

MIL-E-5400T
AMENDMENT 1
5 September 1980

MILITARY SPECIFICATION
ELECTRONIC EQUIPMENT, AEROSPACE, GENERAL
SPECIFICATION FOR

This amendment forms a part of Military Specification MIL-E-5400T dated 16 November 1979, and is approved for use by all Departments and Agencies of The Department of Defense.

PAGE 1

Specification title: Delete and substitute the title of this amendment.

1.1 Scope, line 3: Change the period at the end of the first sentence to a comma and add: "missiles, boosters and allied vehicles."

PAGE 2

After equipment classification Class 4, add:

"Class 5 Equipment designed for altitudes greater than 100,000 ft. for periods of time not exceeding 6 hours, and continuous sea level operation over the temperature range of -54⁰ to +95⁰C (+125⁰C intermittent operation)."

PAGE 7

3.1.9 Grounding, line 2: Delete "Requirement 1" and substitute "Requirements 1 and 74."

PAGE 10

3.1.25 Tools (special), line 2: Change the period at the end of the sentence to a comma and add: "except that the contractor shall not mount tools in the equipment or make space provisions therefore unless required by the detail specification or contract."

PAGE 13

Add: "3.1.59 Electronic modules. Electronic modules shall be in accordance with MIL-STD-454, Requirement 73. The use of electronic modules requires the approval of the procuring activity."

PAGE 24

6.1 Intended use, line 3: Change the period at the end of the sentence to a comma, and add: "used in piloted aircraft, missiles, boosters and vehicles used for short periods of time in space environments."

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*TABLE I. Environmental conditions.

Equipment class	Equipment operating				Equipment nonoperating		Equipment nonoperating			
	Temperature extremes for the chamber (without external cooling provisions)				Altitude		Temperature extremes			
	Column I continuous	Column II intermittent	Column III short-time	Column IV	Column V	Column VI	Column VII	Column VIII	Column IX	Column X
Class 1	-54°C +55°C	30 min. +71°C	---	Defined by curve A, figure 3, (sheet 1)	Defined by curve B, figure 3, (sheet 1)	---	-54°C to +71°C	Sea level (30.0 in. Hg.) (9.4 in. Hg.) 50,000 ft.	-57°C to +85°C	-57°C to +85°C
Class 1A	-54°C +55°C	30 min. +71°C	---	Defined by curve A, figure 3, (sheet 1)	Defined by curve B, figure 3, (sheet 1)	---	-54°C to +71°C	Sea level (30.0 in. Hg.) (8.89 in. Hg.) 30,000 ft.	-57°C to +85°C	-57°C to +85°C
Class 1B	-40°C +55°C	30 min. +71°C	---	Defined by curve A, figure 3, (sheet 1)	Defined by curve B, figure 3, (sheet 1)	---	-40°C to +71°C	Sea level (30.0 in. Hg.) (16.89 in. Hg.) 15,000 ft. 1/	-57°C to +85°C	-57°C to +85°C
Class 2	-54°C +71°C	30 min. +95°C	---	Defined by curve A, figure 3, (sheet 2)	Defined by curve B, figure 3, (sheet 2)	---	-54°C to +95°C	Sea level (30.0 in. Hg.) (1.32 in. Hg.) 70,000 ft.	-57°C to +95°C	-57°C to +95°C
Class 3	-54°C +95°C	30 min. +125°C	10 min. +150°C	Defined by curve A, figure 3, (sheet 3)	Defined by curve B, figure 3, (sheet 3)	Defined by curve C, figure 3, (sheet 3)	-54°C to +125°C	Sea level (30.0 in. Hg.) (0.32 in. Hg.) 100,000 ft.	-57°C to +125°C	-57°C to +125°C
Class 4	-54°C +125°C	30 min. +150°C	10 min. +260°C	Defined by curve A, figure 3, (sheet 4)	Defined by curve B, figure 3, (sheet 4)	Defined by curve C, figure 3, (sheet 4)	-54°C to +150°C	Sea level (30.0 in. Hg.) (0.32 in. Hg.) 100,000 ft.	-57°C to +150°C	-57°C to +150°C
Class 5	-54°C +95°C	30 min. +125°C	---	Same as Class 3	---	---	-54°C to +125°C	Sea level (30.0 in. Hg.) (10.10 in. Hg.) 2,000,000 ft.	-57°C to +125°C	-57°C to +125°C

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Altitude range shown is for operation only.

Classes 1A and 1B equipment shall withstand a nonoperating altitude of 40,000 feet (5.5 in. Hg.).

For altitude above 100,000 ft., the equipment's surrounding environment shall not exceed 71°C and means shall be available for rejection of heat into the surroundings by conduction, radiation or some other means.

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Table I. Environmental Conditions: Delete the table and substitute new Table I of this amendment.

PAGE 40

Document number ANSI-Z-35.1-1968: Delete "1968" in document number and substitute "1972."

PAGE 41

Document number MIL-B-5087: In last column, add ",74."

PAGE 44

Document number MIL-STD-1472: In last column, add "1,36,."

PAGE 45

Document number MIL-STD-196: In last column, add ",67."

PAGE 47

Document number FED-STD-No. 406: Delete "No." from the document number.

PAGE 48

Document number MIL-P-55640: Delete the following completely from list -

"Printed Wiring Boards, Multilayer MIL-P-55640 17"
(Plated-Through Hole)

Document number MIL-STD-275: In last column, delete ",36."

PAGE 49

Document number MIL-HDBK-217: In last column, delete "15" and substitute "35."

PAGE 51

Document number MIL-T-7928: In last column, add "19,."

Document number MIL-T-22361: In last column, add "12."

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PAGE 52

Add: "Welding Symbols ANSI Y32.3-1969 13."

PAGE 53

Document number MIL-S-1222: In second column, delete "1" and substitute "12."

Document number MIL-B-5087: In second column, add ",74."

Document number MIL-W-5486: Delete "5486" and substitute "5846."

Document number MIL-T-7928: In last column, add "19,."

PAGE 54

Document number MIL-C-22759: Delete "C" from document number and substitute "W." In second column, add ",71."

Document number MIL-P-55640: Delete "MIL-P-55640 17" completely from list.

PAGE 55

Document number MIL-STD-188: Delete "MIL-STD-188" completely from list.

Document number MIL-STD-275: In second column, delete "36."

Document number MIL-STD-883: In last column, add "5,."

PAGE 56

Document number MIL-STD-1472: In second column, add ",36."

Document number MIL-HDBK-217: In second column, delete "15" and substitute "35."

Document number ANSI Y32.3-69: In last column, add "13."

Custodians:

Army - CR
Navy - AS
Air Force - 11

Preparing activity:

Navy - AS
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Reviewer activities:

Army - MI, AR
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Army - AV