

INCH-POUND

MIL-M-21393A
AMENDMENT 7
8 August 2002
SUPERSEDING
AMENDMENT 6
15 November 1968

MILITARY SPECIFICATION

MICROPHONE, DYNAMIC, M-92C/U

This amendment forms part of MIL-M-21393A, dated 1 July 1960, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

Specification title: Delete "M-92/U" and substitute "M-92C/U". Make this same change wherever "M-92/U" appears in this specification.

2.1, first sentence: Add: "(see 6.3 (4))".

2.1, under specifications, military: Delete:

"MIL-M-14	Molding Plastics and Molded Plastic Parts, Thermosetting
MIL-E-5272	Environmental Testing, Aeronautical and Associated Equipment, General Specification for.
MIL-C-6181	Interference Limits and Tests; Aircraft Electrical and Electronic Equipment
MIL-P-15035	Plastic Material, Laminated, Thermosetting; Sheets, Cotton-Fabric Base, Phenolic-Resin"

* 2.1, MIL-T-5422, and MIL-STD-781: Delete in their entirety.

PAGE 2

* 2.1, under standards: Add the following:

"DEPARTMENT OF DEFENSE

MIL-STD-461	-	Requirements of the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment.
MIL-STD-810	-	Environmental Engineering Considerations and Laboratory Tests.

HANDBOOK

DEPARTMENT OF DEFENSE

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MIL-HDBK-781 - Reliability Tests Methods Plans, and Environments for Engineering, Development Qualification, and Production.”

Add as new paragraph:

- * “2.3 Non-Government publications. The following document forms a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents, which are DoD adopted, are those listed in the issue of the DoDISS cited in the solicitations. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D5948 - Compounds, Molding, Thermosetting.

(Application for copies should be addressed to the ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959).

PAGE 3

3.3.5, first sentence: Add: “or figure 1A”.

3.3.8, 3.3.8.1 and 3.3.8.2: Delete and substitute:

- * “3.3.8 Reliability in mean time between failures. The microphones shall have a minimum of 500 hours mean (operating) time between failures (refer to MIL-HDBK-781).”

3.3.11, at end of first sentence: Add: “as modified by 3.5.11.1.”

PAGE 4

3.3.15.1: Delete “type FBE” and substitute:

“and shall meet the performance requirements of this specification.”

3.3.15.2: Delete and substitute:

- * “3.3.15.2 Molded plastic - material - Molded plastic-material shall be in accordance with ASTM D5948 and shall meet the performance requirements of this specification.”

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3.4.1.2: Add: “or figure 1A.”

3.4.1.3: Delete and substitute:

“3.4.1.3 Contents – The microphone shall be composed of a microphone element, an amplifier, a push button switch and a housing with cordage and plug.”

3.5.1 and 3.5.2: Delete “50 ±3 db” and substitute: “54 ±3 db.”

3.5.2: Delete “Table I” and substitute: “figure 12.”

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Pages 5 and 6

Table I: Delete and substitute: figure 12.

Page 6

3.5.6: Delete "Impedance" in its entirety.

3.5.9: Delete and substitute:

"3.5.9 Microphone Current – For test purposes, the microphone shall be connected as shown in the standard test circuit, figure 5, and the microphone D.C. current shall not exceed 35 ma."

3.5.10: Delete: "shall be contained in the hand grip and"

3.5.11 and 3.5.11.1: Delete and substitute:

"3.5.11 Susceptibility.

3.5.11.1 Radiated R. F. Susceptibility – The microphone, when connected as shown on figure 13, shall not evidence oscillation or other degradation of performance including extraneous signals or noise (i.e., output which does not correspond to a desired input) when subjected to any frequency and steady field intensity shown in table V. The microphone shall not evidence oscillation or other degradation when subjected to the required steady field intensity for a period of three minutes at nine frequencies including end and mid frequency of each frequency band of table V.

TABLE V

<u>Frequency (MC)</u>	<u>Steady Field Intensity (Antenna Induced)</u>
2-30	-4 db relative to 1.0 volt (0.63 volt) in a 41 inch vertical rod antenna*
30-52	-2 db relative to 1.0 volt (0.8 volt) in a half wave dipole antenna
225-400	24 db relative to 1.0 (16.0 volt) in a half wave dipole antenna

*As used with NF-105 Noise and Field Strength Meter or equivalent"

3.5.12: Add:

"3.5.12 Voltage Transients Susceptibility. There shall be no degradation of performance or any change in DC current of the microphone as a result of the voltage transients test in accordance with 4.5.3.17."

Page 7

4.2: Delete "10 units" and substitute "20 units."

4.2 and 4.3: Delete "Bureau of Naval Weapons" and substitute "U. S. Naval Ammunition Depot, Crane, Indiana 47522.

* Table II: Delete "Reliability Assurance" in its entirety.

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Page 14

6.2: Delete last sentence and substitute:

“The activity responsible for the Qualified Products List is the U. S. Naval Ammunition Depot, Crane, Indiana 47422, and information pertaining to qualification of products may be obtained from that activity.”

* 6.3 (4), add new paragraph as follows:

“(4) Reordered Equipment – The following specifications shall take precedence over those concerning performance requirements listed or referenced 2.1, where equipment is reordered.

<u>OLD</u>	<u>NEW</u>
MIL-T-5422E	MIL-STD-810
MIL-I-6181D	MIL-STD-461
MIL-STD-781A	MIL-HDBK-781”

6.4: Add:

“6.4 Ordering data – The procurement document should specify the title, number and date of this specification and configuration in accordance with either figure 1 or figure 1A of this specification.”

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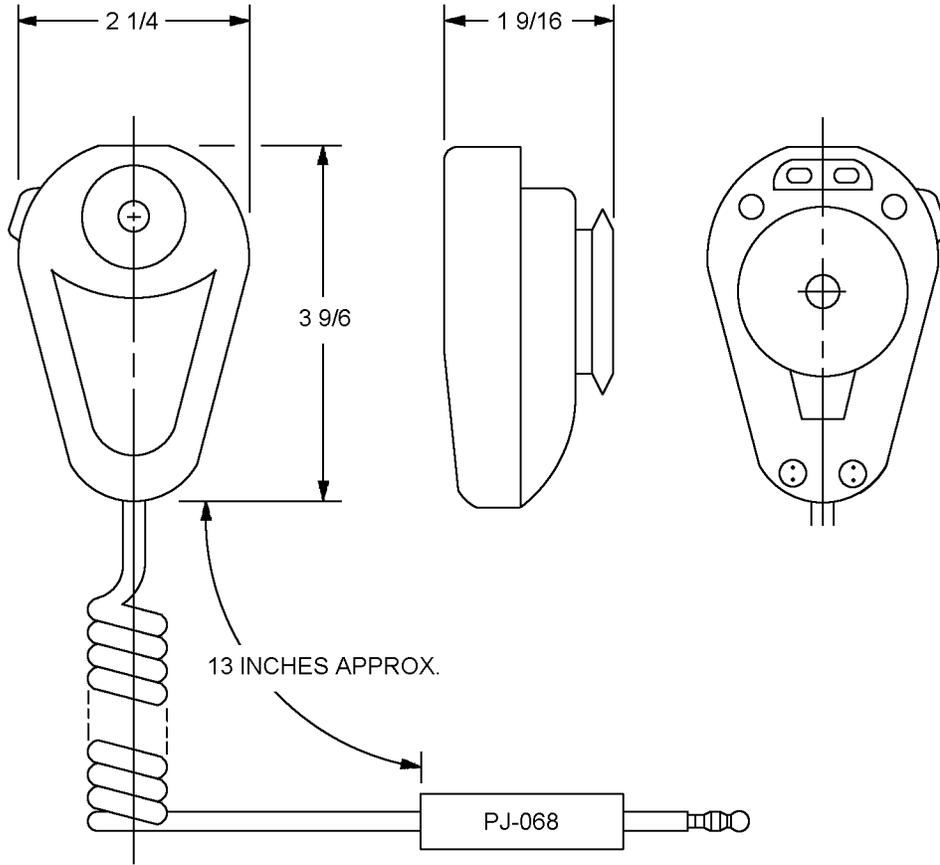
* Figure 5: Delete “330 ohms” and substitute “390 ohms”, as the value for Resistor “R1”.

Add as new figures:

Figures 1A, 12 and 13 (see pages 6, 7, and 8 below):

The margins of this amendment are marked with an asterisk to indicate where changes from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

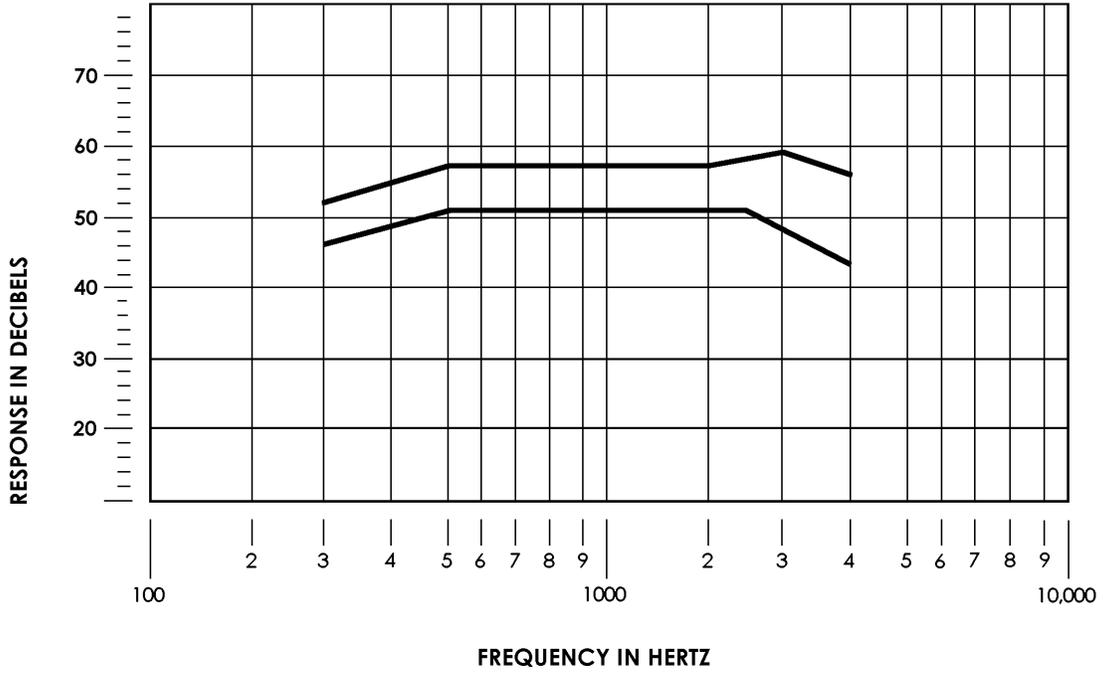
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NOTES:
All dimensions are in inches, tolerances.
 $\pm 1/64$ unless otherwise noted.

FIGURE 1A. Hand-held microphones M-92C/U.

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Frequency in cycles per second (see 3.5.2)

FIGURE 12. Frequency response.

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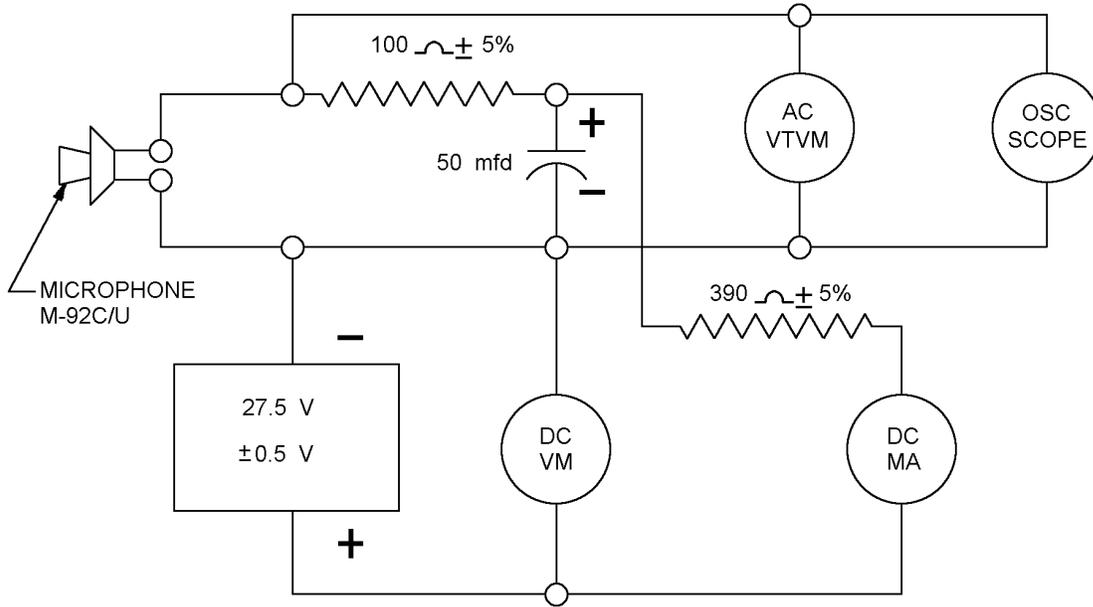


FIGURE 13. Radiated radio frequency susceptibility test circuit.

CONCLUDING MATERIAL

Custodians:
Navy - AS
DLA - CC

Preparing activity:
DLA - CC

(Project 5965-0375)