

MIL-C-48656 (AR)

20 June 1986

MILITARY SPECIFICATION

CARTRIDGES, SHOTSHELL

This specification is approved for use within the U.S. Army Armament, Munitions and Chemical Command and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification establishes quality assurance requirements for the testing, inspection and packaging for shotshell cartridges specified as Type I and Type II:

Type I - Tactical Applications

Type II - Training and Marksmanship Applications

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications and standards. Unless otherwise specified, the following specifications and standards of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation, form a part of this specification to the extent specified herein.

SPECIFICATIONS

FEDERAL

PPP-B-636 - Boxes, Shipping Fiberboard

MILITARY

MIL-P-116 - Preservation, Methods of
MIL-B-117 - Bags, Sleeves and
Tubing-Interior Packaging
MIL-A-2550 - Ammunition, General
Specification for

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, U.S. Army Armament Research, Development and Engineering Center, Attn: AMSMC-QA, Dover, New Jersey 07801-5001 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 1305

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

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MIL-A-48078 - Ammunition, Standard Quality Assurance Provisions, General Specification for

STANDARDS

MILITARY

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes
 MIL-STD-129 - Marking for Shipment and Storage
 MIL-STD-636 - Visual Inspection Standards for Small Arms Ammunition through Caliber .50
 MIL-STD-1168 - Ammunition Lot Numbering

2.1.2 Other Government documents, drawings and publications.

The following other Government documents form a part of this specification to the extent herein. Unless otherwise specified, the issues shall be those in effect on the date of the solicitation.

DRAWINGS

US ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER (ARDEC)

Type I Cartridges:

9390438 - Cartridge, 12 Gauge, No. 00 Buckshot
 9395772 - Wirebound Box Assembly
 9396196 - Carton, Paperboard
 9396197 - Packing and Marking for M2A1 Ammo Box for Cartridge, Shotshell
 9396198 - Packing and Marking for Box, Wirebound for Cartridges, Shotshell

Type II Cartridges:

9390439 - Cartridge, 12 Gauge, No. 7 1/2 Shot
 9390440 - Cartridge, 12 Gauge, No. 9 Shot

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

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2.2 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein, (except for associated detail specifications, specification sheets or MS standards), the text of this specification shall take precedence. Nothing in this specification however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Cartridge. The cartridge shall comply with all requirements specified on the applicable drawing, all associated drawings and with all requirements specified in applicable specifications and standards.

3.2 Material. Materials shall be in accordance with the applicable drawings and specifications.

3.3 Primer sensitivity. The energy imparted by a steel ball, 1.94 ± 0.02 ounces, falling 12 inches onto a simulated firing pin* shall cause initiation of the primer. The energy imparted by a steel ball, 1.94 ± 0.02 ounces, falling 2 inches onto a simulated firing pin* shall not cause initiation of the primer. See Section 4.6.1.

* Simulated firing pin shall have a nominal weight of 70 grains (0.160 ounces) and a spherical end radius of $.0500 \pm .0025$ inches.

3.4 Velocity. The mean velocity and the standard deviation from the mean velocity shall be as follows, for the sample cartridges temperature conditioned (unpacked cartridges) for four hours minimum:

3.4.1 Ambient. Conditioned at 60° to 80° Fahrenheit. The mean velocity shall be as specified on the appropriate drawing and the standard deviation from the mean shall be 15.0 feet per second maximum.

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3.4.2 Hot. Conditioned at $125^{\circ} \pm 5^{\circ}$ F. The mean velocity shall be as specified on the appropriate drawing and the standard deviation from the mean shall be 15.00 feet per second maximum.

3.4.3 Cold. Conditioned at $\text{minus } 20^{\circ} \pm 5^{\circ}$ F. The mean velocity shall be as specified on the appropriate drawing and the standard deviation shall be 15.0 feet per second maximum.

3.5 Pressure. The pressure of the cartridges temperature conditioned as specified below for 4 hours minimum (unpacked cartridges) shall be as follows:

3.5.1 Ambient. Conditioned at 60° to 80° F. The pressure shall not exceed that prescribed on the appropriate drawing.

3.5.2 Hot. Conditioned at $125^{\circ} \pm 5^{\circ}$ F. The pressure shall not exceed that prescribed on the appropriate drawing.

3.5.3 Cold. Conditioned at $\text{minus } 20^{\circ} \pm 5^{\circ}$ F. The pressure shall not exceed that prescribed on the appropriate drawing.

3.6 Pattern. The average percentage of pellets inside or touching a thirty (30) inch diameter circle shall be no less than that specified on the appropriate drawing.

3.7 Function and casualty. The cartridge shall function without casualty when conditioned for 4 hours minimum (unpacked cartridges) and fired as follows:

| | |
|-------------------------------|--|
| Type I and Type II Cartridges | - Ambient, 60° to 80° F |
| Type I Cartridges | - Hot, $125^{\circ} \pm 5^{\circ}$ F |
| Type I Cartridges | - Cold, $\text{minus } 20^{\circ} \pm 5^{\circ}$ F |

3.8 First article test. This specification contains technical provisions for first article examination and testing. Requirements for submission of the first article sample by the contractor shall be as specified in the contract.

3.9 Workmanship. The requirements for workmanship shall be in accordance with MIL-A-2550 and as specified on the applicable drawing.

4. QUALITY ASSURANCE PROVISIONS

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4.1 Responsibility for inspection. In accordance with MIL-A-48078.

4.1.1 Responsibility for compliance. All items must meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of assuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling in quality conformance does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to acceptance of defective material.

4.2 Inspection equipment. In accordance with MIL-A-48078 (Inspection Equipment) and MIL-A-2550 (Test and Measuring Equipment).

4.3 Classification of inspection. The following types of inspection shall apply:

- a. First article inspection
- b. Quality conformance inspection

4.4 First article inspection.

4.4.1 First article sample. The First Article sample shall be subjected to the first article inspection and tests as specified in Table I to determine contract compliance. The first article sample shall be representative of the manufacturing methods and processes to be used for quantity production. The first article samples shall be submitted and tested prior to the beginning of production.

4.4.2 Submission. The contractor shall submit a first article sample as designated by the Contracting Officer for evaluating in accordance with provisions of Table I. The first article sample shall consist of the following items in sample quantities as indicated.

| <u>Part Description</u> | <u>Drawings</u> | <u>Quantity</u> | |
|---|-------------------------------|-----------------|----------------|
| | | <u>Type I</u> | <u>Type II</u> |
| Cartridge, Shotshell | (As Specified In Contract) | 390 | 175 |
| Empty primed shotshell Cartridges (no pro- pellant, wad or wadding, shot, etc. | (As Specified In Contract) | 60 | 60 |

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4.4.3 Inspection to be performed. First article cartridges shall be tested in accordance with Table I. Any test samples may additionally be subjected, by the government, to any or all of the examinations and tests specified herein, or in the contract or on the applicable drawings.

4.4.3.1 Rejection. If any cartridge samples fail to comply with any of the applicable requirements, the First Article sample shall be rejected. MIL-A-48078 shall apply.

TABLE I. First article inspection

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CLASSIFICATION OF DEFECTS & TESTS

| PARAGRAPH | TITLE | SHEET | | NO. OF SAMPLE UNITS | EXAMINATION OR TEST | AQL OR 100% | REQUIREMENT PARAGRAPH | DRAWING NUMBER | |
|-----------|---------------------------------------|-----------------|-----------------|---------------------|---------------------|-------------|---------------------------------|--------------------|----------------------|
| | | 1 st | 2 nd | | | | | As appropriate | NEXT HIGHER ASSEMBLY |
| CATEGORY | Cartridge, Shotshell Type I (Type II) | | | | | | | | |
| | Examination for defects | | | 390 (175)1/ | | | 3.1 | 4.5.5.1 or 4.5.5.2 | |
| | Primer Sensitivity 4/ | | | 60 (60)1/ | | | 3.3 | 4.6.1 | |
| | Velocity, Pressure, Ambient 2/, 3/ | | | 20 (20)1/ | | | 3.4, 3.4.1, 3.5, 3.5.1 | 4.6.2, 4.6.3 | |
| | Velocity, Pressure, Hot 2/, 3/ | | | 20 (20)1/ | | | 3.4 3.4.2, 3.5, 3.5.2 | 4.6.2, 4.6.3 | |
| | Velocity, Pressure, Cold 2/, 3/ | | | 20 (20)1/ | | | 3.4 3.4.3, 3.5, 3.5.3 | 4.6.2, 4.6.3 | |
| | Pattern 2/, 3/ | | | 30 (15)1/ | | | 3.6 | 4.6.4 | |

NOTES1/ Numbers in parenthesis are sample size for Type II cartridges only.

2/ All sample cartridges shall be subjected to examination for defects prior to performing other tests specified.

3/ Firing defects for these tests shall be subject to the acceptance criteria specified in Table II.

4/ Empty primed shotshell cartridges (no propellant, wads, wadding, shot, etc.)

TABLE I. First article inspection

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CLASSIFICATION OF DEFECTS & TESTS

| PARAGRAPH | TITLE | SHEET | | NO. OF SAMPLE UNITS | EXAMINATION OR TEST | AQL OR 100% | REQUIREMENT PARAGRAPH | DRAWING NUMBER | |
|--------------|---------------------------------------|-------|---|---------------------------|--|-------------------|--------------------------|--|----------------------|
| | | 2 of | 2 | | | | | As appropriate | NEXT HIGHER ASSEMBLY |
| CATEGORY | | | | | | | | PARAGRAPH REFERENCE / INSPECTION METHOD | |
| | Cartridge, Shotshell Type I (Type II) | | | 100 (100) 1/ 100 | Function & Casualty, Ambient 2/, 3/ Function & Casualty, Hot 2/, 3/ Function & Casualty, Cold 2/, 3/ | - - - | 3.7 3.7 3.7 | 4.6.5 4.6.5 4.6.5 | |
| NOTES | | | | | | | | | |

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4.5 Quality conformance inspection.

4.5.1 Lot information.

4.5.2 Lot submission. The product shall be submitted in accordance with MIL-STD-105.

4.5.3 Lot size. Unless otherwise specified in the contract, the size of the ammunition lot shall be no more than 500,000 cartridges.

4.5.4 Lot identification. Each lot of ammunition shall be identified as to type, gauge, and model, as well as with a lot number in accordance with MIL-STD-1168.

4.5.5 Examination for defects.

a. Major and minor defects. Examination for major and minor defects shall be performed on a sampling basis in accordance with classification of defects using applicable sampling plans and acceptance criteria of MIL-STD-105, Normal Inspection Level II. The Acceptance Quality Level (AQL) for the major class and the minor class shall be as specified in the appropriate Classification of Defects and Tests criteria. All non-conforming cartridges (or components) shall be rejected.

b. Critical defects. Unless otherwise specified, one hundred percent examination shall be performed for all critical defects.

c. Order of test. All cartridges shall have been submitted to and passed the criteria specified in 4.5.5.1 or 4.5.5.2 prior to being tested in 4.5.5.3.

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CLASSIFICATION OF DEFECTS & TESTS

| PARAGRAPH | TITLE | SHEET | | DRAWING NUMBER | |
|-----------|--|---------------------|-------------|-----------------------|---|
| 4.5.5.1 | Cartridge, Shotshell (Type I Cartridges only) | 2 | 1 | As appropriate | NEXT HIGHER ASSEMBLY |
| CATEGORY | EXAMINATION OR TEST | NO. OF SAMPLE UNITS | AQL OR 100% | REQUIREMENT PARAGRAPH | PARAGRAPH REFERENCE / INSPECTION METHOD |
| CRITICAL | | | | | |
| 1. | No primer | | 100% | | Visual |
| 2. | Cocked primer | | 100% | | Visual |
| 3. | Inverted primer | | 100% | | Visual |
| 4. | Mashed head 1/ | | 100% | | Visual |
| 5. | Head split 1/ | | 100% | | Visual |
| MAJOR | | | | | |
| 101. | Perforated or split case 1/ | | .25% | | Visual |
| 102. | Open crimp 1/ | | .25% | | Visual |
| 103. | Defective head 1/ | | .25% | | Visual |
| 104. | Sheared case over head 1/ | | .25% | | Visual |
| 105. | Defective body 1/ | | .25% | | Visual |
| 106. | Battery cup defects 1/ | | .25% | | Visual |
| NOTE: 1/ | Refer to cartridge section of MIL-STD-636 for Visual Standards of defects. | | | | |

QUALITY CONFORMANCE INSPECTION

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CLASSIFICATION OF DEFECTS & TESTS

| PARAGRAPH | TITLE | SHEET | 2 nd | 2 | DRAWING NUMBER |
|-----------|---|---------------------|-----------------|-----------------------|---|
| CATEGORY | EXAMINATION OR TEST | NO. OF SAMPLE UNITS | AQL OR 100% | REQUIREMENT PARAGRAPH | As appropriate NEXT HIGHER ASSEMBLY |
| | | | | | PARAGRAPH REFERENCE / INSPECTION METHOD |
| 4.5.5.1 | Cartridge, Shotshell (Type I Cartridges only) | | | | |
| 107. | Cartridge length, max | | .258 | | SMTE or GAGE |
| 108. | Rim, thickness, max | | .258 | | SMTE or GAGE |
| 109. | Head diameter, max | | .258 | | SMTE or GAGE |
| 110. | Case diameter, max | | .258 | | SMTE or GAGE |
| 111. | Primer above flush | | .258 | | SMTE or GAGE |
| MINOR | | | | | |
| 201. | Illegible or missing cartridge marking | | .408 | | Visual |
| 202. | Workmanship | | .408 | | Visual |
| NOTES | | | | | |

QUALITY CONFORMANCE INSPECTION

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CLASSIFICATION OF DEFECTS & TESTS

| PARAGRAPH | TITLE | SHEET | | NO. OF SAMPLE UNITS | EXAMINATION OR TEST | AQL OR 100% | REQUIREMENT PARAGRAPH | DRAWING NUMBER | |
|-----------|--|-------|---|---------------------|---------------------|-------------|-----------------------|---------------------|----------------------|
| | | 1 | 2 | | | | | As appropriate | NEXT HIGHER ASSEMBLY |
| CATEGORY | | | | | | | | PARAGRAPH REFERENCE | INSPECTION METHOD |
| 4.5.5.2 | Cartridge, Shotshell (Type II Cartridges only) | | | | | | | | |
| CRITICAL | | | | | | | | | |
| 1. | Mashed head 1/ | | | | | 100% | | Visual | |
| 2. | Head split 1/ | | | | | 100% | | Visual | |
| MAJOR | | | | | | | | | |
| 101. | Perforated or split case | | | | | .25% | | Visual | |
| 102. | No primer | | | | | .25% | | Visual | |
| 103. | Cocked primer | | | | | .25% | | Visual | |
| 104. | Inverted primer | | | | | .25% | | Visual | |
| 105. | Open crimp 1/ | | | | | .25% | | Visual | |
| 106. | Defective head 1/ | | | | | .25% | | Visual | |
| 107. | Sheared case over head 1/ | | | | | .25% | | Visual | |
| 108. | Defective body 1/ | | | | | .25% | | Visual | |
| 109. | Battery cup defects 1/ | | | | | .25% | | Visual | |
| NOTE: 1/ | Refer to cartridge section of MIL-STD-636 for Visual Standards of defects. | | | | | | | | |

AMSMC Form 1570, 1 Feb 85

Replaces DRS/C-QA (D) Form 160, 1 Aug 83, which may not be used.

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CLASSIFICATION OF DEFECTS & TESTS

| PARAGRAPH | TITLE | SHEET 2 OF 2 | | DRAWING NUMBER |
|--------------------------------------|---|---------------------|--------------------------------------|--|
| | | AQL OR 100% | REQUIREMENT PARAGRAPH | |
| 4.5.5.2 | Cartridge, Shotgun (Type II Cartridges only) | | | As appropriate NEXT HIGHER ASSEMBLY |
| CATEGORY | EXAMINATION OR TEST | NO. OF SAMPLE UNITS | | PARAGRAPH REFERENCE / INSPECTION METHOD |
| 110. 111. 112. 113. 114. | Cartridge length, overall, max Rim, thickness, max Head diameter, max Case diameter, max Primer above flush | | .258 .258 .258 .258 .258 | SMTE or GAGE SMTE or GAGE SMTE or GAGE SMTE or GAGE SMTE or GAGE |
| MINOR | | | | |
| 201. 202. | Illegible or missing cartridge marking Workmanship | | .408 .408 | Visual Visual |
| NOTES | | | | |

QUALITY CONFORMANCE INSPECTION

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CLASSIFICATION OF DEFECTS & TESTS

| PARAGRAPH | TITLE | NO. OF SAMPLE UNITS | AQL OR 100% | SHEET 1 OF 1 | DRAWING NUMBER As Applicable |
|---|--|----------------------|-------------|---------------------------------|---|
| 4.5.5.3 | Testing: Type I (Type II) | | | | NEXT HIGHER ASSEMBLY |
| CATEGORY | EXAMINATION OR TEST | | | REQUIREMENT PARAGRAPH | PARAGRAPH REFERENCE / INSPECTION METHOD |
| | <u>TEST</u> | | | | |
| | Primer Sensitivity <u>b/</u> | 30 (30) <u>a/</u> | | 3.3 | 4.6.1 |
| | Velocity, Pressure Ambient <u>1/</u> | 20 (10) <u>a/</u> | | 3.4, 3.4.1, 3.5, 3.5.1 | 4.6.2, 4.6.3 |
| | Velocity, Pressure Hot <u>1/</u> | 20 (10) <u>a/</u> | | 3.4, 3.4.2, 3.5, 3.5.2 | 4.6.2, 4.6.3 |
| | Velocity, Pressure Cold <u>1/</u> | 20 (10) <u>a/</u> | | 3.4, 3.4.3, 3.5, 3.5.3 | 4.6.2, 4.6.3 |
| | Pattern <u>1/</u> | 30 (15) <u>a/</u> | | 3.6 | 4.6.4 |
| | Function and casualty, Ambient <u>1/</u> | 50 (50) <u>a/</u> | | 3.7 | 4.6.5 |
| | Function and casualty, Hot <u>1/</u> | 75 | - | 3.7 | 4.6.5 |
| | Function and casualty, Cold <u>1/</u> | 75 | - | 3.7 | 4.6.5 |
| <u>NOTES:</u> <u>a/</u> Numbers in parenthesis are the sample size for Type II cartridges only. <u>b/</u> Empty primed shotshell cartridges (no propellant, wads, wadding, shot, etc.) <u>1/</u> Firing defects for these tests shall be subject to the acceptance criteria specified in Table II. | | | | | |

AMSMC Form 1570, 1 Feb 85

Replaces DRS7C-QA (D) Form 160, 1 Aug 83, which may not be used.

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TABLE II
Acceptance criteria

Firing defects. Firing defects and acceptance criteria shall be as specified in the following table:

| <u>Firing Defects</u> | <u>Acceptance Numbers</u> |
|---|---------------------------|
| 1. Head pulled off | 0 |
| 2. Burst rim | 0 |
| 3. Head split | 0 |
| 4. Head cut off | 0 |
| 5. Partial cut off | 0 |
| 6. Body cut off | 0 |
| 7. Rupture | 0 |
| 8. Blown battery cup | 0 |
| 9. Blown primer | 0 |
| 10. Misfire | 0 |
| 11. Wad or other obstruction remaining in bore | 0 |

NOTE 1: For defects 1 through 11 no failures are permissible regardless of sample size. There is no retest permitted, the lot is rejected.

| <u>Firing Defects</u> | <u>Acceptance Numbers</u> | |
|--------------------------|---------------------------|----------------|
| | <u>Type I</u> | <u>Type II</u> |
| 12. Partial split | 1 | 1 |
| 13. Head start | 1 | 1 |
| 14. Bulged rim | 1 | 1 |
| 15. Body split | 1 | 1 |
| 16. Powder burns | 1 | 1 |
| 17. Primer set back | 0 | 1 |
| 18. Battery cup set back | 0 | 1 |
| 19. Pierced primer | 1 | 2 |
| 20. Other | 1 | 2 |

Cumulative Defects for 12-20 not to
 exceed:

3 4

NOTE 2: If the cumulative firing defects or individual firing defects 12 through 20 for the combined tests specified for Type I or Type II exceed the acceptance number, the tests in 4.5.5.3 shall be performed again with a double size sample. If the double sample passes the acceptance numbers for firing defects 12 through 20 and no type 1 through 11 firing defects are found, the lot is acceptable.

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NOTE 3: For firing defects 1-09 and 12-20 refer to MIL-STD-636, shotshell cartridges section, for firing defect standards.

4.6 Methods of inspection (see 6.3)

4.6.1 Primer sensitivity. The sample of empty primed shotshell cartridges shall be tested for primer sensitivity. Two-thirds of the sample shall be tested at a height of 12 inches and one-third of the sample shall be tested at a height of 2 inches. If one or more cartridge primers fail at either height, the sample fails and a sensitivity rundown test shall be conducted. The sensitivity rundown test shall consist of a 25 cartridges test at each 1 inch increment of height between 0% and 100% firing. If the average critical height (H) plus four standard deviations (4 sigma) exceeds 14 inches, or if the average critical height (H) minus 2 standard deviations (2 sigma) is less than 1 inch, the lot of cartridges shall be rejected. The average critical height (H) is defined as the mean height at which 50% of the primers being tested will fire.

4.6.2 Velocity. The velocity test shall be fired through government approved horizontally mounted test barrels. Test barrel length shall be as specified on the appropriate drawing. Two warming shots shall be fired prior to the test. The time of flight shall be measured using 100 kHz (minimum) electronic counter chronographs with coil disjunctors 3 feet apart. The first coil shall be placed 18 inches from the muzzle of the test barrel.

4.6.3 Pressure. The pressure and velocity test shall be conducted concurrently. The pressures shall be determined using piezoelectric transducers or lead crush cylinders.

4.6.4 Pattern. The pattern test shall be conducted independent of velocity and pressure, at ambient temperature (60°F to 80°F), through unaltered commercial shotguns with barrels whose length and choke are as specified on the appropriate drawing. The number of pellets contained in each of five cartridges shall be counted and the average of the five counts shall be taken as the basic pellet count. The test sample quantity shall be divided equally and fired from each of three shotguns. Each cartridge shall be fired at a separate 40" X 40" piece of paper. A circle 30" in diameter shall be drawn on each paper so as to include the greatest number of pellet perforations. The pattern percentage is the number of pellet perforations within, or touching, the 30" circle divided by the basic pellet count and multiplied by the factor 100. The average pattern percentage is the average of the percentages.

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4.6.5 Function and casualty. Cartridges shall be fired in a ratio of approximately 50% - 50% for each temperature through two unaltered shotguns. One weapon shall have a semi-automatic action and one shall have a manually operated action. Both weapons shall have a total chamber and magazine capacity of five cartridges minimum. The weapons shall be loaded to capacity and the test performed until the total test sample quantity is reached.

4.6.6 Defect penalty. In any ballistic test, except function and casualty, in which the occurrence of a firing defect listed in Table II, prevents the obtaining of a reliable result for the characteristic being tested an additional shot shall be fired. That particular test shall not be penalized but the total ballistic sample shall be penalized for such defects in accordance with Table II.

5. PACKAGING

5.1 Packaging. Packaging shall be either Level A or B, unless otherwise specified in the contract or order.

5.1.1 Level A. Type I cartridges shall be packed in accordance with the manufacturers best commercial practice and in accordance with the requirements of the following drawings:

| | | |
|---------|---|--|
| 9395772 | - | Wirebound Box Assembly |
| 9396196 | - | Carton, Paperboard |
| 9396197 | - | Packing and Marking for M2A1 Ammo Box for Cartridge, Shotshell |
| 9396198 | - | Packing and Marking for Box, Wirebound for Cartridges, Shotshell |

5.1.2 Level B. Type II cartridges shall be unit packed in accordance with the manufacturer's best commercial practice in quantities of twenty-five (25). The packed cartridges shall then be overpacked into a close fitting fiberboard box in accordance with the manufacturer's best commercial practices and closed such that the total cartridge quantity shall be five hundred (500). This should be overpacked and sealed in a Type I, Class E Bag per MIL-B-117 and conform to the requirements of Method 1A and Submethod 1A-8 of MIL-P-116. After sealing, the five hundred cartridge box shall be overpacked in close fitting fiberboard box conforming to Class Weather Resistant, Grade W5C; sealed per Method V or VI, per PPP-B-636.

5.2 Marking. Unless otherwise specified, marking shall be in accordance with MIL-STD-129. Required UN marking for Level B packages are as follows:

| | |
|---|--------------|
| u | 4G/Y45/S/*/ |
| n | USA/DOD/AYD/ |

* Insert year packed.

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6. NOTES

6.1 Intended use. The shotshell cartridges covered by this specification are intended for use as specified in paragraph 1.1 of this specification.

6.2 Ordering data. See MIL-A-48078

6.3 Submission of inspection equipment design for approval. See MIL-A-48078. Submit equipment designs, test set-ups and appropriate test procedures as required to perform testing and inspection to Commander, ATTN: AMSMC-QAF-I (D), ARDEC, Dover, NJ 07801-5001. Request letter of submittal should state contractor, contract number, specification number, item nomenclature, drawing number, classification of defects and test paragraph number.

6.4 Drawings. Drawings listed in section 2 of this specification under the heading US Army Armament Research, Development and Engineering Center (ARDEC) may also include drawings prepared by and identified as US Army Armament Research and Development Center (ARDC), Edgewood Arsenal, Frankford Arsenal, Rock Island Arsenal or Picatinny Arsenal drawings. Technical data originally prepared by these activities is now under the cognizance of ARDEC.

Custodian:
Army-AR

Preparing activity:
Army-AR

(Project 1305-A009)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions - Reverse Side)

| | | | |
|---|--|--|--|
| 1. DOCUMENT NUMBER MIL-C-48656 | | 2. DOCUMENT TITLE CARTRIDGES, SHOTSHELL | |
| 3a. NAME OF SUBMITTING ORGANIZATION | | 4. TYPE OF ORGANIZATION (Mark one) <input type="checkbox"/> VENDOR <input type="checkbox"/> USER <input type="checkbox"/> MANUFACTURER <input type="checkbox"/> OTHER (Specify): _____ | |
| b. ADDRESS (Street, City, State, ZIP Code) | | | |
| 5. PROBLEM AREAS | | | |
| a. Paragraph Number and Wording: | | | |
| b. Recommended Wording: | | | |
| c. Reason/Rationale for Recommendation: | | | |
| 6. REMARKS | | | |
| 7a. NAME OF SUBMITTER (Last, First, MI) - Optional | | b. WORK TELEPHONE NUMBER (Include Area Code) - Optional | |
| c. MAILING ADDRESS (Street, City, State, ZIP Code) - Optional | | 8. DATE OF SUBMISSION (YYMMDD) | |