
INCH-POUND

MIL-K-20277H (MC)
14 September 1993
SUPERSEDING
MIL-K-20277G (MC)
19 FEBRUARY 1988

MILITARY SPECIFICATION

KNIFE, COMBAT: AND SHEATH

This specification is approved for use by the U. S. Marine Corps, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers the requirements for one type of sheathed combat knife having a 7-inch [178-millimeter (mm)] blade. When specified (see 6.2), sheaths may be acquired separately.

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: Marine Corps Logistics Bases, 814 Radford Boulevard, ATTN: Code 856-1, Albany, Georgia 31704-1128 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 1095

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SPECIFICATIONS

FEDERAL

- O-L-164 - Leather Dressing, Mildew-Preventive.
- V-T-295 - Thread, Nylon.
- FF-R-556 - Rivet, Solid, Small; Rivet, Split, Small; Rivet Tubular, Small; Flat Washer (Burr); and Cap, Rivet; General Purpose.
- KK-L-165 - Leather, Cattlehide, Vegetable Tanned and Chrome Retanned, Impregnated: and Soles.
- KK-L-271 - Leather, Cattlehide, Strap, Vegetable Tanned.
- PPP-B-576 - Boxes, Wood, Cleated, Veneer, Paper Overlaid.
- PPP-B-585 - Boxes, Wood, Wirebound.
- PPP-B-591 - Boxes, Shipping, Fiberboard, Wood-Cleated.
- PPP-B-601 - Boxes, Wood, Cleated-Plywood.
- PPP-B-621 - Boxes, Wood, Nailed and Lock-Corner.
- PPP-B-636 - Boxes, Shipping, Fiberboard.
- PPP-T-60 - Tape: Packaging, Waterproof.

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- MIL-B-117 - Bags, Sleeves and Tubing.
- MIL-H-6875 - Heat Treatment of Steel, Process for.
- MIL-S-8559 - Steel Bars, Carbon, AISI (1095), Aircraft Quality.
- MIL-F-10884 - Fasteners, Snap.
- DOD-P-16232 - Phosphate Coatings, Heavy, Manganese or Zinc Base (for Ferrous Metals).

STANDARDS

FEDERAL

- FED-STD-66 - Steel: Chemical Composition and Hardenability.
- FED-STD-311 - Leather, Methods of Sampling and Testing.
- FED-STD-595 - Colors Used in Government Procurement.
- FED-STD-751 - Stitches, Seams and Stitchings.

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- MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.
- MIL-STD-129 - Marking for Shipment and Storage.
- MIL-STD-130 - Identification Marking of U. S. Military Property.
- MS27980 - Fasteners, Snap, Style 2 (Regular Wire Spring Clamp Type).

2.1.2 Other Government documents, drawings, and publications.
The following other Government documents, drawings, and

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publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

DRAWINGS

MARINE CORPS

- 81A5020A0000 - Knife, Combat.
- 81A5020A0001 - Sheath for Combat Knife.

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

2.2 Non-Government publications. The following document(s) form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- ASTM D3951 - Standard Practice for Commercial Packaging.
- ASTM E18 - Standard Test Methods for Rockwell Hardness and Rockwell Superficial Hardness of Metallic Materials.
- ASTM E112 - Standard Test Methods for Determining Average Grain Size.

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103-1187.

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

3. REQUIREMENTS

3.1 First article. When specified (see 6.2), two sheathed knives and two blades in the as quenched (untempered) condition, or two sheaths when acquired separately, shall be subjected to first article inspection (see 6.4) in accordance with 4.3.

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3.2 Materials. The materials shall be as specified herein. Unless otherwise specified herein, all materials and articles incorporated in the products covered by this specification shall be new and may be fabricated using materials produced from recovered materials to the maximum extent practicable without jeopardizing the intended use and performance. Recovered materials are those materials which have been collected or recovered from solid waste to become a source of raw materials, as distinguished from virgin raw materials. None of the above shall be interpreted to mean that the use of used, rebuilt, or remanufactured products is allowed under this specification unless otherwise specifically specified.

3.3 Design. The design of the knife shall conform to Drawing No. 81A5020A0000 and the design of the sheath shall conform to Drawing No. 81A5020A0001.

3.4 Construction

3.4.1 Knife. The guard shall fit the tang snugly so that all edges of the slot are in contact. The slot shall provide for the tang fillet to allow the guard to be in full contact with the heel of the blade. The leather grip sections shall be assembled on the tang in appropriate sequence and of such thickness as to require compression thereof and permit the insertion of the pin through the butt plate to form a solid grip handle. This assembly shall be such that the grip shall form an integral part of the knife, with no play between the grip and the blade. The butt pin shall be peened at both ends and ground smooth. The end of the tang shall be flush with the butt plate. The handle assembly shall be deburred and colored to match the sheath. The blade shall contain a blood groove on each side. The cutting edge of the blade shall be ground and sharpened to a keen edge. The cutting edge at the back of the blade near the tip shall be ground to a sharp edge.

3.4.1.1. Grip. The grip shall be made of leather conforming to KK-L-165, except that class 5 material shall not be used.

3.4.1.2 Blade. The blade shall be of the through tang type and shall be made of steel conforming to MIL-S-8559. The finished blade shall be hardened and tempered in accordance with MIL-H-6875, and shall have a Rockwell hardness range from C55 to C58, when inspected as specified in 4.10.5. There shall be a hardness transition zone from the heel of the blade to 0.75 inch (19.0 mm) onto the tang, having a hardness of C35 to C45 at the midpoint. The remainder of the tang shall have a maximum hardness of C30 using the Rockwell scale. After hardening, the blade shall have a fracture grain size no coarser than 8, when compared with the Shepherd fracture grain size standard specified in ASTM E112.

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3.4.1.3 Guard, butt plate and pin. The guard, butt plate and pin shall be made of SAE 1018 or 1020 steel conforming to FED-STD-66.

3.4.2 Sheath. The leather sheath shall consist of a one-piece back section and a one-piece front section forming a pocket for the blade. The flesh side of the leather shall be on the inside of the assembled sheath. The front welt and back sections shall be sewn and riveted together along the edges. The strap for holding the handle shall be riveted to the sheath at its longitudinal center. The snap fasteners shall be centered and spaced on the holding strap. The strap, when snapped closed, shall firmly hold the handle against the top of the sheath and shall prevent movement of the knife when the sheath is inverted or jarred. The hole near the bottom of the sheath for the insertion of a thong shall be punched out, not cut. The punch shall be made after assembly to assure alignment. After assembly, the sheath shall be trimmed to remove all loose ends, and rough edges shall be dyed to match the finished leather. The sheath and welt filler shall be made of leather conforming to type II, Class 1, section 3 of KK-L-271. The outer surface shall not be flaky and shall be free of all other defects (see 4.9.2). The thread shall be nylon conforming to type I or II, letter size F of V-T-295. The color shall closely match the color of the sheath (4.9.2). Colorfastness is not applicable. The rivets shall be split type conforming to FF-R-556, type XI, class 1, grade F, black chemical finish (see 4.9.2). The snap fasteners shall conform to MIL-F-10884, style 2, finish 2, and MS27980 (see 4.9.2).

3.4.2.1 Leather. The leather shall be rendered mildew proof in accordance with type I or II of O-L-164. The treated leather shall contain between 0.2 and 0.5 percent paranitrophenol (see 4.10.6).

3.4.2.2 Sewing. All sewing shall be with nylon thread specified in 3.4.2. The stitch shall be type 301 conforming to FED-STD-751, five to seven stitches per inch (five to seven stitches per 25.4 mm). The stitching shall be straight and parallel to the leather edge. The sheath shall not contain any thread breaks, skips, runoffs, or needle chews. The thread ends shall be neatly trimmed (see 4.9.2).

3.4.2.3 Riveting. The sheath shall be riveted together with rivets as specified in 3.4.2. The head of the rivet shall be on the upper side of the sheath and the split portion shall be flat against the underside of the sheath. All sharp edges shall be removed or turned under. The rivets shall be securely set but shall not straddle or cut the stitching, or unduly cut into the leather (see 4.9.2).

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3.4.2.4 Color. The color of all components shall be black and match chip number 37038 of FED-STD-595 (see 4.9.2).

3.5. Performance. The performance characteristics of the knife shall be as follows:

3.5.1 Holding of the handle by the strap. When tested as specified in 4.10.1, the knife shall not move out of the position by more than 0.25 inch (6.35 mm).

3.5.2 Cutting. When tested as specified in 4.10.2, the blade shall show no undue wear, such as turning over, nicking or breaking of any part of the cutting edge.

3.5.3 Flexibility. When tested as specified 4.10.3, the blade shall not break, or fail to return to the original shape, when bent through an angle of 9°.

3.6 Finish. All metal components of the knife shall be given a protective coating in accordance with type Z, class 2 of DOD-P-16232, after deburring and prior to assembly (see 4.9.2).

3.7 Identification of product. The letters US and the name or trademark of the manufacturer shall be stamped on the heel end of the blade as shown on Drawing number 81A5020A0000. The blade shall be indent stamped, without damage to the knife, with durable and legible letters in accordance with MIL-STD-130 (see 4.9.2).

3.8 Workmanship. Combat knives and/or sheaths shall be of high and uniform quality. The combat knife shall be free of sharp burrs and the sheath shall be free of sharp burrs or edges which may injure the hand of the user or adversely effect performance, reliability and durability. The appearance shall be the highest commercial practice for this type item (see 4.9.2).

4. QUALITY ASSURANCE PROVISION

4.1. Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor 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 this 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

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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.

4.1.2 Test equipment and inspection facilities. The manufacturer shall insure that test and inspection facilities of sufficient accuracy, quality and quantity are established and maintained to permit performance of required inspections.

4.2 Classification of inspections. The inspection requirements specified herein are classified as follows:

- (a) First article inspection (see 4.3).
- (b) Quality conformation inspection (see 4.4).
- (c) Inspection of packaging (see 4.11).

4.3 First article inspection. The first articles shall be subjected to inspection and tests specified in table I.

4.4 Quality conformance inspection. Quality conformance inspection and tests shall be as specified in table I.

4.4.1 Sample. Sampling shall be in accordance with MIL-STD-105 with the lot or batch size the same as the total quantity of the contract unless otherwise directed by the contracting officer. The inspection level and acceptable quality level (AQL) shall be as specified in 4.6. Blades for inspection shall be in the as quenched (untempered) condition.

4.5 Inspection of packaging. Inspection of packaging shall be as specified in table I.

4.5.1 Sample. Sampling shall be in accordance with MIL-STD-105 with each fully prepared shipping container containing sheathed knives, or sheaths if separate acquisition, representing one lot. The shipping container need not be sealed.

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TABLE I. First article and quality conformance inspection.

| Inspection | Requirement Paragraph | Inspection Paragraph |
|--|-----------------------|----------------------|
| Group A | | |
| Dimension | 3.3 | 4.9.1 |
| Visual | 3.4 | 4.9.2 |
| Group B | | |
| Strap holding | 3.5.1 | 4.10.1 |
| Cutting | 3.5.2 | 4.10.2 |
| Flexibility | 3.5.3 | 4.10.3 |
| Group C | | |
| Grain Size | 3.4.1.2 | 4.10.4 |
| Hardness | 3.4.1.2 | 4.10.5 |
| Paranitrophenol (for sheath) | 3.4.2.1 | 4.10.6 |
| Packaging (not applicable to First Article Inspections) | 5.1, 5.2, 5.3 | 4.11 |

4.6 Classification of inspections. First article, quality conformance and packaging inspections shall be classified into groups A, B and C in accordance with the following groupings:

Group A - Nondestructive inspection shall be made in accordance with MIL-STD-105, general inspection level II, normal inspection AQL of 4.0.

Group B - Generally nondestructive inspection shall be made in accordance with MIL-STD-105, general inspection level S-1, normal inspection AQL of 2.5.

Group C - Destructive inspections shall be made on two samples per batch of similar equipment or procedure and zero rejects are allowed.

4.7 Classification of defects. Defects are classified as major or minor in accordance with MIL-STD-105.

4.8 Numbering of defects. Defects are numbered for identification and reference purposes in accordance with the following:

101 through 199 - Major

200 through 299 - Minor

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4.9 Inspection

4.9.1 Dimensional. The knife and sheath, or the sheath when separately acquired, shall be inspected for any nonconformance with the dimensional requirements of Drawing Nos. 81A5020A0000 and 81A5020A0001. Any noncompliance with the dimension shall be classified as a major defect.

4.9.2 Visual. The knife and sheath, or the sheath when separate acquisition, shall be inspected for the defects shown in table II. Defects shall be classified as shown in table II.

TABLE II. Classification of defects for visual examination.

| <u>Defect</u> | <u>Classification</u> | |
|--|-----------------------|-------|
| | Major | Minor |
| 1. Metal components: | | |
| (a) Surface rough, misaligned, or containing cracks, burrs, dents, pit marks or otherwise defective. | 101 | |
| (b) Surface unclean or containing embedded foreign matter. | 102* | |
| (c) Dented, misshaped, distorted or otherwise defective. | 103 | |
| (d) Phosphate or preservative coating missing. | 104 | |
| 2. Leather: | | |
| (a) Open briar, scratches or scars: | | |
| - Single scratch longer than 2 inches (50.8 mm) | 105 | |
| - Any scratch wider than 0.0625 inch (1.59 mm) | 106 | |
| - Three or more short scratches. | 107 | |
| - Single scratch longer than 0.5 inch (12.7 mm) but less than 2 inches (50.8 mm). | | 201 |
| - Two scratches, each less than 0.5 inch (12.7 mm). | | 202 |
| - Any die stab holes or cracky leather. | | 203 |
| (b) Bronzing. | 108 | |
| (c) Fat wrinkles and heel scratches conspicuous at a distance of 4 feet (1.22 m). | 109 | |
| (d) Bloom, hard or boney leather. | | 204 |
| (e) Pitted leather: | | |
| - Six pits anywhere or four pits within 0.25 inch (6.35 mm). | 110 | |
| - Four pits anywhere or three pits within 0.25 inch (6.35 mm). | | 205 |
| (f) Slaughter cuts: | | |
| - Cut longer than 0.50 inch (12.7 mm). | 111 | |
| - Cut deeper than 0.25 inch (6.35 mm) of the thickness. | 112 | |
| - Cut wider than 0.0156 inch (0.397 mm). | 113 | |

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TABLE II. Classification of defects for visual examination, con't.

| Defect | Classification | |
|---|----------------|-------|
| | Major | Minor |
| - All other slaughter cuts. | 114* | |
| (g) <u>Cleanness:</u> | | |
| - More than one permanent spot. | 115 | |
| - Removable spots or stains not removed | | 206 |
| - Unremoved hair or other appearance factors. | | 207 |
| (h) <u>Flaky leather:</u> | | |
| - Two or more adjacent folds or wrinkles, each wider than 0.0625 inch (1.59 mm). | 116 | |
| - Three adjacent folds or wrinkles, each over 0.0312 inch (0.794 mm), but less than 0.0625 inch (1.59 mm) wide. | | 208 |
| 3. <u>Sheath components and assembly:</u> | | |
| (a) Any defective component or defect in assembly not classified herein. | 117* | |
| (b) Any component or required operation omitted, but not classified herein. | 118* | |
| (c) Flesh side of the leather on the outer side of the sheath. | 119 | |
| (d) Skived end of back inadequately attached. | 120 | |
| (e) Cut edges improperly colored or color not matching. | | 209 |
| (f) Filler welt missing, improperly tapered or misaligned on outer edge. | 121* | |
| (g) <u>Sewing of sheath:</u> | | |
| (1) Needle chews | 122 | |
| (2) Thread breaks, run-offs, incorrect type of stitch. | 123 | |
| (3) Thread color does not match the leather; various shades used. | | 210 |
| (4) Loose seam. | 124 | |
| (5) Stitches per inch not within specified range. | 125* | |
| (h) Strap holding not attached as required. | 126* | |
| (i) <u>Snap fastener:</u> | | |
| (1) Improper functioning. | 127** | |
| (2) Loose, improperly clinched, cutting into leather. | 128 | |
| (3) Any sharp burrs or metal slivers. | 129 | |
| (4) Not centered on strap. | 130* | |
| (j) <u>Riveting:</u> | | |

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TABLE II. Classification of defects for visual examination, con't.

| Defect | Classification | |
|--|----------------|-------|
| | Major | Minor |
| (1) Insecurely set (i.e., pulling away from leather). | 131 | |
| (2) Improperly clinched, cutting of leather or stitches. | 132 | |
| (3) Improperly located or inverted (clinched on outside). | 133* | |
| (4) Any sharp burrs or metal silvers. | 134 | |
| 4. Knife handle: | | |
| (a) Any component loose, handle not integral with blade. | 135 | |
| (b) Leather portion not smooth, not grooved or not colored to match. | 136* | |
| (c) Butt pin not peened or not ground smooth. | 137 | |
| (d) Tang protruding from butt plate surface. | | 211 |
| (e) Guard not at right angles to the blade. | 138* | |
| (f) Guard edges not flush with blade heel. | 139 | |
| 5. Knife blade: | | |
| (a) Blood groove not as specified. | 140 | |
| (b) Point broken or not sharp. | 141 | |
| (c) Cutting edge of blade not uniformly honed to a keen edge. | 142 | |
| (d) Cutting edge contains nicks or burrs. | 143 | |
| (e) Back edge of blade not ground to the tip. | 144 | |
| (f) Contour lines not clearly defined. | | 212 |
| (g) Identification markings: | | |
| (1) Missing or illegible. | | 213 |
| (2) Method of application weakens tang. | 145 | |
| 6. Color: Not as specified. | 146* | |

* Major when it seriously affects the serviceability or appearance; otherwise, it is to be classified as a minor defect.

** The snap fasteners shall be checked for proper functioning by snapping closed and unsnapping at least three times.

4.10 Tests

4.10. Strap holding. The effectiveness of the strap in

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holding the knife in the sheath shall be determined by the following test: with the strap snapped shut over the handle of the sheathed knife, grasp the sheath near the tip end without pinching the blade; raise the arm overhead with the knife butt uppermost, then suddenly swing the arm downward through an arc in a rapid motion, stopping suddenly at the bottom of the arc. The guard of the knife shall not have moved away from the sheath at the completion of this hurl.

4.10.2 Cutting. The keenness of the blade shall be tested by cutting at least ten shavings, not less than 0.0625 inch (1.59 mm) thick, from a strip of oak or other wood of similar hardness. The blade shall enter into the wood at an angle of not less than 30° and all portions of the cutting edge shall be capable of producing a clean cut without undue effort. After ten shavings have been cut, the blade shall have no defects in the cutting edge.

4.10.3 Flexibility. The tip of the blade shall be secured by inserting the tip into a contoured metal fixture to a depth of 1.5 inches (38 mm) from the point. Pressure shall be of such magnitude that it shall cause bending of the blade through an angle of 9°. The blade shall not break during the bending and when the pressure is removed, the blade shall return to the original shape with no deformation. (See 3.5.3).

4.10.4 Grain size. The fracture grain size of the blade in the as quenched condition shall be determined by comparison with the Shepherd fracture grain size standards in ASTM E112. The blade shall be notched at the middle of the length and fractured by impact. (See 3.4.1.2)

4.10.5 Hardness. The Rockwell hardness of the steel shall be determined as specified in ASTM E18, hardness scale C. The hardness of the blade shall be determined at the heel, center and point not less than 0.25 inch (6.35 mm) from the cutting edge. The hardness of the tang in the transition area shall be determined in the center on the opposite side to the marking. Three hardness determinations shall be made on the remaining portion of the tang evenly distributed along its length. (See 3.4.1.2).

4.10.6 Paranitrophenol. The paranitrophenol content in the leather shall be determined as specified in method 6711 of FED-STD-311.

4.11 Inspection of packaging. An inspection lot shall be expressed in units of one fully prepared shipping container containing sheathed knives, or sheaths, if separate acquisition, fully prepared for delivery, from essentially the same materials and components offered for acceptance at one time. The sample

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shipping container need not be sealed. Each of the fully prepared shipping containers selected as a sample unit from the lot shall be visually examined to determine that the packaging and marking requirements conform to the requirements specified herein. The defects shall be classified as specified in table III.

TABLE III. Examination of packaging and marking.

| Examine | Defect | Classification Major |
|--------------------|---|----------------------|
| Materials | Any nonconforming component; component omitted, damaged or otherwise defective. | 147 |
| Workmanship | Incomplete closure of case liners or container flaps; loose strapping; bulging or distortion of containers. | 148 |
| Weight and content | Number per container is more or less than required; gross weight exceeds maximum for container used. | 149 |
| Markings | Missing, incorrect, illegible; improper size, location, sequence or method of application. | 150 |

5. PACKAGING

5.1 Preservation and Packaging. Preservation and packaging shall be level A or commercial, as specified (see 6.2).

5.1.1 Level A. Each knife, prior to being packaged, shall be fully inserted into the sheath. The strap shall be snapped closed around the top of the handle. Each sheathed knife, or sheath when separate acquisition, shall then be heat sealed within a snug fitting bag conforming to type I, class B, style 2 of MIL-B-117. Prior to and during the heat sealing operation, excess air shall be exhausted to the extent necessary to permit packaging of the required quantity in the fiberboard box. Ten bagged sheathed knives, or sheaths when separate acquisition, shall be placed within a fiber board box conforming to PPP-B-636, type CF or SF, domestic class, variety SW, grade 275. All seams and joints shall be sealed with minimum of 3-inch (76 mm) wide tape as specified in PPP-T-60.

5.1.2 Commercial. Commercial preservation and packaging shall be in accordance with ASTM D3951.

5.2 Packing. Packing shall be level A, B or commercial, as specified (see 6.2). Exterior containers (see 5.2.1, 5.2.2, and 5.2.3) shall be of a minimum tare weight and cube consistent with the protection required and shall contain equal quantities of identical stock.

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5.2.1 Level A. Eight boxes, 80 sheathed knives, or sheaths when separate acquisition, preserved and packaged as specified in 5.1, shall be packed in a shipping container conforming to one of the following:

PPP-B-576, class 2
 PPP-B-585, class 3
 PPP-B-591, class II
 PPP-B-601, overseas type
 PPP-B-621, class 2, style 4

or, four boxes, 40 sheathed knives, or sheaths when separate acquisition, preserved and packaged as specified in 5.1, shall be packed in a fiberboard container conforming to PPP-B-636, type CF or SF, weather resistant class, variety SW, grade V3c or V3s. Closure of wooden or fiberboard containers shall be as specified in the applicable box specification or appendix thereto.

5.2.2 Level B. A quantity of sheathed knives, or sheaths when separate acquisition, preserved and packaged as specified in 5.1, shall be packed in a shipping container conforming to one of the following:

PPP-B-576, class 1
 PPP-B-585, class 1
 PPP-B-591, class I
 PPP-B-601, domestic type
 PPP-B-621, class 1, style 4
 PPP-B-636, type CF, domestic class

5.2.3 Commercial. Commercial packaging of supplies and equipment shall be as specified in ASTM D3951.

5.3 Marking. Marking shall be level A, B or commercial as specified (see 6.2).

5.3.1 Levels A and B. In addition to any special markings required by the contract, each unit pack, intermediate and exterior container and unitized load shall be marked as specified in MIL-STD-129.

5.3.2 Commercial. Commercial marking shall be as specified in ASTM D3951.

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 knife with sheath covered by this specification is intended for combat use.

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6.2 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and date of this specification.
- b. When sheaths are to be acquired separately (see 1.1).
- c. Issue of DODISS to be cited in the solicitation and, if required, the specific issue of individual documents referenced (see 2.1.1 and 2.2).
- d. Whether first article is required (see 3.1).
- e. Level of preservation and packing required (see 5.1 and 5.2).
- f. Level of marking required (see 5.3).

6.3 Consideration of data requirements. The following data requirements should be considered when this specification is applied on a contract. The applicable Data Item Description (DID's) should be reviewed in conjunction with the specific acquisition to ensure that only essential data are requested/provided and that 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.

| <u>Reference Paragraph</u> | <u>DID Number</u> | <u>DID Title</u> | <u>Suggested Tailoring</u> |
|----------------------------|-------------------|-------------------------|----------------------------|
| 4.3 | DI-NDTI-80603 | Test Procedure | - |
| 4.3 | DI-NDTI-80809A | Test/Inspection Reports | - |
| 4.4 | DI-NDTI-80603 | Test Procedure | - |
| 4.4 | DI-NDTI-80809A | Test/Inspection Reports | - |

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 Data Requirements Control List (AMSDL), must be researched to ensure that only current, cleared DID's are cited on DD Form 1423.

6.4 First article. When first article inspection is required, the contracting officer should provide specific guidance to offerors whether the item(s) should be a preproduction sample, a first article sample, a first production item, a sample selected from the first production items, a standard production item from the contractor's current inventory (see 3.1), and the number of

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items to be tested as specified in 4.3. The contracting officer should also include specific instructions in acquisition documents regarding arrangements for examinations, approval of first article test results, and disposition of first articles. Invitations for bids should provide that the Government reserves the right to waive the requirement for samples for first article inspection to those bidders offering a product which has been previously acquired or tested by the Government, and that bidders offering such products, who wish to rely on such production or test, must furnish evidence with the bid that prior Government approval is presently appropriate for the pending contract. Bidders should not submit alternate bids unless specifically requested to do so in the solicitation.

6.5 Subject term (key word) listing.

Blade
Butt plate
Grip
Guard

6.6 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.

Preparing activity:
Navy - MC
Project No. 1095-A261

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SUMMARY OF CHANGES

1. Page 1, general changes in accordance with MIL-STD-961, paragraph 5.2.
2. Section 2, general changes in accordance with MIL-STD-961, paragraph 5.3.2.
3. Paragraph 2.1.1, specification and standard title corrections.
4. Paragraph 2.1.1, under STANDARDS, FEDERAL, deleted FED-STD-151.
5. Paragraph 2.2, replaced the listing.
6. In the parenthetical note to paragraph 2.2, corrected the ZIP code.
7. Section 3, general changes in accordance with MIL-STD-961, paragraph 5.3.3.
8. Paragraph 3.4.1.1, deleted the reference to "offal" since the term covers more than just class 5 of KK-L-165.
9. Paragraph 3.4.2, made corrections and changes for clarity.
10. Section 4, general changes in accordance with MIL-STD-961, paragraph 5.3.4.
11. Paragraph 4.10.5, replaced the reference to FED-STD-151 with ASTM E18.
12. Section 6, general changes in accordance with MIL-STD-961, paragraph 5.3.6.

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.

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| I RECOMMEND A CHANGE: | | 1. DOCUMENT NUMBER MIL-K-20277H (MC) | 2. DOCUMENT DATE (YYMMDD) 14 September 1993 |
| 3. DOCUMENT TITLE KNIFE, COMBAT; AND SHEATH | | | |
| 4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as 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 COMMANDER | | b. TELEPHONE (Include Area Code) (1) Commercial 912-439-6665/6667 (2) AUTOVON 567-6665/6667 | |
| c. ADDRESS (Include Zip Code) MARINE CORPS LOGISTICS BASES, CODE 856-1 814 RADFORD BOULEVARD ALBANY GA 31704-1128 | | 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 | |