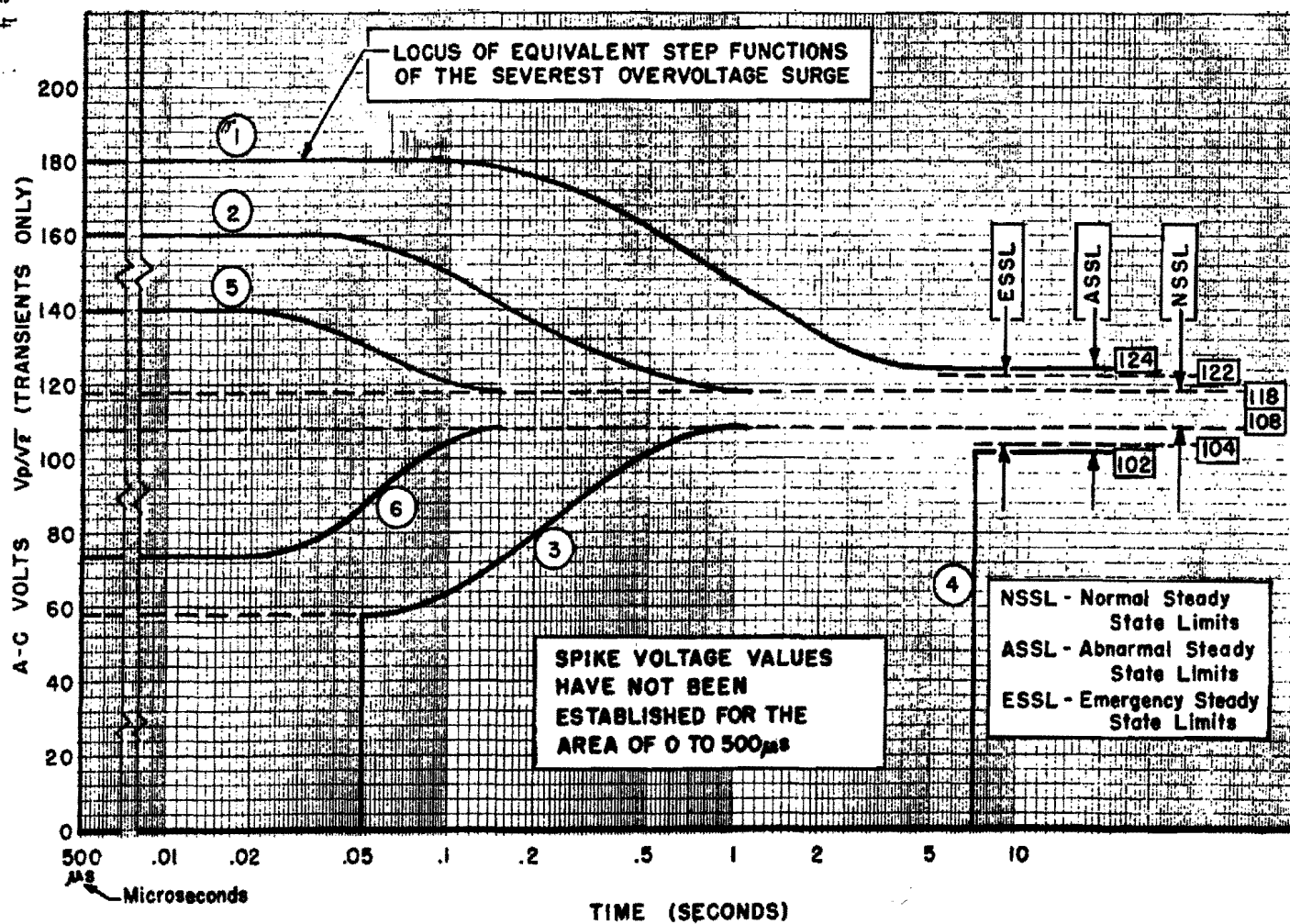


FIGURE 3. Transient surge ac voltage step function loci limits for category B equipment

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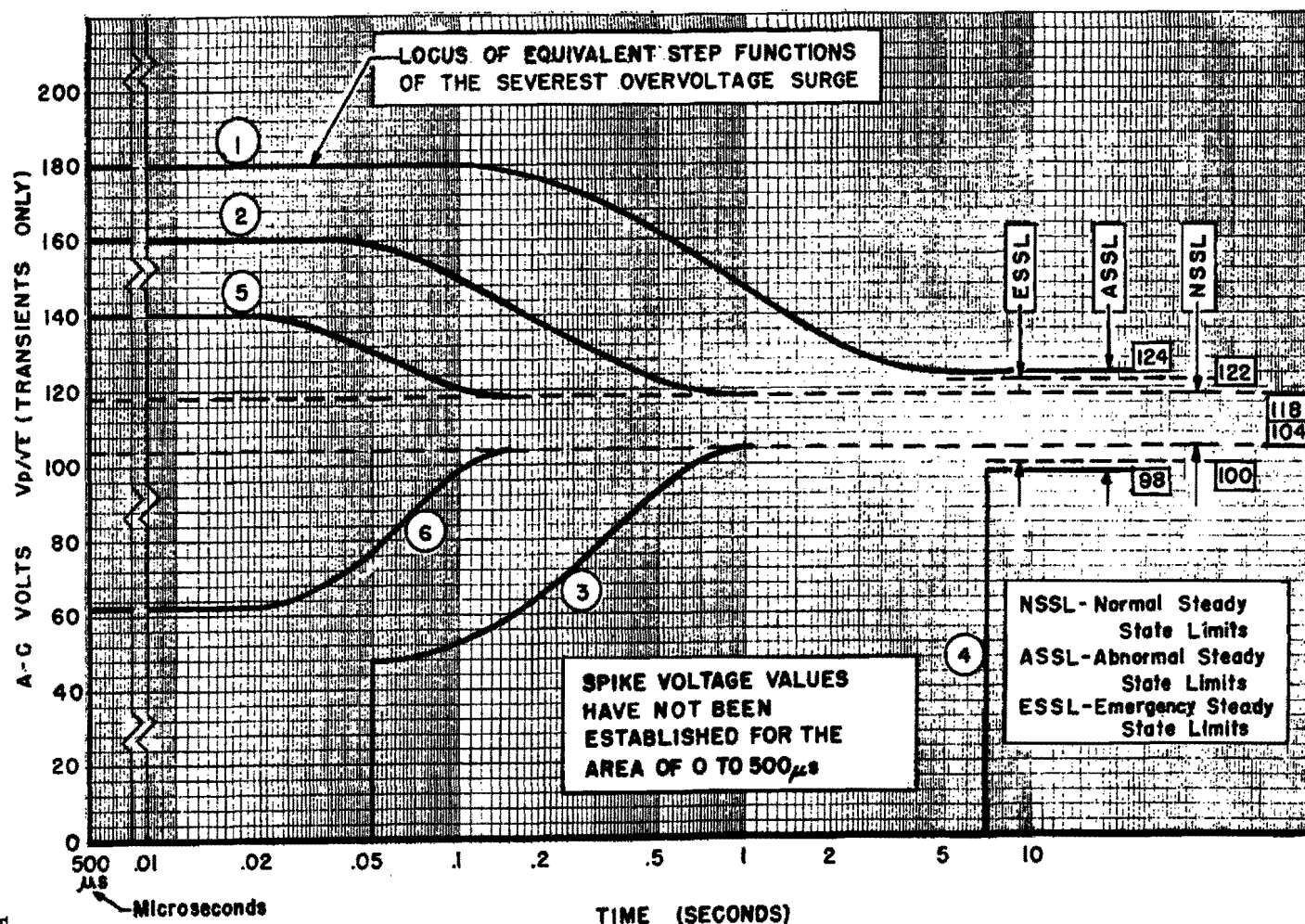
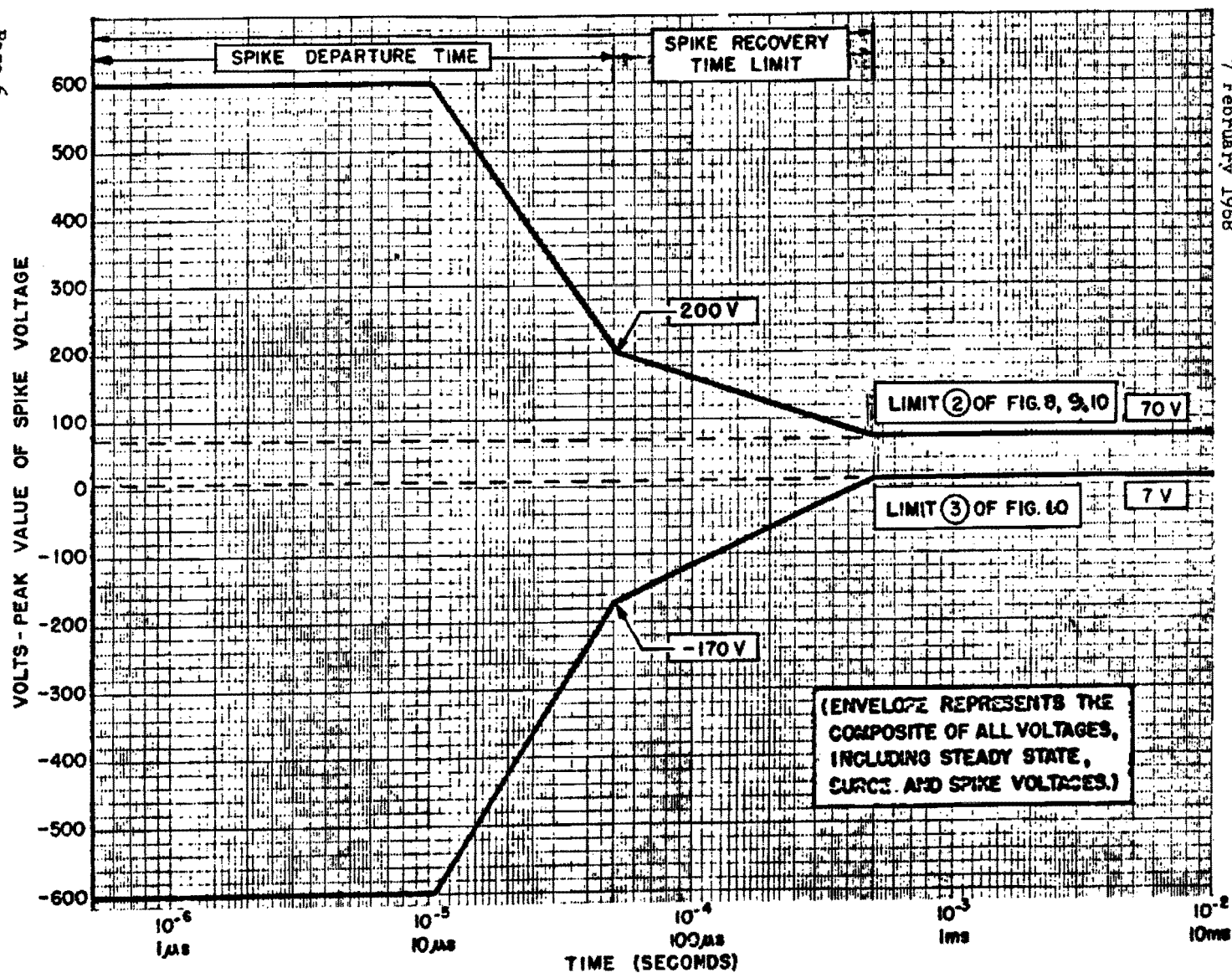


FIGURE 4. Transient surge ac voltage step function limits for category C equipment

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FIGURE 17. Envelope of spike voltages for dc equipment