INCH-POUND

MIL-DTL-29479A(MC)
21 October 1997
SUPERSEDING
MIL-S-29479(MC)
4 August 1995

DETAIL SPECIFICATION

SLACKS, WOMEN'S

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

1. SCOPE

- 1.1. <u>Scope</u>. This specification covers the requirements for women's slacks.
- 1.2. <u>Classification</u>. The slacks will be of one type in the following classes, sizes and lengths (see 6.2).

Class 1 - Polyester/Rayon, Gabardine: White, Shade 2400 Class 2 - Polyester/Rayon, Gabardine: White, Shade 2400 (Lined)

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to the Commander (PSE-D), Marine Corps Systems Command, Quantico, VA 22134-5010 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 8410

<u>DISTRIBUTION STATEMENT A</u>. Approved for public release; distribution is unlimited.

Schedule of sizes and lengths

Sizes: XO, 2, 4, 6, 8, 10, 12, 14, 16, 18 Lengths: Short, Regular and Long

2. APPLICABLE DOCUMENTS

2.1. <u>General</u>. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

2.2. Government documents.

2.2.1 <u>Specifications</u>, <u>standards</u>, <u>and handbooks</u>. 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-50198	- Thread, Gimp, Cotton, Buttonhole
A-A-50199	- Thread, Polyester Core, Cotton or Polyester
	Covered
A-A-52094	- Thread, Cotton
A-A-52106	- Cloth, Twill or Plain Weave, Polyester and
	Polyester Blend
V-B-871	- Button, Sewing Hole, and Button, Staple,
	(Plastic)
V-F-106	- Fastener, Slide, Interlocking
DDD-L-20	- Label: For Clothing, Equipage, and Tentage
	(General Use)

DEPARTMENT OF DEFENSE

MIL-C-41820 - Cloth, Gabardine, Polyester and Rayon

MIL-C-44296 - Cloth, Fusibles

STANDARDS

FEDERAL

FED-STD-191 - Textile Test Methods

FED-STD-751 - Stitches, Seams and Stitchings

DEPARTMENT OF DEFENSE

MIL-STD-656 - Provisions for Evaluating Quality of Slacks, Women's

MIL-STD-984 - Provisions for Size Labeling of Women's Uniform Clothing

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

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

Department of Defense (DoD) Standard Color Card of Official Standardized Shades for Sewing Threads 1968

Department of Defense (DoD) Standard Shades for Buttons 1966

(Application for copies should be addressed to the Color Association of the United States, Inc., 409 W. 44th Street, New York, NY 10016-0927.)

2.4. 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. <u>Standard sample</u>. Standard samples are furnished solely for guidance and information to the contractor (see 6.3). Variation

from this specification may appear in the sample, in which case this specification shall govern.

- 3.2. <u>First article</u>. When specified (see 6.2), a sample shall be subjected to first article inspection in accordance with 4.3.
- 3.3. <u>Materials</u>.
- 3.3.1 <u>Basic materials</u>. The basic material for the slacks shall be cloth, 8 ounces, polyester/rayon, gabardine, white, shade 2400, conforming to type III, class 1 of MIL-C-41820.
- 3.3.2 <u>Lining and pocketing</u>. The material for the pockets, crotch lining and pocket stays shall be twill or plain weave cloth, polyester or polyester blend cloth conforming to class 1 of A-A-52106. The color shall be white.
- 3.3.3 <u>Lining</u>. The material for lining the class 2 slacks shall be cloth, nylon, 1.6 ounces, white, shade 2414, conforming to the following requirements:

Weight - ounces per square yard	1.6	minimum
Yarns per inch: - warp - filling		minimum minimum
Weave Breaking strength - pounds: (Dry) - warp - filling		minimum minimum
Tearing strength - pounds: - warp - filling Acidity (pH)	72	minimum minimum to 8.0
<pre>Material identification: - warp - filling</pre>	Nylo Nylo	

3.3.4 <u>Thread</u>. The thread for each class of slacks shall be cotton conforming to A-A-52094 as follows:

Use	Туре	Ticket No.	Ply
Buttonholes	III	0	3
Seams, stitching	III	A	3
Overedging	I	70	2
Buttons	II	16	4

As an alternate to the cotton thread, a polyester, cotton-covered thread conforming to A-A-50199, ticket No. 50, 3-ply or ticket No. 70, 2-ply may be used. CAUTION: Some automatic machines will not operate properly with this thread.

- 3.3.4.1. <u>Automatic button sewing</u>. If an automatic machine which sews and shanks (wraps) the buttons in one operation is used, the thread shall be waxed.
- 3.3.4.2. <u>Color</u>. The color of the thread for the slacks shall be white, shade AG, cable No. 66049.

NOTE: See DoD Standard Color Card of Official Standardized Shades for Sewing Threads 1968.

- 3.3.5 <u>Gimp</u>. The gimp for reinforcing the buttonhole shall conform to type I or II, ticket No. 8 of A-A-50198. The color of the gimp shall be white.
- 3.3.6 <u>Button</u>. The button for the waistband shall be 27-line conforming to type II, class D, style 4 of V-B-871. The color of the buttons shall be white, shade BA, cable No. 62031 (see DoD Standard Shades for Buttons 1966).
- 3.3.7 <u>Slide fasteners</u>. The slide fasteners shall conform to either 3.3.7.1 or 3.3.7.2.
- 3.3.7.1. <u>Metal</u>. The slide fasteners shall conform to type I, style 3, short tab pull, cam lock size LS (commercial No. 4), of V-F-106, except that the salt spray test shall not be required. All the components of the slide fastener shall be brass and from the same supplier. The tape shall be cotton or synthetic or a combination. The length of the slide fastener shall start at the notch and finish at the raw edge at the waist.

- 3.3.7.2. <u>Plastic coil</u>. The slide fastener shall be manufactured of polyester or nylon consisting of an automatic or cam lock and shall be equal to commercial size No. 2. The tape shall be a blend of nylon and cotton or polyester and cotton or polyester. The length of the slide fastener shall start at the notch and finish at the raw edge at the waist.
- 3.3.7.3. <u>Color</u>. The color of the slide fastener tape shall be white, shade C, cable No. 66503.
- 3.3.8 <u>Combination label</u>. Each pair of slacks shall have a combination identification, and instruction label conforming to type VI, classes 1 and 3 of DDD-L-20. The slacks are intended to be dry cleaned and the labels shall show fastness to dry cleaning. The inscription shall be as follows:

SLACKS, WOMEN'S Fiber content: Name of contractor: DRY CLEAN ONLY

3.3.8.1. <u>Size label</u>. The size label shall conform to type VI, class 2 of DDD-L-20 except the stock number is not required. The inscription on the size label shall conform to MIL-STD-984; Table II Height ranges, Table III Body measurements for Marine Corps and Figure 2. Example of label for women's slacks is as follows:

Hip circumference: 36"
Waist circumference: 25-1/2"

Height: 63-1/2 to 67" R

(Size code 6)

(NOTE: The label on the bottom of Figure 2 shall be used for Marine Corps items.)

- 3.3.8.2. <u>Label/tag</u>. Each item shall be individually bar-coded with type VIII, class 17 label/tag of DDD-L-20. This label/tag shall be located so that it is completely visible on the item when it is folded and/or packaged as specified and so that it causes no damage to the item.
- 3.3.9 <u>Fusible interlining</u>. The fusible interlining for the waistband and left fly shall be white. The fusible shall conform to type V, class 1, style B of MIL-C-44296. The fusible shall be

fused to the basic material as recommended by the supplier of the fusible.

- 3.3.10 <u>Hook and eye</u>. A hook shall be attached to the left waistband and an eye shall be attached to the right waistband through a suitable reinforcement. The finish shall be nickel plate.
- 3.4. <u>Design</u>. The slacks shall be the Marine Corps design shown on Figures 1 and 2, having a two-piece waistband with button closure, with hook and eye, 1/8 inch top side pockets, outlet at the seat seam, front fly with slide fastener and slightly tapered legs with unhemmed overedged bottoms.
- 3.5. <u>Patterns</u>. Standard patterns to be used to cut working patterns will be furnished by the Government. The patterns allow 1/2 inch seam allowance for all seams, except as otherwise indicated herein. The working patterns shall be identical to the government patterns. Neither the government patterns nor the working patterns shall be altered in any way.
- 3.5.1 <u>List of pattern parts</u>. The slacks shall be cut from the materials specified herein in accordance with the pattern parts indicated below:

ITEM	PATTERN NOMENCLATURE	NO. OF CUT PARTS
	Material: Basic	
1 2 3 4	Front Back Left waistband Right waistband	2 2 1 1
5 6 7 8	Left fly Right fly Front pocket bearer Front pocket facing	1 2 2
	Material: Interlining (fusible)	
9 10 11	Left fly Left waistband Right waistband	1 1 1
	Material: Lining (class 2 only)	
12 13	Front (use item 1) Back (use item 2)	2 2

ITEM	PATTERN NOMENCLATURE	NO. OF CUT PARTS
	Material: Lining (cloth, twill)	
14 15 16	Crotch lining Pocket stays Pockets	1 2 2

- 3.6. <u>Construction</u>. The slacks shall be manufactured in accordance with operation requirements as specified in Table I. The contractor is not required to follow the exact sequence of operations as listed in Table I, but all operations specified shall be used to manufacture the slacks.
- 3.6.1 Stitches, seams and stitching. Stitch, seam and stitching types specified in Table I shall conform to FED-STD-751. Whenever two or more methods for seam or stitching types are given for the same part of the operation, any one of them may be used. Where stitch 401 is used, the looper (under thread) shall be on the inside of the slacks. The minimum and maximum number of stitches per inch shall be as specified in Table I.
- 3.6.1.1. Thread breaks and ends of seams. The ends of all seams and stitching produced with 301 stitch type, when not caught in other seams or stitching, shall be backstitched not less than 1/4 inch. Thread breaks (all stitch types) shall be secured by stitching back of the break not less than 1/2 inch. Skipped stitches may be repaired by using 301 stitch type. The ends of a continuous line of stitching shall be overlapped not less than 1/2 inch. Thread ends of darts shall be trimmed to a length of 1/2 inch. When an automatic dart machine is used, the ends shall be backstitched not less than three stitches.
- 3.6.2 <u>Buttonhole</u>. The buttonhole shall be eyelet end, taper bar type. The finished cut length of buttonhole shall be 5/8 inch.
- 3.6.3 <u>Pressing</u>. Pressing as required in Table I shall be accomplished with a heated pressing iron or machine.
- 3.6.4 <u>Shade marking</u>. The component parts shall be marked to insure a uniform shade and size throughout the slacks. Any method of shade marking may be used except:
 - a. Corrosive metal fastening devices.
 - b. Sew-on shade tickets.

c. Adhesive type tickets which show discoloration or leave traces of paper or adhesive mass to the material upon removal of the tickets.

TABLE I. Manufacturing requirements.

-			SEAM/			
NO	OPERATION	STCH TYPE	STCH TYPE	STCH/IN	NDL	BOB/ LPR
1	Cutting.					
	a. Cut the slacks in strict accordance with patterns furnished, which shall show size, placement of component parts, directional lines for cutting, marks for finished length of darts and notches for proper assembly of parts.					
	b. All component parts of the basic material shall be cut from one piece of material except fly facings, which may be cut from ends. Parts cut from ends shall approximate the shade of the main assembly.					
	c. Place fronts and backs so that the directional line is in the warp direction. The directional line may vary from the warp direction by not more than 1 inch on fronts and backs. Measurement shall be taken from the top and bottom of the directional line on the pattern to the selvage edge of the fabric. The difference between the two measurements shall not exceed the tolerance specified.					
	d. Cut the waistbands and left fly interlining in accordance with the patterns.					
	e. Cut the lining for the class 2 slacks in accordance with the patterns.					
	f. Cut the crotch lining, pocket stays and pockets from the twill cloth in accordance with the patterns.					
2	Shade marking.					
	a. Mark or ticket all component parts of slacks except parts cut from ends, to ensure a correct size and uniform shade throughout the slacks (or uniform).					

TABLE I. <u>Manufacturing requirements</u> - Continued.

		STCH	SEAM/ STCH TYPE			BOB/
NO	OPERATION	TYPE		STCH/IN	NDL	LPR
2	Shade marking. (cont'd)					
	b. The use of corrosive metal fastening devices or sew-on tickets for shade marking is prohibited.					
	c. The use of ink pad numbering machine, rubber stamp, or pencil is acceptable provided the numbers do not show on the outside of the slacks and whenever possible, numbers shall be covered by the seam allowance.					
3	Replacement of defective components.					
	a. During the spreading, cutting and manufacturing process, components having material defects or damages that are classified as defects in MIL-STD-656 shall be removed from production and replaced with nondefective and properly matched components.					
4	Make darts (basic material).					
	The darts shall be tapered on the inside without twists or puckers. Thread ends at lower end of darts shall not be trimmed closer than 1/2 inch in length. End of dart need not be backtacked except when automatic dart machine is used.					
	a. Fold and stitch back darts as indicated by notches and marks on the pattern. Press toward center back. Stitch across top of dart 1/8 inch from raw edge.	301	OSf-1	12-14	50/3	50/3
	b. Fold and stitch front darts as indicated by notches and marks on the pattern. Press toward the center front. Stitch across the top of dart 1/8 inch from raw edge.	301	OSf-1	12-14	50/3	50/3
5	Make darts (lining - class 2).					
	The darts shall be tapered on the inside without twists or puckers. Thread ends at lower end of darts shall not be trimmed closer than 1/2 inch in length. End of dart need not be backtacked except when automatic dart machine is used.					

TABLE I. <u>Manufacturing requirements</u> - Continued.

			SEAM/			
NO	OPERATION	STCH TYPE	STCH TYPE	STCH/IN	NDL	BOB/ LPR
	a. Fold and stitch back darts as indicated by notches and marks on the pattern. Press toward center back. Stitch across top of dart 1/8 inch from raw edge.	301	OSf-1 and SSa-1	12-14	50/3	50/3
	b. Fold and stitch front darts as indicated by notches and marks on the pattern. Press toward the center front. Stitch across top of dart 1/8 inch from raw edge.	301	OSf-1 and SSa-1	12-14	50/3	50/3
6	Join lining to slacks (class 2).					
	Finished appearance. The front and back lining parts shall be joined to the front and back of the slacks without twists, puckers, pleats or distortion.					
	a. Position front and front lining back to back with edges even and notches matching. Seam together 1/8 inch from all edges.	301	SSa-1	12-14	50/3	50/3
	b. Position back and back lining back to back with edges even and notches matching. Seam together 1/8 inch from all edges.	301	OSf-1	12-14	50/3	50/3
7	Join crotch pieces.					
	a. Fold crotch pieces in half lengthwise and attach the raw edge to the crotch of the front panels with a 1/8 inch seam at the raw edge. It may also be attached in the overedge operation.	301	SSa-1	12-14	50/3	50/3
8	Overedge stitching.					
	a. Overedge stitch the raw edge of outseams and inseams of front and back parts.	503 or 504	EFd-1	8-10	70/2	70/2
8	Overedge stitching. (cont'd)					
	b. Overedge stitch the raw edges of center front seam, and seat seam.	503 or 504	EFd-1	8-10	70/2	70/2
	c. Fold fly piece in half lengthwise and overedge stitch side and bottom raw edges together.	503 or 504	EFd-1	8-10	70/2	70/2

TABLE I. <u>Manufacturing requirements</u> - Continued.

		STCH	SEAM/ STCH TYPE			BOB/
NO	OPERATION	TYPE		STCH/IN	NDL	LPR
	d. Position the interlining on the left fly facing and overedge stitch the back edge of interlining and facing together.	503 or 504	EFd-1	8-10	70/2	70/2
9	Join side pocket stays.					
	a. The side pocket stays, with the bottom edge turned up 3/8 inch, shall be attached to the outseam with a 1/8 inch seam at the raw edge. It may also be attached in the overedge operation.	301	SSa-1	10-14	50/3	50/3
10	Set side pocket bearer and facing.					
	Finished appearance. The side pocket bearer and facing shall be properly positioned and securely sewn with the stitching of uniform gauge and without pleats, puckers or other distortions.					
	a. The side pocket bearer and facings shall each be a single ply of basic material.					
	b. Position the bearer and facing on the pocket material in accordance with notches indicated by marks on the pattern.					
	c. Fold under the front raw edge of bearer and facing 1/4 to 3/8 inch and stitch to the pocket 1/8 inch from the folded edge. Continue stitching across the bottom raw edge. A selvage edge need not be turned.	301	LSd-1 and LSbj-1	10-14	50/3	50/3
	d. Position the label on the folded edge of right pocket, facing the wearer, and stitch the label to the pocket 1/16 to 1/8 inch from the label edge.	301	SSa-1	10-14	50/3	50/3
11	Attach side pockets (1/8 top).					
	Finished appearance. The edges of the pocket opening shall finish smooth and flat without distortion. Pocket openings shall be of uniform appearance. The bottom front corners of the pockets shall be backstitched. Care shall be taken to avoid notching the pockets on the underside beyond the width of the side seam outlet.					

TABLE I. <u>Manufacturing requirements</u> - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/IN	NDL	BOB/ LPR
	a. Position the outside of the fronts on the facing of the side pocket in accordance with the notches for the pocket openings as indicated by marks on the pattern.					
	b. Seam front, facing and pocketmaterial together from notch to notch3/8 inch from the edge of the front.	301	SSe-2 (a)	12-16	0	0
	c. Cut the depth of the notches for the pocket opening to the seam. Raise stitch the joining seam on the pocket facing and pocket 1/16 inch from seam, catching all plies of the seam.	301	LSq-2	12-16	50/3	50/3
	d. Turn the pocket to the inside of the front so that the seam will finish on the inside of the pocket 1/16 inch back from the finished edge of pocket opening.					
	e. Topstitch the front from notch to notch through all plies of material, 1/4 inch from the finished edge of the pocket opening.	301	SSe-2 (b) (shows finished seam)	12-16	A or 50/3	A or 50/3
	f. Fold pocket inside out and seam raw edges from step to folded edge of pocketing 3/16 to 1/4 inch from edge. Notch pockets and bearers at top of step and turn.	301 or 401	SSae-2 (a) SSae-2	12-16 12-16	A or 50/3	A or 50/3
	g. Tack the ends of pocket opening to the facing with 1/4 to 3/8 inch tack. The right and left pocket opening shall not be out of alignment by more than 1/2 inch.	301	SSa-1 (each end)	12-16	A or 50/3	A or 50/3
11	Attach side pockets (1/8 top). (cont'd)					
	h. In the finished slacks, the top of pocket shall extend into the waistband and be caught in the bottom stitching of waistband.					
	i. The finished pocket opening (after bartacking) shall measure 5-3/4 to 6-1/2 inches.					

TABLE I. <u>Manufacturing requirements</u> - Continued.

			SEAM/			
NO	OPERATION	STCH TYPE	STCH TYPE	STCH/IN	NDL	BOB/ LPR
12	Join outseams.					
	Finished appearance. Outseams shall be carefully joined with notches matching and without twists, puckers or pleats. The seams shall start and finish evenly and lie smooth and flat.					
	a. Join the outseam with a 1/2 inch seam, matching the notches as	301 or	SSa-1	12-14	30/3	30/3
	indicated by marks on the patterns, joining the back pocket bearer to the front at the side seam and catching the side pocket stay with its bottom end turned up (if not previously caught in overedge operation) (see operation 9.a).	401	SSa-1	12-14	30/3	30/3
	b. Spread open the outseams from top edge of slacks to bottom and press smooth and flat with a heated pressing machine with the pocket stay folded and pressed flat over the open seam.					
13	Finish side pockets.					
	a. Turn under the back edge of side pocket and position in line with the	301 and	SSc-1	12-16	50/3	50/3
	folded edge of the stay piece and stitch pocket to stay piece 1/4 inch to 3/8 inch from edge along the side seam allowance. Continue stitching along the side seamed edge of pocket to folded edge of pocket and securely backstitch end of stitching.	301	SSe-2	12-16	50/3	50/3
14	Make waistband.					
	Finished appearance. The two piece waistband shall be constructed with left and right parts. Each part shall consist of one ply of basic material and one ply of interlining. The left waistband shall have a pointed front end and the right waistband shall have a square end. The center back of the waistbands shall have square ends.					
	a. Overedge stitch the inside raw edge of left and right waistbands, and interlinings.	503 or 504	EFd-1	8-10	70/2	70/2

TABLE I. <u>Manufacturing requirements</u> - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/IN	NDL	BOB/ LPR
	b. Fold the left waistband in half lengthwise, face to face with ends even and notches matching. Join the plies together at the pointed end with a 1/4 inch seam, starting at the notches, forming the pointed end and stitching up to the folded edge. Finish the square end of left waistband with a 1/4 inch seam, turning up 1/4 inch of raw edge and seaming across the width of the waistband through all plies to close end.	301	SSe-2 (a)	12-14	50/3	50/3
	c. Fold the right waistband in half lengthwise face to face with ends even. Finish each square end with a 1/4 inch seam, turning up 1/4 inch of raw edge and seaming across the width of the waistband through all plies to close the end.	301	SSe-2 (a)	12-14	50/3	50/3
	d. Trim the excess material at each end to 1/8 inch from the seams. Turn the right and left waistbands, forcing out the corners and point completely. Edgestitch 1/16 inch from the seamed edges at the pointed and squared ends.	301	SSe-2 (b)	12-14	50/3	50/3
	e. Continue to edgestitch along the length of the waistband 1/16 inch from the upper folded edge. f. The edge stitching may be performed continuously with the top stitching on the outside of the waistband in operation 19.a.	301	OSf-1	12-14	50/3	50/3
15	Join inseams.					
	a. Match notches at front and back of inseam and join with a 1/2 inch	301 or	SSa-1	12-14	50/3	50/3
	seam from notch to bottom.	401			50/3	50/3
	b. Press inseam open and flat.					
16	Make left fly.					
	Finished appearance. The left fly shall finish smooth and flat without twists, puckering or distortion. The overedge stitching shall be securely caught in the fabric.					

TABLE I. <u>Manufacturing requirements</u> - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/IN	NDL	BOB/ LPR
	a. Position the slide fastener on the left fly facing and left fly interlining with bottom end of chain 1/4 inch above the fly notch and top edges even. The front edge of chain shall be 1/2 to 5/8 inch from front edge of finished fly. Stitch slide fastener tape to the fly through the interlining with a double row of stitches 3/16 to 1/4 inch gage.	301	LSbj-2	12-14	50/3	50/3
17	Make right fly.					
	Finished appearance. The right fly shall finish without bulkiness, twists, puckers or pleats.					
	a. Position the slide fastener on the fly with the slide fastener tape 1/2 inch from the overedged seam and the top edges even. Stitch the slide fastener to the fly 1/2 inch from the back edge of fly.	301	LSbj-2	12-14	50/3	50/3
18	Join left and right fly to front.					
	Finished appearance. The seam joining the fly assemblies to the front shall be without pleats, puckers, twists or other distortions.					
	a. Position the left fly assembly on the outside of left front, face to face, with notches matching. Join left fly assembly to front with a 1/2 inch seam.	301	SSa-1	12-14	50/3	50/3
18	Join left and right fly to front. (cont'd)					
	b. Turn joining seam onto fly assembly and stitch 1/16 inch from seamed edge, starting at top raw edge of fly and stitching to the notch.	301	LSb-1	12-14	50/3	50/3
	c. Turn left fly to the inside with joining seam 1/16 to 1/8 inch back of folded edge. Press front edge without damage to the fastener, forcing out the seams to the edge.					

TABLE I. <u>Manufacturing requirements</u> - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/IN	NDL	BOB/ LPR
	d. Stitch left fly to left front, starting at the top and continuing with a curve to the bottom notch. The stitching shall be 1-1/4 ± 1/8 inches from the front edge of the fly.	301	SSa-1	12-14	50/3	50/3
	e. Position right fly assembly on right front with overedged edges and top raw edges even. Join right fly to front with 1/2 inch seam.	301	SSa-1	12-14	50/3	50/3
	f. Press right and left fly flat with heated pressing iron, with the seam toward the side seam.					
	g. Edgestitch 1/16 inch from the front seamed edge, through the slide fastener tape and the placket.	301	LSq-2 (b)	12-14	50/3	50/3
19	Join waistband to slacks.					
	Finished appearance. The waistband shall be joined without twists, puckers, pleats or distortions. The back square ends of the waistband shall be even with the seat seams.					
	a. Position the left waistband on the left front, face to face, with the notch and finished left fly opening matching. Join together with a 3/8 inch seam.	301	SSa-1	12-14	50/3	50/3
	b. Position the right waistband on the outside of slacks, face to face, with square end and folded edge of placket even. Join together with a 3/8 inch seam.	301	SSa-1	12-14	50/3	50/3
20	Attach hook and eye.					
	Finished appearance. In the finished slacks, when the hook and eye is engaged, the closure shall not bulge, pucker or twist.					
	a. Position the hook at the center (1/4 inch off center tolerance) of the left waistband with the rolled edge of hook aligned with the slide fastener scoops. Attach hook to left waistband through a suitable reinforcement.					

TABLE I. <u>Manufacturing requirements</u> - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/IN	NDL	BOB/ LPR
	b. Position the eye at the center of the right waistband aligned with slide fastener scoops and to correspond with hook and left waistband. Attach eye to right waistband through a suitable reinforcement.					
21	Topstitch waistband.					
	Finished appearance. The waistband shall be sewn on smoothly and evenly and shall have a flat appearance throughout, without gathers, puckers, pleats or other distortions either in the waistband, front part or back part, and shall be even in width along the entire length. The waistband shall be 1-3/8 ± 1/8 inches wide.					
	a. Topstitch the waistband to the slacks 1/16 inch from the lower folded edge, catching the overedge stitched portion of waistband in the stitching, and with the stitching extending the entire length of the waistband.	301	BSr-2 (a)	12-14	50/3	50/3
22	Join crotch and seat seam.					
	Finished appearance. The crotch and seat seams shall be joined with stitch tension of sufficient elasticity to meet strain encountered in sitting and stooping. The waist shall be measured before joining crotch and seat seam to assure correct waist size. In the finished slacks, the inseams shall meet and the right and left waistband joining seams shall be aligned; the base of the left fly shall cover the right fly on the outside.					
	a. Measure waist to proper size before joining crotch, seat and waist seam.					
	b. Join crotch and seat seams from the base of the fly to the notch with a 1/2 inch seam, tapering from the notch through waistband to accomplish the measured size and leaving a tail of stitching 3/4 to 1 inch long.	401	SSa-1	8-10 (each needle)	AA Poly- ester	AA Poly- ester

TABLE I. <u>Manufacturing requirements</u> - Continued.

			SEAM/			
		STCH	STCH TYPE			BOB/
NO	OPERATION	TYPE		STCH/IN	NDL	LPR
	c. Spread open crotch and seat seams and press smooth and flat with a heated pressing machine tucking in the stitching tail under the pressed open seat seam.					
	d. The inseam at the crotch shall not stagger more than 1/4 inch.					
	e. Topstitch through the finished waistband superimposing the topstitching and catching the pressed open seat seam at the top of the waistband.	301	LSq-1	8-10	A	A
23	Bartack fly.					
	Finished appearance. The bartacks shall be properly positioned and correctly placed to reinforce the points of strain.					
	a. Bartack the bottom end of the fly horizontally through all plies at the juncture of the crotch seam and fly (see Figure 2).	Bartack		21-28 per bartack	0	0
23	Bartack fly. (cont'd)					
	b. Bartack the inside front edge of right fly to back of left fly with a horizontal bartack. Bartack shall be 1 ± 1/4 inch from bottom folded point of right fly.	Bartack		21-28 per bartack	0	0
	c. Bartacks shall be 3/8 to 1/2 inch long and shall be stitched through all plies of material at the point of bartacking.					
24	Finish slack bottoms.					
	a. Overedge stitch or pink the slack bottoms.	503 or 504	EFd-1	8-10	70/2	70/2

TABLE I. Manufacturing requirements - Continued.

			SEA	M/			
NO	OPERATION	STCH TYPE	STCH '	TYPE	STCH/IN	NDL	BOB/ LPR
25	Make buttonhole.	1111			BICII/ IN	NDL	ши
23	Finished appearance. The buttonhole shall be clean cut, well made and correctly positioned. The stitching shall be securely caught in the basic material. The buttonhole shall be well worked over gimp to fit a 27-line button. The purling of the buttonhole shall be on the outside of the waistband.						
	a. Make 3/4 inch long horizontal, eyelet end, taper-bar type buttonhole through the center of the pointed end of waistband with the inside, purled edge of the eyelet 1/2 to 5/8 inch from the finished ends to waistband.	Button- hole			44-46 per button-hole (incl. tack)	0	0
26	Clean slacks.						
	a. All ends of stitching shall be trimmed and the loose threads removed from slacks. Pull and remove any basting threads.						
	b. Any spots, stains and shade tickets or markings shall be removed without injury to the material.						
27	Sew on button.						
	a. Close the slide fastener and mark or gage the outside ends of waistband with the location for sewing on the button to correspond with the eyelet of buttonhole.						
	b. The button shall be positioned to engage with the eyelet end of buttonhole so that on the finished slacks, the ends of the waistband lie smooth and flat without twisting, bulging, or other distortions.						

TABLE I. <u>Manufacturing requirements</u> - Continued.

NO	OPERATION	STCH TYPE	SEAM/ STCH TYPE	STCH/IN	NDL	BOB/ LPR
	c. Securely sew a 27-line button at the mark. The thread ends of hand sewn buttons shall be securely tacked. The button shall be sewn through all plies of waistband.	101 or Hand		14-16 per button 4 double per button (not incl. shank wrap- ping)	20/4 20/4	20/4
28	Press slacks. a. The tops shall be pressed smooth. b. The legs shall be pressed smooth and creased in the center with the seams matching at the bottom and in the crotch.					

3.7. <u>Finished measurements</u>. Finished measurements of slacks shall be as listed in Table II.

TABLE II. Finished measurements. 1/

	Inseam length $\underline{4}/$								
Size	Waist $2/$ (inches)	Hips $3/$ (inches)	Short (inches)	Regular (inches)	Long (inches)	Knee $5/$ (inches)	Bottom $\underline{6}$ / (inches)		
Х0	22-1/2	35	32	34	36	19	16-1/2		
2	23-1/2	36	32	34	36	19	16-1/2		
4	24-1/2	37	32	34	36	19-1/2	17		
6	25-1/2	38	32	34	36	19-1/2	17		
8	27	39-1/2	32	34	36	20	17-1/2		
10	28-1/2	41	32	34	36	20	17-1/2		
12	30	42-1/2	32	34	36	20-1/2	18		
14	32	44-1/2	32	34	36	20-1/2	18		
16	34	46-1/2	32	34	36	21	18-1/2		
18	36	48-1/2	32	34	36	21	18-1/2		

- 1/ Tolerance on all measurements shall be \pm 1/2 inch.
- <u>2</u>/ <u>Waist</u>. Twice the measurement taken in center of waistband from folded edge to folded edge.
- <u>3/ Hips.</u> Twice the measurement taken from folded edge to folded edge 7 inches from bottom of waistband.
- <u>4</u>/ <u>Inseam</u>. Length measurement taken along inseam from crotch seam to unfinished bottom of legs.
- <u>Knee</u>. Twice the measurement taken from folded edge to folded edge across the width of slack leg at a point up from unfinished bottom of leg as follows: Short 19-1/2 (± 1/4) inches; Regular 20-1/2 (± 1/4) inches; Long 21 (± 1/4) inches.
- <u>6</u>/ <u>Bottom</u>. Twice the measurement taken from folded edge to folded edge across unfinished bottom of leg.
- 3.8. <u>Workmanship</u>. The finished slacks shall conform to the quality and grade of product established by this specification.
- 3.9. <u>Recycled, recovered, or environmentally preferable</u> <u>materials</u>. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible provided that the material meets or exceeds the operational and

maintenance requirements, and promotes economically advantageous life cycle costs.

4. VERIFICATION

- 4.1. <u>Classification of inspection</u>. The inspection requirements specified herein are classified as follows:
 - a. First article inspection (see 4.3).
 - b. Conformance inspection (see 4.4).
- 4.2. <u>Inspection conditions</u>. Unless otherwise specified, all inspections shall be performed in accordance with provisions set forth in MIL-STD-656.
- 4.3. <u>First article inspection</u>. When first article is required, inspection shall be made of a completely fabricated pair of slacks for all provisions in this specification.
- 4.4. Conformance inspection.
- 4.4.1 <u>Testing of components</u>. Testing of components shall be in accordance with the applicable subsidiary specifications and standards to the extent applicable, except that this specification shall govern in the event of conflict. The method of testing shall be as specified in FED-STD-191, wherever applicable. Testing shall be performed on components listed in Table III for characteristics noted.

TABLE III. Test methods.

Components	Characteristics	Reqmt. para.	Test method	No. det. per S/unit	Results reported as
Lining	Material identification	3.3.3	1530	1	Pass or fail
	Weight-oz/sq. yd.	3.3.3	5041	5	Pass or fail
	Breaking strength - lbs: - warp - filling	3.3.3	5100	5	Average of the five det. in each direction to the nearest 1.0 lb.
	Tearing strength - lbs: - warp - filling	3.3.3	5134	5	Average of the five det. in each direction to the nearest 1.0 lb.
	Yarns per inch (min.) - warp - filling	3.3.3	5050	5	Average of the five det. in each direction
	Shrinkage	3.3.3	See <u>1</u> /	1	Pass or fail
	Weave	3.3.3	Visual	1	Pass or fail
	Acidity (pH)	3.3.3	2811	5	Average of the five det.

- <u>1/</u> <u>Determination of shrinkage</u>. Shrinkage shall be determined in accordance with Method 5558 except that the specimen shall be 22 inches by 22 inches without slits, soaked for one hour, and if an extractor is not available, the excess water shall be removed by wrapping the specimen in a towel or similar material and squeezed by hand. Wringing by hand or passing the specimen between squeeze rollers is prohibited. The extracted specimen shall be dried by pressing at a temperature not to exceed 275°.
- 4.4.2 <u>In-process inspection</u>. Inspection shall be performed during the manufacturing of the end item to ascertain that the operations are performed as specified herein. The Government reserves the right to determine the acceptability of construction methods not performed in accordance with specified requirements for operations or subassemblies.
- 4.4.3 <u>Examination of the end item</u>. Samplings and examination of the end item shall be performed for dress (D) slacks in accordance with the provisions of MIL-STD-656.

4.4.3.1. <u>Finished measurement examination</u>. The provisions for the finished measurement examination of the finished slacks shall be as specified in MIL-STD-656 and as outlined in 3.7.

5. PACKAGING

5.1. <u>Packaging</u>. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of material is to be performed by Department of Defense (DoD) personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department of Defense Agency, or within the Military Department's Systems Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

- 6.1. <u>Intended use</u>. The slacks described herein are intended for wear by female personnel of the U.S. Marine Corps.
- 6.2. <u>Acquisition requirements</u>. Acquisition documents must specify the following:
 - a. Title, number, and date of the specification.
- b. Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.2).
 - c. Packaging requirements (see 5.1).
 - d. Classes, sizes and lengths required (see 1.2).
 - e. Whether first article is required (see 3.2).
- 6.3. <u>Standard sample</u>. For information regarding the availability of standard samples, address inquiry to the procuring activity issuing the invitation for bids.
- 6.4. <u>Figures</u>. Figures 1 and 2 are furnished for information purposes only. To the extent of any inconsistencies between the

written specification and the figures, the written specification will govern.

- 6.5. <u>Hook and eye</u>. North and Judd (Hook Flex H-49, K-50, H-89 and E-90); Universal Button Co. (Talon #3, #7 and #8 hook with #8 eye); Akim Co. or Patwin, Inc., Junior Series, type JB; Stimpson (P-536, D-4086, D04457, D-4288); Rau (0A50, OX 1256, 080415; Patwin, Inc. (Slim-Slak with MB eye and Slim-Slax) have been found to meet the requirements of 3.3.10.
- 6.6. <u>Subject term (keyword) listing</u>.

Female Pants

6.7. <u>Changes from previous issue</u>. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Preparing Activity:
Navy - MC
Project No. 8410-N349

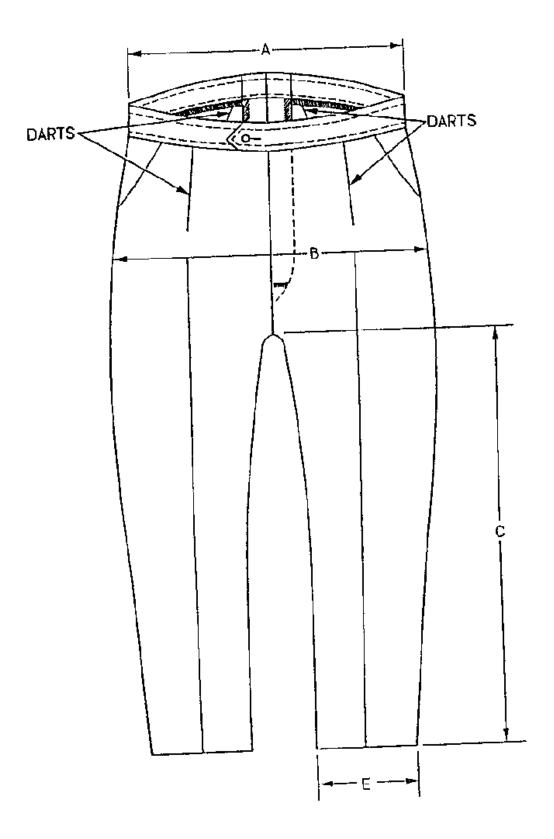


Figure 1. Slacks, Women's

$\mathtt{MIL-DTL-29479A(MC)}$

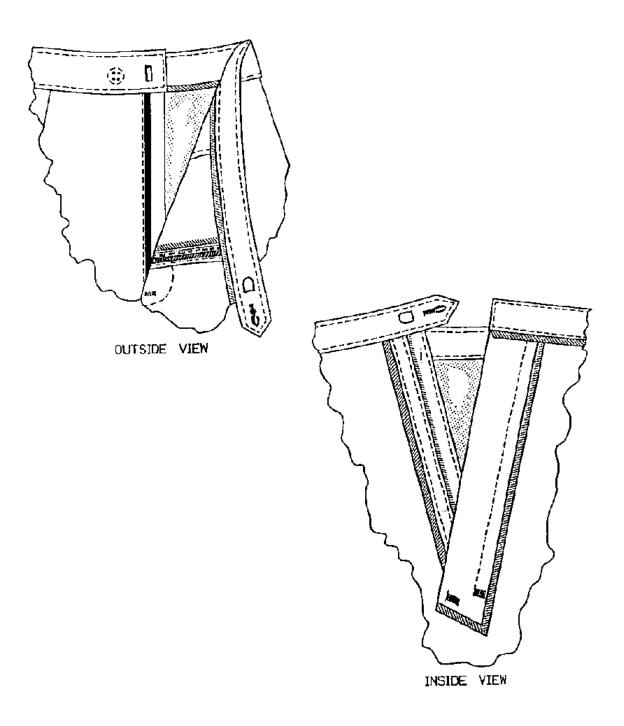


Figure 2. Slacks, Women's

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3. DOCUMENT TITLE SLACKS, WO		,				
4. NATURE OF CHANGEdentify paragraph num	nber and include proposed n	ewrite, if possible. Attach e	extra sheets as	needed.)		
5. REASON FOR RECOMMENDATION						
6. SUBMITTER		OPCANIZATION				
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