INCH-POUND

MIL-P-71012A(AR)
15 February 1994
SUPERSEDING
MIL-P-71012(AR)
7 October 1992

MILITARY SPECIFICATION

PISTOL, SEMIAUTOMATIC, COMPACT, 9MM: M11

This specification is approved for use by 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 the design, performance, quality assurance and packaging requirements for the Pistol, Semiautomatic, Compact, 9MM: M11.

1.2 Classification. Compact pistols covered by this specification shall be of the following types.

Type I. With standard 3-dot horizontal sights.

Type II. With tritium 3-dot horizontal night sights.

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications, standards and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

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 ARDEC, ATTN: SMCAR-BAC-S, Picatinny Arsenal, New Jersey 07806-5000 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 1005

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

SPECIFICATIONS

FEDERAL

JP-4	-Jet Fuel
O-I-503	-Insect Repellent, Clothing and Personal Application
P-C-111	-Carbon-removing compound
P-D-680	-Dry Cleaning Solvent
PPP-B-601	-Boxes, Wood, Cleated Plywood
PPP-B-636	-Box, Shipping, Fiberboard
PPP-B-640	-Box, Fiberboard, Corrugated, Triple-wall
PPP-P-1660	-Pallet, Expendable
VV-F-800	-Diesel fuel
VV-G-1690	-Gasoline

MILITARY

MIL-P-116	-Preservation, Methods of
MIL-B-117	-Bag, Sleeve and Tubing - Interior Packaging
MIL-C-372	-Cleaning Compound Solvent (for Bore of Small Arms and Automatic Aircraft Weapons)
MIL-L-3150	-Lubricating Oil, Preservative, Medium
MIL-I-8574	-Inhibitors, Corrosion, Volatile, Utilization of
MIL-D-12468	-Decontaminating Agent, Stb
MIL-W-13855	-Weapons: Small Arms and Aircraft Armament Subsystems, General Specification for
MIL-L-14107	-Lubricating Oil, Weapons, Low Temperature
MIL-C-16173	-Corrosion Preventive Compound, Solvent Cutback, Cold Application
MIL-B-22019	-Barrier Materials, Transparent, Flexible, Sealable, Volatile Corrosion Inhibitor Treated
MIL-I-45607	-Inspection Equipment Acquisition, Maintenance and Disposition of
MIL-L-46000	-Lubricant, Semi-Fluid (Automatic Weapons)
MIL-D-50030	-Decontaminating Agent, Ds2
MIL-W-63150	-Weapons and Support Material Standard Quality Assurance Provisions for
MIL-L-63460	-Lubricant, Cleaner and Preservative for Weapons and Weapon System
MIL-A-70625	-Automated Acceptance Inspection Equipment for Non-electrical Components, Design, Testing & Approval of

STANDARDS

MILITARY

MIL-STD-109	-Quality Assurance Terms and Definitions
MIL-STD-129	-Marking for Shipping and Storage
MIL-STD-810	-Environmental Test Methods and Engineering Guidelines
MIL-STD-1186	-Cushioning, Anchoring, Bracing, Blocking, and Waterproofing with Appropriate Test Methods.
MIL-STD-1472	-Human Engineering Design Criteria for Military Systems, Equipment and Facilities
MIL-STD-1949	-Inspection Process, magnetic Particle
MIL-STD-6866	-Inspection, Liquid Penetrant
MIL-STD-45662	-Calibration Systems Requirements

HANDBOOKS

MILITARY

MIL-HDBK-759	-Human Factors Engineering Design for Army Materiel

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from: DODSSP - Customer Service, Standardization Documents Order Desk, Bldg. 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.1.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

PUBLICATIONS

CODE OF FEDERAL REGULATIONS

Title 10	-Energy
Title 49	-Interstate Commerce Commission Rules and Regulations for the Transportation of Explosives and other Dangerous Articles

(Copies of Code of Federal Regulations are available from the Superintendent of Documents, U.S. Government Printing Office, Washington D.C. 20402. Orders should specify,"10 CFR 0-50 and 49 CFR 100-199 (latest revisions)).

2.2 Order of precedence. In the event of a conflict between the text of this document and the reference cited herein, the text of this document shall take precedence. Nothing in this document, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 First Article. Unless otherwise specified in the contract or purchase order, a sample shall be subjected to first article inspection in accordance with the technical provisions herein. Unless otherwise specified, the first article shall include the pilot pack. (See 4.4 and 6.2).

3.2 Materials and construction. The pistol and component parts shall conform to the applicable material, construction and dimensional requirements of MIL-W-13855 and as specified herein. Parts and surfaces subject to rolling or sliding contact shall be of sufficient hardness to resist wear. Staked or dovetailed members shall have sufficient temper to retain their original fit after extended use. Screws, when firmly tightened, shall not cause binding of any of the mechanism. External pins shall be secured in position by detent or retainer.

3.3 Design. The pistol and component parts shall conform to the applicable design requirements specified in MIL-W-13855 and as specified herein.

3.3.1 General requirements. The pistol shall be a magazine fed, semiautomatic pistol conforming to the following physical requirements:

Length	198mm (7.8 in.) max
Height	137mm (5.4 in.) max
Width	37mm (1.45 in.) max
Weight (with unloaded magazine)	.894 kg (31.5 oz.) max
Magazine capacity	8 rounds minimum

3.3.1.1 Operation. The pistol shall be capable of being placed into operation with either hand after loading. The pistol shall be capable of allowing multiple strikes on an ammunition primer by multiple pulls on the trigger alone.

3.3.2 Caliber. The caliber of the pistol shall be 9MM NATO. The pistol shall be capable of meeting all requirements specified herein when firing M882 9MM ball ammunition. The pistol shall also function with commercial subsonic and supersonic controlled expansion ammunition. The pistol must function with above ammunition without substitution or exchange of parts.

3.3.3 Magazine and magazine catch. The magazine shall be free of defects which may affect functioning of either the magazine or the pistol. The magazine follower and the magazine

catch shall function without binding throughout their full range of travel. The magazine shall be positively retained in place in the receiver by the magazine catch. When the magazine catch is depressed, it shall disengage the magazine and the empty magazine shall drop out of the receiver of its own weight. The magazine release shall be located at the rear of the trigger guard and be accessible by the firing hand of both left and right handed users.

3.3.4 Slide. The slide shall function without binding through its full range of travel on the receiver guide ways.

3.3.5 Barrel. The minimum barrel length shall be 89mm (3.5 in). Burrs and sharp edges shall be removed from chamber edges. Scratches or marks, occurring in a chamber which otherwise meets best commercial surface roughness requirements, shall be permitted provided they do not cause marks on the case of a high-pressure test cartridge fired in the chamber.

3.3.6 Sights. The front and rear sight shall be fastened securely in place so that there will be no relative movement due to firing. The rear sight shall be drift adjustable for deflection. Both front and rear sights shall be replaceable and completely interchangeable between types. Three dot horizontally aligned sights are required. Tritium sights will be clearly stamped or engraved with a "T" on an external surface that is visible when the sight is installed on the pistol. Tritium sights must be exempt from licensing by the Nuclear Regulatory Commission as specified in Title 10 Code of Federal Regulations (10 CFR).

3.3.7 Safety Mechanisms.

3.3.7.1 Firing pin safety. The pistol shall contain a mechanism that locks, blocks, interdicts, or otherwise renders the firing pin inoperable until the mechanism is disengaged by deliberate movement of the trigger in the rearward direction.

3.3.7.2 Decocking mechanism. If the fire control system does not automatically return to a rest position (no stored energy) at the completion of each firing cycle, a decocking mechanism must be provided to safely return the firing mechanism from the fully cocked position to the uncocked position without actuating the trigger.

3.3.7.3 Loading safety. The pistol shall be capable of being loaded, unloaded, and cleared without actuating the trigger.

3.3.7.4 Magazine disconnect. The pistol shall not have a magazine disconnector.

3.3.8 Firing pin and firing pin spring. The firing pin and firing pin spring shall be retained in the slide. The firing pin spring shall hold the firing pin to the rear of the breech face of the slide and shall retract the firing pin into the slide after each firing.

3.3.9 Extractor. The extractor shall move throughout its full range of travel without binding. The extractor shall extract both fired and loaded cartridges from the barrel chamber, regardless of whether the slide is operated rapidly or slowly, and regardless of the pistol's orientation, e.g., pointed up or pointed down.

3.3.10 Ejector. The ejector shall eject both fired and loaded cartridges completely out of the pistol when the slide is operated with moderate to rapid speed regardless of the pistol's orientation.

3.3.11 Slide stop. The pistol shall contain a slide stop that permits the slide to be manually locked to the rear and released at will. Moving the stop to the release position shall permit the slide to return under spring action to the battery position. The slide stop shall be automatically positioned to lock the slide to the rear when the last round in a magazine is fired and shall remain engaged with the slide when a magazine is removed or inserted.

3.3.12 Trigger. With the magazine assembled to the pistol, the trigger shall move through its full range of travel under spring action without binding. After partial or complete trigger pull the trigger shall return to its normal forward position under spring action immediately upon release.

3.3.13 Grips. Grips shall be fastened securely on the receiver. There shall be no relative movement of these parts. The grips shall be free of defects which may affect appearance or serviceability.

3.3.14 Finishes.

3.3.14.1 Machine finishes. Machine finishes shall be in accordance with best commercial practice for small caliber weapons.

3.3.14.2 Final protective finish. The final protective finish of metal parts shall meet the requirements of 3.4.13. Color of finished parts shall be lusterless uniform dark grey or black. The final protective finishes shall not apply to springs, or spring pins which may be left bright. However, exterior exposed surfaces of these parts are subject to the touch-up requirements in accordance with 3.3.14.3.

3.3.14.3 Touch-up material. Exterior surfaces on metal components which are bright or without finish after assembly operations, such as rivets, pins, screw heads, and surfaces subject to staking operations, may be refinished using either the original final protective finish material or with materials and procedures in accordance with MIL-W-13855 touch-up procedures.

3.3.15 Human Engineering. The pistol shall be in general conformance to the human engineering requirements of MIL-STD-1472 and MIL-HDBK-759, and shall meet with the approval of the Government for human engineering characteristics. With the trigger in its forward most position, there shall be space for a 22 mm (7/8 inch) diameter rod to move freely between the front of the trigger and the trigger guard. Additionally, there shall be no sharp edges on which to snag clothing.

3.4 Performance characteristics.

3.4.1 Headspace. The headspace shall be 1.915 centimeters (cm) to 1.950 cm. Headspace is defined as the distance from the breech face of the slide in the battery position to the surface in the chamber which stops the case mouth.

3.4.2 Trigger pull. For safety considerations, the pistol shall provide an uncocked trigger pull of 4.0 to 7.3 kg (8.8 to 16.1 lbs) for the first round. For accuracy purposes, subsequent rounds shall be fired with a trigger pull of 1.8 to 2.9 kg (4.0 to 6.4 lbs.)

3.4.3 High pressure resistance

3.4.3.1 Pistol. Each complete pistol produced for delivery to the Government, with all parts assembled to the receiver, shall withstand the firing of one M905 high pressure test cartridge. The barrel, slide and all parts subjected to direct pressure shall be free of firing-induced defects after proof firing as evidenced by magnetic particle inspection (MPI) per MIL-STD-1949 for ferrous metals, dye penetrant inspection (DPI) per MIL-STD-6866 for non-ferrous metals, and by visual examination. Other parts and surfaces shall be visually inspected for evidence of firing-induced defects or damage.

3.4.3.2 Repair parts. Firing-pressure affected parts produced for delivery to the Government as repair parts (the barrel, slide and other parts designated by a Government representative) shall withstand the firing of one M905 high pressure test cartridge. These parts shall be free of firing-induced defects after proof firing, as evidenced by MPI or DPI (as appropriate) and visual inspection."

3.4.4 Functioning. Pistols shall operate without stoppages or unserviceable parts when firing M882 9MM ammunition and commercial 9MM subsonic and supersonic controlled expansion ammunition when tested as specified in 4.6.4.

3.4.5 Accuracy and dispersion.

3.4.5.1 Accuracy (targeting). At a range of 25 meters, all shots of a series of 8 shots shall fall within, or cut the edges of, a 34 cm (13.4 inch) diameter circle when using the center of the circle as point of aim and firing M882 ammunition.

3.4.5.2 Dispersion. The extreme spread, measured from center to center of shot holes, of a group of 8 shots fired from the pistol at a range of 25 meters shall not exceed 20 cm (7.9 in) when firing M882 ammunition.

3.4.6 Interchangeability. As it applies to pistol parts and assemblies, interchangeability is defined as the capability of being replaced or interchanged without alteration, modification or hand fitting. It must be accomplished without the use of special tools and it must result in no degradation in pistol performance. All parts and assemblies which are interchangeable will be listed by the contractor in the response to the solicitation, and shall be interchange tested as specified in 4.6.6. As a minimum, all parts disassembled at the field strip level must be interchangeable. Field strip is defined as the level of disassembly required by the operator to clean and lubricate the pistol. Generally in semiautomatic handguns this is disassembly down to the slide assembly, barrel assembly, receiver assembly, magazine assembly, and recoil spring and guide rod.

3.4.7 Reliability. When firing M882 ball cartridges, pistols shall be capable of passing the 5000 round reliability test described in 4.5.3.4 and 4.6.7 without exceeding the malfunction and unserviceable part criteria stated in Table I. (Table I presents limits for a three-gun lot test and a fifteen-gun first article test).

TABLE I. Malfunctions and unserviceable parts

	TOTAL ALLOWED IN EACH TEST 1/			
	Reliability		High Temp	Low Temp
Number of pistols	3	15	3	3
Critical Malfunction:				
Uncontrolled firing	0	0	0	0
Critical unserviceable parts:				
Receiver, broken or cracked 4/ *	0	0	0	0
Slide, broken or cracked 4/	0	0	0	0
Barrel, broken or cracked 4/	0	0	0	0
Other unserviceable parts 2/	6	30	2	3
Total malfunctions (includes 3/ malfunctions attributable to unserviceable parts)	18	85	8	15

* See 3.4.8 (Durability)

1/ The malfunctions and unserviceable parts shall not exceed those allowed for the pistols combined. As an example, for the three (3) pistol reliability test, one (1) instance of uncontrolled fire, or one (1) cracked barrel, or seven (7) unserviceable parts or nineteen (19) malfunctions would each be a failure to achieve the requirement. When a series of malfunctions is traceable to particular parts, it is permissible to replace such parts and record them as unserviceable (see note 2/), and combine the series of malfunctions as one chargeable malfunction occurrence, subject to the following limitations. When a contractor failure analysis, as agreed to by a Government representative, establishes that previously recorded malfunctions are attributable to an unserviceable part(s), such malfunctions shall be counted as only one (1) malfunction, provided they occurred not more than 200 rounds prior to replacement of the unserviceable part(s). These 200 rounds shall have been fired with the unserviceable part(s) in the pistol. However, such malfunctions shall remain recorded and properly identified. Similar malfunctions which occur outside of the 200 round limit are exempt from this special provision and must each be charged as one malfunction occurrence.

For the total production-lot test sample of 3 pistols, no more than 9 of the allowed malfunctions shall be attributable to any one type of failure (e.g., failure-to-feed). Further, no more than 6 malfunctions of any one type (e.g., failure-to-feed) shall be allowed on any one of the test pistols. For example, a lot would be acceptable with 9 failures-to-eject only if no more than 6 of those failures occur on any one pistol. Ten failure-to-eject malfunctions would fail a lot, as would 7 failures-to-eject on any one pistol.

For the total first article test sample of 15 pistols, no more than 45 of the allowed malfunctions shall be attributable to any one type of failure (e.g., failure-to-eject). Further, no more than 6 malfunctions of any one type (e.g., failure-to-eject) shall be allowed on any one of the test pistols. For example, the first article would be acceptable with 45 failures-to-feed only if no more than 6 of those failures occur on any one pistol. Fourty-six failures-to-feed malfunctions would fail the lot, as would 7 failures-to-feed on any one pistol.

2/ An unserviceable part is defined as any part which fails to perform its intended function, is broken or visible cracked, or whose condition impairs the safety of the pistol. It includes broken or set springs, a burred or broken extractor, ejector, firing pin, etc., and magazine failures such as bent side walls, bent or cracked lips, or a distorted follower. It includes all parts replaced during corrective and preventive maintenance, as follows:

a. During corrective maintenance, multiple replacement of parts to restore the system to operation shall be charged as one unserviceable part provided the replacements are deemed necessary and related to the corrective action required to eliminate a malfunction (see note 3/).

b. Unrelated replacement of each unserviceable part detected and replaced during corrective maintenance is charged as an unserviceable part.

c. Each Unserviceable part found during preventive (scheduled) maintenance is chargeable as an unserviceable part.

3/ A malfunction is defined as any incident resulting in unplanned cessation in firing, or the inability to commence or cease firing. A malfunction also includes system stoppages which are chargeable to an unserviceable part. Malfunction descriptions include failure to feed, extract, eject, close, fire, or failure of the magazine catch or the slide stop to function. Malfunctions attributed to ammunition, as substantiated by a contractor failure analysis acceptable to the Government representative, shall not be counted against the pistol/magazine being tested. However, they shall be recorded and properly identified with supporting analysis.

4/ Breaks or cracks must be visible to the unaided eye (corrected to 20/20, if required).

3.4.8 Durability. When firing M882 ball cartridges during the reliability test described in 4.5.3.4 and 4.6.7, the pistol receiver shall have a minimum service life of 5000 rounds (see Table I). A service life failure is defined as any break or crack in the receiver visible to the unaided eye (correctable to 20/20), or any other condition attributable to the receiver which prevents proper function of the pistol or poses a safety hazard to the shooter.

3.4.9 Safety. The pistol and all component parts shall not fail in a mode that presents a safety hazard, regardless of round count.

3.4.10 Maintainability. The maximum time to repair (MTTR) the compact pistol shall not exceed 0.5 hours. The time to repair is defined as the total time required to restore the pistol to operation, including diagnostic time, after a stoppage or unserviceable part occurs.

3.4.11 Environmental.

3.4.11.1 High temperature. When conditioned at a temperature of 60 +/- 3 degrees C, pistols shall be capable of passing a 1000 round high temperature test firing M882 ammunition as specified in 4.6.11.1 without exceeding the malfunction and unserviceable part criteria stated in Table I.

3.4.11.2 Low temperature. When conditioned at -40 +/- 3 degrees C, pistols shall be capable of passing a 2000 round low temperature test firing M882 ammunition as specified in 4.6.11.2 without exceeding the malfunction and unserviceable part criteria stated in Table I.

3.4.12 Rough handling. Pistols shall be capable of withstanding the impact when dropped from a height of 1.2 meters (48 in) onto a hard surface without causing the pistol to be unsafe or unserviceable. This requirement applies throughout the temperature range of -40 degrees C to +60 degrees C.

3.4.13 Corrosion resistance. The pistol shall function as intended after being subjected to the cyclical procedure salt fog test of MIL-STD-810 for a period of 48 hours. In addition, if any corrosion occurs as a result of this test, it shall be limited to discoloration or staining which can be completely removed by MIL-L-63460 (CLP) during normal operational maintenance, or minor pitting and etching in the barrel bore which does not adversely affect the function or performance of the pistol.

3.4.14 Chemical resistance. Except for the tritium night sights, no non-metallic component of the pistol shall be rendered unserviceable by exposure to the following compounds. Tritium night sights shall be unaffected by short term exposure to the compounds listed below.

Antifreeze (ethylene glycol)
Bore cleaner - MIL-C-372 (RBC)
Carbon-removing compound - P-C-111, type II
Cleaner, lubricant, preservative - MIL-L-63460 (CLP)
Diesel fuel - VV-F-800
Dry-cleaning solvent - P-D-680, type I
Ds2, Decontaminating agent -MIL-D-50030
Gasoline - VV-G-1690
Insect repellent - O-I-503
Jet fuel - JP-4
Lubricating oil - MIL-L-46000 (LSA)
Lubricating oil - MIL-L-14107 (LAW)
MIL-C-16173 (corrosion prevention compound solvent,cutback, and cold application)
Preservative oil - MIL-L-3150
Salt-water (20% sodium chloride)
Stb, Decontaminating agent -MIL-D-12468
Trichloroethane solvent

3.4.15 X-ray identification. The compact pistol shall be identifiable as a weapon by standard security x-ray screening equipment.

3.5 Marking. Marking of pistols shall be in accordance with MIL-W-13855. Each pistol shall be identified by a serial number from a list provided by the contractor and approved by the procuring activity (See 6.2). Each pistol shall be marked with the following:

a. Manufacturer's name

b. Serial number (on the receiver)

c. "9mm" (caliber of ammunition)

d. "M11" (model number, on the receiver)

e. " U.S." (mark on the receiver near the serial number)

f. "T" (on front and rear tritium sights - see 3.3.6)

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

3.6 Workmanship. Workmanship shall be in accordance with the workmanship requirements of MIL-W-63150. In addition, the pistol shall be free of dust, grease, rust, corrosion products and other foreign matter. The cleaning method used shall not be injurious to any parts nor shall the parts be contaminated by the cleaning agent. All markings and stampings shall be neat and clearly defined.

3.7 Documentation.

3.7.1 Operator's manual. An operator's manual which clearly and fully explains the operation, field stripping and maintenance shall be provided with each pistol. Manuals shall be written in the English language.

3.7.2 Drawings. When specified in the contract or purchase order, the contractor shall provide a complete set of component part and assembly drawings which reflect the design of the pistols to be furnished. The drawings shall be in the contractor's format (see 6.2).

3.7.3 Parts list. The contractor shall provide a comprehensive list of pistol components including assemblies, subassemblies and individual components. All parts conforming to the definition of interchangeable in 3.4.6 shall be so indicated.

The part numbers on this list must represent the identical pistol components provided under the applicable pistol contract so that repair parts ordered against these part numbers will be exactly representative of the contractural pistol components in all areas, including dimensions, protective finishes (see 3.3.14.2), etc.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements (examinations and test) as specified herein. Except as otherwise specified in the contract or purchase order, the supplier 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 inspections set forth in the specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items shall 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 ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

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

4.3 Classification of inspection. The inspection requirements specified herein are classified as below. The provisions of MIL-W-63150 shall apply. Packages opened for examination shall be repackaged by the contractor at the contractors expense.

a. First article inspection (see 4.4)

b. Quality conformance inspection (see 4.5)

4.4 First article. The first article shall be selected from pistols produced prior to the beginning of contractual quantity production and submitted for testing in accordance with the contract requirements (see 6.2). The first article shall be representative of production processes to be used during contractual quantity production. The first article shall be

subjected to all examinations and tests specified in 4.4.2 and such other inspection as necessary to determine that all the requirements of this specification and the contract have been met.

4.4.1 First article sample. The contractor shall submit a first article sample as designated by the Contracting Officer for evaluation in accordance with 4.4.2. The first article sample shall consist of 21 each, Pistol, Semiautomatic, 9mm: M11, and sets of components as specified in 6.2.

4.4.2 Inspections to be performed. The first article sample shall be subjected to the following tests, in the quantities specified. Prior to testing, the first article pistols shall be subjected to the examinations specified in 4.5.2.1.2 through 4.5.2.1.15. Component parts shall be inspected as specified in 4.5.2.2.

TABLE II. First article tests

Test	Quantity to be tested	Requirement	Test Method
General requirements	21	3.3.1	Manual/SMTE
Caliber	21	3.3.2	CTR
Human engineering	21	3.3.15	4.6.16/Visual
Headspace	21	3.4.1	4.6.1
Trigger pull	21	3.4.2	4.6.2
High pressure resistance	21	3.4.3	4.6.3
Functioning	21	3.4.4	4.6.4
Accuracy and dispersion	21	3.4.5	4.6.5
Interchangeability	21	3.4.6	4.6.6
Reliability	15	3.4.7	4.6.7
Durability	15	3.4.8	4.6.8
Safety	5	3.4.9	4.6.9
Maintainability	15	3.4.10	4.6.10
Environmental			
High temperature	3	3.4.11.1	4.6.11.1
Low temperature	3	3.4.11.2	4.6.11.2
Rough handling	3	3.4.12	4.6.12
Corrosion resistance	3	3.4.13	4.6.13
Chemical resistance	1/	3.4.14	4.6.14
X-ray identification	1	3.4.15	4.6.15
Packaging	5	5	4.6.17

1/ One sample of each non-metallic component (including tritium sights) for each chemical compound listed in 3.4.14.

4.4.3 Rejection. The Government reserves the right to reject the first article and to terminate its inspection upon any failure of any assembly, component, or test specimen in the sample to comply with any of the stated requirements.

4.5 Quality conformance inspection.

4.5.1 Inspection lot.

4.5.1.1 Pistols.

4.5.1.1.1 Inspection lot formation. The term "inspection lot" is defined as a homogeneous collection of units of product from which a representative sample is drawn or which is inspected 100 percent to determine conformance with applicable requirements. Units of product selected for inspection shall represent only the inspection lot from which they are drawn and shall not be construed to represent any prior or subsequent quantities presented for inspection. Homogeneity shall be considered to exist provided the inspection lot has been produced by one manufacturer, in one unchanged process, using the same materials and methods, in accordance with the same drawings, same drawing revisions, same specifications and same specification revisions. All material submitted for inspection in accordance with this specification shall comply with the homogeneity criteria specified herein, regardless of the type of inspection procedure which is being applied to determine conformance with requirements.

4.5.1.1.2 Lot size. The first three test lots shall each consist of 500 pistols or a month's production, whichever is smaller. When three successive lots meet the interchangeability requirements and the reliability and durability requirements, the lot size shall be increased to 3,000 pistols or a month's production, whichever is smaller. If rejection of a lot occurs at any time, the smaller test lot size criteria shall be reinstated and the above procedure repeated in returning to the larger lot size. All changes to the lot sizes must be approved by the Government representative.

4.5.1.1.3 Lot identification. Each inspection lot shall be identified with a lot number. The serial number of each pistol in a lot shall be recorded on the individual lot record. The reason for rejection of any inspection lot shall be recorded. When a rejected inspection lot is resubmitted after reconditioning, it shall be identified as such.

4.5.1.2 Parts and packaging. The formation, size, and presentation of inspection lots of parts and packaging shall be in accordance with MIL-W-13855. Inspection lots shall be as large as practical in consideration of quality history, manufacturing conditions, and contractor's delivery schedule.

4.5.2 Examination.

4.5.2.1 Pistols. Final examination of pistols shall be performed by the contractor after completion of all testing of 4.5.3.1 and 4.5.3.2. Unless otherwise specified herein, each pistol shall be examined as specified below. All examinations specified below are classified as major. All non-conforming

pistols shall be rejected and the reason for rejection recorded on the individual weapon record.

4.5.2.1.1 Rejected pistols. Rejected pistols shall be corrected by the contractor and the corrective action taken shall be recorded. The pistols shall be reexamined as specified below.

4.5.2.1.2 Magazine and magazine catch. Visually and manually examine the magazine and the magazine catch to determine compliance with 3.3.3.

4.5.2.1.3 Slide.

a. With the magazine, barrel and recoil spring removed from the pistol, manually examine the slide to determine compliance with 3.3.4.

b. Visually examine the slide for presence of the proof and magnetic particle inspection marks.

4.5.2.1.4 Barrel.

a. Disassemble the barrel from the pistol and visually examine the barrel to determine compliance with 3.3.5.

b. Visually examine the barrel for presence of proof and magnetic particle inspection marks.

4.5.2.1.5 Sights. Visually and manually examine the sights to determine compliance with 3.3.6.

4.5.2.1.6 Safety mechanisms.

4.5.2.1.6.1 Firing pin safety. Visually and manually examine the firing pin safety mechanism for compliance with 3.3.7.1.

4.5.2.1.6.2 Decocking mechanism. Visually and manually examine the decocking mechanism for compliance with 3.3.7.2.

4.5.2.1.7 Firing pin and firing pin spring. Visually and manually examine the firing pin and the firing pin spring to determine compliance with 3.3.8.

4.5.2.1.8 Extractor. Visually and manually examine the extractor to determine compliance with 3.3.9.

4.5.2.1.9 Ejector. Visually and manually examine the ejector to determine compliance with 3.3.10.

4.5.2.1.10 Slide stop. Visually and manually examine the slide stop to determine compliance with 3.3.11.

4.5.2.1.11 Trigger. Visually and manually examine the trigger to determine compliance with 3.3.12.

4.5.2.1.12 Grips. Visually and manually examine the grips to determine compliance with 3.3.13.

4.5.2.1.13 Finishes.

a. Visually examine the machine finishes on the pistol to determine conformance with 3.3.14.1.

b. The contractor shall provide the Government representative with Certified Test Reports (in accordance with MIL-W-63150) demonstrating compliance with touch-up material requirements of 3.3.14.3 for all pistols submitted for Government acceptance.

4.5.2.1.14 Marking. Visually examine the pistol to determine compliance with 3.5.

4.5.2.1.15 Workmanship. Visually examine the pistol for conformance with the workmanship requirements of 3.6.

4.5.2.2 Component parts and repair parts. Examination of component parts and repair parts shall be performed in accordance with the applicable criteria specified in 4.5.2 and MIL-W-63150. Examination of these parts shall be accomplished prior to assembly into the end item or submission for acceptance as repair parts.

4.5.2.3 Packaging. Examination of packaging of pistols shall be performed in accordance with the classification of characteristics specified in 4.5.2.3.1. Examination for the packaging characteristics shall apply to each item of the applicable sample of pistols, interior packages, or exterior containers, as applicable. Failure of the packaging to conform to the specified characteristics shall be cause for rejection of the lot. Sample size shall be as follows:

Lot Size	Sample Size	
	Majors	Minors
91 to 150	32	12
151 to 280	32	14
281 to 500	32	17
501 to 1200	74	20
1201 to 3200	74	24

4.5.2.3.1 Classification of characteristics for packaging. (Unless otherwise specified in each listed characteristic, the packaging requirements are specified in Section 5.)

Categories	Characteristics
Critical:	None Defined.
Major:	
101.	Marking is legible and correct
102.	Correct location of marking
103.	Correct level of packaging for packing (see procurement documents)
104.	Correct cleaning and drying
105.	Correct preservative application and drainage
106.	Correct closure of bags and interior packages
107.	Correct cushioning and wrapping
108.	Correct closure and strapping of shipping containers
109.	Correct packing in exterior container
110.	Pistol serial number visible through barrier material
Minor:	
201.	Workmanship

4.5.2.3.2 Repair part packaging. Examination of packaging of repair parts shall be performed in accordance with the criteria specified in the contract (see 6.2).

4.5.3 Testing. Testing will be performed in the sequence listed below.

4.5.3.1 High-pressure resistance, functioning, and accuracy and dispersion testing. The contractor shall test each pistol for high-pressure resistance, functioning, and accuracy and dispersion in this sequence using the test methods specified in 4.6.3, 4.6.4.1, and 4.6.5 respectively. Pistols failing to meet any of the requirements shall be rejected. The cause of the failure shall be determined for each rejected pistol and corrective action shall be taken and recorded prior to resubmittal for acceptance testing. Unless otherwise specified, retesting shall be performed following the test methods in 4.6.3, 4.6.4.1, and 4.6.5, as applicable. If the corrective action performed affects the validity of previous test/inspections, those tests so affected must also be repeated and successfully passed for acceptance. Those tests not affected by the corrective action need not be repeated, unless directed otherwise by the Government representative.

4.5.3.2 Headspace and trigger pull testing. The contractor shall test each pistol for headspace and trigger pull using the test method specified in 4.6.1 and 4.6.2 respectively. Pistols failing to meet the requirements shall be rejected. The cause of the failure shall be determined for each rejected pistol and corrective action shall be taken and recorded prior to resubmittal for acceptance testing. Retesting of corrected pistols shall be

performed using the test methods in 4.6.1 and 4.6.2, as applicable. If the corrective action performed affects the validity of previous test/inspections, those tests so affected must also be repeated and successfully passed for acceptance. Those tests not affected by the corrective action need not be repeated, unless directed otherwise by the Government representative.

4.5.3.3 Interchangeability testing.

4.5.3.3.1 Pistols. The contractor shall subject a sample of ten pistols selected by the Government representatives from each inspection lot to interchangeability testing using the test method specified herein (4.5.3.3.1) and in 4.6.6. Pistols selected for interchangeability testing shall have been found satisfactory in all other individual examinations (4.5.2.1) and tests (4.5.3.1 and 4.5.3.2). Failure of any sample pistol to successfully complete all of the testing/inspections specified herein (4.5.3.3.1) shall constitute a failure of the interchangeability test and shall cause retest or rejection of the represented lot. At the discretion of the Government representative, an interchangeability retest may be allowed without reconditioning the lot of pistols. Failure in the retest shall cause rejection of the represented lot subject to reconditioning and further test as a reconditioned lot. A sample of 20 pistols from each retest or reconditioned lot shall be tested using the same procedure described above. The smaller test lot size criteria shall be reinstated for subsequent lot testing and the above procedures repeated in returning to the larger size lot.

4.5.3.3.2 Repair parts. The contractor shall subject at least five parts from each inspection lot of concurrent repair parts to the interchangeability test specified in 4.6.6.2. Failure of any part to meet the requirements shall be cause for rejection of the represented lot of parts subject to reconditioning and further test as a reconditioned lot. A sample of double the number of parts used in the original test shall be tested from each reconditioned lot using the test method specified in 4.6.6.2.

4.5.3.4 Reliability and durability testing.

4.5.3.4.1 Lot size. The lot size shall be as specified in 4.5.1.1.2.

4.5.3.4.2 Reliability and durability. Three (3) pistols and sixty magazines selected by the Government representative from each reliability/durability lot shall be tested by the contractor for reliability and durability using the test methods specified in 4.6.7 and 4.6.8. Pistols selected for reliability/durability testing shall have been found satisfactory in all other individual examinations (4.5.2.1) and tests (4.5.3.1 and 4.5.3.2). Failure of the pistols shall be cause for rejection of the represented lot. If the lot is rejected, the contractor shall conduct a

thorough failure analysis to determine the cause of failure and shall effect the necessary corrective action on all pistols of the lot and, as necessary, parts/subassemblies in-process. Following these actions, and if authorized by the procuring agency, the reconditioned lot may be resubmitted for the reliability test. Sample size and test methods for reconditioned lots shall be the same as for new lots.

4.5.3.5 Component parts and repair parts testing. Raw material testing, part testing, and certification shall be performed in accordance with the criteria specified in the contract (see 6.2). This will include chemical analysis and physical tests of materials, and tests of protective finish, heat treatment, bonding, and function of parts as applicable. The contractor shall accomplish these tests prior to assembly of parts into the end item.

4.5.3.6 Packaging testing.

4.5.3.6.1 Pistols.

4.5.3.6.1.1 Certification. The contractor shall furnish the Government representative with certification that the packaging materials conform to the applicable packaging instructing in 5.0 and 6.2.

4.5.3.6.1.2 Determination of cleanliness testing. The contractor shall test items from each inspection lot for determination of cleanliness using the test method specified in 4.6.17.1. Sampling shall be in accordance with MIL-P-116.

4.5.3.6.1.3 Seam strength testing. The contractor shall test level A unit package from each inspection lot for seam strength in accordance with the requirements of MIL-P-116 and 4.6.17.2. Sampling shall be in accordance with MIL-P-116.

4.5.3.6.2 Repair parts. Testing of packaging of repair parts shall be performed in accordance with MIL-P-116 or as specified in the contract (see 6.2).

4.5.3.7 Test ammunition. Unless otherwise specified, Government furnished M882 9MM Ball ammunition shall be used in first article and acceptance test firing.

4.5.3.8 Alternative quality conformance provisions. Unless otherwise specified herein or provided for in the contract, alternative quality conformance procedures, methods, or equipment, such as statistical process control, tool control, other types of sampling procedures, etc., may be used by the contractor when they provide, as a minimum, the level of quality assurance required by the provisions specified herein. Prior to applying such alternative procedures, methods, or equipment, the contractor shall describe them in a written proposal submitted to the Government for evaluation (see 6.7). When required, the

contractor shall demonstrate that the effectiveness of each proposed alternative is equal to or better than the specified quality assurance provision(s) herein. In cases of dispute as to whether the contractor's proposed alternative(s) provides equivalent assurance, the provisions of this specification shall apply. All approved alternative provisions shall be specifically incorporated into the contractor's quality program or detailed inspection system, as applicable.

4.5.4 Inspection equipment. Unless otherwise specified in the contract, responsibilities for acquisition, maintenance, and disposition of all inspection equipment required to perform inspection prescribed by applicable specifications, shall be in accordance with MIL-I-45607 and MIL-STD-45662. When automated inspection equipment is to be used, the provisions of MIL-A-70625 shall apply.

4.6 Methods of inspection.

4.6.1 Headspace test. Pistols shall be gaged for headspace requirement after proof firing, prior to acceptance in accordance with 3.4.1.

4.6.2 Trigger pull test. The pistol shall be in the uncocked position and the load shall be gradually applied at the middle of the trigger bow, exerted in a line parallel to the axis of the barrel bore. When the minimum load is applied the hammer/striker shall not fall and when the maximum load is applied the hammer/striker shall fall. This will simulate first shot firing. The test shall be repeated with the exception that the hammer/striker shall be fully cocked. This will simulate the firing of subsequent rounds. The test shall be repeated using the same procedure with the exception that the hammer/striker shall be in the fully cocked position prior to load application.

4.6.3 High-pressure resistance (proof-firing) test.

4.6.3.1 Pistols. The pistol shall be tested for high-pressure resistance requirement by being subjected to the firing of one Government standard M905 high-pressure test cartridge. Proof firing shall be accomplished with the pistol held in a contractor test fixture having a protective shield (it may be remotely fired). After proof firing the pistol shall be visually examined for evidence of damage, and cartridge cases shall be visually examined for bulges, splits, rings, and other defects caused by defective barrels. In addition, after proof firing, the barrel, slide and any other part(s) involved in locking the barrel to the slide during firing (as identified by the Government representative) shall be magnetic particle inspected in accordance with MIL-STD-1949 or dye penetrant inspected in accordance with MIL-STD-6866, as applicable, for evidence of injurious defects. Proof marks and inspection marks shall be applied on parts that have passed this test.

4.6.3.2 Repair parts. Each barrel, slide and other pistol component subjected to direct pressure during pistol firing (as identified by a Government representative) shall be tested for high-pressure resistance requirement by being subjected to the firing of one M905 high-pressure test cartridge. A slave pistol or pistol-simulating test fixture may be used for this test. Proof firing shall be accomplished in a contractor test fixture having a protective shield (or it may be remotely fired). After proof firing, the parts shall be magnetic particle inspected (MPI) per MIL-STD-1949 or dye penetrant inspected (DPI) per MIL-STD-6866, as applicable, for evidence of firing-induced defects or failures. In addition, the parts shall be visually examined for evidence of damage, and the cartridge cases shall be visually examined for bulges, splits, rings, and other defects caused by defective barrels. Proof marks and inspection marks shall be applied on parts that have passed this test.

4.6.4 Function testing.

4.6.4.1 Function firing test (M882). The pistol shall be tested for functioning requirement by firing a fully loaded magazine of M882 ammunition. Function firing shall be accomplished with the pistol hand-held or held in a contractor designed fixture simulating hand-held firing. The magazine used shall be one to be shipped with the pistol. The first four rounds shall be fired slowly (each shot being deliberately spaced at approximately 2 second intervals) and the remaining rounds shall be fired in rapid succession. Two of the first four rounds shall be fired after the hammer/striker has been returned to the uncocked position using the decocking mechanism. All other rounds shall be fired in the cocked position.

4.6.4.2 First article test. After completing the testing specified in 4.6.4.1, the first article test pistols shall be function tested using commercially available controlled expansion ammunition. Each pistol shall be tested by firing one fully loaded magazine of subsonic controlled expansion ammunition (Federal Cartridge jacketed hollow point 147 grain Hydra-shok or equivalent) and one fully loaded magazine of supersonic controlled expansion ammunition (Olin/Winchester jacketed hollow point 115 grain Silvertip or equivalent) following the procedure specified in 4.6.4.1. Ammunition not provided by the Government shall be obtained from a commercial manufacturer approved by the Government.

4.6.5 Accuracy and dispersion test. Each pistol shall be tested for accuracy and dispersion requirements (see 3.4.5). Accuracy and dispersion firing shall be accomplished with the pistol hand-held or held in a contractor-designed, government approved fixture which simulates hand-held conditions. If a fixture (e.g. a Ransom Rest) is used, each pistol may be fired with not more than 8 rounds of contractor furnished ammunition to settle the pistol in the fixture and to allow optimization of the rear sight position. During this time, the pistol may be

disassembled as necessary to facilitate rear sight adjustment. However, the receiver must remain in the fixture and not parts may be replaced. One eight-shot target shall be fired for record using M882 ammunition. The point of aim shall be the center of the target. The target shall then be checked to determine whether the accuracy and dispersion requirements have been met. At the contractor's option and expense, a pistol which fails the accuracy or the dispersion requirement initially may be refired, one additional eight-shot target using M882 ammunition. The refiring shall be accomplished using a government approved fixture to simulate hand-held firing. If initial firing was done using a fixture, no pistol adjustment in the fixture is allowed prior to the retest. If the pistol meets the accuracy and dispersion requirements in the retest, the pistol will be considered to have passed.

4.6.6 Interchange of parts.

4.6.6.1 Pistols. Pistols shall be tested for interchange of parts as defined by 3.4.6. All parts of the same kind shall be placed together in individual containers. The pistols shall then be reassembled using parts selected at random from each container. Any commercial parts such as screws, spring pins, etc., rendered unserviceable by disassembly shall be replaced without penalty to the interchangeability test. The pistols shall be tested for and shall comply with the requirements for headspace, trigger pull, functioning and accuracy and dispersion before and after interchange of parts using the test methods specified in 4.6.1, 4.6.2, 4.6.4, and 4.6.5 respectively.

4.6.6.2 Repair parts. Repair parts shall be tested for interchangeability requirement by disassembling five pistols previously tested per 4.6.6.1, as necessary, and then reassembling them using the repair parts. No refinement of the parts will be allowed. This test may be performed independently of the pistol interchangeability test specified in 4.6.6.1 provided the pistols used for this test have met all the requirements of this specification. The five reassembled pistols (containing the repair parts) shall operate and function properly after the interchange of parts and shall be tested for, and comply with, the requirements stated in 4.6.6.1 except that only the dispersion requirement (3.4.5.2) is assessed in the accuracy and dispersion test.

4.6.7 Reliability.

4.6.7.1 Firing procedures. Pistols shall be tested for reliability requirement by firing 5,000 rounds of M882 ammunition in each pistol. Firing shall be accomplished with the pistol hand-held. Firing shall be in series of approximately 500 rounds using fully loaded magazines whenever possible. The first series shall be fired slowly (each shot being deliberately spaced at approximately 2 second intervals); and the remaining series shall be fired slowly or in rapid succession at the discretion of the

Government representative. The first round of each magazine shall be fired uncocked. The hammer/striker shall be lowered before the first round by use of the decocking mechanism. The barrel shall be cooled after each 250 rounds. Twenty (20) magazines shall be utilized during the test of each pistol. Each magazine shall be coded and maintained with its assigned pistol.

4.6.7.2 Cleaning, inspection and lubrication. The pistol shall be cleaned and lubricated with lubricant per MIL-L-63460 after each series of approximately 500 rounds. No parts shall be altered and only parts broken or worn to the extent that they are unserviceable shall be replaced. At the close of each day's firing the pistol shall be protected against corrosion.

4.6.7.3 Recording of data. A complete record shall be kept for each reliability test, showing each stoppage and part replacement including a complete description of the failure mode, the round count at each occurrence, and the pistol identification. Each stoppage and unserviceable part shall be scored in accordance with Table I.

4.6.8 Durability . After completion of reliability testing (4.6.7) the receivers from the reliability test pistols shall be visually examined to determine compliance with the requirement of 3.4.8.

4.6.9 Safety. After completion of the reliability and durability test, slides, barrels, receivers, and other parts identified by the Government as critical shall be magnetic particle inspected (MPI) or dye penetrant inspected (DPI), as appropriate. DPI testing shall be in accordance with MIL-STD-6866, type I, method B,sensitivity level 3,form D. Five pistols, determined by the Government to exhibit most extensive crack indications, shall be reassembled and fired an additional 5000 rounds. Each critical part shall be reinspected with the same inspection procedure as above. Three of these five pistols shall be selected by a Government representative, reassembled, and fired as follows:

Each pistol is to be fired to a total of 4000 rounds, or until each original critical part (as determined above) has been replaced because it has failed in a manner which precludes firing of the pistol or causes unacceptably repetitive stoppages (as determined by a Government representative). Each critical part (as determined above) shall be subjected to visual inspection after each 2500 rounds of firing. All parts except the barrel, slide, receiver and other critical parts previously identified may be replaced as necessary to assure continued firing. A critical part may be replaced only after it has failed in a manner which precludes firing of the pistol or causes unacceptably repetitive stoppages (as determined by a Government representative). The first article is rejected if any pistol component fails in a mode which has the potential of causing injury to the operator or a bystander.

4.6.9.1 Recording of data. A complete record of stoppages, parts replacements and inspection results shall be kept including a complete description of the failure mode, the round count at which each occurred and the pistol identification.

4.6.10 Maintainability. During both the reliability testing specified in 4.6.7 and the safety testing specified in 4.6.9, a complete record of total time required to repair the pistol after the occurrence of each stoppage or unserviceable part shall be kept. The record shall include a description of the actions performed and identification of the parts replaced.

4.6.11 Environmental test.

4.6.11.1 High temperature test. Pistols shall be tested for the high temperature requirement (see 3.4.11.1) by firing 1,000 rounds each. Each pistol, with ten magazines and at least 1,000 rounds of ammunition for each pistol, shall be initially conditioned at +60 ± 3 degrees C for at least 4 hours. The pistols shall be fired hand-held, in 100 round cycles. The minimum dwell time between each cycle shall be one hour to allow the pistol to return to the conditioned temperature. Each magazine shall be coded and maintained with its assigned pistol. The first round of each magazine shall be fired uncocked. Cleaning and lubricating with lubricant per MIL-L-63460 shall be accomplished prior to the test and at 500 rounds. After the 1,000 rounds have been fired on each pistol, the pistol shall be cleaned and visually inspected. All stoppages and unserviceable parts shall be recorded and scored in accordance with Table I.

4.6.11.2 Low temperature test. Pistols shall be tested for the low temperature requirement (see 3.4.11.2) by firing 2,000 rounds each. Each pistol, with ten magazines and 2,000 rounds for each, shall be initially conditioned at -40 ± 3 degrees C for at least 4 hours. The pistols shall be fired hand-held, in 100 round cycles, with a minimum dwell time of two hours between each cycle to allow the pistol to return to the conditioned temperature. Each magazine shall be coded and maintained with its assigned pistol. The first round of each magazine shall be fired uncocked. Cleaning and lubrication shall be accomplished prior to the test and at 500 round intervals. The lubricant for this test shall be in accordance with MIL-L-14107 (LAW). After the 2,000 rounds have been fired on each pistol, the pistol shall be cleaned and visually inspected. All stoppages and unserviceable parts shall be recorded and scored in accordance with Table I.

4.6.12 Rough handling test. The pistols shall be tested for rough handling with a primed cartridge case in the chamber, a fully loaded magazine in each firing/safety mode available. One pistol is to be conditioned at -40 ± 3 degrees C, one at ambient and one at +60 ± 3 degrees C. Each pistol is dropped from a minimum height of 1.2 meters (48 in) (lowest point of the pistol to the drop surface) in each of the following six orientations: muzzle down, hammer/striker area down, butt down, slide top down,

right side down and left side down. The drop surface shall be a steel plate at least 12 mm thick, backed by concrete. The chambered cartridge case shall not fire during testing and at the conclusion of all drop events the chambered cartridge case and the full magazine shall fire without stoppages.

4.6.13 Corrosion resistance test. The pistol, with loaded magazine in place and full of cartridges, shall be exposed to a 5 per cent salt fog test in accordance with MIL-STD-810 (The cycle shall consist of 48 hours salt fog followed by 48 hours drying.).

At the conclusion of the test, the pistol shall be functioned in accordance with 4.6.4.1 and there shall be no evidence of corrosion other than as defined in 3.4.13.

4.6.14 Chemical resistance test. A sample of each different non-metallic material except tritium sight components used in the construction of the pistol or its component parts shall be submerged in each of the chemicals listed in 3.4.14 for 24 hours at ambient temperature. Tritium sight components shall be submerged in these same chemicals for 30 seconds at ambient temperature. The sample shall be removed, dried, and visually and manually inspected. The samples shall be free of adverse effects and shall not be rendered unserviceable.

4.6.15 X-ray test. Pistols which have one or more of the major components (barrel, slide, and receiver) constructed of nonmetallic material shall be passed through a commercial x-ray screening device, approved by the Government. The display shall be observed for conformance to the x-ray identification requirement.

4.6.16 Human engineering. A 22 mm (7/8 inch) diameter rod shall pass freely between the front of the trigger and trigger guard without trigger movement.

4.6.17 Packaging tests.

4.6.17.1 Determination of cleanliness. The applicable surfaces (except for barrel bore and chamber) of each sample unit shall be subjected to the determination of cleanliness test in accordance with MIL-P-116. The barrel bores and chambers shall be wipe tested for cleanliness using clean white bore cleaning swabs and the degree of cleanliness shall be verified by comparison of test swabs with standard clean/new swab samples furnished by the contractor and approved by the Government.

4.6.17.2 Seam strength. The level A sample unit packages shall be subjected to a seam strength test in accordance with the test procedures specified in MIL-P-116 for a heat-sealed seam test with the exception that the seams shall be cold sealed. A 1/2 pound weight shall be used in conducting the seam strength test.

5. PACKAGING

5.1. Preservation.

5.1.1 Level A.

5.1.1.1 Cleaning. The pistol shall be disassembled as necessary to accomplish the cleaning specified herein. All metallic surfaces of parts subjected to burned powder residue, including barrel bore and chamber, shall be scrubbed clean with bristle brush or swabs saturated with rifle bore cleaner conforming to MIL-C-372 followed with a wash of solvent P-D-680. All other metallic surfaces shall be cleaned by process C-3 of MIL-P-116. Non-metallic surfaces shall be cleaned by process C-1 of MIL-P-116.

5.1.1.2 Drying. All surfaces shall be thoroughly dried prior to preservation application. Drying shall be in accordance with procedure D-1 of MIL-P-116 except that barrel bore and chamber shall be dried in accordance with procedure D-4 of MIL-P-116 using clean, dry and lint-free swabs.

5.1.1.3 Preservation application. Preservatives or lubricants contaminated or removed during the cleaning process shall be reapplied in accordance with final protective finish requirements (see 3.3.14.2).

5.1.1.4 Unit packaging. The weapon shall be unit package method IC-1 with a supplementary container.

a. Insert magazine into pistol. Place hammer/striker in uncocked position.

b. Place weapon in bag, MIL-B-22019, Type II.

c. Place bagged weapon in the supplementary container, PPP-B-636, W5C. Ensure tight pack in accordance with MIL-STD-1186.

NOTE: Place weapon in container with the serial number facing up.

d. Close container in accordance with PPP-B-636. Seal all seams and joints.

5.1.1.4.1 Corrosion inhibitor. Volatile corrosion inhibitor shall be used in accordance with MIL-I-8574.

5.1.1.4.2 Operator's manual. The operator's manual, if provided, shall be placed in a waterproof barrier bag. Closure shall be heat sealed, stapled or taped. Barrier material may be MIL-B-117, Class B or MIL-B-22019, Type II, or commercial waterproof material. Place the item in the unit container with the weapon.

5.1.1.4.3 Spare magazine. A spare magazine, if provided, shall be placed in a waterproof barrier bag IAW MIL-B-117, class B. Closure to be heat sealed. MIL-B-22019, type II material may be used in lieu of MIL-B-117. Tape bagged magazine to interior of weapon unit container to prevent movement.

5.1.1.4.4 Spare parts. Spare parts shall be cleaned, dried, and preserved in accordance with 5.1.1.1, 5.1.1.2, and 5.1.1.3 as required. Packaging shall be in accordance with MIL-P-116. The tritium sight shall be cleaned in accordance with method C-1 and packaged in accordance with method IC-1 with a supplementary container of PPP-B-636, W5C.

5.1.2 Level B. Not applicable.

5.2 Packing. A quantity of weapons not to exceed 1,000 pounds shall be placed in a minimum size shipping container. The container shall conform to requirements for the applicable level (5.2.1 or 5.2.2.). The maximum allowable tolerance for void shall not exceed 1/2 inch in any dimension (length, width or depth). Closure/reinforcement shall be in accordance with the requirements of the applicable container specification (see 6.2).

5.2.1 Level A. The shipping container shall comply with PPP-B-601. Style A, B, I or J, Type OS, Grade B.

5.2.2 Level B. The shipping container shall comply with PPP-B-640, Style E, Class 2. The packed container shall be secured to an expendable pallet conforming to PPP-P-1660, Type I, Class A, Grade 2. The pallet shall be the same size as outside length and width of the container (+0, -5/8 inch). The same type of metallic strapping selected to reinforce the container shall be used to secure the container.

5.3 Marking. Unit and exterior shipping containers shall be marked in accordance with MIL-STD-129. Packing lists are required. Serial number marking is required and shall be on a packing list. Nomenclature marking shall be omitted from shipping container as required by MIL-STD-129 for sensitive items. The requirements of CFR 49 apply.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. The compact pistols covered by this specification are intended for use in applications where a concealable weapon is required.

6.2 Acquisition requirements.--Acquisition documents should specify the following:

a. Title, number, and date of the specification.

b. Issue of DODISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.2).

c. First article submission requirements (see 3.1).

d. Requirements for submission of operator's manuals (see 3.7.1 and 6.6).

e. Requirements for submission of drawings (see 3.7.2 and 6.7).

f. Requirements for submission of a parts list (see 3.7.3 and 6.7).

g. Pistol serial numbers assignment (see 3.5).

h. Disposition of interchangeability, reliability, and safety tested pistols.

i. Levels of preservation and packing. (see 5.1 and 5.2).

j. Examination and testing criteria for repair parts (see 4.5.2.3.2, 4.5.3.5, 4.5.3.6.2 and 5.1.1.4.4).

k. Place of final inspection and acceptance.

l. Responsibility for furnishing ammunition and associated certification.

m. Procedures and methods for demilitarizing and disposing of rejected material.

n. Disposition of Government furnished property.

6.3 Test firing facilities. Test firing facilities and operating procedures shall be designed by the contractor in conformance with local, state, and Federal regulations and shall be suitable for carrying out prescribed firing tests with safety of operating and visiting personnel. Copies of the contractor designs shall be provided to the contracting officer. Government facilities may be viewed upon application to the contracting officer.

6.4 Ammunition for test firing. To avoid delay in test firing, the contractor should maintain a minimum of two month's supply of ammunition as determined by anticipated firing requirements.

6.5 Submission of contractor inspection equipment designs for approval. Submit copies of designs as required to: Commander, U.S. Army ARDEC, ATTN: SMCAR-QAF-I, Picatinny Arsenal, NJ 07806-5000. This address will be specified on the Contract Data Requirements List, DD Form 1423 in the contract.

6.6 Technical manuals. The requirements for technical manuals should be considered when this specification is applied on a contract. If technical manuals are required, military specifications and standards that have been cleared and listed in DOD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL) must be listed on a separate Control Data Requirements List (DD Form 1423), which is included as an exhibit to the contract. The technical manuals must be acquired under separate contract line item in the contract.

6.7 Consideration of data requirements. The following data requirements should be considered when this specification is applied on a contract. The applicable Data Item Descriptions (DID's) should be reviewed in conjunction with the specific acquisition to ensure that only essential data are requested/provided and that the the DID's are tailored to reflect the requirements of the specific acquisition. To ensure correct contractual application of the data requirements, a Contract Data Requirements List (DD Form 1423) must be prepared to obtain the data, except where DOD FAR Supplement 27.475-1 exempts the requirement for a DD Form 1423.

Reference Paragraph	DID Number	DID Title	Suggested Tailoring
3.7.2	DI-DRPR-81000	Product Drawings, and Associated Lists	Level II Drawings

The above DID's were those cleared as of the date of this specification. The current issue of DOD 5010.12-L, Acquisition Management Systems and Date Requirements Control List (AMSDL), must be researched to ensure that only current, cleared DID's are cited on the DD Form 1423.

6.8 Subject term (key word) listing.

Accuracy and dispersion
Arms, small
Corrosion resistance
Handgun
Headspace
Interchangeability
Safety/reliability/durability
Tritium sights
Weapon

6.9 Changes from previous issue.--Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodian:
Army-AR

Preparing activity:
Army-AR

(Project 1005-A820)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER	2. DOCUMENT DATE (YYMMDD)
	MIL-P-71012A(AR)	15 February 1994

3. DOCUMENT TITLE: Pistol, Semiautomatic, Compact, 9MM: M11

4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets if needed.)

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME (Last, First, Middle Initial)	b. ORGANIZATION	
c. ADDRESS (Include Zip Code)	d. TELEPHONE (Include Area Code) (1) Commercial (2) AUTOVON (If applicable)	7. DATE SUBMITTED (YYMMDD)

8. PREPARING ACTIVITY

a. NAME	b. TELEPHONE (Include Area Code)
US Army, ARDEC	(1) Commercial 201 724-6626 (2) AUTOVON DSN 880-6626
c. ADDRESS (Include Zip Code) SMCAR-BAC-S Picatinny Arsenal, NJ 07806-5000	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Quality and Standardization Office 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone (703) 756-2340 AUTOVON 289-2340