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DEC 201975 N. S. WILSON MIL-R-45972(WC)

29 October 75 SUPERSEDING (See Section 6)

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# MILITARY SPECIFICATION

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### RIFLE, CALIBER .22: ML3

#### COMMERCIAL, TRAINING GRADE

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 This specification covers one type of manually operated, boltaction, rimfire rifle, of commercial design, chambered for caliber .22 long rifle cartridges, used for general training.

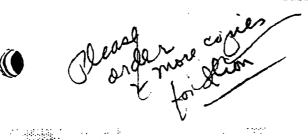
2. APPLICABLE DOCUMENTS

2.1 The following documents, of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

#### SPECIFICATIONS

Federal P-D-680 TT-L-215	-	Dry Cleaning Solvent Linseed Oil, Raw (For Use In Organic Coatings)
PPP-B-601	-	Boxes, Wood, Cleated-Plywood
PPP-B-621	-	Boxes, Wood, Nailed and Lock-Corner
PPP-B-636	-	Box, Fiberboard
Military		
MIL-P-116	-	Preservation-Packaging, Methods of
MTL-B-117	-	Bags and Sleeves, Interior Packaging
MIL-C-372	-	Cleaning Compound, Solvent (for Bore of Small Arms and Automatic Weapons)
MIL-P-3420	•	Packaging Materials, Volstile Corrosion Inhibitor Treated, Opague
MIL-I-8574	-	Inhibitors, Corrosion, Volatile, Utilization of
MIL-F-13088	-	Finish, Protective, Tung (Chinawood) Oil Base (For Wooden Components of Small Arms)

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MIL-I-45607	-	Inspection Equipment, Aquisition, Maintenance and Disposition of
STANDARDS		
Federal Fed. Test Method Std. No. 101 Fed. Std. No. 356	-	Preservation, Packaging and Packing Materials: Test Procedures Commercial Packaging of Supplies and Equipment
Military MIL-STD-109	-	Quality Assurance Terms and Definition

Parts, Equipment and Tools For Army Materiel, Fackaging and Packing of

MILITARY		
MIL-SID-109	•	Quality Assurance Terms and Definitions
MIL-STD-129	-	Marking For Shipment and Storage
MIL-STD-130	-	Identification Marking of U.S. Military
		Property
MIL-STD-147	•	Palletized and Containerized Unit Loads
MIL-6TD-1186	-	Cushioning, Anchoring, Bracing, Blocking,
		and Waterproofing; with Appropriate Test
		Methods

### DRAWINGS

Rock Island	Arsenal	
B7265933	-	Bag, Barrier w/VCI Treated Liner (For Rifles and Shotguns)
B7266299 C11018988	-	Tube, Bore, VCI Treated Gage, Comparison, Color and Surface Finish For Wood Components

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

2.2 <u>Other publications</u>. The following documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

Sporting Arms and Ammunition Manufacturers Institute

S.A.A.M.I. Technical Committee Manual Rimfire .22 Long Rifle

(Applications for copies should be addressed to the Sporting Arms and Ammunition Manufacturers Institute, 420 Lexington Avenue, New York, NY 10017.)

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### 3. REQUIREMENTS

#### 3.1 Bid samples.

3.1.1 Each bidder shall furnish the specified number of bid sample rifles (see 6.1) of the design be proposes to supply for test and evaluation for determination of compliance with this specification and other characteristics as may be desired by the Government. Rifles shall be representative of the latest commercially available design modified as necessary to meet this specification. Unless otherwise specified, bid sample rifles shall be prepared for delivery in accordance with Level B requirements and shall be forwarded to the test and evaluation agency specified in the contract. Along with the submitted sample, each bidder shall indicate the commercial nomenclature and model designation of the samples submitted.

3.1.2 Upon award of contract, samples submitted by the successful bidder and approved by the evaluation and test agency will be retained for use by the contractor and the Government as inspection standards. These standards shall apply to all characteristics for which definite requirements are not prescribed.

3.2 <u>Materials, construction, and design.</u> Materials, construction and design shall conform to this specification and to the approved manufacturing models. The action and parts in rolling or sliding contact shall be of hardened steel. Staked or dovetailed members shall have sufficient temper to retain their original fit after extended use.

3.2.1 <u>General characteristics</u>. General characteristics shall be in accordance with Table I.

#### TABLE I

#### General Characteristics

	(unloaded, with sight, out accessories).
	l length
ofr	
	length
Sights	-
Туре	-Rear
	Front
Loadin	g device
Trigger	r pull

8 to 10 pounds

43 to 48-inches

24 to 29-inches

Redfield 75, or approved equal Redfield 68, globe target, or approved equal, with standard set of inserts Magazine (5 to 7 rounds) Turn-bolt, manually operated repeater, box magazine fed 4 to 6 pounds

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3.2.2 Shape. The stock shall have a drop of not more than 1-5/8 inches at the comb and not more than 2-1/4 inches at the heel. Measurements shall be made from the centerline of the bore.

3.2.3 <u>Balance</u>. The length of pull (distance from the trigger to the butt of the stock measured parallel to the centerline of the bore) shall not be less than 13 inches and not more than 13-3/4 inches. The center of the balance shall be 8 to 10 inches forward of the trigger.

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3.2.4 <u>Barrel</u>. The barrel shall be so fabricated that, upon assembly to the receiver, the requirements for accuracy and targeting hereinafter prescribed shall be met. The bore and chamber shall be free of scratches, cracks, seams, pits and toolmarks.

3.2.5 <u>Bolt Assembly</u>. The bolt shall be free of cracks, burs, toolmarks, scratches and mutilations. It shall move freely through its full range of travel without binding.

3.2.6 <u>Trigger</u>. The trigger shall return to its normal forward position immediately upon release after partial or complete trigger pull.

3.2.7 <u>Sights</u>. The front sight component parts shall have no looseness in assembly and the front sight assembly shall have no looseness where affixed to its base. The rear sight shall be adjustable by hand; the movement from "click" to "click" shall be distinct but not difficult to turn. The moveable parts of the rear sight shall be fitted closely enough to prevent discernible "shake" or backlash. After adjustment, the sight shall maintain its setting during firing (see 3.3.4 and 3.3.5).

3.2.8 <u>Safety device</u>. A safety device shall be provided which, when set at the safe position, shall prevent firing of the rifle. It shall be movable manually between the safe position and the fire position and shall remain in the position set until reset manually.

3.2.9 Finishes.

3.2.9.1 Machine finish. Machine finishes shall be in accordance with good commercial practice for the type of rifle furnished.

3.2.9.2 Final protective finish. The exterior metallic surfaces shall be polished and blued, or blackened and shall be uniform in texture and appearance. The finish shall be applied so as not to draw the temper or alter the form or dimensions of components sufficiently to affect functioning.

3.2.10 Stock.

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3.2.10.1 Material. The stock shall be of walnut (black) or birch (yellow or sweet). The grain shall be straight and in the longitudinal direction of the stock. Slight deviations in grain, small knots in the butt of the stock, slight sap streaks, small checks, and small cracks shall not be cause for rejection provided they do not cause weakness, particularly in a thin section. Stocks shall be free of patches. Small checks, cracks and knotholes shall be filled with plastic fillers or other suitable material approved by the procuring agency.

3.2.10.2 <u>Color</u>. The stock shall have a uniform nonbleeding color which shall be no lighter than color standard 11018988-W (walnut) or 11018988-B (birch) drawing Cl1018988, as applicable. Black walnut and birch may be stained prior to the protective finish treatment.

3.2.10.3 <u>Protective finish compound</u>. The stock shall be treated with tung (chinawood) oil base protective finish compound conforming to MIL-F-13088, raw linseed oil conforming to TT-L-215, or other suitable finish approved by the procuring agency.

3.2.11 <u>Swivels</u>. The rifles shall be equipped with swivels adaptable to slings 1-1/4 inches wide and 1/8 inch thick. The front swivel shall be movable permitting adjustment of handhold with relation to the sling. After adjustment, the front swivel shall maintain its position during normal usage.

3.2.12 <u>Magazine</u>. The magazine shall be free of dents, cracks, burs, scratches, sharp edges, spread or bent lips, and other defects which may affect functioning of either the magazine or the rifle. It shall fit into its recess, be held firmly in place, and release freely. Each magazine shall be of the "box" type and have a capacity of from 5 to 7 cartridges.

3.2.13 <u>Single loading</u>. The ejection port shall be sufficiently large as to facilitate loading single rounds into the chamber with the fingers.

3.3 Performance characteristics.

3.3.1 <u>Trigger pull</u>. The trigger pull shall be free of creep and shall be within the range specified in Table I (see 3.2.1). Creep shall be interpreted to mean any detectable movement between the time positive resistance is met and the firing mechanism is released. Testing shall be as specified in 4.5.2.2.

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3.3.2 <u>Functioning</u>. The rifle shall operate without malfunctions, unserviceable parts, punctured or ruptured cartridge cases, and loose stock or screws, using standard velocity commercial cartridges conforming to Sporting Arms and Ammunition Manufactures' Institute (SAAMI) standards. Drawing the bolt entirely to the rear shall extract the cartridge or cartridge case from the chamber and eject it freely and completely out of the receiver. Returning the bolt forward to the closed position shall push the top cartridge from the magazine into the chamber. Thrusting the bolt forward sharply by hand in chambering a cartridge shall not fire the cartridge. Testing shall be as specified in 4.5.2.2.

3.3.3 <u>High-pressure resistance</u>. The rifle shall withstand the firing of one high-pressure cartridge containing the SAAMI standard commercial proof load of 310 to 330 Copper Units of Pressure (CUP) with no evidence of cracks, seams and other injurious defects. After proof firing the headspace shall be 0.042 inch minimum to 0.046 inch maximum. Testing shall be as specified in 4.5.2.2.

### 3.3.4 Targeting and accuracy.

3.3.4.1 <u>Ammunition</u>. The rifles shall meet the following targeting and accuracy requirements using lots of match grade ammunition conforming to SAAMI expected accuracy standards for rimfire match cartridges; having an average extreme spread for fifteen 10-shot targets at 100 yards of 1.25 inches or less.

3.3.4.2 <u>Targeting</u>. Sights shall be capable of being zeroed to the rifle within the limits of the adjustable windage and elevation index plates and still have additional adjustment remaining on the index plates in both directions. A series of 5 shots fired from the rifle at a range of 50 yards shall be within or cut the edge of a bull's eye 4 inches in diameter. Testing shall be as specified in 4.5.2.2.

3.3.4.3 <u>Accuracy</u>. A series of 5 shots fired from the rifle at a range of 50 yards shall group within or cut the edge of a circle 1 inch in diameter. Testing shall be as specified in 4.5.2.2.

3.3.5 Endurance. The rifle shall be capable of withstanding the firing of 2,000 rounds without malfunctions or unserviceable parts using cartridges specified in 3.3.2. Cleaning and lubrication are allowed after each 500 rounds and at the end of a day's firing. In addition, the fifle shall be capable of withstanding an additional 2,000 falls of the firing pin upon an empty chamber, without malfunctions, unserviceable parts or damage to the chamber. Lubrication is allowed after each 500 snaps. After the 2,000 rounds and the 2,000 snaps, the rifles shall meet the trigger pull (see 3.3.1) and targeting and accuracy (see 3.3.4) requirements of this specification. Testing shall be as specified in 4.4.

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3.4 <u>Model number identification</u>. The contractor shall identify models of weapons with positive identification. If in previous commercial or military production the manufacturer identified a weapon model with a certain designation and intends incorporation of a component or an assembly change which would affect functional characteristics, reliability, safety or interchangeability, the contracting officer should be notified. Such changes may or may not require a new model identification. Upon request from the contracting officer, the contractor shall apply a new model number identification to the new procurement.

3.5 <u>Handbook of instructions</u>. A handbook of instructions for cleaning and maintenance and a parts list shall be provided with each rifle.

3.6 <u>Marking</u>. Each rifle shall be identified by a serial number assigned by the procuring agency (see 6.1). Each rifle shall be marked with the following in accordance with MIL-STD-130.

a. Manufacturer's name.

- b. Serial number (on the receiver).
- c. ".22 long rifle".
- d. Model number identification.
- e. "U.S." (mark on the receiver near the serial number).

3.7 Workmanship. Workmanship and finish shall be in accordance with the highest grade practice used in manufacturing commercial weapons. Finished items and parts shall not exhibit poor material and processing such as seams, laps, laminations, cracks, visible steps, sharp edges, nicks, scratches, burs, deformations and missing operations which may affect serviceability, functioning, operation, appearance or safety. Fins and other extraneous metal shall be removed from cast or forged parts. Hammering to shape, salvage operations (including repair by welding except that normal cosmetic welding of surface blemishes on forgings or castings prior to heat treatment shall be permissible, except on barrels) or other similar practices shall not be permitted without prior approval of the procuring activity.

4. QUALITY ASSURANCE PROVISIONS

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4.1 <u>Responsibility for inspection</u>. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities 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 inspections set forth in the specifications where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

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4.2 <u>Quality assurance terms and definitions</u>. Quality assurance terms and definitions used herein are in accordance with MIL-STD-109.

4.3 <u>Classification of inspection</u>. The inspection requirements specified herein are classified as follows:

a. Bid sample inspection (see 4.4).

b. Quality conformance inspection (see 4.5).

4.4 <u>Bid sample inspection</u>. Bid sample rifles shall be subjected to the quality conformance inspection specified herein, the endurance test (see 4.6.6) and such other inspection as necessary to determine compliance with the contract.

4.5 Quality conformance inspection.

4.5.1 Examination. Each rifle shall be examined in accordance with Table II. The examination provisions should be applied at the earliest practical point in manufacture at which it is feasible to inspect for acceptance without risk of change in the characteristic by subsequent operations. Reinspection of these characteristics on the completed product is not required provided assurance exists the characteristic has not been changed, degraded, or damaged by subsequent manufacturing, assemble or bandling and that adequate inspection records are maintained. Rifles failing to meet the requirements shall be rejected.

4.5.1.1 <u>Inspection methods</u>. The following provisions shall be applicable to the prescribed inspection methods. Requests for methods other than that specified shall be submitted for Government approval.

- a. Where "Visual" is specified as the inspection method for dimensional and machine finish inspection, the characteristic shall be scaled and compared with a specimen of known acceptable quality that has been established as an inspection standard (if applicable).
- b. Where "Visual" is specified as the inspection method for functioning requirements, the assembly shall be visually examined for completeness and manually operated for functioning requirements as specified.
- c. Where "Visual" is specified as the inspection method for protective coating, the coating shall be visually examined for completeness, uniformity in appearance and color, freedom from pits, corrosion, scratches, and worn or bare spots.

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d. Where "SMTE" (Standard Measuring and Test Equipment) is specified as the method of inspection, the contractor may use any type of industry-developed, commercially available, multi-usage equipment or special inspection equipment approved by the Government.

## TABLE II

Examinations						
Characteristic	Requirements	Inspection Method				
Materials, design and construction	3.2	Visual				
General characteristics	3.2.1	SMIE, Visual				
Shape (stock)	3.2.2	SMITE				
Balance	3.2.3	SMITE				
Barrel	3.2.4	Visual				
Bolt assembly	3.2.5	Visual				
Trigger	3.2.6	Visual				
Sights	3.2.7	Visual				
Safety device	3.2.8	Visual				
Finishes	3.2.9	Visual				
Stock material	3.2.10	Visual				
Stock color	3.2.10.2	Visual (see 4.5.4.4)				
Swivels	3.2.11	SMTE, Visual				
Magazine	3.2.12	Visual				
Single loading	3.2.13	Visual				
Marking	3.6	Visual				
Workmanship	3.7	Visual				

### 4.5.2 Testing.

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4.5.2.1 Failure data. Unless otherwise specified herein, all tests shall be conducted on a complete rifle. If test requirements cited herein are not met, acceptance of the rifle shall be deferred and the contractor shall accomplish as applicable, the following actions:

- a. Conduct a failure analysis study performing a dimensional, physical and visual examination of the components which are suspected to be the cause of failure or malfunction.
- b. Evaluate and correct the applicable production processes and procedures to prevent recurrence of the same defect(s) in the future production.
- c. Examine rifles, partially assembled rifles, and components (including components and subassemblies at in-process or final assembly) to insure that material containing the same defect is purged from the inventory and not presented to the Government for acceptance.

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d. Submit the results of the failure analysis and the corrective actions taken to the Government for review and approval prior to submitting a reconditioned lot or reconditioned rifle for retest.

4.5.2.2 <u>Trigger pull, functioning, high-pressure resistance and</u> targeting and accuracy firing testing. Each rifle shall be tested for trigger pull (see 3.3.1), functioning (see 3.3.2), high-pressure resistance (see 3.3.3) and targeting and accuracy (see 3.3.4) using the test methods specified in 4.6.1, 4.6.2, 4.6.3, 4.6.4 and 4.6.5 respectively. The tests for functioning and targeting and accuracy may be performed concurrently. Failure of a rifle to meet any of the tests shall cause rejection of the individual rifle.

4.5.3 Packaging examination and testing. Unless otherwise specified (see 6.1), the packaging examination and testing shall be in accordance with MIL-P-14232.

4.5.4 Inspection equipment.

4.5.4.1 Acquisition, maintenance and disposition. Unless otherwise specified (see 6.1), responsibility for acquisition, calibration, maintenance and disposition of acceptance inspection equipment required to perform inspection prescribed by applicable specifications shall be in accordance with MIL-I-45607.

4.5.4.2 Accuracy of standard measuring equipment. When commercial and modified commercial inspection and test equipment is used, it must be capable of repetitive measurements to an accuracy of 10 percent of the total tolerance of the characteristic being inspected.

4.5.4.3 <u>Ammunition</u>. Cartridges used in the various tests shall be as specified in 3.3.2, 3.3.3 and 3.3.4. When functioning, and bargeting and accuracy tests are performed concurrently, cartridges specified in 3.3.4 shall be used. Malfunctions attributable to defective ammunition shall not be counted against the rifle being tested.

4.5.4.4 <u>Color comparison gage</u>. Color comparison gages 11018988-W (Walnut) or 11018988-B (Birch) (Drawing C11018988), shall be used for visual color comparison of stock wood finish (see 6.2).

4.6 Test methods.

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4.6.1 <u>Trigger pull test</u>. The rifle shall be tested at both the minimum and maximum limits of required adjustment using a contractor designed, Government approved measuring device. The rifle shall be cocked and the safety shall be in the fire position. The load shall be gradually applied to the center of the trigger and exerted in a line parallel to the axis of the bore. The trigger pull shall also be tested for creep by applying pressure manually to the trigger at a uniform rate of increase over a period of not less than three seconds.

4.6.2 <u>Functioning test</u>. The rifle shall be tested by hand functioning and function firing. In performing this test, all cartridges shall be fed from the magazine. Prior to firing, five dummy cartridges shall be chambered, extracted and ejected by hand operation of the bolt without pulling the trigger. Rifles shall then be function fired by firing at least five rounds. Chambering of each of the five rounds shall be accomplished by thrusting the bolt forward sharply. The safety device shall be checked (see 3.2.8) by attempting to fire the rifle with the safety device set at the safe position.

4.6.3 <u>High-pressure resistance test</u>. The rifle shall be tested by firing one high-pressure test cartridge in each rifle. After proof firing, rifles shall be visually examined for cracks, deformations and other evidence of damage, and cartridge cases shall be visually examined for bulges, splits, rings and other defects caused by defective barrels. Headspace shall be checked using a contractor designed, Government approved measuring device.

4.6.4 <u>Targeting test</u>. The rifle shall be fired with the sights set at zero windage and elevation and aligned at 6 o'clock on the bull's-eye using post-type front sight inserts. The targets shall be checked to determine whether the targeting requirements have been met, and the rifles shall be checked to determine whether additional index plate adjustment is available (see 3.3.4.2).

4.6.5 <u>Accuracy firing test</u>. The rifle shall be shoulder fired or fired using a mizzle and elbow rest or a machine rest simulating shoulder firing. Each rifle may have a 5-shot warmup, prior to the test, for adjustment of test equipment and rifle. Refiring any individual target of 5 shots will be permitted to eliminate pomepresentative results due to ammunition "Flyers". A "flyer" is defined as a shot hole which is a greater distance from the nearest shot hole than the extreme spread of the other four shots of the five-shot group. One refiring of any target will be permitted to eliminate nonrepresentative results induced by faulty test procedure or malfunctioning test equipment.

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4.6.6 <u>Endurance test</u>. The rifle shall be tested by firing 2,000 rounds of ammunition. Cleaning and lubricating shall be performed after each 500 rounds and at the end of a day's firing. In addition, the rifle shall be tested by 2,000 falls of the firing pin upon an empty chamber. Lubrication shall be performed after each 500 snaps. Upon completion of the endurance test, rifles shall be subjected to the trigger pull test and the targeting and accuracy firing tests specified in 4.6.1, 4.6.4 and 4.6.5.

5. FREPARATION FOR DELIVERY

5.1 <u>Pilot pack</u>. The pilot pack shall consist of a rifle packaged in accordance with the requirements specified herein and for the level of protection specified in the contract (see 6.1), packed level B, and forwarded in accordance with 3.1.

5.2 <u>Preservation and packaging</u>. The following is applicable to levels A and B. The rear sight shall be detached from the rifle prior to preservation and packaging. The rifle and sight shall be preserved and packaged in accordance with the requirements specified herein and for the level of protection specified in the contract (see 6.1). Materials, methods, processes and procedures specified herein shall conform to the requirements of MIL-P-116 and MIL-P-14232.

### 5.2.1 Level A.

5.2.1.1 <u>Cleaning</u>. The rifle shall be further disassembled as necessary to accomplish cleaning. All metallic surfaces of the rifle and sights shall be cleaned by process C-3. Surfaces of parts subjected to burned powder residue (i.e. bore and chamber, and bolt face) shall be scrubbed clean with bristle brushes saturated with rifle bore cleaner conforming to MIL-C-372 followed by a wash of solvent conforming to P-D-680. Non-metallic parts of the rifle and sights shall be cleaned by process C-1.

5.2.1.2 <u>Drying</u>. All cleaned surfaces shall be dried prior to preservative application. Drying shall be accomplished in accordance with procedure D-1 except that barrel bores and chambers shall be dried in accordance with procedure D-4 using clean, dry, lint free swabs.

5.2.1.3 Preservative application.

5.2.1.3.1 <u>Oil application</u>. Oils or lubricants removed or contaminated during the cleaning process shall be reapplied as applicable in accordance with the manufacturer's standard practice.

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5.2.1.3.2 Volatile corrosion inhibitor (VCI) application. Unless otherwise specified herein, VCI treated material shall conform to Type I, Class 1, Style C of MIL-P-3420. The procedure for use and application of VCI treated materials shall conform to the requirements of MIL-I-8574.

5.2.1.3.3 <u>Rifle.</u> All sharp corners and projections of the rifle capable of abrading or puncturing the barrier bag specified in 5.2.1.4.1 shall be cushioned with VCI treated material. A VCI treated bore tube conforming to drawing B7266299, part number 7267766, shall be inserted into the bore of the barrel. The protruding end of the tube shall be bent over the outside of the muzzle end.

5.2.1.3.4 <u>Rear sight assembly</u>. Wrap the rear sight with one or more thicknesses of VCI treated material.

5.2.1.3.5 Front sight metallic inserts. The inserts shall be wrapped in one piece of VCI treated material.

5.2.1.3.6 Non-metallic insert. No preservation required.

5.2.1.4 Unit packaging.

5.2.1.4.1 <u>Rifle</u>. Each rifle preserved in accordance with 5.2.1.3.3 shall be unit packaged method IA-8 as specified herein. The barrier bag shall conform to drawing B7265933. Due to dimensional variations in the overall length of rifles (see 3.2.1), the bag size specified on the drawing shall be adjusted to adequately inclose the rifle while providing sufficient material to permit one additional heat seal on the end of the bag.

5.2.1.4.2 <u>Rear sight</u>. Each rear sight assembly preserved in accordance with 5.2.1.3.4 shall be unit packaged method IA-8 utilizing a minimum size barrier bag conforming to Type I, Class E, Style 1 of MIL-B-117.

5.2.1.4.3 Front sight metallic inserts. The metallic inserts preserved in accordance with 5.2.1.3.5 shall be unit packaged method IA-8 utilizing a minimum size barrier bag conforming to Type I, Class E, Style 1 of MIL-B-117.

5.2.1.4.4 <u>Non-metallic front sight insert</u>. The insert shall be packaged method III utilizing a minimum size barrier bag conforming to Type I, Class B, Style 2 of MIL-B-117. Closure shall be accomplished by heat sealing or stapling.

5.2.1.4.5 <u>Rifle and sights</u>. The rifle and sights packaged as specified in 5.2.1.4.1 thru 5.2.1.4.4 shall be placed in a minimum size fiberboard box conforming to PPP-B-636, Class WR. The box shall be closed in accordance with PPP-B-636. The items shall be cushioned within the container in accordance with the requirements of MIL-STD-1186. The completed package shall pass the drop test specified in Fed. Test Method Std. No. 101, Method 5007, Procedure B.

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5.2.2 Level B.

5.2.2.1 Cleaning, drying and preservative application. Cleaning, drying and preservative application shall be the same as specified for Level A (see 5.2.1.1, 5.2.1.2 and 5.2.1.3).

5.2.2.2 Unit packaging. Unit packaging of the rifle, rear sight, front sight, metallic inserts and non-metallic front sight insert shall be the same as Level A (see 5.2.1.4.1 through 5.2.1.4.4.).

5.2.2.3 <u>Rifle and sights</u>. The rifle and sights shall be unit packaged the same as specified for Level A (see 5.2.1.4.5) with the following exception: The fiberboard box shall conform to class domestic.

5.2.3 Commercial. Preservation and packaging shall be in accordance with Fed. Std. No. 356.

5.3 Packing. A uniform quantity of unit packaged rifles and sights shall be packed in a minimum size shipping container as specified herein, (see 5.3.1, 5.3.2 and 5.3.3). The maximum allowable tolerance for void shall not exceed one-half inch in any dimension (length, width and depth). Closure and reinforcement shall be in accordance with the requirements of applicable container specification.

5.3.1 Level A. PPP-B-601, Overseas Type, Style A, B, I, or J, Grade B, or PPP-B-621, Style 2 or 4, Class 2.

5.3.2 Level B. Unit containers shall be palletized in accordance with the applicable requirements of MIL-STD-147 except that commercial expendable pallets may be used in lieu of those specified.

5.3.3 Commercial. Packing shall be in accordance with Fed. Std. No. 356.

5.3.4 Odd quantities. When uniform quantities cannot be maintained, the size of the shipping container or palletized load shall be adjusted to obtain minimum cube. As required, void areas of shipments shall be blocked and braced in accordance with MIL-STD-1186.

5.4 Marking.

5.4.1 Levels A and B. Marking of unit packages and exterior shipping containers shall be in accordance with the applicable requirements of MIL-STD-129 and as specified herein. Packing lists and serial number markings are required.

5.4.2 Commercial. Marking shall be in accordance with Fed. Std. No. 356.

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5.4.3 Special marking. Concealed identification marking in accordance with MIL-STD-129 is required.

6. NOTES

6.1 Ordering data. Ordering documents should specify:

a. Title, number and date of this specification.

- b. Shipping instructions and quantity of bid samples (see 3.1.1).
- c. Block of serial numbers (see 3.6).
- d. Packaging examination and testing, if different (see 4.5.3).
  e. Responsibilities for furnishing acceptance inspection equipment (see 4.5.4.1).
- f. Selection of applicable levels of preservation, packaging and packing (see 5.1, 5.2 and 5.3).

6.2 Color standards for stocks (see 3.2.10.2 and 4.5.4.4) may be obtained from Commanding Officer, Rock Island Arsenal, ATTN: SARRI-QM, Rock Island, Illinois 61201.

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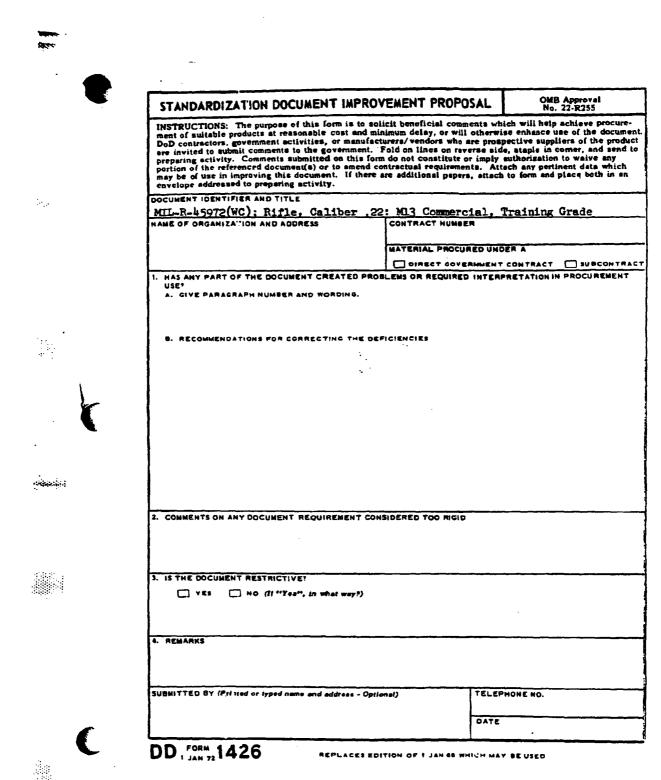
6.3 <u>Supersession data</u>. This specification includes the requirements of Springfield Armory Purchase Description SAPD-278; Rifle, Caliber .22, M13, dated 12 May 1965.

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