

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 -54° to +95°C (+125°C 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."

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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 1. Environmental conditions.**

Equipment operating										Equipment operating and nonoperating		Equipment nonoperating			
Temperature extremes for the chamber (without external cooling provisions)										Temperature shock		Temperature extremes		Temperature shock	
Equipment class	Temperature extremes for the chamber (without external cooling provisions)			Column III short-time	Combined temperature-altitude				Temperature shock	Altitude	Temperature extremes	Temperature shock			
	Column I continuous	Column II intermittent	Column IV		Column V	Column VI	Column VII								
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)	---	Column VIII	Sea level (30.0 in. Hg.) (3.4 in. Hg.) 50,000 ft.	-57°C to +85°C	-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)	---	Column VIII	Sea level (30.0 in. Hg.) (8.89 in. Hg.) 30,000 ft.	-57°C to +85°C	-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)	---	Column VIII	Sea level (30.0 in. Hg.) (16.89 in. Hg.) 15,000 ft. 1/	-57°C to +85°C	-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)	---	Column VIII	Sea level (30.0 in. Hg.) (1.32 in. Hg.) 70,000 ft.	-57°C to +95°C	-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)	Column VIII	Sea level (30.0 in. Hg.) (0.32 in. Hg.) 100,000 ft.	-57°C to +125°C	-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)	Column VIII	Sea level (30.0 in. Hg.) (0.32 in. Hg.) 100,000 ft.	-57°C to +150°C	-57°C to +150°C	-57°C to +150°C				
Class 5	-54°C +95°C	30 min. +125°C	---	Same as Class 3 2/	---	---	Column VIII	Sea Level (30.0 in. Hg.) (10 in. Hg.) 2,000,000 ft.	-57°C to +125°C	-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
(Proj. No. GDRQ-0005)

Reviewer activities:

Army - MI, AR
Navy - EC
Air Force - 99

User activity:

Army - AV