

MIL-F-7872C(ASG)  
 AMENDMENT 1  
 18 August 1980

# MILITARY SPECIFICATION

## FIRE AND OVERHEAT WARNING SYSTEMS, CONTINUOUS, AIRCRAFT: TEST AND INSTALLATION OF

This amendment forms a part of Military Specification MIL-F-7872C dated 18 November 1966, and is approved for use by all Departments and Agencies of the Department of Defense.

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### Paragraph 2.1 SPECIFICATIONS:

Add the following:

"FEDERAL

TT-S-735      Standard Test Fluids, Hydrocarbon"

MILITARY - Delete the following:

|             |   |
|-------------|---|
| "MIL-W-5088 | Wiring, Aircraft, Installation of   |
| MIL-E-5400  | Electronic Equipment, Aircraft General Specification for                                      |
| MIL-R-6106  | Relay, Electric, Aerospace, General Specification for   |
| MIL-E-7080  | Electric Equipment, Piloted Aircraft Installation and Selection of, General Specification for |
| MIL-P-7936  | Parts and Equipment, Aeronautical Preparation for Delivery"                                   |

MILITARY - Add the following:

|             |  |
|-------------|--|
| "MIL-W-5088 | Wiring, Aerospace Vehicle  |
| MIL-E-5400  | Electronic Equipment, Airborne, General Specification for  |
| MIL-R-6106  | Relay, Electromagnetic (Including Established Reliability (ER) Types), General Specification for |
| MIL-E-7080  | Electric Equipment, Aircraft, Selection and Installation of                                      |

Bottom of page 1, add the following:

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Engineering Specifications and Standards Department (Code 93), Naval Air Engineering Center, Lakehurst, NJ 08733, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

FSC 6340

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STANDARDS

MILITARY - Delete the following:

|              |   |
|--------------|---|
| "MIL-STD-411 | Aircrew Station Visual Signals                                  |
| MIL-STD-704  | Electric Power, Aircraft, Characteristics<br>and Utilization of |
| MS33586      | Metals, Definition of Dissimilar"                               |

MILITARY - Add the following:

|              |   |
|--------------|---|
| "MIL-STD-411 | Aircrew Station Signals   |
| MIL-STD-704  | Aircraft Electric Power Characteristics                         |
| MIL-STD-794  | Parts and Equipment, Procedures for<br>Packaging and Packing of |
| MIL-STD-889  | Dissimilar Metals"  |

Delete paranthesized source paragraph and substitute:

"(Copies of specifications, standards, drawings, and publications required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)"

Paragraph 3.1: Delete and substitute:

"3.1 First article. When specified (see 6.2), the contractor shall furnish sample units for first article inspection and approval (see 4.3.1 and 6.4).

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Paragraph 3.4.1, line 4: delete "MS33586" and substitute "MIL-STD-889".

Paragraph 3.5.1, line 2: after "6-inch" add "(152.4mm)" and after  
2000°F" add "(1093.3°C)"  
line 7: after "6-inch" add "(152.4mm)" and after  
"1500°F" add "(815.5°C)"

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Paragraph 3.5.5, line 2: after "150°F to 250°F" add "(65.5°C to 121.1°C)"

Paragraph 3.5.5.1, line 2: after "500°F" add "(260°C)"  
line 4: after "4-inch" add "(101.6mm)"; after "1000°F"  
add "(537.7°C)"  
line 5: after "500°F" add "(260°C)"

Paragraph 3.5.7, line 2: delete "wore" and substitute "word".  
line 2: after "one half inch" add "(12.7mm)".

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Paragraph 3.5.13, line 3: delete "400 cycles per second" and substitute: "400 Hertz".

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Paragraph 3.6.2.1, line 2: after "36, 60, 120 and 180" add "(914.4mm, 1524mm, 3048mm, and 4572mm)"

Paragraph 3.6.3, line 2, after "2000°F" add "(1093.3°C)"

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Paragraph 4.1, delete and substitute:

"4.1 Responsibility for inspection. Unless otherwise specified in the contract, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspection requirements set forth in this specification where such inspection is deemed necessary to assure supplies and services conform to prescribed requirements."

Paragraph 4.2(a): Delete and substitute  
"(a) First article inspection"

Paragraph 4.3, delete "Preproduction tests" wherever it appears and substitute "First article inspection".

Paragraph 4.3.1, delete "Preproduction test" wherever it appears and substitute "First article inspection".

Paragraph 4.3.1.1, line 1: delete "preproduction test" and substitute: "first article inspection".

Paragraph 4.3.2, line 1: delete "preproduction tests" and substitute "first article inspection".

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Paragraph 4.3.3, delete all reference to "preproduction" and substitute "First article".

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Paragraph 4.5.3, line 3: after "60-inch" add "(152.4mm)"  
line 6: after "120-inches" add "(3048mm)"  
line 11: after "4°F" add "(13.3°C)"

Paragraph 4.5.4.1, line 4: after "2000°F" add "(1093.3°C)"  
line 5: after "1500°F" add "(815.5°C)"  
line 7: after "50°F" add "(10°C)"

Paragraph 4.5.4.2, line 4: after "3 inches" add "(76.2mm)"

Paragraph 4.5.4.3, line 1: after "2000°F" add "(1093.3°C)"  
line 2: after "6 inch" add "(152.4mm)"

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Paragraph 4.6.11, line 2: after "500°F" add "(260°C)."  
line 2: after "1000°F" add "(537.7°C)"  
line 4: after "75°F" add "(23.88°C)"

Paragraph 4.6.13, line 3: after "50°F" add "(10°C)"

Paragraph 4.6.15, line 3: after "(-65°F)" add "(-52.7°C)"

Paragraph 4.6.16, lines 4, 5 and 8: after "100,000 feet" add "(30,480 mm)"  
line 4 after "20,000 feet" add "(6096 mm)"

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Paragraph 4.6.19, line 7: after "8 inches" add "(203.2mm)".

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Paragraph 4.6.25, in title: after "1500°F" add "(815.5°C)"  
line 2, after "1500°F" add "(815.5°C)".

Paragraph 4.6.29, lines 6 and 8: after "6-inch" add "(152.4mm)"  
line 7: after "2000°F" add "(1093.3°C)".

Paragraph 4.6.30, line 9: after "3-inches" add "(76.2mm)".

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Paragraph 4.6.31, line 4: after "6-inch" add "(152.4mm)"  
line 5: after "2000°F" add "(1093.3°C)"

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Paragraph 4.6.34 delete and substitute:

"4.6.34 Salt water immersion test. With the system operating at standby, the sensing element loop shall be disconnected at a convenient point or the internal conductor shall be exposed by other means. The open end fitting or exposed conductor shall be completely immersed in a 5 percent solution (by weight) of salt water for not less than 10 seconds and an alarm shall not occur. The end fitting shall be removed from the salt solution, and excess solution may be shaken off. Within one minute after removal from the salt solution, the end fitting shall be reconnected, the test switch shall be actuated and the warning signal shall actuate to verify system operation.

Paragraph 4.6.35, line 2: after "2000°F" add "(1093.3°C)".

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Paragraph 5.1.1, line 2: delete "MIL-P-7936" and substitute "MIL-STD-794".

Paragraph 5.2.1, line 2: delete "MIL-P-7936" and substitute "MIL-STD-794".

Paragraph 5.3, line 2: delete "MIL-P-7936" and substitute "MIL-STD-794".

Paragraph 6.2, delete and substitute:

"6.2 Ordering data. Procurement documents should specify the following:

- a. Title, number and date of this specification.
- b. First article requirements (see 3.1 and 4.3.1).
- c. Levels of packaging and packing required (see 5.1).
- d. Whether or not first article is to be waived (see 4.3.3).
- e. Items of data required (see 6.3).

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Delete paragraphs 6.3 and 6.3.1

Add the following new paragraphs:

"6.3 Data requirements. When this specification is used in a procurement which incorporates a DD Form 1423 and invokes the provisions of 7-104.9(n) of the Armed Services Procurement Regulations, the data requirements identified below will be developed as specified by an approved Data Item Description (DD Form 1664) and delivered in accordance with the approved Contract Data Requirements List (DD Form 1423) incorporated into the contract. When the provisions of ASPR-7-104.9(n) are not invoked, the data specified below will be delivered by contractor in accordance

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with the contract requirements. Deliverable data required by this specification is cited in the following paragraphs:

| <u>Paragraph</u> | <u>Data Requirements</u>            | <u>Applicable DID</u>                |
|------------------|-------------------------------------|--------------------------------------|
| 4.3.2            | First Article<br>Inspection Reports | DI-T-5329 Inspection<br>Test Reports |

6.4 First article inspection. When a first article is required for inspection and approval (see 3.1, 4.3.1, and 6.2), the article shall be tested and approved under the appropriate provisions of 7-104.55 of the Armed Services Procurement Regulations. The first article shall be a preproduction sample (see 4.3.1). The contracting officer should include specific instructions in all procurement instruments regarding arrangements for examinations, test and approval of the first article.

6.5 Precedence of documents. When the requirements of the contract, this specification, or applicable subsidiary specifications are in conflict, the following precedence shall apply:

a. Contract. The contract shall have precedence over any specification.

b. This specification. This specification shall have precedence over all applicable subsidiary specifications. Any deviations from this specification, or from subsidiary specifications where applicable, shall be specifically approved in writing by the procuring activity.

c. Referenced specifications. Any referenced specification shall have precedence over all applicable subsidiary specifications referenced therein. All referenced specifications shall apply to the extent specified.

#### 6.6 Definitions

6.6.1 Procuring activity. For purpose of this specification, the term "procuring activity" is defined as the Government activity that is procuring the aircraft involved."

#### Custodians:

Navy - AS  
Air Force - 11  
Army - AV

#### Preparing activity:

Navy - AS  
Project No. 6340-0067