

INCH-POUND

A-A-55204

14 May 1993

COMMERCIAL ITEM DESCRIPTION

HEELS, FOOTWEAR (RUBBER)

The General Services Administration has authorized the use of this Commercial Item Description in preference to ZZ-H-141.

Abstract. This document covers heels made of natural rubber, synthetic rubber, or a mixture of these materials. The intended use of these heels are for manufacture or repair of boots and shoes.

Classification. The rubber heels shall be in the following types, classes and styles:

Type I - Half heels (intended for use on men's dress shoes).

Class:

1. Standard composition.
3. Nonmarking composition.

Style 1 - Straight breast.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Defense Personnel Support Center, Clothing and Textiles Directorate, Attn: DPSC-FSSD, 2800 South 20th Street, Philadelphia, PA 19101-8419, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 8335

DISTRIBUTION STATEMENT A.

Approved for public release;
distribution is unlimited.

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Type II - Whole Heels (intended for use on field type of men's footwear).

Class:

1. Standard composition.
2. Oil resistant composition.
3. Nonmarking composition.
4. Oil resistant, nonmarking, cork composition.
5. Wood core heel, oil resistant, nonmarking composition.
7. Plastic core heel, oil resistant, nonmarking composition

Style:

1. Straight breast.
2. Full beveled breast.
3. Straight breast truncated corners.

Type III - Junior and cuban heels (intended for use as components for women's semidress shoes).

Class:

3. Nonmarking composition.

Style 1 - Straight breast.

Note:

- a. Class 3 when specified, high abrasive commercial heels are expected to endure the life of the footwear.
- b. Classes 3, 4, 5, and 7 will not leave a permanent mark when scuffed over a clean surface.
- c. Classes 2, 4, 5, and 7 will withstand deterioration when in contact with oil.
- d. Class 4 containing cork is for use where slip-resistance is required.

Salient Characteristics. The rubber heels shall be of a half, whole, or junior and cuban heel type, as above. The colors of the rubber heels shall be black or tan. When specified, type I, class 3 heels shall be supplied in high abrasive composition. Heels furnished to shoe manufacturers for use on new shoes and boots shall be sized in B&S (USMC) sizes.

Type I: Heels shall be furnished in sizes 24 through 42, as specified.

Type II: Heels shall be furnished in sizes 27 through 41, as specified.

Type III: Cuban heels shall be furnished in sizes 1, 3, 5 and 7 as specified. Junior heels shall be furnished in sizes J-14 through J-17, as specified.

Heels furnished to Government agencies for repair use shall be dealer sized. Type I heels shall be furnished in sizes 7-8 through 13-14, as specified. Type II heels shall be furnished in sizes 7-8 through 14-15, as specified.

The molded heels shall be of commercial design conforming to types and styles as above, except that design and dimensions of type II, style 2 heels conform to figure 1, and the dimensions of the type I heels shall be as specified in figure 2. Each nail hole shall be provided with a metal washer molded in the heel.

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Correlation between B&S (USMC) sizes and dealer sizes is as follows:

B&S (USMC)	Dealer	
	Type I	Type II
24	7 - 8	-
25	-	7 - 8
26	9 - 10	-
27	-	9 - 10
28	10 - 11	-
29	-	10 - 11
30	11 - 11	-
31	-	11 - 12
32	11 - 12	-
33	-	12 - 13
34	12 - 13	-
35	-	13 - 14
36	13 - 14	-
37	-	14 - 15
38	14 - 15	-
39	-	15 - 16
40	15 - 16	-
41	-	16 - 17
42	16 - 17	-

Type I: Half heels shall have eight holes properly located.

Type II: Classes 1, 2, and 3 whole heels shall have 13 nail holes. The 5 rear nail metal washers shall be molded in the heel 1/16 inch lower than the 8 forward nail metal washers. All nail holes shall be properly located. Class 4 heels, there shall be no spaces, nail holes, or metal washers. Class 5 and 7, there shall be no nail holes or washers. Style 3 shall have both breast corners truncated at an angle of 45 deg. +/-5 deg. for a distance of 5/16 +/-1/16 inch on the tread surface.

Type III: Unless otherwise specified, each junior heel shall have not less than 7 nail holes. Each cuban heel shall have not less than 5 nail holes. All nail holes shall be properly located.

Thickness of heels shall be as follows:

<u>Heel</u>		<u>Thickness (inches)</u>
Type I -	Back center	1/2 +3/64 -1/64
	Center breast	7/16 +3/64 -1/64
Type II -	Back center	7/8 min.
	Center breast	5/8 min.
Type III -	Back center	3/8 min.
	Center breast	5/16 min.

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Physical characteristics.

Abrasive index before and after aging. (Classes 1, 2, 3, and 4) The abrasive index before aging shall be not less than 50 for classes 1, 2, and 3 and not less than 35 for class 4 heels, when tested as specified in table II. After aging as specified in table II, the abrasive index of classes 1, 2, 3, and 4 heels shall be not less than 75 percent of the abrasive index determined on the heels before aging.

(Classes 5 and 7) The abrasive index for classes 5 and 7 shall be not less than 65 before and after aging when specified in table II.

(Subclass "a" heels) The abrasive index for subclass "a" heels shall be not less than 175 before and after aging when specified in table II.

Hardness (before and after aging). The hardness of the heels, (except classes 5 and 7) shall be not less than 60 nor more than 80. The hardness of classes 5 and 7 shall be not less than 50 nor more than 75 when tested as specified in table II. After aging as specified in table II, the hardness of classes 1, 2, 3, and 4 heels shall be not more than 10 points higher than the hardness determined on the heels before aging.

Volume swell (classes 2, 4, 5, and 7). Class 4 heels shall have a volume swell not greater than 65 percent, classes 2, 5, and 7 shall have a volume swell not greater than 50 percent when tested as specified in table II.

Label/markings. The label/markings shall be in accordance with the contract or order. The manufacturer's name or trademark shall be legibly marked on the wearing surface of the heel. Both the B&S size and the dealers size shall be legibly marked on the attaching face of each heel. Barcoding of each unit shall be as specified by the procuring activity.

Workmanship. The finished heels shall conform to the quality of product established by this document. The occurrence of defects shall not exceed the applicable acceptable quality levels.

Product Demonstration Model. When required, offerers shall submit samples of their intended production. The Product Demonstration Model will consist of units independently developed. Product Demonstration Models will be analyzed and evaluated by the government. Evaluation criteria and basis for award are contained in the solicitation. Product Demonstration Models will be retained by the government. One (1) Product Demonstration Model approved by DPSC under the resultant contract will serve as a manufacturing standard for the corresponding production items delivered under this contract. Offerers are advised that the Product Demonstration Model does not relieve the successful offerer of his responsibility to perform in accordance with the Commercial Item Description specified above.

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Regulatory Requirements. The offeror/contractor is encouraged to use recovered materials in accordance with Public Law 94-580 to the maximum extent practicable.

Quality Assurance

Certification. The contractor shall certify that the product offered meets the salient characteristics of this description and that the product conforms to the producer's own drawings, specifications, standards and quality assurance practices. The government reserves the right to require proof of such conformance prior to the first delivery and thereafter as may be otherwise provided for, under the provisions of the contract. Reliance on contractor QA systems 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.

Examination. Lots of heels shall be inspected in accordance with "Sampling Procedures and Tables for Inspection by Attributes", ANSI/ASQC Z1.4, published by the American Society for Quality Control.

Visual Examination. The heels shall be examined for the defects listed below. The lot size shall be expressed in units of heels. The sample unit is one completely fabricated pair of heels. The inspection level shall be II and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 4.0.

Defects. The heels shall be examined for the following defects: improperly matched pairing; size not as specified; design not in accordance with the specified requirements; type, class, and style not as specified; any hole, color not as specified; any spot or stain (outside); label missing, incorrect, incomplete, or illegible; measurement of item not as specified. Any area of porosity or sponginess resulting in loss in density of the rubber stock. More than one cavity or air check 1/16 inch or more deep but not exceeding 1/3 the thickness dimension of the heel. Any cavity or air check more than 1/3 the thickness dimension of the heel in depth. Any press cut, tear, check, blister, loss of thread detail, imbedded foreign matter, or otherwise defective. Not cleanly trimmed. Number of nail holes not as specified.

Dimensional Examination. The finished heels shall conform to the dimensions specified. Any dimension that is not within the established tolerance shall be classified as a defect. The sample unit shall be one heel; the inspection level shall be S-2 and the AQL shall be 4.0 expressed in defects per one hundred units. sample unit

Packaging Examination. The fully packaged shipping containers shall be examined in accordance with defects listed below. The lot size shall be the number of shipping containers in the inspection lot. The inspection level shall be S-2 and AQL shall be 2.5 defects per one hundred units.

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EXAMINE	DEFECT
Marking (exterior and interior)	Omitted; incorrect; illegible; of improper size, location, or method of application
Materials	Any component missing, damaged, or not as specified
Workmanship	Inadequate application of components, such as: incomplete closure of container flaps, loose strapping, improper taping, or inadequate stapling
Content	Number of items in container is more or less than required NSN shown on one or more items not as specified on shipping container
Palletization	Length, width, or height exceeds specified maximum requirements Pallet type not as specified Load not bonded as specified

End Item Performance Testing. The method of testing contained in FED-STD-601, whenever applicable, and as listed in table II shall be followed. The physical values specified apply to the average of determinations made on a sample unit. All test reports shall contain the individual values utilized in expressing the final result. The lot size shall be expressed in units of one pair of heels. The sample unit for test shall be twelve heels. The sample size (number of sample units) shall be as shown in table I. The lot size shall be unacceptable if one or more units fail to meet any requirement specified. For those characteristics where test results are reported as pass or fail, there shall be no failure of any test specimen to meet the requirement as specified. For requirements applicable to the lot average, there shall be no failure to meet the requirement as specified.

Table I

Lot size	Sample size
800 or less	2
801 up to and including 22,000	3
22,001 and over	5

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Table II. End Item Tests

Characteristic	Test method	Requirements applicable to		Number determinations per unit	Results reported as	
		Individ. unit	Lot aver.		Pass or fail	Numerically to nearest
Abrasive index before aging	ASTM D 1630-83	-	X	3	-	Unit
Abrasive index after aging	7221 <u>1</u> / and ASTM D 1630-83	-	X	3	-	Unit
Hardness before aging	3021	-	X	5	-	Scale reading
Hardness after aging	3021 and 7221 <u>1</u> /	-	X	5	-	Scale reading
Volume swell (classes 2, 4, 5, and 7)	6211 <u>2</u> /	X	-	3	-	Percent

1/ Aging shall be conducted at 212°F for 24 hours.

2/ Specimens shall be cut from heel, shall be 1 by 1 inch, and shall be buffed to a thickness of 0.075 ± 0.010 inch. The immersion medium shall be medium No. 6 fuel of Method 6001 of FED-STD-601.

Preservation, Packing, and Marking. The preservation, packing, and marking shall be as specified in the contract or order.

Source of Government Documents. Copies of Military and Federal documents are available from:

Standardization Documents Order Desk
 Bldg. 4D
 700 Robbins Avenue
 Philadelphia, PA 19111-5094

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Sources of Nongovernment Documents.

ANSI/ASQC Z1.4 - Sampling Procedures and Tables For Inspection
By Attributes

(Applications for copies should be addressed to American
National Standards Institute, 1430 Broadway, New York, NY 10018-
3308.)

Custodians:

Army - GL
Navy - NU
Air Force - 99
Air Force - 45

Civil Agencies Coordinating
Activity:

GSA - FSS
DC - DCG
JUS - FPI

Review Activity:

Army - MD

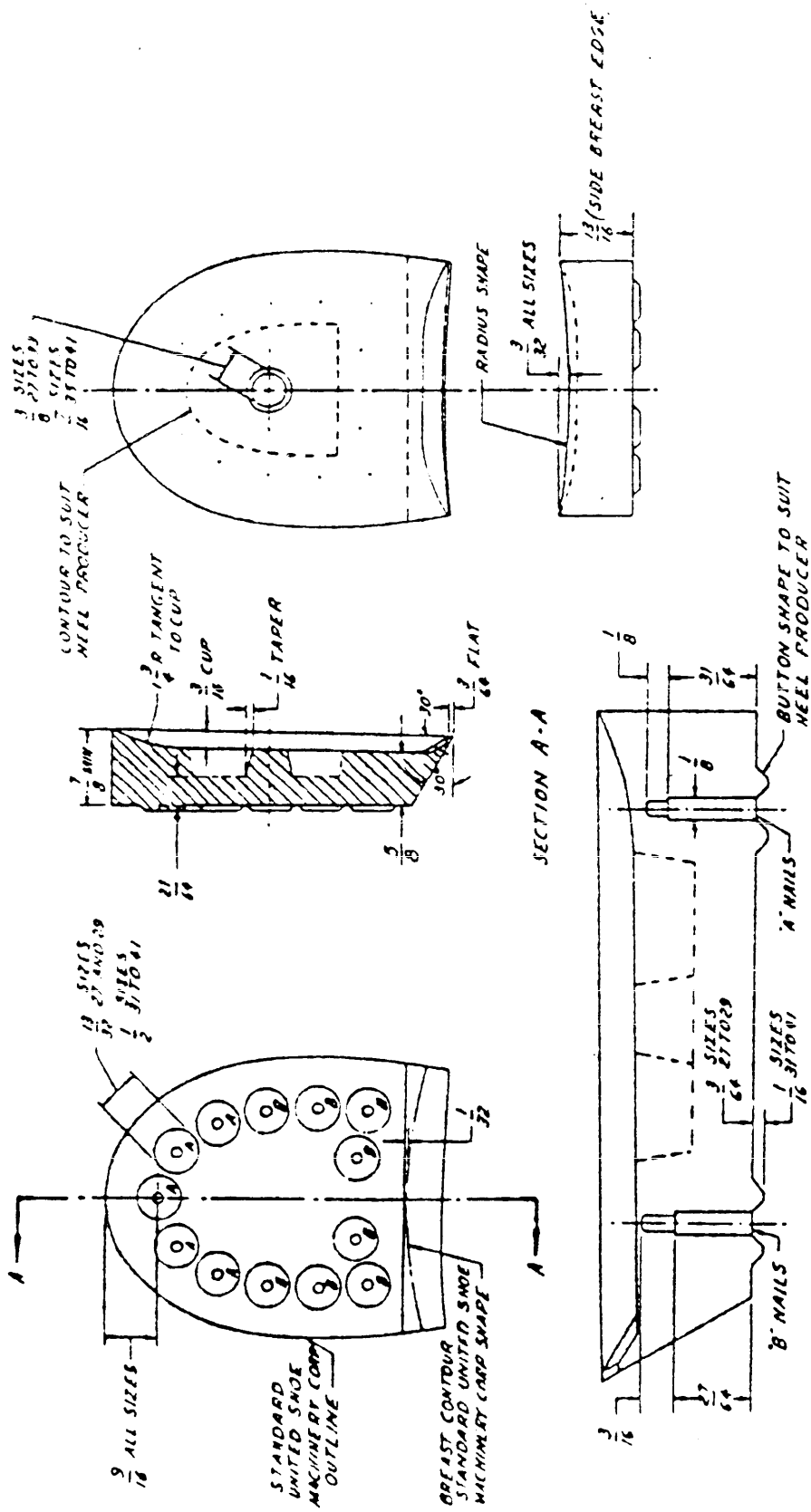
Preparing Activity:

DLA - CT

User Activity:

Navy - MC
Coast Guard - CG

Project No. 8335-0174



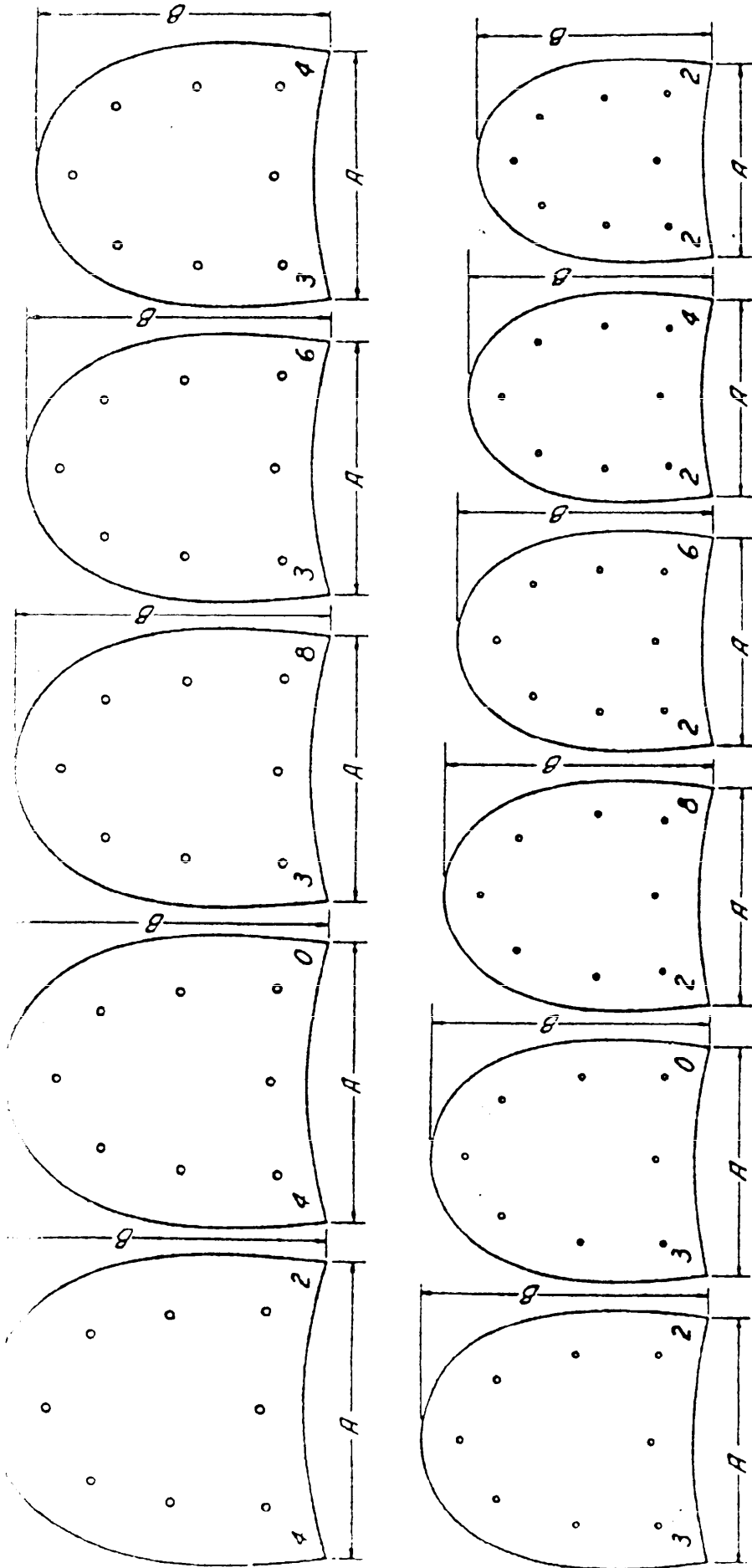
REFER TO UNITED SHOE MACHINERY CORP FOR STANDARD PATTERNS

SIZE	MAIL GROUP	USMC STANDARD 18 MAIL HOLE NUMBER
27	23	31543
29	25	31545
31	27	31547
33	29	31549
35	31	31551
37	37	35027
39	39	35029
41	41	35032

HEELS, RUBBER
TYPE II, STYLE 2
(FULL BEYELED BREAST)

FIGURE - 1

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UNLESS OTHERWISE STATED,
DIMENSIONS POLYMERIZES ARE
DECIMALS — WHOLE NUMBERS
AND FRACTIONS $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{4}$

FIGURE — 2 STANDARD DIMENSIONS MEN'S HALF HEEL

	A	B
22	2-3/8"	2-7/8"
24	2-1/2"	3"
26	2-5/8"	3-1/8"
28	2-11/16"	3-1/4"
30	2-13/16"	3-3/8"
32	2-15/16"	3-1/2"
34	3-1/16"	3-5/8"
36	3-3/16"	3-3/4"
38	3-5/16"	3-7/8"
40	3-7/16"	4"
42	3-9/16"	4-3/16"

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 A-A-55204	2. DOCUMENT DATE (YYMMDD) 93-05-14
3. DOCUMENT TITLE HEELS, FOOTWEAR (RUBBER)			
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 Defence Personnel Support Center ATTN: DPSC-FSSD(12-3-D)		b. TELEPHONE (Include Area Code) (1) Commercial 215-737-8105	(2) AUTOVON 444-8105
c. ADDRESS (Include Zip Code) 2800 South 20th Street P.O. Box 8419 Philadelphia, Pennsylvania 19101-8419		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	