INCH-POUND

MIL-C-44048F
27 June 1991
SUPERSEDING
MIL-C-44048E
29 August 1990

MILITARY SPECIFICATION

COATS, CAMOUFLAGE PATTERN, COMBAT

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers camouflage pattern, single breasted combat coats.

* 1.2 Classification. The coat shall be of the following types and sizes as specified (see 6.2).

Type I	-	Woodland camouflage pattern cotton/nylon twill cloth
Type II	-	Deleted (see 6.9)
Type III	-	Woodland camouflage pattern, ripstop cotton cloth
Type IV	-	Desert camouflage pattern (3 color), cotton/nylon twill cloth
Type V	-	Desert camouflage pattern (3 color), cotton poplin cloth

Schedule of Sizes

X-Small	Small	Medium	Large	X-Large
	XX-Short	XX-Short		
X-Short	X-Short	X-Short	X-Short	
Short	Short	Short	Short	
Regular	Regular	Regular	Regular	Regular

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be used in improving this document should be addressed to: U.S. Army Natick Research, Development, and Engineering Center, Natick, MA 01760-5019 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 8415

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Long X-Long	Long X-Long	Long X-Long	Long

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).

SPECIFICATIONS

FEDERAL

A-A-50083	-	Bag, Plastic Folded Garment
A-A-50198	-	Thread, Gimp, Cotton, Buttonhole
A-A-50199	-	Thread, Polyester Core, Cotton-, or Polyester-Covered
V-B-871	-	Button, Sewing Hole, and Button, Staple, (Plastic)
V-T-276	-	Thread, Cotton
V-T-285	-	Thread, Polyester
DDD-L-20	-	Label: For Clothing, Equipage and Tentage (General Use)
PPP-B-636	-	Boxes, Shipping, Fiberboard

MILITARY

MIL-L-35078	-	Loads, Unit: Preparation of Semiperishable Subsistence Items; Clothing, Personal Equipment and Equipage; General Specification For
MIL-C-43468	-	Cloth, Camouflage Pattern, Wind Resistant Poplin, Cotton
MIL-C-44031	-	Cloth, Camouflage Pattern: Woodland, Cotton and Nylon
MIL-C-44034	-	Cloth, Twill, Camouflage Pattern, Cotton and Nylon for Desert Uniform
MIL-C-44296	-	Cloth, Fusibles

STANDARDS

FEDERAL

FED-STD-595	-	Colors Used in Government Procurement
FED-STD-751	-	Stitches, Seams, and Stitchings

MILITARY

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes
MIL-STD-129 - Marking for Shipment and Storage
MIL-STD-147 - Palletized Unit Loads
MIL-STD-731 - Quality of Wood Members for Containers and Pallets

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

* 2.2 Non-Government publications. The following documents 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 ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)

AATCC Photographic Comparative Rating of Single and Double Needle Seams (Method 88B, two photos)

(Application for copies should be addressed to the American Association of Textile Chemists and Colorists, Research Triangle Park, P.O. Box 12215, Durham, NC 27709.)

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D 3951 - Standard Practice for Commercial Packaging

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

(Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, 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), a sample shall be subjected to first article inspection (see 6.3) in accordance with 4.3.

3.2 Guide sample. Samples, when furnished, are solely for guidance and information to the contractor (see 6.4). Variation from this specification may appear in the sample, in which case this specification shall govern.

3.3 Material. It is encouraged that recycled material be used when practical as long as it meets the requirements of this specification.

3.3.1 Basic material.

3.3.1.1 For type I coat. The basic material shall be woodland camouflage pattern cotton/nylon twill cloth conforming to class 1 of MIL-C-44031.

3.3.1.2 For type III coat. The basic material shall be woodland camouflage pattern cotton ripstop poplin cloth conforming to type III of MIL-C-43468.

* 3.3.1.3 For type IV coat. The basic material shall be desert camouflage pattern (3 color) cotton/nylon twill cloth conforming to class 3 of MIL-C-44034.

* 3.3.1.4 For type V coat. The basic material shall be cotton poplin printed in a desert camouflage pattern (3 color) conforming to type V of MIL-C-43468.

* 3.3.2 Pencil pocket. The cloth for the pencil pocket shall be camouflage pattern basic material, ground shade cloth, or printed seconds cloth. Ground shade cloth shall be dyed in conformance with class 1 of MIL-C-44031 for type I coat, type III of MIL-C-43468 for type III coat, class 3 of MIL-C-44034 for type IV coat and type V of MIL-C-43468 for type V coat. Ground shade cloth shall meet the physical, mechanical, and dimensional requirements of the respective finished fabric. Printed seconds shall be cloth which has been rejected only for defects pertaining to color, infrared reflectance, or camouflage print patterns, cited in MIL-C-44031 for type I coat, MIL-C-44034 for type IV coat, and MIL-C-43468 for types III and V coats.

* 3.3.3 Cloth, fusible, interlining collar and pocket flaps. The material for interlining the collar and pocket flaps of the type I, III and V coats shall conform to bonding strength and type V, class 3, adhesive dot application, style B of MIL-C-44296.

3.3.3.1 Fusing press operating procedure and conditions. Fuse a single layer of fusible interlining to a single layer of basic material on a dry electrically heated fusing press which has the capacity of controlling and retaining pressure, dwell time, and temperature for a minimum of 8 hours. Pair or sandwich fusing which can create differential shrinkage, and uneven bonding shall not be permitted. A steam sourced fusing press shall not be allowed for any initial fusing operations. For optimum results, the fusible material manufacturers recommendations for fusing dwell time, pressure and temperature, based upon the fusing equipment used and basic material being

fused, shall be utilized. The temperature used in fusing shall not exceed 340°F and shall not cause an objectionable color change or staining of the basic fabric. Basic preproduction and production maintenance procedures, including a fusing press information chart, shall be required to ensure proper fusing press performance relative to temperature control, evenness in pressure head or roller contact, dwell time, cleanliness, and bonding strength. The fusing process shall be controlled to ensure that the fused plies of material show no sign of bubbling or delamination initially or after three launderings when tested as specified in 4.4.3.4. Results of the production maintenance procedures shall be recorded on figure 2.

3.3.4 Thread and gimp.

* 3.3.4.1 Thread. The thread shall be cotton- or polyester-covered polyester core type I or type II of A-A-50199, ticket Nos. 30, 2 or 3 ply; 50, 2 ply and 70, 2 ply, except that cotton thread conforming to V-T-276, ticket No. 70, 2 ply may be used to serge facings and fly. As an alternate, polyester thread conforming to type IV or V of V-T-285, size 40 may be substituted for sizes 50 and 70 of A-A-50199 and size 60 may be substituted for size 30 of A-A-50199. The thread shall be dyed Camouflage Green 483 approximating Color Chip 34094 of FED-STD-595 for type I and type III coats and Khaki P-1 C.A. 66019 for types IV and V coats.

* 3.3.4.2 Gimp. The cotton gimp for reinforcing buttonholes shall be Camouflage Green 483 approximating Color Chip 34094 of FED-STD-595 for type I and III coats and Khaki P-1, C.A. 66019 for types IV and V coats and shall conform to type I or II, size No. 8 of A-A-50198.

3.3.4.3 Colorfastness. The dyed thread and gimp shall show fastness to laundering equal to or better than the standard sample. When no standard sample is available, the dyed thread and gimp shall show "good" fastness to laundering.

* 3.3.5 Labels. Each coat shall have a class 2 size label and either a class 15 combination identification and instruction label or separate class 1 identification and class 3 instruction labels conforming to type VI of DDD-L-20. The label color for type I and III shall be Medium Green, Cable No. 70034, 70130 or 70131 and for types IV and V shall be Khaki, Cable No. 70188. The labels shall show fastness to laundering. The legend for the class 2 size label shall be as specified in 3.3.5.1. The instruction label or the combination label, as applicable, shall include the following information:

Type I - Coat, Woodland Camouflage Pattern; Combat
Type III - Coat, Hot Weather, Woodland Camouflage Pattern; Combat
Type IV - Coat, Desert Camouflage Pattern (3 color); Combat
Type V - Coat, Hot Weather, Desert Camouflage Pattern (3 color); Combat

1. Wear outside of trousers
2. Adjust closures to ventilate; avoid overheating of body.
3. Machine washing. Use Permanent Press Cycle. Wash in warm water with mild detergent.
4. Hand washing. Wash in warm water using mild detergent. DO NOT WRING OR TWIST. Rinse in clean warm water.
5. DO NOT USE CHLORINE BLEACH OR STARCH.
6. Dry at low heat (Do not exceed 130°F). After drying, tumble at room temperature for 10 minutes. Remove immediately from dryer. To drip dry, remove from water and place on rust-proof hanger.

DO NOT REMOVE THIS LABEL

3.3.5.1 Size label legend. The legend shall be printed with not less than 10 point characters. The legend for each size of coat shall contain the following information as applicable.

X-Small - X-Short Height: From 59 to 63 Chest: Up to 33 Stock No. NATO Size 5060/7484	X-Small - Short Height: From 63 to 67 Chest: Up to 33 Stock No. NATO Size 6070/7484	X-Small - Regular Height: From 67 to 71 Chest: Up to 33 Stock No. NATO Size 7080/7484
Small - XX-Short Height: Up to 59 Chest: From 33 to 37 Stock No. NATO Size 4050/8494	Small - X-Short Height: From 59 to 63 Chest: From 33 to 37 Stock No. NATO Size 5060/8494	Small - Short Height: From 63 to 67 Chest: From 33 to 37 Stock No. NATO Size 6070/8494
Small - Regular Height: From 67 to 71 Chest: From 33 to 37 Stock No. NATO Size 7080/8494	Small - Long Height: From 71 to 75 Chest: From 33 to 37 Stock No. NATO Size 8090/8494	Small - X-Long Height: Above 75 Chest: From 33 to 37 Stock No. NATO Size 9000/8494
Medium - XX-Short Height: Up to 59 Chest: From 37 to 41 Stock No. NATO Size 4050/9404	Medium - X-Short Height: From 59 to 63 Chest: From 37 to 41 Stock No. NATO Size 5060/9404	Medium - Short Height: From 63 to 67 Chest: From 37 to 41 Stock No. NATO Size 6070/9404
Medium - Regular Height: From 67 to 71 Chest: From 37 to 41 Stock No. NATO Size 7080/9404	Medium - Long Height: From 71 to 75 Chest: From 37 to 41 Stock No. NATO Size 8090/9404	Medium - X-Long Height: Above 75 Chest: From 37 to 41 Stock No. NATO Size 9000/9404

Large - X-Short Height: From 59 to 63 Chest: From 41 to 45 Stock No. NATO Size 5060/0414	Large - Short Height: From 63 to 67 Chest: From 41 to 45 Stock No. NATO Size 6070/0414	Large - Regular Height: From 67 to 71 Chest: From 41 to 45 Stock No. NATO Size 7080/0414
Large - Long Height: From 71 to 75 Chest: From 41 to 45 Stock No. NATO Size 8090/0414	Large - X-Long Height: Above 75 Chest: From 41 to 45 Stock No. NATO Size 9000/0414	
X-Large - Regular Height: From 67 to 71 Chest: Above 45 Stock No. NATO Size 7080/1424	X-Large - Long Height: From 71 to 75 Chest: Above 45 Stock No. NATO Size 8090/1424	

* 3.3.6 Buttons. The buttons shall be type II, class D, style 26, 30-line, conforming to V-B-871. The buttons shall have a dull finish and the color shall be shade Olive Green BP Cable 62016 for type I and type III coats and Tan AJ Cable 62028 for types IV and V coats.

* 3.4 Design. The coat is a single breasted coat style design with collar, four patch bellows-type pockets with flaps, a straight cut bottom, elbow patches (types I, III and V), waist tabs (types I, III and V), and sleeve tabs.

3.5 Figure. Figures 1, 2, and 3 are furnished for information only. If there are inconsistencies between this specification and the figures, this specification shall control.

3.6 Patterns. Standard patterns, which provide an allowance of 3/8 inch for single needle and 1/2 inch for shoulder, backarm, sleeve setting, and side and underarm seams, except as otherwise indicated, will be furnished by the Government to the contractor for cutting working patterns. Neither the Government patterns or the working patterns shall be altered in any way.

* 3.6.1 List of pattern parts. The component parts of the coat shall be cut from materials specified in accordance with pattern parts indicated in table I.

TABLE I. List of pattern parts

Basic material	Nomenclature	Cut parts
Cotton/nylon cloth or cotton ripstop cloth	Front	2
	Back	1
	Collar	2
	Collar (one piece) 1/	1

TABLE I. List of pattern parts (cont'd)

Basic material	Nomenclature	Cut parts
Cotton/nylon cloth or cotton ripstop cloth (cont'd)	Top sleeve	2
	Undersleeve	2
	Sleeve and waist tab 2/	8
	Sleeve and waist tab (one piece) 2/ 3/	4
	Breast pocket	2
	Breast pocket flap	2
	Breast pocket flap tab	2
	Breast pocket flap and tab (one piece) 4/	2
	Pencil pocket	1
	Lower pocket	2
	Lower pocket flap	2
	Lower pocket flap tab	2
	Lower pocket flap and tab (one piece) 4/	2
	Left front fly	1
	Top sleeve elbow patch (types I, III and V)	2
	Undersleeve elbow patch (types I, III and V)	2
	Elbow patch (one piece) (types I, III and V) 5/	2
Fusible interlining (types I, III and V coats only)	Collar 1/	1
	Breast pocket flap	2
	Breast pocket flap and tab (one piece) 4/	2
	Lower pocket flap	2
	Lower pocket flap and tab (one piece) 4/	2

1/ When alternate one piece collar is used, disregard separate collar piece.

2/ Waist tabs are included only on types I, III and V coats.

3/ When alternate one piece sleeve and waist tab is used, disregard separate sleeve and waist tab pieces and deduct the seam allowance along the back edge.

4/ When alternate one piece breast pocket flap and tab and lower pocket flap and tab pattern pieces are used, disregard separate flap and tab pieces. NOTE: Tabs are not fused.

5/ When alternate one piece elbow patch is used, disregard top and under-sleeve patches.

3.7 Stitches, seams, and stitchings. Stitch, seam, and stitching types specified in table II are those covered by FED-STD-751. Whenever two or more methods, seams, or stitching types are given for the same part of the operation, any one of them may be used. When stitch type 401 is used, the looper, that is, the underthread, shall be on the inside of the coat. Unless otherwise specified, double needle stitching shall be 3/16 to 1/4 inch gage with outer row of stitching 1/16 inch from edge on outside of coat. The guides and knives on the overedge machines shall be set to trim only the ravelled ends of the fabric. Seam allowances shall be maintained with seams sewn so that raw edges, runoffs, twists, pleats, puckers, or open seams will not result. All seams shall start and finish evenly. Seams required to be worked out having a depth between the fold of 1/8 inch or more shall be considered a defect.

3.7.1 Type 301 stitching. Ends of all stitching shall be backstitched or overstitched not less than 1/4 inch except where ends are turned under or caught in other seams or stitching. Ends of continuous lines of stitching shall be overlapped not less than 1/2 inch except on labels where a minimum of a three stitch overlap is required. Thread tensions shall be maintained so that there will be no loose stitching resulting in loose bobbin or top thread or excessively tight stitching resulting in puckering of the materials sewn. The lock shall be imbedded in the materials sewn.

3.7.1.1 Repairs of type 301 stitching. Repairs of type 301 stitching shall be as follows:

a. When thread breaks or bobbin run-outs occur during stitching, the stitching shall be repaired by restarting the stitching a minimum of 1/2 inch back of the end of the stitching. 1/

b. Thread breaks or two or more consecutive skipped or runoff stitches noted during inspection of the item shall be repaired by overstitching. The stitching shall start a minimum of 1/2 inch in back of the defective area and continue over the defective area a minimum of 1/2 inch beyond the defective area onto the existing stitching. Loose or excessively tight stitching shall be repaired by removing the defective stitching without damaging the materials and restitching in the required manner. 1/

1/ When making the above repairs, the ends of the stitching are not required to be backstitched.

3.7.1.2 Types 401, 502, 503, and 504 stitching. Thread tension shall be maintained so that there will be no loose stitching. All repairs shall be in accordance with 3.7.1.1a and 3.7.1.1b. Repairs to stitch type 401 may be accomplished by use of stitch type 301 except when used for eyelets.

3.7.2 Stitches per inch. The minimum and maximum number of stitches per inch shall be as specified in table II.

3.7.3 Buttonholes.

3.7.3.1 Eyelet-end tapered bar. The buttonholes in the pocket flaps and tabs, sleeve and waist tabs, and left front fly shall be eyelet-end tapered bar type worked over gimp specified in 3.3.4.2 with not less than four tacking stitches at bar end catching gimp ends (not counting crossover stitch). The purling shall be on outside of sleeve and waist tabs between tab and flap plies and front facing and front plies. Left front lapel buttonhole purling shall be on outside of coat. The cut lengths shall be 3/4 to 7/8 inch, unless otherwise indicated in table II. The buttonholes shall be clean cut with the stitching securely caught in the fabric.

3.7.4 Eyelets. Eyelets for pockets shall be sewn with purling on the outside with a 3/16 to 1/4 inch diameter finished opening. The width or bight of stitching around the eyelet shall be no less than 1/16 inch. The eyelet stitching shall have at least four overlapping stitches.

3.7.5 Bartacks. Bartacks shall measure 3/8 to 5/8 inch long and be free from thread breaks and loose stitching.

3.8 Manufacturing operations requirements. The coat shall be manufactured in accordance with operation requirements specified in table II. The contractor is not required to follow the exact sequence of operations listed. Any basting or holding stitching required to facilitate manufacture is permissible, provided the thread is removed or does not show in the finished coat except elbow patches and pockets which may be prehemmed.

3.9 Use of automated apparel equipment. Automated apparel equipment may be used to perform any of the operations specified in table II, providing that the seam and stitch type are as specified and the finished component conforms to the required configuration. When a government furnished shaper pattern is forwarded, the component shall conform to that pattern.

NO.	TABLE II. MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
1.	Cut coat. a. Cut coat in strict accordance with patterns furnished which show size, shape, directional lines, placement of pockets, and notches for the proper assembling of all parts. b. Cut top collar with long dimension across the material. The undercollar may be cut on the warp or filling direction. When option to cut one-piece collar is used, the long dimension shall be across the material. For type III only, the collar and tabs may be cut in either the warp or filling direction. c. Cut all parts of the coat out of one piece of material except the undercollar, pencil pocket, pocket flap tabs, and left front fly, which may be cut from ends. d. Cut the fusible interlinings in the same direction as the parts to be fused.						
2.	Replacement of damaged parts. Care shall be exercised during the spreading, cutting, and manufacturing operations to assure that material defects and damages as classified in 4.4.4.1 are excluded and replaced with nondefective material.						
3.	Marking or bundling. a. Mark or bundle cut parts of the coat to insure a uniform size, uniformity of shades, and proper assembly throughout the coat.						

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NO.	TABLE II. (cont'd) MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
3.	Marking and bundling. (cont'd) b. Any method of marking may be used except: (1) Metal fastening devices. (2) Sew-on tickets. (3) Adhesive type tickets which leave traces of adhesive on the material after removal of the tickets. c. The use of an ink pad numbering machine, rubber stamp or pencil will be acceptable provided the numbers do not show through the outside of the coat. d. Identify test swatches (basic material and fusible interlining) that represent every 1000 coat units of production (see 4.4.3.4).						
* 4.	Fusing (types I, III and V coats only). (see 3.3.3.1) a. Position collar interlining centered on the top collar with all the edges 1/8 inch from the top collar edges. Fuse the fusible to the top collar. b. Position fusible centered on both breast and lower pocket flaps with all edges set back 1/8 inch from flap edges. Fuse the fusible to the flaps. (The tab is not fused.) or c. When using the alternate one piece flap and tab construction, position fusible with all edges set						

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NO.	TABLE II. (cont'd) MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
* 4.	Fusing (types I, III and V coats only). (see 3.3.3.1) (cont'd) back 1/8 inch from flap side edges. Fuse the fusible to the flaps. (The tab is not fused.) NOTE: Fused lots shall be allowed to cool to the touch prior to bundle tying or testing.						
5.	Labeling. Sew labels to coat on all four sides with stitching not more than 3/16 inch from edge of label. Stitching shall not be through writing on label. Locate label as follows: (1) Identification label. On inside of left front with the label stitching covered by lower pocket. (2) Size. On center back, 1/2 to 3/4 inch down from collar joining seam or top edge may be caught securely in undercollar joining seam. The label shall be toward the wearer in the finished coat and centered, (± 1 inch off the center tolerance). (3) Instruction. On inside of right front with the label stitching covered by lower pocket. (4) Combination identification and instruction label (see 3.3.5). Attach as specified in (3) above.	301	LSbj-1	10-14	50	50	
6.	Make left front fly. a. Fold left front fly in half lengthwise, and seam top and bottom edges.	301 or 401	SSe-2(a)	10-14	50 50	50 70	

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TABLE II. (cont'd)

NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
6.	Make left front fly. (cont'd)						
	b. Turn, work out corners, and stitch top and bottom edges 3/16 to 1/4 inch from edge. Continue stitching along front folded edge maintaining gage of stitching.	301	SSe-2(b) and OSf-1	10-14	50	50	
	or						
	c. Fold left front fly in half lengthwise, turn in raw edges at ends of fly and stitch top, front and bottom edges, 1/8 to 3/16 from turned edges.	301	SSc-1 and OSf-1	10-14	50	50	
	d. Make four buttonholes in left front fly as indicated by marks on pattern, with the inside front edge of each eyelet 5/8 to 3/4 inch from front edge.	Buttonhole		52-56 per buttonhole	30	50	
7.	Make facings.						
	Finished appearance. The fronts shall be even in length with the facings neither tight, short, twisted nor too full. The lapel steps shall be even in length. Front edge of left front fly shall not be exposed on outside of coat.						
	a. Seam top edge of each lapel, slash seam allowance at collar notch, turn, work out corners, and single stitch beginning at collar notch 3/16 to 1/4 inch from edge; continue across step and down front edge to the bottom of coat 3/16 to 1/4 inch from front edge.	301 and 301	SSe-2 OSf-1	10-14 10-14	50 50	50 50	

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TABLE II. (cont'd)

NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
7.	Make facings. (cont'd)						
	b. Turn under back edge of right facing and single stitch through front, 1/16 to 1/8 inch from turned edge.	301	EFb-1	10-14	50	50	
	or						
	c. Overedge stitch back edge of right facing and stitch through front 1/8 to 1/4 inch from edge.	503 or 504 and 301	EFd-1 and EFa-1	6-10 10-14	70 50	70 50	
	d. Mark the position and make buttonhole in left lapel parallel with the top edge, as indicated on pattern, with the inside edge of eyelet 5/8 to 3/4 inch from front edge of coat.	Button-hole		52-56 per buttonhole	30 or 70	50 or 70	
	e. Superimpose left front fly on left facing, as indicated on pattern, with back edges of left fly and facing even.						
	f. Turn under back edge of left facing and stitch through front, 1/16 to 1/8 inch from turned edge.	301	EFb-1	10-14	50	50	
	or						
	g. Overedge stitch fly and facing together. The overedge stitching shall extend the entire length of the facing.	503 or 504	SSa-1 and EFa-1	6-10 6-10	70 70	70 70	

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TABLE II. (cont'd)

NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
7.	Make facings. (cont'd)						
	h. Single stitch left facing through front 1/8 to 1/4 inch from back edge of facing.	301	EFa-1	10-14	50	50	
	and						
	i. Tack or bartack left front fly to front of coat with three vertical tacks, 1/4 to 1/2 inch long, position at top and bottom edge of fly with the third tack centered between the two middle buttonholes ± 1/4 inch. The tacks or bartacks shall be superimposed on the edge stitching of front of coat.	301 or bartack	SSa-1	10-14 28 per bartack	50 50	50 50	
8.	Make breast and lower pocket flaps.						
	a. Fold tab, back to back, on tab foldline. Make two vertical buttonholes in each tab, as indicated by pattern, with inside of eyelet 3/8 to 1/2 inch from bottom folded edge. The purling shall finish on the narrow width side of tab.	Buttonhole		52-56 or buttonhole	30	50	
	b. Align inner (narrow) edges of flap and tab. Stitch through one ply of flap and both plies of tab 1/4 to 3/8 inch from flap edge. The buttonhole purling shall face the flap.	301	LSb-1	10-14	50	50	
	c. Fold opposite raw edge of flap (fabric face to face) even with raw edge of tab enclosing tab within the fold, and stitch raw edges.	301	SSe-2(a)	10-14	50	50	

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NO.	TABLE II. (cont'd) MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
8.	Make breast and lower pocket flaps. (cont'd)						
	d. Turn flap and tab right side out, force out corners and edges. Stitch side edges and bottom 3/16 inch from edges. Bottom edge of buttonhole tab shall not be caught in the bottom edge stitching.	301	SSe-2(b) and OSf-1	10-14	50	50	
	e. Overedge stitch the top raw edges of each pocket flap.	503 or 504	EFd-1	6-10	70	70	
	f. Fold top edge of left breast pocket flap 1/4 to 5/16 inch and double stitch forming pencil pocket opening (see 13.d.).	301	EFa-2	10-14	50	50	
	or						
	g. Fold buttonhole tab portion of flap, as indicated by marks on pattern (fabric back to back) and make two vertical buttonholes in each tab, as indicated by pattern, with inside edge of eyelet 3/8 to 1/2 inch from bottom folded edge.	Button-hole		52-56 per buttonhole	30	50	
	h. Fold tab on tab fold line (fabric face to face). Fold opposite raw edge of flap (fabric face to face), even with raw edge of tab enclosing tab within the fold, and stitch side raw edges.	301	SSe-2(a)	10-14	50	50	
	i. Turn flap and tab right side out, force out corners and edges. Stitch bottom and side edges 3/16 to 1/4 inch from edge. Turn flap and tab again (to finished position with the raw edges hidden) and work out the corners and edges. Bottom edge of buttonhole tab shall not be caught in the bottom edge stitching.	301	SSe-2(b) and OSf-1	10-14	50	50	

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TABLE II. (cont'd)

NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD NEEDLE	THREAD BOBBIN/ LOOPER	THREAD COVER
8.	Make breast and lower pocket flaps. (cont'd)						
	j. Double stitch, 3/16 to 1/4 inch gage, the top folded edge of left breast pocket at pencil opening (see 13.f.).	301	OSf-2	10-14	50	50	
9.	Make sleeve and waist tabs.						
	a. Join plies of tab along top, bottom, and pointed edges; turn, clip and work out points and edges and stitch 3/16 to 1/4 inch from edges. The tab shall finish 1-3/4 ± 1/8 inches wide.	301 or 401 and 301	SSe-2(a) SSe-2(b)	10-14 10-14	50 50 50	50 70 50	
	or						
	b. Crease all sides of one-piece tab. Fold tab in half lengthwise and double stitch tab together around sides and points 1/16 to 1/8 inch from edges. The tab shall finish 1-3/4 ± 1/8 inches wide.	301	SSc-2	10-14	50	50	
	c. Make a horizontal buttonhole in center (1/8 inch off center tolerance) of each tab with the inside edge of eyelet end 5/8 to 3/4 inch from pointed end of tab.	Button-hole		52-56 per buttonhole	30	50	
10.	Make collar.						
	a. Seam plies of collar around outside edges; trim corners, turn, work out points and edges and single stitch 3/16 to 1/4 inch from edge.	301 or 401 and 301	SSe-2(a) SSe-2(b)	10-14 10-14	50 50 50	50 70 50	
	or						

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TABLE II. (cont'd)

NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD NEEDLE	THREAD BOBBIN/ LOOPER	THREAD COVER
10.	Make collar. (cont'd)						
	b. When collar is cut in one piece, fold collar in half lengthwise and stitch side edges; trim corners, turn, work out points and edges, and stitch 3/16 to 1/4 inch from side and top edges.	301 or 401 and 301	SSe-2(a) SSe-2(a) SSe-2(b) and OSf-1	10-14 10-14 10-14	50 50 50	50 70 50	
	c. The collar shall finish 2-1/2 ± 1/8 inches wide at the neck opening (for types I, III and V coats only).						
11.	Make breast and lower pockets.						
	Finished appearance. The bellows portion of the pockets should finish even with the edge of the pocket. The bellows portion of each breast pocket shall face toward the side seam/arm hole of the coat and should not extend beyond the edge of the pocket.						
	a. Make one 3/16 to 1/4 inch sewn eyelet at bottom bellows part of each breast pocket, and two sewn eyelets at bottom bellows part of each lower pocket (type I and type III coats only). The eyelets shall be positioned as indicated by marks on pattern.	401 or 502 or 503		19-24 per eyelet 26-32 per eyelet 26-32 per eyelet	50 70 70	70 70 70	
	b. Hem top of each pocket, as indicated on pattern, and stitch 1/16 to 1/8 inch from edge.	301	EFb-1	10-14	50	50	
	c. Seam the two edges of the cut-out corners of the pockets; turn seam toward bottom of pocket and raise stitch 1/16 to 1/8 inch from joining seams.	301 or 401 301	LSq-2(a) LSq-2(a) LSq-2(b)	10-14 10-14 10-14	50 50 50	50 70 50	

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TABLE II. (cont'd)

NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
11.	Make breast and lower pockets. (cont'd)						
	or						
	d. Stitch the corners with two rows of stitching 1/16 to 3/32 inch apart.	301 or 401	SSa-2	10-14	50 50	50 70	
	e. Fold inside and outside edges of bellows (both sides and bottom of lower pockets and back side and bottom of breast pockets), as indicated by pattern, and stitch 1/16 to 3/32 inch from folded edges.	301	OSf-1	10-14	50	50	
	f. Raw edges of pockets may be prehemmed prior to attachment to coat. The back and bottom edges of breast pockets and the sides and bottom edges of lower pockets may be turned under 3/8 inch and stitched 1/16 to 1/8 inch from edge.	301	EFa-1	8-10	50	50	
12.	Make and attach pencil pocket.						
	a. Turn in top edge of pocket as indicated by marks on pattern and stitch 1/8 to 1/4 inch from raw edge.	301	EFa-1	10-14	50	50	
	b. Turn in side and bottom edges of pocket; position to left front, as indicated on pattern, and stitch 1/16 to 1/8 inch from edges.	301	LSd-1	10-14	50	50	
13.	Sew on pockets and flaps.						
	a. Turn in raw edges of pockets 3/8 inch, if not prehemmed (see 11.f.), position as indicated by pattern, and stitch back and bottom of breast pockets and all three sides of lower pocket to fronts 1/16 to 1/8 inch from turned-in edges.	301	LSd-1	10-14	50	50	

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TABLE II. (cont'd)

NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
13.	Sew on pockets and flaps. (cont'd)						
	Stitching shall superimpose prehemming stitching when this option is selected. Do not catch bellows in the stitching. The bellows on the breast pocket shall face the side seam/arm hole of the coat. The bellows portion of the pocket should finish even with the pocket, and not be exposed beyond the pocket edge.						
	b. Stitch the turned-in front edge of breast pocket to fronts 1/16 to 1/8 inch from edge, continuing the stitching along bottom of pocket catching the corner of the bellows for not less than 1/4 inch nor more than 3/4 inch.	301	LSd-1	10-14	50	50	
	or						
	c. Operations 13.a. and 13.b. may be performed as one operation on the breast pocket. When using the single operation, the front bottom corner of each breast pocket shall be backtacked through the bellows and the pocket for not less than 1/4 inch. The crossover stitch from the bellows to the pocket should finish under the backtack to preclude any weak spot in this area.	301	LSd-1	10-14	50	50	
	d. Turn in top edge of flaps; position folded edge above pockets on lines indicated on pattern, and stitch with two rows of stitching 3/16 to 1/4 inch apart, leaving the seam on the left breast pocket flap open 1-1/4 to 1-1/2 inches at center of flap. Both rows of stitching on the left flap shall be a continuation of the stitching in operation 8.f.	301	LSd-2	10-14	50	50	

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TABLE II. (cont'd)

NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
13.	Sew on pockets and flaps. (cont'd)						
	or						
	e. Position flaps (except left breast pocket flap) above pockets so that the line of stitching will be aligned with the lines indicated on pattern. Stitch to fronts 3/16 to 1/4 inch from raw edges. Turn flaps down and raise stitch with two rows of stitching 3/16 to 1/4 inch apart.	301 or 401 301	LSbk-3(a) LSbk-3(a) LSbk-3(b)	10-14 10-14 10-14	50 50 50	50 70 50	
	or						
	f. When operations 8.g. through j. are used: Position top folded edge of flaps above pockets on lines indicated on pattern, and stitch with two rows of stitching 3/16 to 1/4 inch apart, leaving the seam on the left breast flap open 1-1/4 to 1-1/2 inches at center of flap. Both rows of stitching on the left flap shall be a continuation of the stitching in operation 8.j. The raw edges inside the flap and tab shall be caught in the stitching.	301	OSf-2	10-14	50	50	
	g. Bartack pockets and flaps as follows: Do not catch bellows in the bartacks.						
	(1) At each end of the pocket, superimpose bartack over line of stitching.	Bartack		21-28 per bartack	50	50	
	(2) Left breast flap, at each end of pencil pocket opening, positioned vertically.						

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NO.	TABLE II. (cont'd) MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
14.	Join shoulder seams.						
	Join fronts to back at shoulder with the back over fronts, with a double-lapped and double-stitched seam.	301 or 401	LSc-2	10-14	50 50	50 70	
15.	Make sleeves.						
*	NOTE: Elbow patches are included on types I, III and V coats only.						
	a. Elbow patches may be prehemmed by turning under top, bottom, and front edges (for top sleeve patch) or back edges (for undersleeve patch), and stitch 1/16 to 1/8 inch from turned edges.	301	EFa-1	8-10	50	50	
	or						
	b. Turn in top and undersleeve patch edges as specified in operation 15.a. and position on sleeves, as indicated on pattern.						
	and						
	c. Join patches to sleeves with a double row of stitching with outside row 1/16 to 1/8 inch from turned edges of patch. The outside row shall superimpose prehemming stitching when this option is selected.	301	LSd-2	10-14	50	50	
	d. Join the back arm seams of sleeves with a double-stitched seam with top sleeve lapped on undersleeve and the edge of elbow patches caught in the stitching.	301 401	LSc-2	10-14	50 50	50 70	

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NO.	TABLE II. (cont'd) MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
15.	Make sleeves. (cont'd)						
	e. If alternate one-piece elbow patch is used, the patch shall be positioned as indicated by marks on pattern after backarm seam is joined.	301	LSd-2	10-14	50	50	
16.	Set in sleeve.						
	Set sleeves to coat with double-lapped and double-stitched seams, with fronts and back lapping the sleeves.	301 or 401	LSc-2	10-14	50 50	50 70	
17.	Join side and sleeve seams and attach waist tabs.						
	a. Sleeves may be hemmed according to operation 18.a. prior to closing side and underarm seams.						
	b. Join side seams and underarm seams in one continuous operation with double-lapped and double-stitched seams with fronts lapping backs. When sleeves are prehemmed, finished hem stitching and bottoms of undersleeve and top sleeve shall not be out of alignment by more than 1/8 inch.	301 or 401	LSc-2	10-14	50 50	50 70	
	c. Prehemmed sleeves shall be bartacked 1/8 inch from bottom of finished sleeve with a horizontal bartack positioned across sleeve joining seam.	Bartack		21-28 per bartack	50	50	
*	d. Position raw edges of waist tab on side seam of of coat front (types I, III and V only). The bottom of the tab shall be positioned the following applicable distance above the bottom raw edge of the coat.	301	LSb1-2	10-14	50	50	

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NO.	TABLE II. (cont'd) MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
17.	Join side and sleeve seams and attach waist tabs. (cont'd) Coat Size — Inches XX-Short 8-3/8 X-Short 8-7/8 Short 9-3/8 Regular 10-5/16 Long 11-5/16 X-Long 12-5/16 Tolerance ± 1/8 e. Stitch the width of the tab 1/8 to 3/16 inch from raw edge of tab. Turn tab to finished position (toward coat back) and raise stitch tab 3/16 to 1/4 inch from turned edge. Raw edges shall be buried within the seam. or f. Position straight end of tab on side seam of coat front (types I, III and V only), with the bottom of the tab positioned above the bottom raw edge of the coat in accordance with the measurements cited in 17.d. Stitch the width of the tab with a rectangular box stitch or double row of stitching 3/16 to 1/4 inch wide.	301	SSc-2	10-14	50	50	

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TABLE II. (cont'd)

NO.	MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
18.	Hem sleeves and attach sleeve tabs.						
	a. Turn up bottom of sleeves as indicated on pattern with raw edge turned in and stitch 1/16 to 1/8 inch from the edge. Hem shall finish 1-1/8 to 1-3/8 inches in width.	301	EFb-1	10-14	50	50	
	b. Position raw edge of tab on top sleeve, as indicated on pattern with bottom edges even and stitch the width of tab 1/8 to 3/16 inch from raw edge of tab. Turn tab to finished position (toward back arm seam) and raise stitch tab 3/16 to 1/4 inch from turned edge. Raw edges shall be buried within the seam.	301	LSb1-2	10-14	50	50	
	or						
	c. Position straight edge of tab on top sleeve, as indicated on pattern, with bottom edges even and stitch the width of the tab with a rectangular box stitch or double row of stitching 3/16 to 1/4 inch wide.	301	SSc-2	10-14	50	50	
19.	Set collar.						
	a. Seam undercollar to neck of coat with the seaming at ends of the collar not more than 1/8 inch below top edge of lapel. When size label is caught in seam, it shall be caught securely.	301	SSa-1	10-14	50	50	
	b. Turn in bottom edge of top collar and single stitch to neck of coat 1/16 to 1/8 inch from edge, with the stitching not more than 1/8 inch from undercollar joining seam.	301	LSb-1	10-14	50	50	

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NO.	TABLE II. (cont'd) MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
20.	Hem bottom.						
	a. Turn up bottom with the raw edge turned in and single stitch 1/16 to 1/8 inch from folded edge with the stitching continued across ends of hem. Hem shall finish 5/8 ± 1/8 inch wide and the ends shall not extend beyond front edges of coat.	301	EFb-1 and SSa-1	10-14	50	50	
	b. In lieu of stitching across ends of hem, vertical bartacks may be substituted in line with vertical stitching and shall cross the horizontal stitching.	Bartack		21-28 per bartack	50	50	
21.	Attach buttons.						
	Attach buttons to coat as follows:						
	(1) Five buttons on right front positioned 1 to 1-1/4 inches from finished front edge (measurement taken from center of buttons) and corresponding to the eyelet ends of buttonholes in left front and front fly.	101 or 301		14-16 per button 14-16 per button	30 30	30	
	(2) Two buttons on each pocket to correspond with the eyelet end of flap buttonholes.						
	(3) Three buttons on each cuff. The first button shall conform to the tab buttonhole with sleeve in finished position. The second button on undersleeve with the center of button 4 ± 1/8 inches from first button and 7/8 ± 1/8 inch from bottom edge of sleeve. The third button on undersleeve with the center of button 2 ± 1/8 inches from second button and 7/8 ± 1/8 inch from bottom edge of sleeve. The buttons shall be sewn through the hem.						

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NO.	TABLE II. (cont'd) MANUFACTURING OPERATIONS REQUIREMENTS	STITCH TYPE	SEAM AND STITCHING TYPE	STITCHES PER INCH	THREAD		
					NEEDLE	BOBBIN/ LOOPER	COVER
21.	Attach buttons. (cont'd) (4) Two buttons on each side back. The first button shall conform to the tab buttonhole with the tab in the finished position. The second button on the back shall be 1-1/2 ± 1/8 inches from the first button.						
22.	Clean coat. a. Trim all ends of stitching to 1/2 inch maximum length throughout (inside and outside) and remove loose threads from the coat. b. Remove all spots, stains, and visible shade or size markings.						

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3.10 Finished measurements. The finished measurements shall be as shown in table III.

TABLE III. Finished measurements (inches)

	XX-Short	X-Short	Short	Regular	Long	X-Long	Tolerance
Half chest 1/							
X-small	--	20-1/4	20-1/4	20-1/4	--	--	± 3/4
Small	22-1/4	22-1/4	22-1/4	22-1/4	22-1/4	22-1/4	± 3/4
Medium	24-1/4	24-1/4	24-1/4	24-1/4	24-1/4	24-1/4	± 3/4
Large	--	26-1/4	26-1/4	26-1/4	26-1/4	26-1/4	± 3/4
X-Large	--	--	--	28-1/4	28-1/4	--	± 3/4
Back length 2/							
X-small	--	27-1/8	28-1/8	29-5/8	--	--	± 3/4
Small	26-5/8	27-5/8	28-5/8	30-1/8	31-1/2	32-7/8	± 3/4
Medium	27-1/8	28-1/8	29-1/8	30-5/8	32	33-3/8	± 3/4
Large	--	28-5/8	29-5/8	31-1/8	32-1/2	33-7/8	± 3/4
X-Large	--	--	--	31-5/8	33	--	± 3/4
Sleeve length 3/							
X-small	--	22-1/4	23-1/4	24-1/4	--	--	± 1/2
Small	21-3/4	22-3/4	23-3/4	24-3/4	25-3/4	26-3/4	± 1/2
Medium	22-1/4	23-1/4	24-1/4	25-1/4	26-1/4	27-1/4	± 1/2
Large	--	23-3/4	24-3/4	25-3/4	26-3/4	27-3/4	± 1/2
X-Large	--	--	--	26-1/4	27-1/4	--	± 1/2

1/ With coat buttoned, in line with pit of armhole from folded edge to folded edge.

2/ Along center back from undercollar seam to bottom edge of coat.

3/ Fold sleeve along the underarm seam, measure along folded edge of the top sleeve from shoulder seam to the bottom of sleeve.

3.11 Workmanship. The finished coats shall conform to the quality of product established by this specification and the occurrence of defects shall not exceed the applicable acceptable point values and quality levels.

4. QUALITY ASSURANCE PROVISIONS

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 must 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.

4.1.2 Responsibility for dimensional requirements. Unless otherwise specified in the contract or purchase order, the contractor is responsible for ensuring that all specified dimensions have been met. When dimensions cannot be examined on the end item, inspection shall be made at any point, or at all points in the manufacturing process necessary to ensure compliance with all dimensional requirements.

4.1.3 Certificates of compliance. When certificates of compliance are submitted, the Government reserves the right to inspect such items to determine the validity of the certification.

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

a. First article inspection (see 4.3).
b. Quality conformance inspection (see 4.4).

4.3 First article inspection. When a first article is required (see 3.1 and 6.2), it shall be examined for the defects specified in 4.4.4.1 and 4.4.4.2.

4.4 Quality conformance inspection. Unless otherwise specified, sampling for inspection shall be performed in accordance with MIL-STD-105.

4.4.1 Component and material inspection. In accordance with 4.1, components and materials shall be inspected in accordance with all the requirements of referenced documents unless otherwise excluded, amended, modified, or qualified in this specification or applicable purchase document.

4.4.2 Certification. When printed or dyed seconds are used, the contractor shall furnish a certificate of compliance indicating that they meet the requirements of 3.3.2.

4.4.3 Daily preproduction testing (types I, III and V coats only). The tests listed in table IV shall be performed each day prior to the start of production.

TABLE IV. Daily preproduction tests

Characteristics	Requirement	Test procedure
Fusing press settings	3.3.3.1	4.4.3.1
Actual fusing temperature	3.3.3.1	4.4.3.2
Bonding strength	MIL-C-44296	4.4.3.3

4.4.3.1 Fusing press settings. Before production begins each day, all fusing machine settings for temperature, pressure, and dwell time shall be visually checked for conformance with manufacturers recommendations. Nonconforming settings shall be adjusted accordingly. Actual setting shall be recorded in the first column of figure 2.

4.4.3.2 Actual fusing temperature. One swatch of outershell material, 8 inches in the warp direction and 11 inches in the filling direction, shall be cut from material to be used in the first of the days production. At the same time, one swatch of fusible interlining cloth material, 8 inches in the machine direction and 11 inches in the cross-machine direction, shall be cut from material to be used in the first of the days production. All test swatches shall be cut into three equal parts of approximately 3.6 inches by 8 inches. The fusible test swatches may be cut slightly smaller in size to avoid fusing belt or head contamination. Sandwich a temperature strip (see 6.8) face down between one specimen of outershell material placed face down and a specimen of fusible interlining cloth material placed on top with the adhesive side down. The temperature strip shall be placed slightly within the fusible starter strip. All fusing tests shall have an approximate 1 inch by full width starter strip or non-fused area incorporated into the top portion of any given bond strength samples. This can be accomplished by placing a thin, non-adhesive material between the fusible interlining cloth material and outershell before fusing, or by folding the fusible onto itself.

This sample shall be placed in the center of the fusing press conveyor or head with the outershell material down. Prepare two additional samples as described above using fusible interlining cloth material and place them on the left and right sides of the fusing head or conveyor belt with the outershell material face down. After the fusing press is fully warmed up, run all samples through the fusing press, take the temperature of the strip specimens, determine the average of the three readings, and record the results in column 2 of figure 2. Retain each individual temperature reading in an organized, self-developed worksheet format. If the average falls outside of the fusible manufacturers recommended range, or if there is a variance in excess of 10°F or 6°C between lanes, determine the cause, correct the problem, and repeat the testing process. Actual temperature and time shall be recorded in Chart A of figure 2.

4.4.3.3 Bonding strength. To determine bonding strength, trim all fusible interlining cloth swatches from the actual temperature test to 1 inch by 8 inch strips. Pinking shears shall not be used to cut strips. The outershell fabric of each shall be clamped at the top, and the fusible material pulled from the starter strips downwards in a vertical direction in a steady, continuous motion. A constant-rate-extension (CRE), or a constant-rate-traverse (CRT), or calibrated spring scale type tester may be used. If a spring scale type tester is used it shall be calibrated once weekly. Any calibration procedure used shall ensure an accuracy of 1/4 ounce or better, and the date of calibration shall be entered on figure 2. Average the three bonding strength readings in an organized self-developed worksheet format and record the averages on Chart A of figure 2. If any individual reading fails to meet minimum bonding strength requirements, then cause must be determined, corrections made, and the material retested until the problem is resolved before commencing production. In case of bonding strength dispute see 6.7.

4.4.3.4 In-process fusing press maintenance and representative production testing (types I, III and V coats only). In-process tests listed in table V shall be performed. Actual fusing temperature and bonding strength testing shall be performed after every 4 hours of fusing production time. Pressure evenness and dwell time maintenance testing shall be performed once weekly. All representative production testing shall be performed once weekly. All representative production testing shall be performed on outershell, and fusible interlining cloth materials, sampled from component lots to be consumed in the next 1000 units of end item production. Sample size, and acceptance/rejection criteria shall be as specified in the applicable test procedure. Tests shall include appearance before laundering and appearance and bonding strength after three launderings.

TABLE V. In-process fusing maintenance and representative production tests

Characteristic	Requirement	Test procedure
Fusing press maintenance:		
Actual fusing temperature	3.3.3.1	4.4.3.2
Bonding strength	MIL-C-44296	4.4.3.3

TABLE V. In-process fusing maintenance and representative production tests (cont'd)

Characteristic	Requirement	Test procedure
Pressure evenness	3.3.3.1	4.4.3.5
Dwell time	3.3.3.1	4.4.3.5
Representative production: Appearance (before and after 3 launderings)	3.3.3.1	4.4.3.6
Laundered bonding strength	3.3.3.1	4.4.3.6

4.4.3.5 Pressure evenness and dwell time. Cut five strips, 8 inches in the warp direction by 2 inches in the filling direction, of outershell material and slightly smaller sized fusible interlining cloth material. Place each of the fusible strips, with the adhesive side down, on the top of the outershell material with the face side down and with a fusible starter strip (see 4.4.2.3). Arrange the five specimens on the fusing press conveyor belt alongside each other in five different lanes, consisting of extreme left, middle left, center, middle right, and extreme right. For head press equipment, place a specimen in each corner and one in the middle. Run the specimens through the fusing press and using a stop watch, mark the time elapsed between the time the leading edge of one of the specimens comes under pressure contact and the time it is released from the pressure contact. Enter the dwell time on figure 2. Remove the strips from the fusing machine when adequately cooled, cut fused outershell/fusible laminate to 1 inch in the filling direction, and perform the bonding test in 4.4.2.4 on all five specimens, recording the results for each specimen on figure 2. The dwell time should be consistent with the machine speed ratings. The fusible manufacturers recommended range and all five specimens should meet the minimum initial requirement for bond strength. Any variations shall be investigated for cause, corrections made, and the testing process repeated.

4.4.3.6 Laundered appearance and bonding strength. For testing, prepare an 8 inch in the warp by an 11 inch in the filling, outershell material specimen representative of each 1000 unit production end item lot. Prepare a slightly smaller sized fusible interlining cloth specimen and fuse in accordance with 4.4.3.2. Launder the fused sample three times in accordance with MIL-C-44296 requirements, except launder for a minimum of 10 minutes and do not condition to equalibrium under standard conditions. Examine the test swatch for bubbling, delamination, or strike through and record observations on Chart B of figure 2. Trim the swatch into three 1 inch by 8 inch strips and perform bonding strength tests using the bonding strength procedure in the preproduction testing in 4.4.3.3. Retain each individual bonding strength reading in an organized, self-developed worksheet format and record averages on Chart B of figure 2. Any evidence of bubbling, delamination, or strike through, or bonding strength not meeting the requirements of

MIL-C-44296 shall be investigated for cause, corrections made, and retesting performed before continuing production of the 1000 end items represented by the sample. At the conclusion of all tests, authorized initials shall be written in to verify contractor results.

4.4.4 Point count inspection (see 6.6).

4.4.4.1 End item visual examination. The end items shall be examined for the defects listed in table VI and the assessment of penalty points shall be as indicated therein. Sampling and acceptance criteria shall be as specified in 4.4.4.1.1. Material defects and damages shall be clearly visible when examined at a distance of 3 feet.

TABLE VI. End item visual defects

Examine	Defect	Point value
Material defects and damage	Any hole, cut, tear, smash, burn, drill hole 1/, scorched area, multiple float, or open place:	
	a. On outside 2/ (longest dimension in any direction):	
	- Up to 1/4 inch inclusive	2
	- More than 1/4 inch	3
	b. On inside 3/ (longest dimension in any direction):	
	- Up to 1/4 inch inclusive	1
	- More than 1/4 inch	2
	Misweave, dyestreak, broken or missing yarn, visible mend, thin place, or shade bar greater than 1/4 inch	1
	Loose yarn or coarse yarn on outside	1
	Needle chew on outside (largest dimension in any direction):	
	- Up to 1/2 inch inclusive	2
	- More than 1/2 inch	3
	No printed dye penetration:	
	- Up to 1/4 inch inclusive	1
	- More than 1/4 to 1/2 inch inclusive	2
	- More than 1/2 inch	3
	Poor printed dye penetration:	
	- More than 1/4 to 1/2 inch inclusive	1
	- More than 1/2 inch	2
	Knot or slub on outside 4/	1
	Woven in waste on outside more than 1/2 inch (largest dimension in any direction)	1

TABLE VI. End item visual defects (cont'd)

Examine	Defect	Point value
Shaded part	Variation in shade within an outside part	1
	NOTE: Parts suspected as being shaded shall be examined at a distance of 3 feet against the background of the other parts and colors of the garment. When the shade difference is readily discernible under these examined conditions, it shall be scored as a shaded part.	
	Any part required to be cut from one piece of material, shaded	2
Cleanness	Spot or stain on outside 1/4 inch or more (largest dimension in any direction)	1
	Five or more thread ends of more than 1/2 inch on the outside, or nine or more thread ends of more than 1/2 inch on the inside	1
	Two or more shade or size tickets not removed	1
	Any size or shade marking on outside 1/4 inch or more	1
	More than 10 loose threads of 1 inch or more throughout (inside and outside)	1
Components and assembly	Any component part or required operation omitted (unless otherwise classified herein)	3
	Any component not as specified	3
	Any component part twisted, distorted, pleated, misshaped, tight, or full (unless otherwise classified herein)	2
	Any operation not as specified (unless otherwise classified herein)	1
	The edge of any component part required to be forced out having folds of more than 1/8 inch (unless otherwise classified herein)	1

TABLE VI. End item visual defects (cont'd)

Examine	Defect	Point value
Cutting	Any component part not cut in accordance with specified pattern or directional lines on patterns, or not in accordance with requirements	3
Seams and stitching	Accuracy of seaming:	
	a. Seam irregular, twisted, pleated, or wavy	1
	NOTE: Pleats shall be scored when they exceed 1/4 inch in length and 1/16 inch in depth of fold.	
	b. Seam puckered (score only when on major portion of seam) 5/	1
	c. Any part of coat caught in an unrelated operation or stitching	2
	d. End of stitching when not caught in other seams or stitching, backtacked less than 1/4 inch	1
	e. Thread break (all stitch types) stitched less than 1/2 inch beyond each end of break	1
	f. Ends of a continuous line of stitching overlapped less than 1/2 inch (except label stitching)	1
	g. Ends of stitching on label overlapped with less than three stitches	1
	Gage of stitching and seam allowance:	
	a. Irregular, i.e. unevenly gaged, or corresponding stitchings not uniformly gaged (to be scored only when condition exists on more than 1/2 the length of the seam)	1
	b. Width not as specified or not within range of gage specified or varies more than 1/16 inch when no range is specified	1
	c. Edge or raised stitching sewn too close to edge resulting in damage to cloth	2
	d. Seam allowance not as specified or varies more than 1/8 inch (to be scored only when condition exists on more than 1/2 the length of the seam):	2

TABLE VI. End item visual defects (cont'd)

Examine	Defect	Point value
Seams and stitching (cont'd)	Open seam (all seams):	
	a. Up to 1/2 inch inclusive	1
	b. More than 1/2 to 3/4 inch inclusive	2
	c. More than 3/4 inch	3
	NOTE: One or more broken stitches or two or more continuous skipped or runoff stitches on joining seam constitute an open seam. On double stitched seams, a seam is considered open when one or both sides of seam is open.	
	Raw edges:	
	a. On outside:	
	- Up to 1/2 inch inclusive	1
	- More than 1/2 to 3/4 inch inclusive	2
	- More than 3/4 inch	3
	On inside (except overedge edge):	
	- More than 1 inch	1
	On overedged edge:	
	- 1 to 2 inches inclusive	1
	- More than 2 to 3 inches inclusive	2
	- More than 3 inches	3
	Exposed under pocket flaps and sleeve tab	
	- 1/4 to 1 inch inclusive	1
	- More than 1 inch	2
	Raw edge on inside or outside of coat caused by excessive seam allowance protruding from a double-lapped, double-stitched seam	1
	Run-offs:	
	Edge or raised stitching:	
	- 1/4 to 1/2 inch inclusive	1
	- More than 1/2 inch	2
	Seam and stitch type:	
	a. Not specified seam or stitch type	2
	b. Looper thread on outside (when 401 stitch type is used)	3
	c. Any line of stitching omitted	3

TABLE VI. End item visual defects (cont'd)

Examine	Defect	Point value
Seams and stitching (cont'd)	Stitch tension:	
	a. Loose tension, resulting in a loose seam:	
	- Up to 1/2 inch inclusive	1
	- More than 1/2 up to 3/4 inch inclusive	2
	- More than 3/4 inch	3
	b. Loose tension on raised or edge stitching resulting in exposed loose thread	1
	c. Tight tension (stitches break when normal strain is applied in the direction of the seam or stitching)	3
	Stitches skipped or broken:	
	a. 1/4 to 1/2 inch inclusive	1
	b. More than 1/2 inch	2
	Stitches per inch (to be scored only when condition exists on major portion of seam):	
	a. All seams, except stitching of labels and overedge stitching:	
	- Less than the minimum	2
	- More than the maximum	1
	b. Stitching of label and overedge stitching, two or more stitches less than specified	1
Buttonholes and eyelets	One or more omitted, added, not specified type, or not finished as specified	3
	Gimp omitted, uncut buttonhole, or ends of gimp not pulled through to underside	1
	Ragged edge, incomplete stitching, stitching not securely caught in fabric	2
	One or more broken stitches or two or more skipped stitches in one or more buttonholes	1
	Buttonhole stitching extending beyond bartack; stitches per buttonhole less than minimum specified	1
	Finished cut length not as specified	1
	End of buttonhole tacked with less than four stitches per bar (see 3.7.3):	
	a. One buttonhole	1
	b. Two or more buttonholes	2

TABLE VI. End item visual defects (cont'd)

Examine	Defect	Point value
Buttons (one or more)	Missing, broken, defective, not attached as specified, or insecurely sewn	1
	Stitching not locked at end of cycle (tug at loose end of thread when accessible, to determine if it will ravel)	1
	Sleeve buttons not sewn through sleeve hem	1
Bartacks or tacks (one or more)	Missing, insecure, misplaced, not specified size or type, or not serving intended purpose	2
Collar	Top collar tight, causing collar to curl	2
	Fullness or puckers on top collar	2
	Tight at joining to neck, causing puckers or pleats on front or back	2
	Corner of pointed end poorly shaped or not of uniform size or shape	2
	Edge uneven	1
	Twisted	2
	Points uneven in length:	
	- 1/4 to 1/2 inch inclusive	1
	- More than 1/2 inch	2
	Ends of undercollar joining seam overlapping top of lapel more than 1/8 inch	1
	Width of collar ends on type I and III coats only, less than 2-3/8 inches wide or more than 2-5/8 inches wide	2
	Stitching of top collar joining seam more than 1/8 inch above or below stitching of undercollar joining seam for a distance of more than 2 inches	1
Fronts	Lengths of fronts:	
	- Uneven by more than 1/4 inch at bottom when buttoned	2
	- Uneven by 1/4 inch or more at neck, when buttoned	2
	Front buttons and left fly buttonholes out of alignment, causing a noticeable bulge or twist on fronts when buttoned	2

TABLE VI. End item visual defects (cont'd)

Examine	Defect	Point value
Fronts (cont'd)	Lapel and left fly buttonholes (position):	
	a. Buttonhole less than 5/8 inch or more than 3/4 inch from edge	2
	b. Left fly buttonholes 1/2 inch or more from equal spacing	2
	c. Left fly buttonhole constructed with the purling on the reverse side (facing wearer) of left fly	2
	d. Lapel buttonhole not parallel with top edge of lapel	1
	e. Lapel buttonhole constructed with the purling on inside of facing	1
	Front buttons (position measured to center of button):	
	a. Button less than 7/8 inch or more than 1-1/4 inches from edge	2
	b. Buttons 3/8 inch or more out of vertical alignment	2
	Lapel steps uneven by more than 1/4 inch	2
Pocket and flaps	Construction and position:	
	a. Edges of pocket pleated or twisted in stitching	1
	b. Double row of stitching omitted at pencil opening of left breast pocket flap	1
	c. Pencil opening omitted in left breast pocket flap	2
	d. Raw edge of pocket hems not turned in	2
	e. Pocket flap tab tight, causing fullness, twisting or curling of pocket flap	2
	f. Flap attached crookedly, i.e. distance between sides of pocket and underside of opened flap vary by more than 1/4 inch	2
	g. Bellows portion of breast pocket positioned toward front center of coat	2
	h. Pocket or flap poorly shaped	2
	i. Pocket or flap out of alignment at any corresponding point from pocket to pocket or flap to flap by more than 3/8 inch (measure vertically from bottom of coat)	2

TABLE VI. End item visual defects (cont'd)

Examine	Defect	Point value
Pocket and flaps (cont'd)	j. Front edge of breast or lower pocket not parallel to front edge of coat by 3/8 inch or more	2
	k. Breast pocket and/or lower pockets unequal in width or height by more than 3/8 inch	2
	l. Flap not covering front or back edge of pocket by 3/16 inch or more	2
	m. Bottom folded edge of pocket flap button tab caught in edge stitching of pocket flap, affecting function	3
	n. Pocket flaps not uniform in width and length from pocket to pocket by more than 1/8 inch	1
	Button and buttonhole:	
	a. Button not corresponding with eyelet end of buttonhole, causing pocket to be pulled up, or flap to bulge or twist when buttoned	2
	b. Buttonhole not vertically positioned on button tab	3
	c. Constructed with purling on the underside of button tab	2
	Pencil pocket:	
	a. Hem less than 1/2 inch or more than 5/8 inch wide	1
	b. Edge exposed beyond side or bottom edge of pocket	3
	c. Opening less than 1-1/4 inches or more than 1-1/2 inches	1
Bellows	Bellows exposed beyond edges of pocket 1/8 to 1/4 inch	1
	Bellows exposed beyond edges of pocket more than 1/4 inch	2
Sleeves	Sleeves reversed, i.e., right sleeve in left armhole, left sleeve in right armhole	3
	Sleeve puckered or pleated at joining to armhole	2
	Sleeve tight at armhole, causing puckers, or pleats on fronts or back at armhole seam	2

TABLE VI. End item visual defects (cont'd)

Examine	Defect	Point value
Sleeves (cont'd)	Sleeve backarm seams unequal distance from shoulder seams by more than 3/4 inch	1
	Elbow patches on types I, III, and V reversed, i.e., top patch on undersleeves, undersleeve patch on top sleeve	2
	Sleeve hem less than 1-1/8 inches or more than 1-3/8 inches wide	1
	Bottom edges of top and undersleeve not aligned at bottom by more than 1/8 inch if alternate hemming is used	2
	Sleeve hem irregular by more than 1/4 inch	1
Sleeve tabs and buttons	Inside edge of eyelet less than 5/8 inch or more than 3/4 inch from pointed end of tab	1
	Buttonhole off center from point of cuff by more than 1/8 inch	1
	Bottom edge of tab extending below sleeve, or extending above bottom edge of sleeve by more than 1/8 inch	1
	First button not aligned with eyelet end of sleeve tab when turned to finished position	1
	Second button less than 3-7/8 inches or more than 4-1/8 inches from first button or less than 3/4 or more than 1 inch from bottom edge of sleeve (measurements taken from center of buttons)	1
	Third button less than 1-7/8 or more than 2-1/8 inches from second button or less than 3/4 or more than 1 inch from bottom edge of sleeve (measurements taken from center of buttons)	1
	Width of sleeve tab less than 1-5/8 inches or more than 1-7/8 inches	1
*Waist tabs and buttons (types I, III and V coats only)	Inside edge of eyelet less than 5/8 inch or more than 3/4 inch from pointed end of tab	1
	Buttonhole off center from point of tab by more than 1/8 inch	1
	First button not aligned with eyelet end of buttonhole tab when turned to finished position	1

TABLE VI. End item visual defects (cont'd)

Examine	Defect	Point value
*Waist tabs and buttons (types I, III and V coats only) (cont'd)	Second button less than 1-3/8 or more than 1-5/8 inches from first button or more than 1/4 inch out of horizontal alignment with first button	1
	Width of waist tab less than 1-5/8 inches or more than 1-7/8 inches	1
	Waist tab and buttons out of horizontal alignment from each other by more than 1/4 inch	1
	Waist tabs out of horizontal alignment with each other by more than 3/8 inch	1
	NOTE: Measure from bottom edge of coat to bottom edge of waist tab on each side of coat. Any difference of more than 3/8 inch in the two measurements will be scored as a defect.	
Shoulder, armhole, underarm, side seams, and back and front arm sleeve seams	Front lapped on back at shoulder seams	1
	Back lapped on front at side seams	1
	Undersleeve lapped on top sleeve at back arm or front arm seams	1
	Sleeve lapped on front or back at armhole seam	2
Labels	Size:	
	a. Missing, incorrect, or illegible	2
	b. Top edge of label less than 1/2 inch or more than 3/4 inch below collar joining seam (when not caught in collar stitching)	1
	c. Not positioned as specified	1
	d. Not stitched on four sides	1
	e. More than 1 inch off center	2
	Identification:	
	a. Missing, incorrect, or illegible	2
	b. Label stitching not covered by lower left pocket	2
	c. Not stitched on four sides	1
	Instruction or combination identification and instruction:	
	a. Missing, incorrect, or illegible	3
	b. Label stitching not covered by lower right pocket	2
	c. Not stitched on four sides	1

TABLE VI. End item visual defects (cont'd)

Examine	Defect	Point value
Front facings	Twisted, causing twist on fronts	2
	Tight or short, causing fullness on fronts	2
	Front puckered or pleated by stitching on back edge of facing through front	1
	Back edge of right facing not turned under or overedged	3
	Back edge of left facing and fly not turned under or overedge stitched together	3
	Lapel steps uneven by more than 1/4 inch	2
Left fly	Construction and position:	
	a. Fly twisted or puckered	2
	b. Fly exposed beyond edge of left front	2
	c. Tacking of left fly not superimposed on edge stitching of left front	1
Bottom hem	Stitching across ends of hem omitted or insecure	1
	Twisted	2
	Width less than 1/2 inch or more than 3/4 inch	2
	Irregular in width by 1/4 inch or more	1
	Bottom of coat pleated or puckered at stitching, forming hem	3
	One or both hem ends extending more than 1/8 inch beyond front edge of coat	2
*Fusing (types I, III and V coats only)	Bubbling or delamination on fused components	3
	Any strike through or bleed through	2
	Any resin transfer:	
	- On any fused component	2
	- On any non-fused component	3
	Color fading of fused parts, i.e., fused parts shaded from rest of garment	2

1/ Drill hole - This defect should not be scored when visible on the inside of the coat, provided that the component as attached to outside of coat fully covers the drill hole.

2/ The "outside" is any part of the coat that is visible when the completely buttoned and closed coat is examined.

3/ The "inside" is any part of the coat that is not visible when the completely buttoned and closed coat is examined.

4/ Only knots or slubs that exceed the limit specified in the basic cloth document and are clearly visible when examined at a distance of 3 feet shall be scored as defects in evaluating the quality of the coat.

5/ Seams suspected of being puckered shall be examined at a distance of 3 feet in comparison with the AATCC Photographic Comparative Rating (see 2.2) for seams. Puckering on a major portion of the suspected seam that equals or is worse than rating 3 for single needle seams or double needle seams shall be scored as a puckered seam.

4.4.4.1.1 Sampling and acceptance for visual examination. The sampling and acceptance criteria shall be as specified in table VII and 4.4.4.1.2 through 4.4.4.1.4.4. The lot size unit and the sample unit shall be one coat. The lot shall be unacceptable if:

a. The point value for 3 and 2 point defects exceeds the applicable maximum acceptable point value.

or

b. The point value for total (3, 2 and 1 point) defects exceeds the applicable maximum acceptable point value.

TABLE VII. Sampling and acceptance criteria for visual examination

	Lot size	Sample size	Maximum acceptable point values: 3 & 2 point defects	Maximum acceptable point values: 3, 2 & 1 point defects
Normal inspection	Up thru 500	50	13 points	25 points
	501 thru 1200	80	19 points	31 points
	1201 thru 3200	125	27 points	43 points
	3201 thru 10,000	200	38 points	63 points
	10,001 and over	315	58 points	93 points

	Lot size	Sample size	Maximum acceptable point values: 3 & 2 point defects	Maximum acceptable point values: 3, 2 & 1 point defects
Tightened inspection	Up thru 500	50	7 points	16 points
	501 thru 1200	80	12 points	25 points
	1201 thru 3200	125	18 points	37 points
	3201 thru 10,000	200	28 points	57 points
	10,001 and over	315	41 points	85 points

TABLE VII. Sampling and acceptance criteria for visual examination (cont'd)

	Lot size	Sample size	Maximum acceptable point values: 3 & 2 point 1/ defects	Maximum acceptable point values: 3, 2 & 1 point defects
Reduced inspection	Up thru 1200	32	7-14 points	24 points
	1201 thru 3200	50	12-18 points	30 points
	3201 thru 10,000	80	16-21 points	38 points
	10,001 and over	125	23-28 points	43 points

1/ If the first value is exceeded but the second value has not been exceeded, accept the lot but reinstate normal inspection (see 4.4.4.1.4.4b). The second value is the maximum acceptable point value.

4.4.4.1.2 Initiation of inspection. Normal inspection shall be used at the start of inspection unless otherwise directed by the responsible procurement quality assurance element administering the contract.

4.4.4.1.3 Continuation of inspection. Normal, tightened, or reduced inspection shall continue unchanged on successive lots except where switching procedures in 4.4.4.1.4 require a change.

4.4.4.1.4 Switching procedures.

4.4.4.1.4.1 Normal to tightened. When normal inspection is in effect, tightened inspection shall be instituted when two out of five consecutive lots have been rejected on original inspection (i.e., ignoring resubmitted lots for this procedure).

4.4.4.1.4.2 Tightened to normal. When tightened inspection is in effect, normal inspection shall be instituted when five consecutive lots have been considered acceptable on original inspection.

4.4.4.1.4.3 Normal to reduced. When normal inspection is in effect, reduced inspection shall be instituted provided that all of the following conditions are satisfied:

a. The preceding ten lots have been on normal inspection and none have been rejected on original inspection; and

b. The total number of points for 3 and 2 point defects in the samples from the preceding ten lots is equal to or less than 60 percent of the total maximum acceptable point values for 3 and 2 point defects from the preceding ten lots; and

c. The total number of points for 3, 2, and 1 point defects in the sample from the preceding ten lots is equal to or less than 75 percent of the total maximum acceptable point values for 3, 2, and 1 point defects from the preceding ten lots; and

d. Production is at a steady rate; and

e. Reduced inspection is considered desirable by the procurement quality assurance element administering the contract.

4.4.4.1.4.4 Reduced to normal. When reduced inspection is in effect, normal inspection shall be instituted if any of the following occur on original inspection:

a. A lot is rejected; or

b. A lot is considered acceptable but exceeds the applicable first value (see 1/ to table VII); or

c. Production becomes irregular or delayed; or

d. Other conditions warrant that normal inspection be instituted.

4.4.4.2 Dimensional examination. The appropriate number of coats, as specified below, shall be examined for conformance to the finished measurement requirements specified in 3.10. When a measurement deviates from a dimension and tolerance specified, the coat shall be penalized one point. Each coat shall also be penalized one point when the sleeves are uneven in length by 1/2 inch or more. The lot shall be unacceptable if the total point value resulting from this examination exceeds the maximum acceptable point value specified below. Each size of coat present in the lot shall be represented in the sample selected for this examination. The lot size unit and the sample unit shall be one coat.

Lot size	Sample size	Maximum acceptable point values
Up thru 500	8	0
501 thru 3,200	13	1
3,201 thru 35,000	20	2
35,001 and up	32	3

4.4.5 Packaging examination. The fully packaged end items shall be examined for the defects listed below. The lot size shall be expressed in units of shipping containers. The sample unit shall be one shipping container fully packaged. The inspection level shall be S-2 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 2.5.

Examine	Defect
Marking (exterior and interior)	Omitted; incorrect; illegible; of improper size, location, sequence, 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 Bulged or distorted container
Content	Number of coats per container is more or less than required Size shown on one or more coats not as specified on shipping container

4.4.6 Palletization examination. The fully packaged and palletized end items shall be examined for the defects listed below. The lot size shall be expressed in units of palletized unit loads. The sample unit shall be one palletized unit load, fully packaged. The inspection level shall be S-1 and the AQL, expressed in terms of defects per hundred units, shall be 6.5.

Examine	Defect
Finished dimensions	Length, width, or height exceeds specified maximum requirements
Palletization	Pallet pattern not as specified Load not bonded as specified
Weight	Exceeds maximum load limits
Marking	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application

5. PACKAGING

5.1 Preservation. Preservation shall be level A or Commercial as specified (see 6.2).

5.1.1 Level A preservation. Each coat shall be laid flat with the front up. The sleeves shall be folded at right angles across the chest one on top of the other. For the larger sizes, it may be necessary to adjust the sides

in order to attain the desired width of approximately 23 inches. The bottom edge of the coat shall first be folded over a few inches and the coat then folded in half so the length measures approximately 14-1/2 inches. Each coat shall be placed in a plastic bag conforming to A-A-50083.

5.1.2 Commercial preservation. Coats shall be preserved in accordance with ASTM D 3951.

5.2 Packing. Packing shall be level A, B or Commercial as specified (see 6.2).

* 5.2.1 Level A packing. Thirty coats of one size only for types I, IV and V and thirty-five coats of one size only for type III, preserved as specified in 5.1, shall be packed in a snug-fitting fiberboard shipping container conforming to style RSC-L, grade V2s of PPP-B-636. The inside of each shipping container shall be fitted with a box liner conforming to type CF, class weather-resistant, variety DW, grade V15c of PPP-B-636. Inside dimensions of each shipping container shall approximate 23-1/2 inches in length, 15 inches in width, and 15 inches in depth. Approximate dimensions are furnished as a guide only. Each shipping container shall be closed in accordance with method III, waterproofed in accordance with method V, and reinforced as specified in the appendix of PPP-B-636, except that the inspection shall be in accordance with 4.4.5. Shipping containers shall be arranged in unit loads in accordance with MIL-L-35078 for the type and class of load specified (see 6.2). Strapping shall be limited to nonmetallic strapping for type II, class F loads.

* 5.2.2 Level B packing. Thirty coats of one size only, for type I, IV and V and thirty-five coats of one size only for type III, preserved as specified in 5.1, shall be packed in a snug-fitting fiberboard shipping container conforming to style RSC-L, type CF (variety SW) or SF, class domestic, grade 275 of PPP-B-636. The inside of each shipping container shall be fitted with a box liner conforming to type CF, class domestic, variety DW, grade 275 of PPP-B-636. Inside dimensions of each shipping container shall approximate 23-1/2 inches in length, 15 inches in width, and 15 inches in depth. Approximate dimensions are furnished as a guide only. Each shipping container shall be closed in accordance with method II as specified in the appendix of PPP-B-636, except that the inspection shall be in accordance with 4.4.5.

5.2.2.1 Weather-resistant fiberboard shipping containers. When specified (see 6.2), shipping containers shall be a grade V3c, V3s, or V4s fiberboard box fabricated in accordance with PPP-B-636 and closed in accordance with method III as specified in the appendix of PPP-B-636, except that the inspection shall be in accordance with 4.4.5.

5.2.3 Commercial packing. Coats, preserved as specified in 5.1, shall be packed in accordance with ASTM D 3951.

5.3 Palletization. When specified (see 6.2), coats packed as specified in 5.2.2 or 5.2.3 shall be palletized on a 4-way entry pallet in accordance with load type Ia of MIL-STD-147. Pallet types shall be type I (4-way entry), type IV, or type V in accordance with MIL-STD-147. Pallets shall be fabricated from wood groups I, II, III, or IV of MIL-STD-731. Each prepared load shall be bonded with straps in accordance with bonding means C and D or film bonding means F or G. Pallet pattern shall be number 3 in accordance with the appendix of MIL-STD-147.

5.4 Marking. In addition to any special marking required by the contract or purchase order, shipping containers and palletized unit loads shall be marked in accordance with MIL-STD-129 or ASTM D 3951, as applicable.

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 coats are for wear by military personnel of the Department of Defense as an outer garment: type I in foliated areas, type III in hot humid areas and types IV and V in desert areas.

6.2 Acquisition requirements. Acquisition documents must specify the following:

a. Title, number and date of this specification.
b. Type and size required (see 1.2).
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. When a first article is required (see 3.1, 4.3, and 6.3).
e. Levels of preservation and packing (see 5.1 and 5.2).
f. Type and class of unit load required (see 5.2.1).
g. When weather-resistant grade fiberboard shipping containers are required for level B packing (see 5.2.2.1).
h. When palletization is required (see 5.3).

6.3 First article. When a first article is required, it shall be inspected and approved under the appropriate provisions of FAR 52.209-4. The first article should be a preproduction sample. The contracting officer should specify the appropriate type of first article and the number of units to be furnished. The contracting officer should include specific instructions in all acquisition documents regarding arrangements for selection, inspection, and approval of the first article.

6.4 Samples. For access to samples address the contracting activity issuing the invitation for bids or request for proposal.

6.5 International standardization agreement. Certain provisions of this specification are the subject of international standardization agreement as cited in NATO, STANAG No. 2333. When amendment, revision, or cancellation of this specification is proposed that will modify the international agreement concerned, the preparing activity will take appropriate action through international standardization channels including departmental standardization offices, to change the agreement or make other appropriate accommodations.

6.6 Point count system. This specification contains the requirements for a point count system for sampling and inspection of the end item. For the visual examination, point values of 1, 2, or 3 are assigned to the listed defects depending on severity. The higher point values are assigned to those defects having a more detrimental effect on the appearance or serviceability of the items.

6.7 Bonding strength dispute procedure. In case of a dispute, the average of the first 3 inches of the five highest bonding strength peaks from a chart recording on a CRE Tensile Tester, running at 12 inches/minute shall determine the bonding strength. If splitting is observed, then just the highest peak shall be regarded as the bonding strength.

6.8 Temperature strip. Suggested sources for temperature strips are as follows:

MRCINC, Reatec Divsion, telephone number (215) 687-4300
Paper Thermometer Co., telephone number (603) 547-2034

Also, each fusible manufacturer supplies their own brand of temperature strips.

* 6.9 Supersession data. The type II, desert camouflage pattern (6 color), cotton/nylon twill coat has been deleted since it is no longer required.

6.10 Subject term (key word) listing.

Battle dress uniform
Clothing
Desert
Tropical
Utility
Woodland

6.11 Changes from previous issue. The margins of this specification are marked with asterisks to indicate where changes (additions, modifications, corrections, deletions) from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any

inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content as written, irrespective of the marginal notations and relationship to the last previous issue.

Custodians:

Army - GL
Navy - NU
Air Force - 11

Preparing activity:

Army - GL

(Project 8415-0822)

Review activities:

Army - MD
Navy - MC
Air Force - 82, 99
DLA - CT

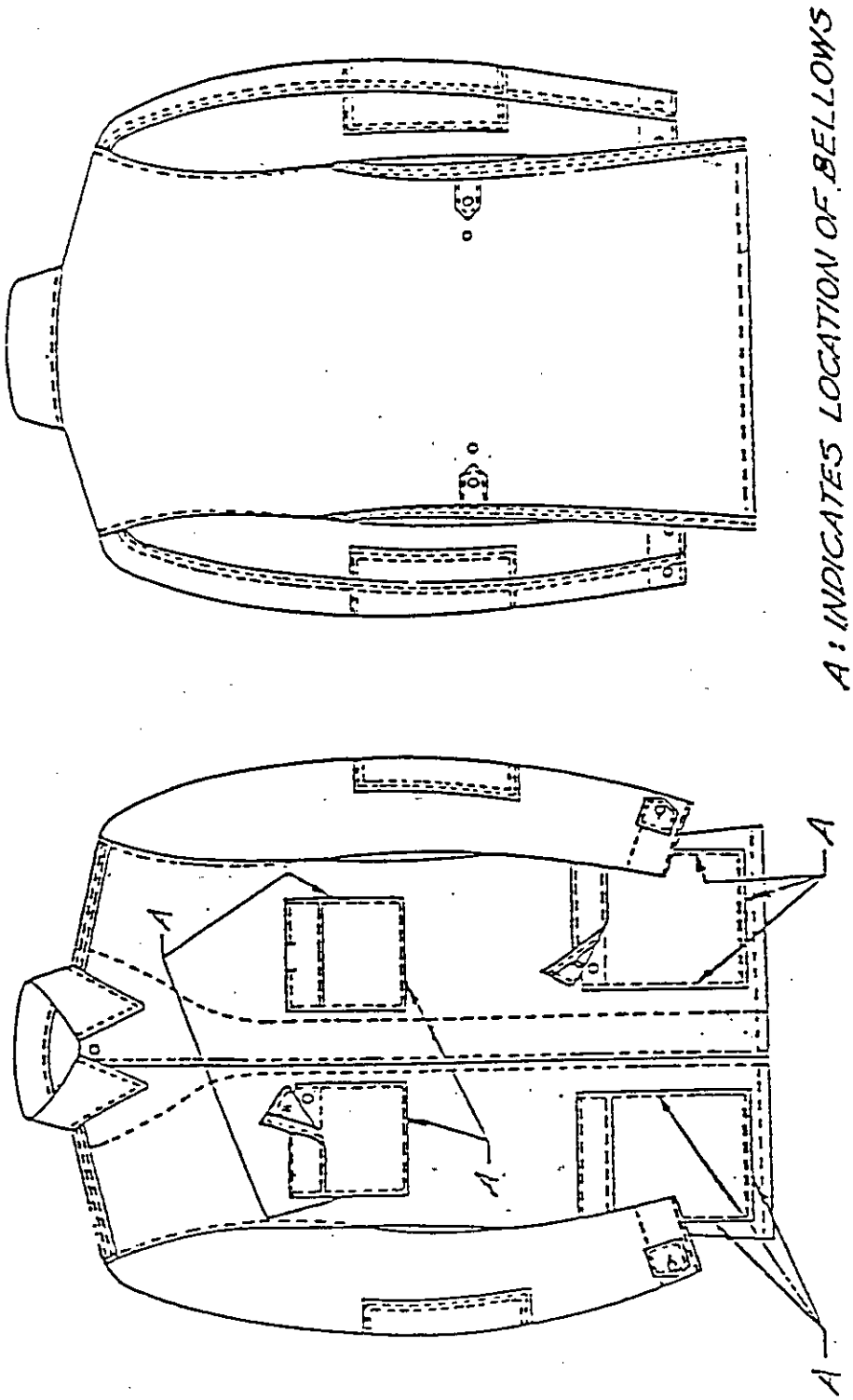

FIGURE 1. COAT, CAMOUFLAGE PATTERN, COMBAT (TYPES I, III AND V)

CONTRACT # - _____ FUSING PRESS SETTINGS RECOMMENDED BY FUSIBLE MFG. _____ TEMPERATURE, °F(°C) _____

CONTRACTOR - _____ PRESSURE, PSI (BAR) _____

QAR NAME _____ STYLE NO.: _____ DWELL TIME, SEC _____

CHART A

DATE DD/MM/YY	INITIAL DAILY TEST (AFTER MACHINE WARM UP)	(4 HOURS LATER)	FUSING PRESS CLEANLINESS (ONCE DAILY)
MS MT - P - DT / /	T TE BS	T TE BS	T AI:
MS MT - P - DT / /	T TE BS	T TE BS	T AI:
MS MT - P - DT / /	T TE BS	T TE BS	T AI:
MS MT - P - DT / /	T TE BS	T TE BS	T AI:
MS MT - P - DT / /	T TE BS	T TE BS	T AI:
MS MT - P - DT / /	T TE BS	T TE BS	T AI:

MIN RQMT: 2 LBS. (907 GMS) /INCH OR SPLIT

PRESSURE EVENNESS, BONDING STRENGTH
TEST ONCE WEEKLY
DATE:
/ / _____ AI _____

DWELL TIME, SEC.
TEST ONCE WEEKLY

DATE:	MACHINE SETTING	STOP WATCH READING
/ /		

AI _____

SPRING SCALE CALIBRATION
TEST ONCE WEEKLY
DATE:
/ / AI _____

CHART B

REPRESENTATIVE PRODUCTION UNITS/1,000	DATE DD/MM/YY	PROD. LOT #	BS AFTER 3 LAUNDER.	APPEAR AFTER 3 LAUNDER	AI
1 - 1,000	/ /				
1,001 - 2,000	/ /				
2,001 - 3,000	/ /				
3,001 - 4,000	/ /				
4,001 - 5,000	/ /				
5,001 - 6,000	/ /				
6,001 - 7,000	/ /				
7,001 - 8,000	/ /				
8,001 - 9,000	/ /				
9,001 - 10,000	/ /				

MIN RQMT: 1.5 LBS. (680 GMS)/INCH OR SPLIT GOOD

KEY:

AI - AUTHORIZED INITIALS TO VERIFY CONTRACTOR TESTS
BS - BONDING STRENGTH/ IN., AVE.
DT - DWELL TIME
MS - MACHINE SETTING
MT - MACHINE TEMPERATURE
P - PRESSURE
T - TIME
TE - TEMPERATURE STRIP READING, AVE.
APPEAR - APPEARANCE

FIGURE 2. FUSING PRESS MAINTENANCE/BONDING STRENGTH CHECK CHARTS - ONE WEEK PRE-PRODUCTION (CHART A) - REPRESENTATIVE PRODUCTION (CHART B)

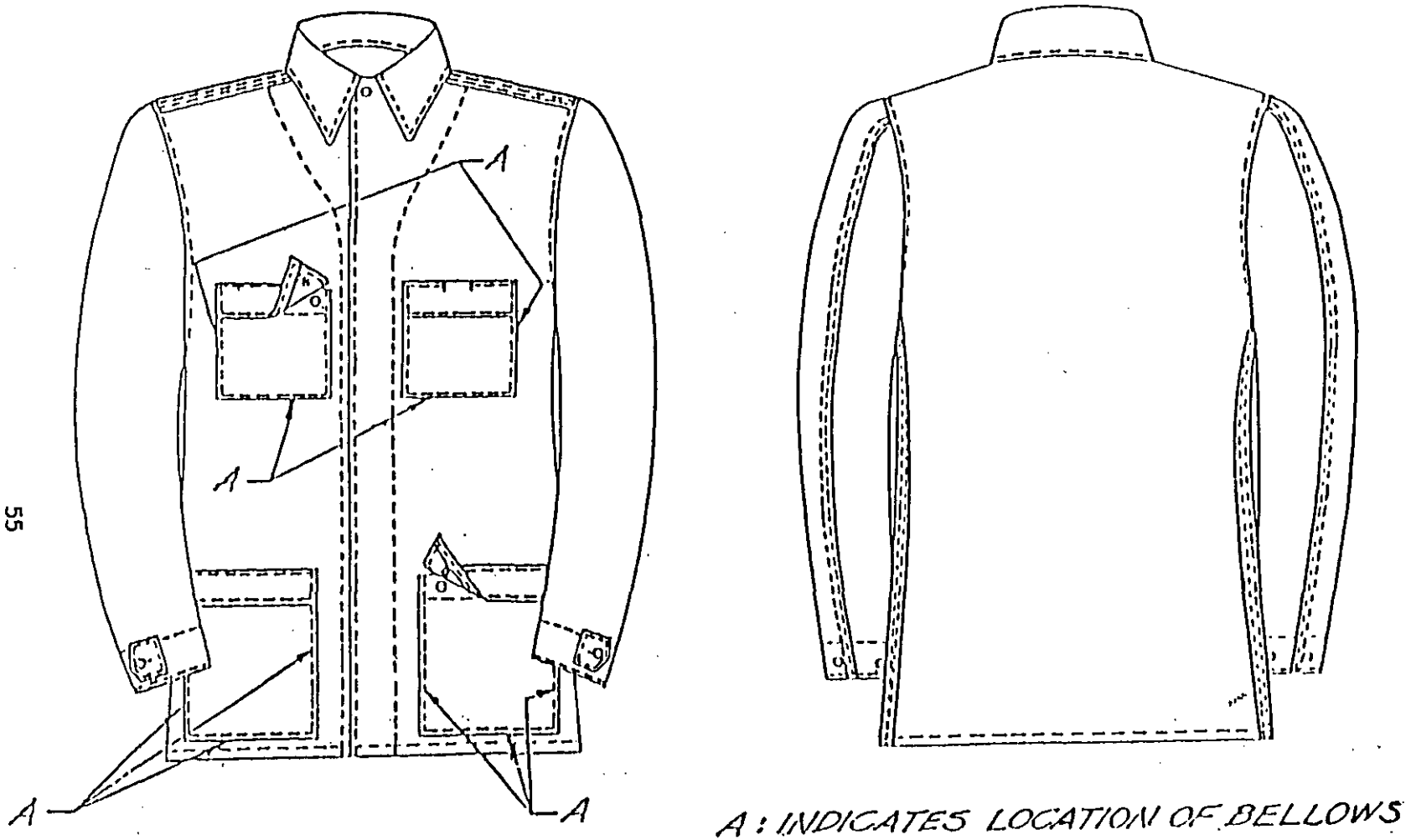

FIGURE 3. COAT, CAMOUFLAGE PATTERN, COMBAT (TYPE IV)

*U.S. GOVERNMENT PRINTING OFFICE: 1991--504-034/50327

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.

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I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER	2. DOCUMENT DATE (YYMMDD)
	MIL-C-44048F	1991 June 27

3. DOCUMENT TITLE

COATS, CAMOUFLAGE PATTERN, COMBAT

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	b. TELEPHONE (*Include Area Code*)	
U.S. Army Natick RD&E Center	(1) Commercial 508-651-4532	(2) AUTOVON 256-4532
c. ADDRESS (*Include Zip Code*) Commander, U.S. Army Natick RD&E Center ATTN: STRNC-IRT Natick, MA 01760-5019	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	

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