

INCH-POUND

MIL-P-46610E (AR)
AMENDMENT 4
18 January 1995
SUPERSEDING
AMENDMENT 3
26 July 1994

MILITARY SPECIFICATION

PRIMERS, PERCUSSION, STYPHNATE AND CHLORATE
TYPES, FOR SMALL ARMS AMMUNITION

This amendment forms a part of MIL-C-46610E (AR), dated 5 November 1973, and is approved for use by the US Army Armaments, Research, Development and Engineering Center, and is available for use by all Departments and Agencies of the Department of Defense.

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2.1, Add the following new specification:

"SPECIFICATIONS

MILITARY

MIL-P-46296 - Primer, percussion, M82 Loading,
Assembling, and Packing"

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2.1, Add to the List of Applicable Drawings:

"C9329664 - Packing and Marking for Box, Wirebound
Packing Ammunition for Primer, Electric
MS2A3B1; Percussion M36A2; and
Percussion 50M
D11920451 - Case, Cartridge, 5.56mm
D9378276 - Case, Cartridge, 5.56mm
8861197 - Primer, Percussion, M82, Assembly

AMSC N/A

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FSC 1305

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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9342868 - Cartridge, 5.56mm, Ball, M855
10522382 - Primer, Composition, FA-70
10522383 - Primer, Composition, FA-90A
10535491 - Primer, Composition, FA1023"

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* **2.1** Under Publications, Delete:

"AMSMU-P 715-501FA1 - Ammunition Ballistic Acceptance Test
Methods Test - Procedures for 5.56mm
Cartridges"

And substitute:

"SCATP-5.56MM - Small Caliber Ammunition Test Procedures -
5.56mm Cartridges

SCATP-5.56MM - Small Caliber Ammunition Test Procedures -
(Heavy Bullet) 5.56mm (Heavy Bullet) Cartridges"

* **Delete:**

"AMCR **715-505**, - Ammunition Ballistic Acceptance Test Methods -
vol. 3 Test Procedures for 7.62mm Cartridges"

And substitute:

"SCATP-7.62 - Ammunition Ballistic Acceptance Test Methods -
Test Procedures for 7.62mm Cartridges"

* **Delete:**

"AMCR 715-505, - Ammunition Ballistic Acceptance Test Methods -
vol. 5 Test Procedures for Cal. .45 Cartridges"

And substitute:

"SCATP-45 - Ammunition Ballistic Acceptance Test Methods - Test
Procedures for Caliber .45 Cartridges"

Add the following new publication:

"SOP NO. 75-1-4 - Rototap Test, Olin Defense System
Group, Lake City Army Ammunition
Plant, **dated 1 Oct 87**"

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3.1, Add the following new paragraph 3.1.1:

"3.1.1 M82 PERCUSSION PRIMER. Unless otherwise specified, when the No. 34 primer is made in accordance with Part No. 10522621-18 for the M82 percussion primer, it shall meet all the requirements of Dwg. No. 10522621 and this specification when tested as Cartridge, 7.62mm, NATO, Ball, M80."

3.2, Add the following new paragraph 3.2.1:

"3.2.1 M82 percussion primer. Unless otherwise specified, when the No. 34 primer is made in accordance with Part No. 10522621-18 for the M82 percussion primer, it shall meet the requirements as specified in para 3.4 and 3.5.1 of MIL-P-46296 when tested in accordance with 4.4.8."

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3.4, Add the following drawing: "9342868"

3.5, Add the following to the cartridges listed:

"5.5mm, Ball, M855 3000 + 40 at 78 feet from muzzle 40"

3.6, Add the following to the list of cartridges:

"5.56mm, Ball, M855 55,000 psi, max."

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3.7.3, Delete in its entirety and substitute the following:

"3.7.3 Priming composition. The priming composition for the following primers shall conform to the applicable drawing as shown below. The priming composition shall be subject to chemical analysis before being assembled into the cartridge cases.

Primers
#26
#28
#34 and #41
#43
50 M

Drawing
10522382
10522382 or 10522383
10522388
10535491
7645339"

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3.8, Add the following new paragraph 3.8.3:

"3.8.3 Rototap test. A Rototap test shall be performed on No. 34 primers for use in M82 primers (Part No. 10522621-18) which are made from each new mixer batch of primer mix. The primers shall not dust or break down as the result of a rototap test. The Rototap test shall be performed in accordance with 4.4*7."

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4.3.2, Delete in its entirety and substitute:

"4.3.2 Examination. One hundred percent examination shall be performed by the contractor for Critical and Major A defects. Examination for Major B and Minor defects shall be as specified herein. Each component or assembly found to be defective shall be rejected."

4.3.2.1, Delete in its entirety and substitute:

"4.3.2.1 Sampling and acceptance. The sampling plans and Procedures shall be in accordance with MIL-STD-105. To determine product acceptability, examination for Major B and Minor defects shall be performed on a class basis in accordance with the Classification of Defects in Table I. The Acceptable Quality Level (AQL) for the Major B class shall be 0.065 percent and the AQL for the Minor class shall be 1.50 percent. If any critical or Major A defects are detected during acceptance sampling inspection, the lot shall be rejected."

Add new paragraph 4.3.2.2 as follows:

"4.3.2.2 Classification of defects. The classification of defects shall be as specified in Table I."

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4.3.3.1, Delete in its entirety and substitute the following:

"4.3.3.1 Class 1 Primers (see 1.2). Each lot of class 1 primers shall be subjected to all the tests listed in Table II."

4.3.3.2, Delete in its entirety and substitute the following:

"4.3.3.2 Class 2 Primers (see 1.2). Each lot of class 2 primers shall be subjected to only the priming composition and

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sensitivity tests listed in Table II. A reduced inspection level may be applied for priming composition in accordance with paragraph 4.4.6.1."

Table II, Add the following below "Case Drawing D10524200, 5.56mm:

| | |
|--------------------|------|
| "D11820451, 5.56mm | 600 |
| D9378276, 5.56mm | 600" |

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Note 6/ Delete in its entirety and substitute the following:

"6/ Failure of the priming composition to comply with the applicable requirements shall be cause for rejection of the initial production sample. For primer lot acceptance, if the primer composition fails to comply with the applicable requirements, a second sample shall be selected and analyzed. If the second sample complies, the lot shall be accepted."

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- * 4.4.1 Delete "AMCR 715-505, Volumes 3 and 5" and substitute "SCATP-7.62 and SCATP-45" Make this change every place it appears in this document.
- * Delete "AMSMU-P 715-501FA1" and substitute "SCATP-5.56MM or SCATP-5.56mm (Heavy Bullet) as applicable." Make this change every place it appears in this document.

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Add new paragraph 4.4.7 as follows:

"4.4.7 Rototap test. The Rototap test for No. 34 primers for use in M82 Percussion primers (Part No. 10522621-18) shall be performed in-accordance-with SOP No. 75-1-4, Olin Defense Systems Group, Lake City Army Ammunition Plant and inspected as follows:

4.4.7.1 Weight analysis. Total amount of dust (Step 17 of the above SOP) shall not exceed 0.03% of total sample pellet weight (Step 11 of the above SOP) . If total amount of dust exceeds 0.03% of total sample pellet weight, all primers which are made from same batch of mix shall be rejected.

4.4.7.2 pellet fracture inspection After the rototap test is completed, all the tested primers shall be visually examined

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to determine if any break-down of any primer pellet has occurred. Any break-up of the pellet will cause rejection of all primers made from the same batch of primer mix.

4.4.8 M82 Percussion Primer sensitivity test.

4.4.8.1 Non-functioning. One hundred and fifty (150) No. 34 primers for use in M82 percussion primers (Part No. 10522621-18) shall be loaded into M892 primers without container charge assembly (less the black powder charge) and tested in accordance with 4.3.2 of MIL-P-46296. Any primer assembled that fires shall be cause for rejection of the lot.

4.4.8.2 Functioning. Three hundred (300) No. 34 primers for use in M82 percussion primers (Part No. 10522621-18) shall be loaded into M82 primers without container charge assembly (less the black powder charge) and tested in accordance with 4.3.3.1 of MIL-P-46296. If five or more primers fail to comply with the specified requirements the lot shall be rejected. If two but less than five defective are found a second sample of six hundred (600) primers shall be tested. If the combined number of defective in both the first and second sample is 5 or more the lot shall be rejected."

5.1.1.1, Add after 7553274: "9329664 (50M primer only)"

The margins of this amendment are marked with an asterisk or vertical lines to indicate where changes (additions, modifications, corrections, deletions) 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.

Custodian:
Army-AR

Preparing activity:
Army-AR

(Project 1305-0113)