

INCH-POUND

A-A-55229

17 September 1993

COMMERCIAL ITEM DESCRIPTION

RAINCOAT, MAN'S

The General Services Administration has authorized the use of this commercial item description in preference to MIL-R-43518.

Abstract. This commercial item description covers the requirements for raincoats. The raincoats are intended for wear by male military personnel of the Department of the Army.

Salient characteristics. The raincoat is a six-button, double-breasted, belted with buckle, trench-type model, with a convertible collar, two-way access hanging pockets, set-in sleeve with tabs, shoulder loops, a right front storm shield, and a storm tab on lower left front. The sleeve tabs, storm tab, shoulder loops, bottom of front shield, collar, and welt pockets shall be top stitched 3/8 inch from turned edges. The coat bottom hem shall be top stitched 3/8 inch, the belt shall have two rows of top stitching 3/8 inch apart with outside edge stitch 1/16 to 3/32 inch from the edge. The sleeve outseam, side seams, center seams, front edge and lapel shall be 1/2 inch top stitched. The under arm seam of the sleeve shall be a double-lapped, double-stitched seam, 3/16 to 1/4 inch gage. The back pleat insert has a 1/4 inch seam. The buttons shall be melamine formaldehyde composition, glossy finish, style 20, 24-line and 45-line, and style 15, 18-line (stay buttons).

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 8405

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

A-A-55229

There shall be three 45 ligne buttons on the right front. The top two buttons shall be sewn through all plies with stay buttons (18 ligne). The bottom button shall be sewn through the front and top ply of the pocket. One 45 ligne button on the right front shall be sewn through all plies with a stay button to correspond with buttonhole on left lapel when coat is buttoned at neck. There shall be three 45 ligne buttons on the left front. The top button shall be sewn through all plies through a 45 ligne button on the facing side with buttons back to back. The center button shall be sewn through all plies with a stay button. The bottom button shall be sewn through the front and top ply of the pocket. The sleeve tabs, storm tab, and shoulder loops shall have 24 ligne buttons to correspond with buttonholes. One 24 ligne button shall be sewn to the underside of the belt (toward center) to correspond to the buttonhole in the belt safety strap. The color shall be DoD Blue BU, Cable No. 62002. The belt shall finish 2-1/4 (+ 1/16, - 1/8) inches wide. The coat shall have three loops, one on each front above pocket welt, and one on the right side finishing 3 to 3-1/4 inches straight. There shall be one belt keeper loop on the left side 5-3/4 to 6 inches long, and one double belt loop on the belt, 6-7/8 to 7 inches long. Purling of the buttonhole on the belt safety strap shall finish away from the belt. The buttonholes shall be eyelet-end, square-bar, cut-first type, worked over gimp with the ends of the gimp pulled through the underside. The ends shall be bartacked. Bartacking shall be 3/8 to 1/2 inch long and 1/16 to 3/32 inch wide and shall be free from thread breaks and loose stitching. The buckle shall be slide-type, size 2-1/4 inches, made from an alpha-cellulose filled melamine formaldehyde molding material having a minimum Izod impact strength of 0.25 foot-pounds per inch (13 J/m) of notch and shall conform to the basic or alternate drawing, 4-1-187.

Figure. Figure 1 is furnished for information purposes only. If there are any inconsistencies between the written commercial item description and figure 1, the written commercial item description shall govern.

Materials

Basic material. The basic material shall be a plain weave, cotton and polyester water-repellent poplin cloth dyed Blue 358. The finished cloth shall match the standard sample for shade and appearance and shall be equal to or better than the standard sample with respect to all characteristics for which the standard sample is referenced. The color of the finished cloth shall match the standard sample when viewed under filtered tungsten lamps that approximate artificial daylight and that have a correlated color temperature of $7500 \pm 200^{\circ}\text{K}$ with illumination of 100 ± 20 foot candles, and shall be a good match to the standard sample under incandescent lamplight at $2300 \pm 200^{\circ}\text{K}$. The fiber shall be polyethylene glycol terephthalate and cotton.

A-A-55229

Basic material - cont'd. The warp and filling yarns shall be a blend of 50 percent polyester fiber and the remaining percentage cotton. The cotton portion shall be carded and combed, and the blend shall be spun into 2-ply yarn for the warp and a singles yarn for the filling. The basic cloth shall conform to the requirements in Table I.

Water repellency and air permeability

Treatment. The cloth shall be given an approved fluorocarbon type of water repellent treatment and shall conform to the water repellency and air permeability requirements as specified in Table I.

Interlining. The material for the belt interlining shall be cotton buckram cloth, 5.7 ounce, natural or bleached, conforming to Type I, class 2 of A-A-50186.

Fusible interlining. As an alternate to basic material interlinings (the pocket welt, facing, belt, top collar, top collarstand, and shoulder loop interlining), either a preshrunk 100 percent cotton plain weave cloth or black spunlaced polyester non-woven fabric that has uniformly distributed dot systems of a polyvinyl chloride (PVC)/polyvinyl acetate type, fusible type, fusible adhesive applied to one side in accordance with good commercial practice shall be used. The interlining shall be fused to the basic material on a electric fusing press. The fusible interlining shall conform to the requirements in Table I.

The material for fusing the center back, side seams, and sleeve outseams shall be a polyamide fusible web, $3/8 \pm 1/16$ inch in width and weighing 1.0 ± 0.2 ounces per square yard. For optimum results, the fusible material manufacturer's recommendations for fusing dwell time, pressure, and temperature, based upon the fusing equipment used and basic material being fused, shall be utilized.

TABLE I. - Material requirements

Characteristic	Basic material	Fusible interlining	Test method
Weight (oz./sq. yd.)			ASTM-D 3776
min.	6.0	3.3	"
max.	6.7	4.1	"
Colorfastness to:			
Laundering	4		TM-5610 <u>1/2/3/4/</u>
Dry-cleaning	4	-	TM-5622 <u>1/4/</u>
Perspiration	4	-	AATCC 15 <u>4/</u>
Light	4	-	TM-5660 <u>1/4/</u>
Crocking:			AATCC 8 <u>4/</u>
wet	2.5	-	"
dry	2.5	-	"

A-A-55229

TABLE I. - Material requirements - cont.

Characteristic	Basic material	Fusible interlining	Test method
Yarns per inch: (minimum)			ASTM-D 3775
Warp	104	60	"
Filling	64	52	"
Breaking strength (minimum, lbs.)			ASTM-D 5034
Warp	165	36	"
Filling	70	14	"
Tearing strength: (minimum, lbs.)			ASTM-D 1424
Warp	4.0	-	"
Filling	2.0	-	"
Bond strength: (oz. per inch width)			
Initial	-	20	TM-5591 <u>1</u> /
After 3 laundering	-	17	TM-5951 <u>1</u> /
After 3 dry-cleaning	-	17	TM-5580 & 5951 <u>1</u> /
Shrinkage: (max.)			TM-5556 <u>1</u> /
Warp	-	3.0%	
Filling	-	2.0%	
Seam web:			
Width	-	$3/8 \pm 1/16$	TM-5020 <u>1</u> /
Weight oz./sq. yd.	-	1.0 ± 0.2	ASTM-D 3776 Option C
Spray rating initial (min.)	100,100,90	-	TM-5526 <u>1</u> /
After one dry cleaning (min.)	70,70,70	-	TM-5508 & 5526 <u>1</u> /
Hydrostatic pressure initial (min.)	40cm	-	TM-5514 <u>1</u> /
After 3 launder- ings (cotton method)	40cm	-	TM-5556 & 5514 <u>1</u> / <u>5</u> /

A-A-55229

TABLE I. - Material requirements - cont.

Characteristic	Basic material	Fusible interlining	Test method
After 1 dry cleaning	40cm	-	TM-5508 & 5514 <u>1/</u>
Dynamic abortion initial (max.)	15%	-	TM-5500 <u>1/</u>
After 3 launderings (cotton method)	15%	-	TM-5556 & 5500 <u>1/5/</u>
Air permeability initial (max.)	4.0 ft ³ / _{min/ft²}	-	TM-5450 <u>1/</u>
Resistance to organic liquid initial	no wetting by n-tetradecane	-	<u>6/</u>
After 3 launderings (cotton method)	no wetting by n-tetradecane	-	TM-5556 <u>1/5/6/</u>

1/ Reference FED-STD-191.

2/ The specimen must be dried after each completed laundering cycle.

3/ Only the stain on the polyester and cotton fibers of the transfer cloth shall be evaluated.

4/ When a standard sample is available, the requirement shall be equal to or better than that of the standard.

5/ Specimens shall be subjected to 3 complete cycles (wash and dry) prior to determinations of hydrostatic height, dynamic absorption and resistance to organic liquid after laundering.

6/ Test for resistance to organic liquid. Place a small specimen of the cloth face up on a smooth horizontal surface. Using a pipette or eye dropper, gently deposit one drop of n-tetradecane on the surface of the specimen. After one minute, examine the specimen under light at an angle. Absence of the reflectance at the fabric drop interface shall be taken as evidence of wetting. Three specimens (or areas) taken at various locations across the sample shall be tested. Evidence of wetting on one or more specimens shall be considered cause for rejection of the lot represented by the sample.

A-A-55229

Thread and gimp

Thread. The thread shall be cotton, soft finish machine thread, conforming to A-A-50294, Ticket Numbers 50, 3-ply and 70, 2 ply for seaming and stitching. Except for sleeve setting, bartacks and top thread of buttonholes shall be 30, 3-ply. Polyester cotton-covered thread conforming to A-A-50199 may be used in lieu of the cotton thread. If polyester cotton-covered thread is used in lieu of cotton thread, a 2-ply may be substituted for 3-ply cotton. The color of the thread shall be Blue AB, C.A. 66044 in accordance with the Department of Defense Standard Shades for Sewing Threads

Gimp. The gimp for reinforcing the buttonholes shall be cotton No. 8 conforming to type I or II of A-A-50198. The color of the gimp shall be Blue AB, C.A. 66044 in accordance with the Department of defense Standard Shades for Sewing Threads.

Colorfastness. The dyed thread shall show fastness to laundering (after 3 cycles) and light. The dyed gimp shall show colorfastness to laundering (after 3 cycles) and testing shall be as specified in Table I. The thread shall be treated with an approved "quarapel type" water repellent. There shall be no noticeable crystallization of the treatment on the thread surface or any noticeable wicking of the treatment on the thread adjacent to material when sewn.

Labels. The raincoat shall have a printed size label and a printed combination identification and instruction label or a separate identification and instruction label. The label shall be a nonwoven, spunbonded polyester cloth or a nonwoven, 80/20 polyester/cellulose cloth, impregnated, acrylic coated and mildew-resistant. The labels shall show fastness to laundering. Barcoding of each unit shall be as specified by the procuring activity. The inscription shall read as follows:

Item Description
Contract Number
National Stock Number
Fur, Wool or Fiber Products Act Information as Applicable

Size label. The size label for the raincoat shall be centered below the finished neck edge and stitched on all four sides. The sizes and lengths (extra short, short, regular, long and extra long) may be abbreviated as follows:

(EXAMPLE) 34XS, 34S, 34R, 34L, 34XL.

A-A-55229

Combination identification and instruction label or separate identification and instruction label. The identification label shall be stitched on all four sides to back side of right under pocket (to face wearer) centered on pocket (1/2 inch tolerance), $1 \pm 1/4$ inches below top edge. The instruction label shall be centered directly below identification label and stitch to pocket on all four sides. The top edge of instruction label may be caught in bottom edge of stitching of identification label. The combination label (when used) shall be positioned as specified for the identification label. The instruction label or combination label, as applicable, shall include the following information:

RAINCOAT, MEN'S,

Laundering (Preferred Method)

Spot wash badly soiled areas.
 Wash in hot water (140⁰F) using detergent.
 Rinse at least 3 times.
 Machine spin or squeeze by hand.
 Press with moderate heat or hang to dry.
 Press with moderately hot iron (synthetic setting).

Dry Cleaning (Alternate Method)

Dry cleaning in "pure" solvent will not reduce water resistance nor will dry cleaning with detergent providing the detergent is removed by rinsing. If poor water resistance is noted after cleaning, rinsing in water followed by dry cleaning and pressing will renew water resistance.

Label/tag. Each raincoat shall be individually coded with a type VII or VIII, class 17 of DDD-L-20 label/tag bar code for personal clothing items. The label/tag bar code shall be located so that it is completely visible on the garment and causes no damage to the garment.

Patterns. The Government shall furnish a single size pattern. The contractor is responsible for grading patterns for additional sizes. The pattern generally provides for a seam allowance of 1/2 inch for top seam of sleeves, side seams, center-back seam, and facing to yoke (lining) seam; 1/4 inch for back pleat insert, shoulder loops, sleeve tabs, welt to coat, hanging pockets; and 3/8 inch for all other seams. Commercial patterns may be used in lieu of the Government-furnished pattern provided they conform to the cited design and finished measurements.

A-A-55229

Sizes and measurements. The finished raincoat shall conform to the measurements below.

TABLE II. - Finished measurements (in inches)

Size	1/2 Breast <u>1/</u>	Sleeve length <u>2/</u>	Back length <u>3/</u>	Belt length <u>4/</u>
<u>Extra short</u>				
32	20-1/8	17	42-1/8	42-1/2
34	20-7/8	17	42-3/8	44-1/2
36	21-7/8	17	42-5/8	46-1/2
38	22-7/8	17	42-7/8	48-1/2
40	23-7/8	17	43-1/8	50-1/2
42	24-7/8	17	43-3/8	52-1/2
<u>Short</u>				
30	19-1/8	18	43-3/8	40-1/2
32	20-1/8	18	43-5/8	42-1/2
34	20-7/8	18	43-7/8	44-1/2
36	21-7/8	18	44-1/8	46-1/2
38	22-7/8	18	44-3/8	48-1/2
40	23-7/8	18	44-5/8	50-1/2
42	24-7/8	18	44-7/8	52-1/2
44	25-7/8	18	45-1/8	54-1/2
46	26-7/8	18	45-3/8	56-1/2
<u>Regular</u>				
30	19-1/8	19	45-3/8	40-1/2
32	20-1/8	19	45-5/8	42-1/2
34	20-7/8	19	45-7/8	44-1/2
36	21-7/8	19	46-1/8	46-1/2
38	22-7/8	19	46-3/8	48-1/2
40	23-7/8	19	46-5/8	50-1/2
42	24-7/8	19	46-7/8	52-1/2
44	25-7/8	19	47-1/8	54-1/2
46	26-7/8	19	47-3/8	56-1/2
48	27-7/8	19	47-5/8	58-1/2
<u>Long</u>				
32	20-1/8	20	47-5/8	42-1/2
34	20-7/8	20	47-7/8	44-1/2
36	21-7/8	20	48-1/8	46-1/2
38	22-7/8	20	48-3/8	48-1/2
40	23-7/8	20	48-5/8	50-1/2
42	24-7/8	20	48-7/8	52-1/2
44	25-7/8	20	49-1/8	54-1/2
46	26-7/8	20	49-3/8	56-1/2
48	27-7/8	20	49-5/8	58-1/2

A-A-55229

TABLE II. - Finished measurements (in inches) - cont'd

Size	1/2 Breast <u>1/</u>	Sleeve length <u>2/</u>	Back length <u>3/</u>	Belt length <u>4/</u>
<u>Extra long</u>				
34	20-7/8	21	49-7/8	44-1/2
36	21-7/8	21	50-1/8	46-1/2
38	22-7/8	21	50-3/8	48-1/2
40	23-7/8	21	50-5/8	50-1/2
42	24-7/8	21	50-7/8	52-1/2
44	25-7/8	21	51-1/8	54-1/2
46	26-7/8	21	51-3/8	56-1/2
48	27-7/8	21	51-5/8	58-1/2
<u>Tolerance</u>				
Plus	1/2	1/2	1/2	1
Minus	1/2	1/2	1	1

1/ One half breast measurement shall be taken with coat buttoned from folded edge to folded edge in line with pit of armhole.

2/ Sleeve length measurement shall be taken along inseam from pit of armhole to bottom of sleeve.

3/ Back length measurement shall be taken along center seam from undercollar seam to bottom.

4/ Belt measurement shall be taken from point of finished belt to fold at buckle bar.

Workmanship. The finished raincoat shall conform to the quality of product established by this document. The occurrence of defects shall not exceed the contractor's own quality assurance standards and the quality assurance standards defined by the technical data in the bid package.

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.

A-A-55229

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 quality assurance systems shall not relieve the contractor of the responsibility to ensure that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract.

Examination

Visual examination. The raincoat shall be examined for the defects listed below. The lot size shall be expressed in units of raincoats. The sample unit is one raincoat.

Defects. The raincoat shall be examined for the following defects: any hole, cut, or tear; color not as specified or shaded parts when required to be cut from one piece of material; any spot or stain (outside); raw edges, open seams, thread ends not removed or loose tension resulting in loose seams; any material defects, distorted parts or poor workmanship; any component part omitted; any fusing delaminated, bubbling of any fused component, any strike through or bleed through or any resin transfer to raincoat; label missing, incorrect, or illegible; measurement of item not as specified; bar code omitted or not readable by scanner; human-readable interpretation (HRI) omitted or illegible; bar-coded type not as specified; code density not as specified.

Dimensional examination. The finished raincoat 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 raincoat.

A-A-55229

Packaging examination. The fully packaged shipping containers shall be examined in accordance with the defects listed below. The lot size shall be the number of shipping containers in the inspection lot.

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 is 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

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

A-A-55229

Sources of non-Government documents

THE COLOR ASSOCIATION OF THE UNITED STATES

Department of Defense Standard Shades For Buttons

Department of Defense Standard Shades for Sewing Threads

(Applications for copies should be addressed to the Color Association of the United States, 409 W 44th St., New York, NY 10036).

- ASTM-D 1424 - Tearing strength
- ASTM-D 3775 - Yarns per inch
- ASTM-D 3776 - Weight
- ASTM-D 5034 - Breaking strength

(Applications for copies should be addressed to American Society For Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

- AATCC 8 - Colorfastness to Crocking: AATCC Crockmeter Method
- AATCC 15 - Colorfastness to Perspiration
- AATCC 16 - Colorfastness to Light
- AATCC 61 - Colorfastness to Laundering, Home, and Commercial: Accelerated
- AATCC 132 - Colorfastness to Dry-cleaning

(Applications for copies should be addressed to American Association of Textile Chemists and Colorists (AATCC), P.O. Box 12215, Triangle Park, NC 27709-2215)

Approval of fluorocarbon water repellent. Approval of the fluorocarbon type water repellent treatment is the responsibility of the U.S. Army Natick Research, Development and Engineering Center, Attn: SATNC-IRT, Natick, MA 01760-5014. Approval is based on extensive tests, including those for toxicity, which are not set forth in this document. Only those chemical treatments already approved and so listed in the invitation for bids or request for proposal shall be considered acceptable for the related procurement.

Custodian:
Army - GL

Civil Agency Coordinating
Activity:
GSA - FSS

Preparing Activity:
DLA - CT

Project No. 8405-0218

A-A-55229

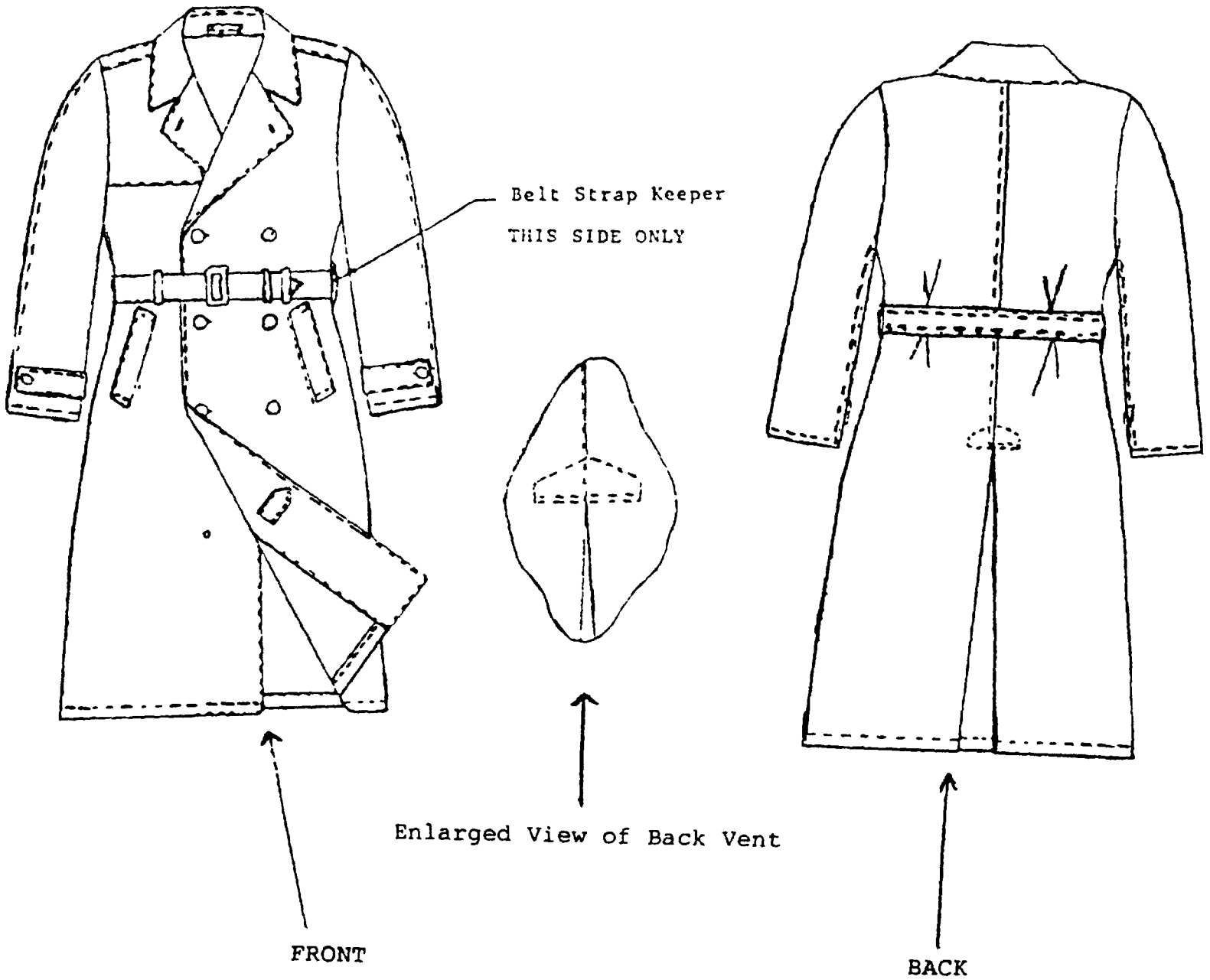


FIGURE 1. - RAINCOAT, MAN'S

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.

1 RECOMMEND A CHANGE:		1 DOCUMENT NUMBER A-A-55229	2 DOCUMENT DATE (YYMMDD) 930917
3 DOCUMENT TITLE RAINCOAT, MAN'S			
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)
PREPARING ACTIVITY			
NAME Defense Personnel Support Center ATTN: DPSC-FSSD (12-3-D)		b TELEPHONE (include Area Code) (1) Commercial (2) AUTOVON	
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	