

MIL-P-18540(NOrd)

20 May 1955

SUPERSEDING

NAVORD OS 1261 C

14 AUGUST 1944

MILITARY SPECIFICATION

PISTOL, SIGNAL, MK 5

1. SCOPE

1.1 This specification governs the manufacture, assembly and preparation for delivery of the Signal Pistol Mk 5 and the methods of inspection and tests upon which acceptance will be based.

2. APPLICABLE DOCUMENTS

2.1 The following specifications, standards, drawings, and publications, of the issue in effect on date of invitation for bids, form a part of this specification:

SPECIFICATIONS

FEDERAL

NN-B-621 -- Boxes, Wood, Nailed and Lock Corner.
 PPP-B-601 -- Boxes; Wood, Cleated-Plywood.

MILITARY

MIL-A-8625 -- Anodic-Coatings, for Aluminum and Aluminum Alloys.
 MIL-C-16232 -- Coatings-Phosphate; Oiled, Slushed or Waxed and Phosphate Treating Compounds.
 MIL-P-17141 -- Plating; Protective for Inert
 (BuOrd) Fuze Parts.

STANDARDS

MIL-STD-105 -- Sampling Procedures and Tables for Inspection by Attributes.
 MIL-STD-129 -- Marking for shipment and Storage.

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MIL-STD-129 -- Salt Spray (Fog) Test for Use in
Development of Fuzes.

DRAWINGS

BUREAU OF ORDNANCE

LD SK 102657 -- Signal Pistol Mk 5 and all speci-
fications, standards and drawings
listed thereon.
LD SK 15570 -- Pyrotechnic Signal, Red or Blue Lights.
244560 -- Accessories, Signal Pistol Mark 5
Holster and Details.
344562 -- Signal Light Mark 2.

PUBLICATIONS

BUREAU OF ORDNANCE

OP 400 -- General Instructions for the Design,
Manufacture, and Inspection of Naval
Ordnance Equipment.

(Copies of specifications, standards, drawings, and
publications 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 Other publications. -- The following documents
form a part of this specification. Unless otherwise
indicated, the issue in effect on date of invitation
for bids shall apply.

CODE OF FEDERAL REGULATIONS

49 CFR 71-78 -- Transportation, Interstate Commerce
Commission, Explosives and Other
Dangerous Articles.

(The Interstate Commerce Commission regulations are
now a part of the Code of Federal Regulations (1949
Edition-Revised 1950) available from the Superintendent
of Documents, Government Printing Office, Washington 25,
D. C. Orders for the above publication should cite
"49 CFR 71-78 (Rev. 1950) ".)

3. REQUIREMENTS

3.1 General. -- The Signal Pistol Mark 5 covered by this specification shall be manufactured in accordance with Bureau of Ordnance List of Drawings LD SK 102657 and all documents listed thereon.

3.1.1 The requirements and procedures established in OP 400 shall be adhered to wherever applicable.

3.2 Plating.

3.2.1 Method and thickness. -- Steel springs requiring cadmium plating shall be plated by an approved electrolytic process in accordance with specification MIL-P-17141 (BuOrd). The plating process shall be so controlled that the amount of plating to be deposited is not less than .0005 inch nor more than .003 inch. All plating must be continuous and smooth without perceptible blisters or granulation.

3.3 Anodizing. -- The barrel, trigger and barrel head shall be anodized in accordance with the requirements of Military Specification MIL-A-8625.

3.4 Dying. -- The barrel, trigger and barrel head shall be dyed black, using Aluminum Company of America coating designation Aluminlite Black 1, 501 or equal.

3.5 Phosphate coating. -- The phosphate coating shall be in accordance with the requirements of Military Specification MIL-C-16232; and shall pass the test described in 4.5.1 of this specification.

3.6 Functioning. -- The pistol shall function effectively when tested in accordance with 4.5.2.

4. QUALITY ASSURANCE PROVISIONS AND TEST REQUIREMENTS

4.1 Sampling. -- Unless otherwise specified, and when applicable, the sampling plans and procedures used by the Government Inspector in the determination of the acceptability of products submitted by a supplier for Government Inspection will be in accordance with the provisions of MIL-STD-105.

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4.1.1 Lot. -- As applied to the Government Inspection of units of product, the term "Lot" shall mean "Inspection Lot", if a collection of units of the product used as a basis for Government Inspection. Unless otherwise specified, the number of units of product in "Inspection Lots" shall be as determined by the Government Inspector, and may differ from the quantity designated in the contract or order as a lot for production, shipment, or other purpose.

4.2 Preproduction sample. -- Before entering into quantity production, a preproduction sample of 5 Signal Pistols Mk 5 shall be delivered by the Contractor for test to an agency designated by the Procuring Agency. These pistols shall be manufactured by the same procedures and processes and at the same location proposed by the Contractor for the execution of the contract. When a preproduction sample is received which proves to be satisfactory for the purpose intended, the Contractor will be notified and will be authorized by the Procuring Agency to proceed with the submission of the product for acceptance. Accepted samples will become the property of the Procuring Agency and will be included in the number called for in the contract schedule.

4.2.1 Preproduction sample for a subsequent contract. -- The necessity for a preproduction sample will be determined by the procuring agency when production under a new contract by the same contractor at the same location follows the manufacture of satisfactory material as covered by this specification.

4.3 Production lot. -- For procurement purposes each lot of pistols shall consist of 200 units plus those required for all test purposes. Unless otherwise stated in the contract, order or requisition, all units for test purposes shall be at the expense of the contractor. The production lot should not be confused with the lot for inspection purposes as defined in MIL-STD-105.

4.4 Inspection. -- The general inspection procedures shall be in accordance with "General Instructions for the Design, Manufacture, and Inspection of Naval Ordnance Equipment", OP 400; Government Inspection shall be in accordance with the provisions of general procedure for Government Inspection and Contractor's Inspection shall be in accordance with inspection by contractor, as contained in OP 400.

4.5 Tests.

4.5.1 Phosphate coating test.— Test two pistols selected at random for each lot of 200 pistols (maximum). Subject the pistols in the salt spray test described in standard MIL-STD-306 for 24 hours. After completion of the test, if necessary to aid in the examination, a gentle wash or dip in running water not warmer than 100 degrees F and a light brushing may be used. The appearance of white corrosion products, visible to the unaided eye at normal reading distance, at scratches through the phosphate film to the cadmium plate or at unscratched areas of the phosphate film shall cause rejection of the lot from which the samples were taken, except that white corrosion products at sharp edges shall not constitute failure.

4.5.2 Functioning test. -- Test five pistols selected at random for each lot of 200 pistols (maximum). Fire six Signal Lights Mark 2 or equivalent in each of the five sample pistols. Any signal which fails to fire is to be checked for firing in a control pistol of known effectiveness. If the signal fires successfully in the control pistol, its original failure will be ascribed to the pistol being tested and will constitute a partial failure of the pistol. Failure of the pistol to fire two or more signals which are subsequently shown to be sound, shall constitute a total failure of the test pistol. Having been fired six times, each pistol is to be dismantled and the parts measured. There is to be no measurable change in any dimension due to firing. The springs shall have acquired no measurable permanent set. Any measurable change in dimensions will be considered a partial failure. Two partial failures in firing or one partial failure in firing, and one in dimensional changes shall constitute a total failure. Two or more total failures shall call for rejection of the lot. A partial failure shall call for a functioning retest.

4.5.2.1 Functioning retest. -- Three additional pistols are to be chosen indiscriminately from the lot from which the partial failure had been taken. These are to be tested in a manner identical with the original service test. Two or more total failures out of the eight pistols tested under the functioning test and retest is cause for the rejection of the lot. Two partial failures shall equal one total failure.

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5. PREPARATION FOR DELIVERY

5.1 Packaging. -- Pistols shall be packaged in individual commercial cardboard cartons so proportioned as to fit snugly over the pistols.

5.2 Packing. -- Ten pistols, packaged as specified in 5.1 shall be packed in wood-cleated plywood or nailed wooden box conforming to the requirements of Federal Specifications PPP-B-601 or NN-B-621, respectively.

5.3 Marking. -- In addition to any special marking required by the contract or order each container shall be marked in accordance with the requirements of standard MIL-STD-129.

5.4 Special packaging and packing. -- When so specified in the contract or order packaging and packing as specified in 5.4.1 and 5.4.2 shall be used in place of that specified in 5.1 and 5.2.

5.4.1 Packaging.

5.4.1.1 Service and reserve boxes. -- The service and reserve boxes shall be wood-cleated plywood or nailed wooden boxes conforming to the requirements of Federal Specifications PPP-B-601 or NN-B-621, respectively.

5.4.1.2 Service boxes. -- These boxes, approximately 7-7/8 inches high by 13-1/2 inches long by 6 inches wide, shall contain two pistols and the following Government Furnished Material:

- 1 Cartridge Belt, 7 by 3-1/2 by 2-11/16 inches
- 15 Boxes of Cartridges, 4-21/32 by 1-15/16 by 2-19/32 inches each
- 2 Holsters as shown on Bureau of Ordnance Drawing 244560

It is suggested that the equipment be packed in the box as follows: Place the 15 boxes of cartridges in the bottom of the box and secure them by metal separators attached to the sides of the box. Then place a tray supported by cleats or the side of the box, the cartridge boxes and place the cartridge belt the pistols, in their holsters, in the tray.

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5.4.1.2.1 Marking. -- Service boxes shall be stencilled with the following in letters not less than 1/2 inch high:

2 Signal Pistols Mk 5
 Service Box
 Contractor _____
 Contract No. _____ Year of Mfg. _____

5.4.1.3 Reserve boxes. -- The reserve boxes, of the same design as service boxes and approximately 13 inches by 10-1/8 inches wide by 6-3/4 inches high shall contain one pistol and the following Government Furnished Material:

15 Boxes of Cartridges as in service boxes
 1 Set of Spare Parts as shown on Bureau of Ordnance Drawings 242692 and 242693
 15 Blue Lights as called for on Bureau of Ordnance Drawing LD SK 15570

5.4.1.3.1 Marking. -- Reserve boxes shall be stencilled with the following in letters not less than 1/2 inch high:

Signal Pistol Mk 5
 Reserve Box
 Contractor _____
 Contract No. _____ Year of Mfg. _____

5.4.2 Packing. -- Ten service or reserve boxes shall be packed in a wood-cleated plywood or nailed wooden box conforming to the requirements of the Code of Federal Regulations 49 CFR 71-78 and Federal Specifications PPP-B-601 or NN-B-62L, respectively.

5.4.3 Special marking. -- When packaging and packing are as specified in 5.4.1 and 5.4.2 each container shall be marked in accordance with the Code of Federal Regulations 49 CFR 71-78 as well as is specified in 5.3.

6. NOTES. -- There are none applicable.

Patent Notice. -- When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States thereby incurs no responsibility nor any

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obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.